

## National News

### India's green hydrogen move

#### Context

- India aims to produce 'green hydrogen' with no fossil fuel emissions.
- A study by Climate Risk Horizons (CRH) warns of potential pollution if proper checks are not in place.

#### Key Points:

#### National Green Hydrogen Mission

- The Ministry of New and Renewable Energy (MNRE) leads the National Green Hydrogen Mission.
- The mission targets five million tonnes of green hydrogen production by 2030.
- This requires 125 GW of renewable energy capacity and 250,000 gigawatt-hour units of power, equivalent to 13% of India's current electricity generation.

#### Current Renewable Energy Capacity

- As of August 2023, India's renewable energy capacity is 131 GW.
- The 2030 green hydrogen plan necessitates adding a similar capacity by 2030.
- India's commitment to install 500 GW of renewable energy capacity by 2030 as part of the Paris Agreement.
- India installed only 15 GW of new solar and wind capacity in 2023, falling short of the annual 45 GW target.

#### Challenges in Green Hydrogen Definition

- MNRE defines green hydrogen as producing no more than two kg of carbon dioxide per kg of hydrogen.
- Current 'grey hydrogen' production emits nine kg of carbon dioxide per kg.
- The definition leaves room for interpretation.

#### Electricity Source for Electrolysers

- The main concern is the source of electricity for electrolysers, especially during nighttime.
- The majority of India's electricity grid relies on coal generation, particularly during non-daylight hours.
- Most projects have not disclosed their electricity source, raising concerns about increased carbon emissions.
- It is unclear if projects committing to 100% clean

energy can meet this requirement.

#### Conclusion

- India's Green Hydrogen Mission faces challenges related to electricity sources and meeting ambitious renewable energy capacity targets.
- Proper checks and transparency are needed to ensure that green hydrogen production does not worsen pollution.

### Vision India 2047 document

#### Context

- The government is in the midst of finalising a national vision plan to make India a developed nation by 2047
- It is to ensure that the country does not slip into a middle-income trap that several countries have fallen into at similar stages of development.

#### About Document

- The vision document will outline the structural changes and reforms needed to reach the objective of becoming a 30-trillion dollars developed economy by 2047.
- It will include government process re-engineering, reforms and cut down on duplication of work by different ministries and departments.
- It is also expected to have details about the country's global engagement on trade, investment, technology, capital, research and development entities.
- The document is also expected to outline which Indian companies would be global leaders and also the strategy for creating an ecosystem needed to achieve the goal.
- It will also have details about creating human capital to achieve the vision, how to leverage the country's market size and how to address regional disparities.
- The vision document will also detail the roadmap where India will be in 2030 and in 2047.

### The Indian Railways' revenue problem

#### Context

The Indian Railways (IR) has been on a spending spree with respect to capital expenditure (capex), particularly after the government merged its rail budget with the main budget.

#### Key points

- Its operating ratio, which is the ratio of ordinary working expenses to the gross traffic receipts, has shown

no improvement.

- A lower ratio implies better profitability and surplus for capital investment.
- The problem is that the IR's freight segment is profitable whereas the passenger segment makes huge losses.

#### Did you know?

The **11** commodities in the IR's transport basket account for **90%** of tonnage and revenue, of which coal is around **45%** and iron ore and cement are around **10%** each.

#### Modi pays tribute to Patel, launches development projects at Statue of Unity

##### Context

Prime Minister paid floral tribute to Sardar Vallabhbhai Patel at the Statue of Unity in Narmada, Gujarat, on the birth anniversary of India's first Home Minister, which is celebrated as National Unity Day. (31st October)

##### Key points

- He launched several development projects at the Statue of Unity, which has emerged as a major tourism hub.
- Statue of Unity is the world's tallest statue with a height of 182 metres. Over three million visitors visit the site annually.
- Mr. Modi witnessed the Rashtriya Ekta Diwas (National Unity Day) parade.

##### About Aarambh

- PM addressed the officer trainees of the 98th Common Foundation Course at the culmination of the fifth edition of "Aarambh" in which 560 trainees from Indian civil services and three from Bhutan civil services participated.
- The 5th edition of the "Aarambh" programme was held on the theme of 'Harnessing the Power of Disruption'.
- The course provides a first-hand introduction to the ideas, challenges and responsibilities of governance in a large and diverse country.

#### SC verdict on same-sex marriage

##### In news:

- Petitions seeking review of SC's majority judgment refusing to legalise same-sex marriage.
- SC holds no fundamental right to marry for same-sex couples, but directs authorities to protect them from harassment.

##### Key points:

- Right to marry is a fundamental right.

- Article 21 of the Constitution guarantees the right to marry the person of one's choice.

#### Did you know?

- Parliament has conferred social status for marriage as an institution under the Special Marriage Act, 1954.

#### 106th Constitutional Amendment Act: Women's Reservation Bill

##### Why in news?

- Delay in implementation of the quota law before the general election in 2024.
- Govt proposes to implement this reservation after the next census followed by delimitation.

##### Key points:

- 106th Constitutional Amendment Act stipulates 33% reservation for women in the Lok Sabha and State Assemblies.
- 73rd and 74th constitutional amendments of 1993 gave women one-third representation in local body elections.
- 77th Constitutional Amendment extended reservations for promotions in jobs for the Scheduled Castes and Scheduled Tribes.
- 103rd CAA provided for 10% EWS reservation for poor Forward Caste sections of the society in educational institutions and public employment.

##### Think:

- Know about 106th Constitutional Amendment Act
- Know about Delimitation

#### Maharashtra State News

#### CPCB orders 45 of 105 Maharashtra sugar units shut

##### In News:

- In a major setback to sugar barons in the state, the Central Pollution Control Board (CPCB) has ordered closure of 45 cooperative sugar factories in Maharashtra for blatant violation of the Environmental Protection Act.

##### Key points:

- Maharashtra Pollution Control Board (MPCB) has issued closure directions to the non-complying sugar industries under section 5 of the Environmental Protection Act
- It was done on account of non-installation/non-connectivity of Online Continuous Emission/Effluent Monitoring Systems (OCEMS) or for non-compliance with the notified

standards/other shortcomings observed during inspections conducted by CPCB.

#### What is CEMS?

- Continuous emission monitoring system (CEMS) is a real time air and water pollution monitoring system.
- It is a system that comprises sampling, conditioning, and analytical components and software that is designed to provide direct, real time, continuous measurements of pollution by analyzing representative samples of air and water.
- It is an important tool for pollution monitoring, control and reporting.
- The system ensures data accuracy, higher monitoring frequency, minimal manual intervention, firm regulatory monitoring and better transparency to strengthen the pollution control regime.

#### Idol of Lord Ram to be installed at Ayodhya temple

**In News:** Idol of Lord Ram to be installed at Ayodhya temple on Jan 22: Mohan Bhagwat

- RSS chief Mohan Bhagwat said that the idol of Lord Ram will be installed at the Ayodhya temple on January 22.

#### Key Points:

- He added that on that day, Indians can organize programmes at the temples across the country to celebrate.
- Bhagwat also said that the world is today looking at India to overcome its problems.

#### October records third-highest temperature in a decade

##### Context:

- Saturday witnessed Mumbai experiencing its highest daytime temperature of the season at 37.4 degrees, ranking as the third-highest October daytime temperature in the past decade
- In 2018, the highest October temperature reached 38 degrees on October 29, while in 2015, daytime temperatures reached a scorching 38.6 degrees on October 17.
- Weather officials attributed this temperature rise to a delayed sea breeze and the influence of Cyclone Tej, which formed in the Arabian Sea, further contributing to the delay in the onset of the sea breeze.

#### GRP to launch safety app for women

##### In News:

- Government Railway Police (GRP) has tied up with a women's app called the Coto Community, urging them to express their views on security issues and experiences within an ecosystem of fellow women travelers on the app.

#### Key Points:

- Women experience incidents of chain-snatching, harassment, or eve-teasing;
- In order to provide them with a safe space and strengthen their security, the GRP will launch women's app called the Coto Community
- The programme, named 'Sakhi in Khaki', aims to bring the women in the city to consider railway police women personnel as their 'sakhis' (friends) and express their safety concerns and the unpleasant experiences they face while commuting by local trains.

#### Parents concerned as APAAR ID consent form requires students' personal information

##### In News:

- Parents have raised concerns about the consent forms of the new Automated Permanent Academic Account Registry (APAAR) student identity system as it requests that parents grant access to students' personal information, including their name, address, age, date of birth, gender, and photograph, to educational institutions and recruitment agencies.

#### Key Points:

- The state has mandated that schools seek parental consent for the creation of APAAR IDs.
- The unique student identity system is part of the central government's ambitious "One National, One Student" project.
- These IDs are designed to track students' educational progress, achievements, and personal details.

#### City's AQI continues to be 'moderate', 7 of 23 stations record 'poor'

**In News:** A majority of the city's air quality monitoring stations continued to record 'moderate' air pollution levels with seven of 23 locations experiencing 'poor' air.

#### Key Points:

- An AQI level between 101 and 200 falls under the 'moderate' category, and from 201-300 is categorized as 'poor'.
- Environmentalists and meteorologists have attributed the drop in air quality levels to natural

factors such as early monsoon withdrawal this year and low wind speed that is essential to the dispersal of pollutants, as well as anthropogenic activities in the form of large-scale construction across the city, vehicular exhaust emissions and resuspension of road dust.

**Think:**

- Read about AQI.

**MahaMADAT app to assess drought**

**In News:** MahaMADAT app to assess drought faulty: BJP MLA Gore

**Key Points:**

- The assessment of drought is done through Maharashtra Monitoring and Assessment of Drought Using Advanced Technology (MahaMADAT)
- It is the remote sensing application developed by the state government jointly with the National Remote Sensing Centre, Hyderabad and Maharashtra Remote Sensing Applications Centre.
- The state government had told the district administrations to carry out 'ground-truthing' in 42 tehsils of Maharashtra to declare them as Trigger 2 drought.

**About MahaMADAT:**

- MahaMADAT is a web-based geo-portal developed by the Maharashtra Remote Sensing Applications Centre (MRSAC)
- Aim is to provide real-time monitoring and assessment of agricultural drought in Maharashtra.
- The portal uses a variety of data sources, including remote sensing data, meteorological data, and agricultural data, to generate drought maps and other products that can be used by farmers, government officials, and other stakeholders to make informed decisions about drought management.

**Nerul lad breaks Asian pyraminx cubing record**

**In News:** 11-year-old Nerul lad breaks Asian pyraminx cubing record

- 11-year-old Imaad Sohel Ajani from Navi Mumbai becomes the first Asian record holder in unscrambling a Pyraminx Cube, with a time of 1.02 seconds.

**Key Points:**

- He aims to break the world record of 0.75 seconds.

- The Asian Pyraminx is a 4-sided puzzle similar to the Pyraminx, but with a different shape and mechanism.
- The Asian Pyraminx is also known as the Chinese Pyraminx, the Japanese Pyraminx, or the Korean Pyraminx.
- The Asian Pyraminx is made up of four layers, with each layer containing four triangular pieces.
- The goal of the puzzle is to twist and turn the layers until all of the pieces are in the same position, with the same color on each side.

**Temple caves older than the Elephanta discovered in Ratnagiri**

**In News:** Temple caves older than the Elephanta discovered in Ratnagiri

- A professor of ancient Indian history and his team of researchers have discovered two rock-cut Shaivite temple caves in a forested area near Rajapur, Ratnagiri.

**Key Points:**

- These rock-cut caves of the Shaiva sect are present around 8km from Rajapur town.
- A similar cluster of such Shaivite caves were earlier discovered in the Cazule area of south Goa.
- The monolithic-cut laterite cave temple was created sometime around 5th or 6th century CE, and so are even older than the Elephanta caves.

**About Elephanta Caves:**

- The Elephanta Caves are a collection of rock-cut cave temples predominantly dedicated to the Hindu god Shiva.
- They are located on Elephanta Island (also known as the Island of Gharapuri), in the Arabian Sea off the coast of Mumbai, Maharashtra, India.
- The caves are thought to have been carved out between the 5th and 8th centuries CE
- The caves are divided into two groups: the west group (Caves 1-5) and the east group (Caves 6-7).
- The west group is the more important of the two groups, and contains the most impressive sculptures, including the famous Trimurti sculpture of Shiva.

**PCMC wins award for The City with the Best Non-Motorized Transport System**

**In News:** PCMC gets award from urban ministry

- The Pimpri Chinchwad Municipal Corporation (PCMC) has received the award for 'The City with the Best Non-Motorized Transport System' at the

Urban Mobility India Conference 2023 hosted by the ministry of housing and urban affairs.

**Key Points:**

- The event was held in Delhi where the civic body was awarded for Non-Motorised (NMT)-friendly Pimple Saudagar Neighbourhood Project.

**About Urban Mobility India Conference 2023:**

- The Urban Mobility India Conference (UMI) is an annual event that brings together policymakers, practitioners, and experts from around the world to discuss and collaborate on the future of urban transportation in India.
- The 2023 UMI Conference was held in New Delhi from October 27-29, 2023.
- The theme of Urban Mobility India Conference 2023 was "Integrated and Resilient Urban Transport."

**MH govt plans to make the state drought free**

**In News:** To make Maharashtra drought-free: Fadnavis seeks PM's help to expedite river-linking projects

- Deputy Chief Minister Devendra Fadnavis sought Prime Minister Narendra Modi's help to expedite the ambitious river-linking water projects to make Maharashtra drought-free.

**Key Points:**

- During Modi's visit to Ahmednagar, Fadnavis raised the issue of drought in parts of Maharashtra.
- Almost 50 per cent Maharashtra is drought-prone.
- Elaborating on two mega projects that the state government has been working on, Fadnavis said, "One of the projects envisages diverting Konkan River water into Godavari basin. The water can help in overriding drought in Marathwada and North Maharashtra," he said.

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MPSC (राज्यसेवा) MPSC (संयुक्त) महाराष्ट्र पोलीस तलाठी, वनरक्षक, कृषी विभाग महानगर पालिका नगर परिषद, जिल्हा परिषद, SSC & ALL OTHER STATE EXAM

**Thane bags 'Best Station for Cleanliness Shield'**

**In News:** Thane bags 'Best Station for Cleanliness Shield'

- Thane, which is one of the most crowded railway stations on the Mumbai division of the Central Railway (CR), has bagged the 'Best Station for Cleanliness Shield'.

**Key Points:**

- The station that witnesses a footfall of nearly six lakh passengers daily was chosen for the 'Best Station for Cleanliness Shield' for 2022 under the non-suburban grade 1 to 4 categories.

**Central Railway (CR) will implement flexible working hours**

**Context:**

- Central Railway (CR) will implement flexible working hours for its staff in the Mumbai division.
- This makes CR the first central government organization to start such an initiative.
- This will benefit employees to avoid peak hours for traveling by trains from their residences to CSMT.

**Thallium as a murder weapon**

**Context**

In Mahagaon village in Gadchiroli district of Maharashtra, two women allegedly killed five family members by lacing their food with poison in the form of thallium.

**About thallium**

- It is a chemical element with the atomic number 81, was discovered by Sir William Crookes in 1861.
- It is a soft, heavy, inelastic metal.
- Thallium is tasteless and odourless and has been used by murderers as a difficult-to-detect poison.
- Appearance: A soft, silvery-white metal that tarnishes easily.

**Sources:**

- It is found in trace amounts in the earth's crust.
- It is found in several ores. One of these is pyrites, which is used to produce sulfuric acid. Some thallium is obtained from pyrites, but it is mainly obtained as a by-product of copper, zinc and lead refining.

**Uses of Thallium**

- Thallium's utilization is restricted due to its toxic nature.
- Thallium sulfate, once a rodent killer, is now banned for household use in many developed nations.
- It finds application in the electronics industry for

photoelectric cells.

- Thallium oxide is used to create high-refraction glass and low-melting glass.
- It is also used in the manufacturing of low temperature thermometers, and imitation jewels.

**Health Hazards:**

- Thallium can damage the nervous system causing headaches, weakness, and irritability. Repeated exposures can cause tremors, hallucinations, coma and death.

**UGC has announced a draft of a new policy**

**In News:**

- Higher education institutions across the country will have to publish information such as syllabus, fee structure, fee refund policy, hostel facility, scholarship, ranking, rating category on the website, UGC announced in a draft of a new policy

**Key Points:**

- The draft of Minimum Mandatory Disclosure was approved in the 572nd meeting of UGC.
- This draft has been opened for objection suggestions and it has been clarified that a deadline of 15 November has been given for it.
- Under the National Education Policy 2020, emphasis has been placed on effective use of technology, transparent disclosure of information for efficient and transparent work of higher education institutions.
- However, it has been seen that the websites of higher education institutions are not updated and minimum information is not available on them

**About National Education Policy 2020:**

**Key Points:**

- The National Education Policy 2020 (NEP 2020) is a comprehensive framework for education in India.
- It was approved by the Union Cabinet on 29 July 2020 and replaces the previous National Policy on Education, 1986.
- The NEP 2020 aims to transform India's education system into a world-class system that is rooted in Indian ethos and values.
- It is based on the five guiding pillars of access, equity, quality, affordability, and accountability.
- The NEP 2020 makes a number of key changes to India's education system, including:
  1. Changing the school education structure from 10+2 to 5+3+3+4, with a focus on

early childhood care and education (ECCE) and foundational literacy and numeracy.

2. Introducing a flexible curriculum that allows students to choose subjects across streams and to pursue multiple pathways of learning.
3. Promoting multilingualism and Indian languages.
4. Increasing the focus on vocational education and skill development.
5. Strengthening teacher education and professional development.
6. Improving the quality of research and innovation in education.

**More than 50 species of migratory birds at dams and lakes in Gondia district**

**In News:**

- Four months stay of more than 50 species of migratory birds at dams and lakes in Gondia district
- The arrival of migratory birds has started in Gondia district due to increasing cold.

**Key points:**

- Due to this, the enthusiasm of the bird lovers and the beauty of the dams and lakes have started to increase.
- These birds travel by keeping in mind the favorable environment and the availability of desired food.
- Migratory birds travel thousands of kilometers to come here in November, December and January, while their return journey begins from Vasant Panchami.
- Migratory birds include Greylock Goose, Common Pochard, Red Crested Pochai, Malai, Gargany, Arctic Tern, Siberian Stork, Black-tailed Godwit, etc.

**Did you Know?**

- Gondia district is widely known as the district of lakes.

**About Crop Demonstration Scheme:**

**Key Points:**

- A crop demonstration scheme is a program that provides farmers with the opportunity to see and learn about new agricultural technologies on their own farms.
- This is done by setting up demonstration plots on farmers' fields, where new technologies are used to grow crops.

- Crop demonstration schemes are typically implemented by government agencies, agricultural research institutions, and non-governmental organizations (NGOs).
- **The goals of these schemes include:**
  - To introduce farmers to new and improved agricultural technologies
  - To demonstrate the benefits of using these technologies
  - To provide farmers with hands-on experience in using these technologies
  - To encourage farmers to adopt these technologies on their own farms

### **'Hirkani Kaksh' made mandatory in all commercial and private buildings**

**In News:** The state urban development department has planned to make it mandatory for all new commercial, educational, mercantile, assembly, public, semi-public, and institutional buildings to have a 'Hirkani Kaksh'

#### **Key Points:**

- It is a room for lactating mothers and mothers having children up to six years.
- Hirkani Kaksh is named after 'Hirkani' a milkmaid from Raigad in the 17th century.
- The first of its kind was set up in the Maharashtra assembly, when NCP MLA Saroj Ahire, with her child, came to attend the winter session in Nagpur.
- Upon seeing her, there was a great demand to set up a Hirkani room in the assembly.

### **'Ajat' community**

#### **In News:**

- The history of the 'Ajat' community in the district has come into discussion in the backdrop of the ongoing Maratha reservation movement.

#### **Key Points:**

- A community of Mangrul Dastgir village is known as 'Ajat', whose caste is not mentioned in any certificate such as birth, death, school, agriculture.
- However, this 'Ajat' community has faced conflict in the name of caste.

#### **About Ajat Community:**

- The Ajat community is a tribal community in the state of Maharashtra, India.
- They are also known as Adivasis or Vanvasis, which means "original inhabitants" or "forest dwellers."
- The Ajats are one of the largest tribal communities in Maharashtra, with a population of over 2 million people.

- The Ajats are a semi-nomadic community, and they traditionally rely on hunting, gathering, and agriculture for their livelihood.

### **Invitation to the University of Wales for youth MLAs**

**In News:** Invitation to the University of Wales for youth MLAs from various parties in the state

- The Wales tour for youth MLAs is organized from November 19 to 25, courtesy of a national English newspaper in the country.

#### **Key Points:**

- Getting an invitation from a prestigious university like Wales is an honor.
- The University of Wales, England, which completed two hundred years of its establishment last year, has organized a workshop on Good Governance and Public Policy.
- The initiative is designed with the aim of developing value-based and sustainable leadership to address various global challenges.

### **State cabinet declares drought in 40 talukas in Maharashtra**

**In News:** State cabinet declares drought in 40 talukas in Maharashtra

#### **Key Points:**

- MH CM and Deputy CM have instructed a cabinet sub-committee, chaired by the Relief and Rehabilitation Minister, to expeditiously assess and declare drought-like conditions in remaining talukas facing insufficient rainfall.
- The Relief and Rehabilitation Department presented vital data during the cabinet meeting, considering mandatory and effective indices outlined in the Drought Management Code of 2016.
- This year, Maharashtra has experienced a notable 13.4 percent reduction in rainfall.

### **'Drone' focus on MNREGA works; Central Government orders to all states**

#### **Context:**

- The central government has decided to monitor MNREGA works through drones.
- The District Grievance Redressal Officer has to inspect the works through drones in case of complaints about Rohyo works.
- The 'Mahatma Gandhi National Rural Employment Guarantee Scheme' (MNREGA) will monitor the work being done in rural areas through drones.

### **Kas flower festival**

#### **In News:**

- The Kas Flower Festival ended 15 days earlier this year because of lack of rainfall at the end of September and the beginning of October
- The festival otherwise stays for two months, but it was only 43 days this year.

#### About Kas flower festival:

- The Kas Flower Festival is an annual event that celebrates the blooming of over 850 species of wildflowers on the Kas Plateau in Maharashtra, India.
- The festival typically takes place from September to October, but the exact dates vary each year depending on the monsoon rains.
- The Kas Plateau is a UNESCO World Heritage Site and is home to a unique ecosystem that supports a wide variety of plant and animal life.
- The wildflowers that bloom on the plateau are particularly diverse and colorful, and the festival is a great opportunity to see them up close.

#### Adivasis get community center in Belapur, a first in the city

##### Context:

- The local tribal community in Belapur has a reason to rejoice as the small community has been blessed with an Adivasi Bhavan, the first of its kind in Navi Mumbai.
- The Bhavan is being built at a cost of Rs 25 lakh on 1,000 square feet plot adjacent to the civic ground in sector 8, near Artist Village of Belapur.
- The tribal community will be able to hold various programmes like marriages, festivals, exhibitions, gatherings etc besides daily recreational activities.

#### Distribution of 'Loksatta Durga Awards'

In News: Sai Paranjpe's Lifetime Achievement; Distribution of 'Loksatta Durga Awards'

- Veteran director, playwright and screenwriter Sai Paranjpe will be conferred with this year's 'Loksatta Durga Lifetime Achievement Award'.

##### Key Points:

- She will be felicitated with this award at the 'Loksatta Durga Award' distribution ceremony to be held in Dadar.
- On this occasion, nine Durgas who have been 'unusual among the common' will be honored and entrepreneur and Vice Chairman of Piramal Group Dr. Swati Piramal, retired Justice Mridula Bhatkar and renowned classical singer Aarti Anklekar will be present.

#### About Loksatta Durga Awards:

- The Loksatta Durga Awards are a set of annual awards **presented by the Marathi newspaper Loksatta to nine women** from different fields who have made significant contributions to society.
- The awards are **presented during the Navratri festival**, and the recipients are known as the "Navdurga" (nine Durgas).
- The Loksatta Durga Awards were **first presented in 2014**, and they have since become **one of the most prestigious awards for women in India**.
- The awards are given to women from a wide range of fields, including education, healthcare, social work, business, and the arts

#### Lek Ladki Yojana:

##### Context

Poor girls in the state will get a gift of Rs one lakh.

##### Key Features

- Aim increases the birth rate of girls by encouraging the birth of girls, promote the education of girls, reduce the death rate of girls and prevent child marriage, reduce malnutrition, reduce the number of out-of-school girls to zero.
- Implementation of the scheme through the Integrated Child Development Service Scheme Commissionerate.
- Applicable to one or two daughters born on or after 1st April 2023 in yellow and orange ration card holder families.
- About two and a half lakh girls in the state will get the benefit of this scheme through direct beneficiary transfer DBT
- Mandatory for the mother and father to submit the family planning certificate after second child.

#### Lahuji Vastad Salve

##### Context

The state government to build memorial to revolutionary Lahuji Vastad Salve at Sangamwadi.

##### Key facts

- State Department of Social Justice and Special Assistance sanctioned Rs 81 crore for the construction of a memorial.
- The memorial includes a mausoleum of Lahuji Vastad Salve, gathering space, administrative building, auditorium for audio video presentation, four-storied academic block, seven-storied boys and girl's hostel.

#### About Lahuji Vastad Salve

- He was born into Mang community near Purandar in the Maharashtra state of India.



- He was the Mang mentor of the Vasudev Balwant Phadke
- He is also referred to as "Lahuji buwa Mang".
- Lahuji also taught martial arts to some of the most prominent revolutionaries of that time Jyotiba Phule, Bal Gangadhar Tilak, Vasudev Balwant Phadke.

### 95 species of butterflies Found in Ratnagiri

#### Context

In Ratnagiri district Kundi village scientists have found 95 species of butterflies

#### Key points

- Information about finding has been published in the international journal 'Bioinfolet'
- Kundi village is located near the Sahyadri Tiger Reserve, nestled in the valley of Mahimat Fort in Ratnagiri district.
- Butterfly species, including rare ones like Abnormal Silverline, Malabar Banded Peacock, and Black Raja. The discovery of the 'Abnormal Silverline' butterfly, previously considered extinct, is particularly noteworthy.
- It is considered as an indicator of good environmental conditions.
- Findings are crucial for the conservation of the area.

### State News

#### The T.N. experience on caste survey

#### Key Points

- The Second BC Commission was established in Tamil Nadu in 1982, following a government decision to increase the BC reservation from 31% to 50%.
- The Commission conducted a survey in two stages in 1983-84, focusing on enumeration and classification of BCs.
- The Commission's findings showed that BCs constituted a significant portion of the State's population, leading to a 50% reservation quota for BCs in Tamil Nadu.
- Differences arose between the Commission's Chairman, Ambasankar, and other members regarding the quantum of BC reservation and the inclusion of certain castes.
- Despite these differences, the government chose to maintain the 50% reservation quota for BCs and included some new communities while rejecting the exclusion of others.

### Akhaura-Agartala rail link to be inaugurated

#### Context

The much-awaited Akhaura-Agartala rail link will be inaugurated virtually by Prime Minister Narendra Modi and his Bangladesh counterpart Sheikh Hasina

#### Key points

- The rail link is 12.24 km, with a 6.78-km dual gauge line in Bangladesh and 5.46 km in Tripura.
- This rail link is being seen as a first step to connect Tripura to Kolkata through Bangladesh.
- The link will significantly reduce the time and distance needed to reach Tripura, southern Assam, and Mizoram from Kolkata.
- It will also help boost India-Bangladesh trade in agriculture products, tea, sugar, construction items, iron and steel, consumer items, besides people-to-people ties.

### Keraleeyam festival

#### Context

- Chief Minister Pinarayi Vijayan inaugurated the first-ever "Keraleeyam" festival on Kerala's foundation day.
- It is a week-long event showcasing the richness of the region's ethnic traditions and the complexity of its evolution as a modern State.

#### Key points

- Keraleeyam is the "mahotsavam" (great festival) that celebrates the spirit of the southern State.
- The event would be held every year from November 1 as part of the State formation day celebrations.
- The event would be held annually for all the people who are proud of themselves as Keralites, to share their happiness in it with others, and to announce this to the world.

### Kozhikode and Gwalior enter creative cities list

#### Context

- Kozhikode in Kerala and Gwalior in Madhya Pradesh have made it to the prestigious creative cities list of UNESCO for contributions in the fields of literature and music, respectively.
- The announcement was made by UNESCO on its official website on October 31, which is designated as World Cities Day.

#### About UNESCO CCN

- The UNESCO Creative Cities Network (UCCN) was created in 2004 to promote cooperation with and

among cities that have identified creativity as a strategic factor for sustainable urban development.

- Objective: placing creativity and cultural industries at the heart of their development plans at the local level and cooperating actively at the international level.
- The Network covers seven creative fields: Crafts and Folk Arts, Media Arts, Film, Design, Gastronomy, Literature and Music.

### International News

#### Bangladesh is building memorial to honour Indian heroes of 1971 war

##### Context

- A memorial to honour the Indian soldiers who sacrificed their lives in the Liberation War of Bangladesh in 1971 at Ashuganj in Bangladesh is in the advanced stages of completion.
- It will have the names of around 1,600 Indian soldiers inscribed on it

##### Key points

- This will be the first memorial in Bangladesh to exclusively honour Indian soldiers from the 1971 war.
- The foundation stone for the memorial at Ashuganj, Brahmanbaria was laid by Prime Minister Narendra Modi and Bangladesh Prime Minister Sheikh Hasina in March 2021.

#### PM discusses security situation in West Asia with Egypt President

##### Context

Prime Minister spoke to Egyptian President Abdel Fattah El-Sisi to discuss the security and humanitarian situation in West Asia amid the Israel-Hamas conflict.

##### Key points

- The discussion indicates the importance that India attaches to the role of Egypt in ensuring humanitarian assistance to Gaza Strip
- On October 22 India sent humanitarian relief meant for Gaza to Egypt's El Arish airbase.
- However, much of the relief material that various countries have been sending for Gaza remained stuck inside Egypt because of intense military activity by Israel as well as due to the shortage of fuel for the trucks inside Gaza.

- India abstained at the UN General Assembly during a resolution calling for ceasefire in the fighting.

#### UN chief Guterres meets Nepal Prime Minister

##### Context

- UN Secretary-General Antonio Guterres met Nepal Prime Minister Pushpa Kamal Dahal 'Prachanda'
- This was his first official visit to the Himalayan nation.
- He urged that developed countries must step up to support sustainable development, and help developing economies, including Nepal, to tackle the climate crisis.

#### PM launches new projects in Gujarat

##### Context

Prime Minister dedicated a slew of infrastructure projects worth ₹5,950 crore in Gujarat during his two-day visit to his home State.

##### Key points

- He inaugurated railway projects, such as new sections of the Western Dedicated Freight Corridor and doubling of the Viramgam-Samakhiali rail line,
- He also inaugurated initiatives to recharge lakes, construct a barrage on the Sabarmati River, and set up drinking water and sewage treatment facilities.
- The projects will come up in the districts of Mehsana, Ahmedabad, Banaskantha, Sabarkantha, Mahisagar, Gandhinagar, and Patan.

### Economy News

#### RBI Maintains 6.5% GDP Growth Projection

##### Context:

##### Reserve Bank of India's Outlook (October 6):

- RBI maintains its 6.5% GDP growth projection for the year.
- Risks include geopolitical tensions, economic fragmentation, volatile financial markets, and an uneven monsoon.
- Domestic demand is strengthening.

##### Key Points:

##### Emerging Uncertainties (Fortnight Since):

- New uncertainties have arisen since the RBI's projection.
- The Israel-Hamas conflict has widened, raising concerns about global food, fuel, and fertilizer supplies.
- India's dependence on fuel and fertilizer imports could be problematic.
- Rising U.S. bond yields and mixed data points add

to uncertainties.

- Sharp sell-off on Indian bourses observed.

### **Inflation to remain high in 2024**

#### **Context**

High inflation will dog the world economy next year, with three-quarters of more than 200 economists polled by Reuters.

#### **Key points**

- Interest rates will also remain higher for longer.
- The latest poll resulted in 2024 growth downgrades and inflation upgrades for a majority of the 48 economies surveyed.

### **Fiscal deficit touches 39.3% of full-year target in first half**

#### **Context**

- The central government's fiscal deficit touched 39.3% of the full year target in the first half of the current financial year, slightly higher than 37.3% recorded in the year-earlier period.
- In the Union Budget, the government projected to bring down the fiscal deficit to 5.9% of the Gross Domestic Product (GDP) in the 2023-24 financial year.
- Tax revenue was at ₹11.60 lakh crore or 49.8% of the annual target. During April-September 2022, net tax collection was 52.3% of Budget Estimate.

### **Agreement news**

#### **China-Bhutan boundary talks**

#### **Context**

- China and Bhutan held their 25th round of boundary talks in Beijing.
- They signed a Cooperation Agreement on the "Responsibilities and Functions of the Joint Technical Team (JTT) on the Delimitation and Demarcation of the Bhutan-China Boundary."

#### **Significance of the Talks:**

- After a seven-year gap, Bhutan and China resumed boundary talks.
- Indicative of significant progress in resolving border disputes.
- The talks were paused after the Doklam Standoff in 2017 and the COVID-19 pandemic in 2019-2021.
- Talks at other levels occurred during the pause, and an Expert Group met in 2021 to agree on a 3-step roadmap.
- Bhutan's Prime Minister stated that they were

"inching towards" completing the roadmap.

- Further progress was made during FM Tandi Dorji's visit to Beijing.

#### **The 3-Step Roadmap:**

#### **A roadmap established in 2021 with three key steps:**

#### **Agreeing on the border "on the table."**

- Visiting the border sites on the ground.
- Formally demarcating the boundary.
- Aims to delineate Bhutanese and Chinese territory clearly for the first time.

#### **India's Concerns:**

- India is closely monitoring these talks due to its strained relations with China since the 2020 Line of Actual Control standoff.
- India is particularly concerned about demarcation discussions over Doklam, where China has proposed a land swap.
- Doklam is strategically significant as it is close to India's Siliguri corridor, connecting the North Eastern States to the rest of India.
- China has continued to build infrastructure in disputed areas in neighbouring Bhutan, eroding India's strategic advantages.
- India is worried about China's demand for full diplomatic relations with Bhutan and opening an embassy in Thimphu.
- This concern arises from India's challenges with Chinese projects and influence in neighbouring countries.

### **Appointment News**

#### **Regional Director of the World Health Organization's South-East Asia region**

#### **Context**

Bangladesh Prime Minister Sheikh Hasina's daughter, Saima Wazed, was elected Regional Director of the World Health Organization's South-East Asia region

#### **Key points**

- She defeated Shambu Acharya, a public health veteran from Nepal, in a vote held here during the 76th session of the WHO Regional Committee for Southeast Asia Region.
- India, Bangladesh, Bhutan, North Korea, Indonesia, the Maldives, Nepal, Sri Lanka, Thailand, and Timor-Leste — 10 of the 11 member countries — took part in the vote.

## Schemes and Committees News

### Electoral bonds

#### Context

A five-judge bench of the Supreme Court is hearing petitions challenging the constitutional validity of the electoral bonds scheme.

#### Key facts about Electoral Bonds

- Implemented in 2018 to reduce the influence of black money in politics.
- Provided a legal and transparent mechanism for contributions to political parties.
- Donors' identities remain confidential, reducing the risk of retaliation.

#### Do you know

- There is a criticism regarding Electoral bonds because
- Lack of transparency regarding the source of funds.
- Concerns about potential misuse, including laundering illicit money.
- Reports indicate a significant portion of political funding comes from electoral bonds.

## Awards and Prize News

### Author Nandini Das wins 2023 British Academy Book Prize

#### Context

Indian-born author Nandini Das has been named the winner of the 2023 British Academy Book Prize

#### Key points

- She got this prize for her book *Courting India: England, Mughal India and the Origins of Empire*.
- The British Academy Book Prize, formerly known as the Nayef Al-Rodhan Prize, was established in 2013 to reward and celebrate the best works of non-fiction that demonstrate rigour.

## Ranks & Reports News

### Salt Consumption in India

#### Context

A recent report, a part of the national non-communicable disease monitoring survey, states that Indian men consume 8.9 grams, and Indian women take in 7.1 grams of salt on a daily basis

#### Key points

- The World Health Organization recommends 5 grams of salt in your diet every day.
- The world average is 10.8 grams.

- High salt intake causes disease in the kidney, brain, vasculature, and immune system.
- High levels of sodium in the diet are also associated with conditions ranging from kidney stones to osteoporosis.
- It is estimated that excessive salt contribution contributes to around five million deaths worldwide every year.

#### Did you know?

- The Yanomami people of the Amazon rainforest live a foraging lifestyle and eat a diet consisting of the root vegetable Cassava, plantains, fruit, fish and an occasional tapir.
- They use peppers for flavour, and no salt.
- They consume less than one gram of salt a day yet stay supremely fit.

### Developed countries to overshoot carbon emissions goal, says study

#### Context

The Delhi-based think tank Council for Energy Environment and Water (CEEW) published a study indicating that Developed countries — responsible for three-fourths of existing carbon emissions — will end up emitting 38% more carbon in 2030 than they have committed

#### Key findings

- The NDCs of developed countries already fall short of the global average reduction of emissions to 43% below 2019 levels that is needed to keep temperatures from rising above 1.5 degrees Celsius.
- Instead, developed countries' collective NDCs only amount to a 36% cut.
- Except for two countries — Belarus and Norway — none of the developed countries seem to be on the path to meet their 2030 targets, though Japan and Kazakhstan are close, and are expected to miss their targets by only a single percentage point.

### Studies provide insight into the internal structure of Mars

#### Context

- Mars's liquid iron core is likely to be surrounded by a fully molten silicate layer, according to a pair of studies published in *Nature*.
- These results offer a new interpretation of the interior of Mars, suggesting its core is smaller and denser than previously proposed.

#### Key points

- InSight Mars Lander used SEIS (Seismic Experiment for Interior Structure) to record Mars's seismic

waves.

- SEIS data in 2021 suggested a large, low-density core on Mars.
- The core has more lighter elements than expected.
- Mars's core is surrounded by a 150 km-thick layer of molten rock.
- The core's smaller radius implies higher density than earlier thought.
- SEIS data challenged previous core density estimates.

### 7.5% dip in active workforce under MGNREGS, says study

#### Context

- The number of active workers under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) has dipped by 7.5%, according to a data analysis for the period April to September 2023 by LibTech India, a consortium of academics and activists.
- The workforce has reduced from 15.49 crore in the previous financial year to 14.33 crore, as per data available till October 6, 2023.

### 53 accidents, 19 deaths per hour in road crashes in 2022, says Ministry

#### Context

India witnessed 53 accidents and 19 deaths every hour, or an average of 1,264 accidents and 42 deaths, daily in road crashes last year, according to a Ministry of Road Transport and Highways report

#### Key findings

- The number of road accidents in 2022 increased by 11.9% and deaths rose by 9.4%.
- According to an analysis by the Save Life Foundation, with a crash severity of 38.15, India ranks among the 20 worst countries for road crashes.
- According to World Road Statistics, 2022 published by the International Road Federation, Geneva, which uses data for the year 2020 in terms of the total number of fatalities, India was followed by China (with a crash severity of 25.22) and the U.S. (with a crash severity of 2.01).
- Of the factors causing road accidents, "speeding" was the most common. It accounted for 72.3% of accidents and 71.2% of deaths.
- Uttar Pradesh registered the highest share of deaths at 13.4%.
- This was followed by Tamil Nadu at 10.6% and Maharashtra at 9%.

## Sports News

### Science and Technology News

#### ISRO to hold more tests for Gaganyaan in coming months

##### Context

- Successful completion of Test Vehicle-D1 (TV-D1) mission on October 21.
- Planned series of test missions to further Gaganyaan program.

##### Upcoming Tests by ISRO

###### TV-D2 Mission

- Demonstrates in-flight abort capability under varied initial conditions.
- Features control system for crew module re-orientation upon separation.
- Utilizes the same expendable version based on L40 strap-on from GSLV.

###### G-X Unmanned Orbital Demonstration Flight

- Involves crew module with service module.
- Launches aboard a human-rated LVM3.
- Introduces 'Vyommitra' – a robot astronaut developed by ISRO Inertial Systems Unit (IISU).
- Tests control systems, reduced life support system, thermal protection, and parachute systems.

###### Integrated Air-Drop Test (IADT)

###### Pad Abort Test

###### Reuse of TV-D1 Crew Module

- Consideration of TV-D1 crew module recovery for future tests.
- Module retrieved from sea after parachute-assisted splash-down.
- Requires detailed inspection due to salt water exposure.
- Plan to assess feasibility of reuse and determine suitable future test programs.

#### IITM Pune demonstrates cloud seeding can produce rainfall

##### Context

A cloud seeding experiment carried out in Solapur city, was able to achieve 18% relative enhancement in rainfall, which is approximately 8.67mm more rainfall than usual.

##### Key points

- Solapur city falls on the leeward side of the Western Ghats and hence gets low rainfall
- It had 384 mm and 422 mm of total rainfall during the period June to September 2018 and 2019, respectively
- The relative enhancement of accumulated rainfall

was seen over two hours after seeding the clouds.

- This was done with the help of Cloud Aerosol Interaction and Precipitation Enhancement Experiment (CAIPEEX phase-4)
- Calcium chloride flare was used for seeding the clouds.

### Access to high-speed Internet

#### Context

Prime Minister hailed telecom operators' progress in spreading 5G coverage in urban centres, saying that over 80% of India's urban population now had access to the high-speed technology.

#### Key points

- Within a year of 5G launch, about 4 lakh 5G base stations have been built in India
- India is exporting about ₹2 lakh crore in electronics manufacturing
- India is not only rapidly expanding 5G in India, but are also moving towards becoming a leader in the field of 6G.

### Police stations to install DNA systems

#### Context

- In April **2022**, the Criminal Procedure (Identification) Act (CrPI) was passed by Parliament.
- The Act enables police and central investigating agencies to collect, store and analyse physical and biological samples including retina and iris scans of arrested persons.

#### About NAFIS

- Police across States have been trained to record finger impressions through the National Automated Fingerprint Identification System (NAFIS).
- NAFIS is under the NCRB
- It is a separate project that was launched in **2022**.
- It assigns a unique ten-digit National Fingerprint Number (NFN) to all suspects arrested by the police.
- State police have their own fingerprint database.
- NAFIS integrates the data on a common platform, enabling the police to run a countrywide search to match fingerprint impressions lifted from a crime scene.

### Haemoglobin isn't used only in blood, scientists discover

#### Context

- A new and serendipitous discovery has revealed that haemoglobin isn't used by RBCs alone.
- In a study published in Nature, scientists from China have reported that chondrocytes – cells that make cartilage, the connecting tissue between bones – also make haemoglobin and seem to

depend on it for their survival.

#### Key points

- The scientists called these blobs haemoglobin bodies, or Hedy.
- The discovery of functional haemoglobin in cartilage also leads to the possibility that it plays a role in certain joint diseases.

### Miscellaneous News

### A new mushroom species named *Candolleomyces albosquamosus*

#### Context

- A new mushroom species named *Candolleomyces albosquamosus* has been discovered in the Jawaharlal Nehru Tropical Botanic Garden and Research Institute (JNTBGRI) at Palode, Thiruvananthapuram.

#### Key Details about the New Species:

- Physical Characteristics: The mushroom has a delicate, fragile appearance with a honey-yellow cap.
- Distinctive Feature: It is identified by the presence of white woolly scale-like structures on its cap, leading to the name 'albosquamosus.'
- Size: The mushroom is small, reaching a height of about 58 mm.

#### Genus and Taxonomic Information:

- Genus: Belongs to the genus *Candolleomyces*.
- Previous Understanding: Seven species previously categorized under the genus *Psathyrella* in India are now recognized as *Candolleomyces*.
- Global Significance: The discovery is notable because there are only 35 known species in the *Candolleomyces* genus worldwide.

#### Significance:

- The discovery adds momentum to the study of fungal diversity in the Western Ghats region, emphasizing its ecological importance and uniqueness in the realm of biodiversity.