

November

8

CRUX 10

10 News. 10 Sources. One Place



MK Yadav Sir



विज्ञान एवं
प्रौद्योगिकी मंत्रालय
MINISTRY OF
SCIENCE AND
TECHNOLOGY

Table of Contents

- 1 Critical Information Infrastructure
- 2 Basmati Rice
- 3 National Population Register
- 4 Active Pharmaceutical Ingredients
- 5 Copyright Law in India
- 6 EWS Reservation
- 7 Guru Nanak Dev
- 8 Florence Nightingale Awards
- 9 Total Lunar Eclipse
- 10 Loss and Damage Funding

Census, NPR sites declared 'protected system'

The Hindu Bureau
NEW DELHI

The websites and applications related to the decennial Census exercise and the National Population Register (NPR) were on Monday notified as "protected system" or "Critical Information Infrastructure" under the Information Technology Act, 2008.

The notification means that any tampering or unauthorised access to the data associated with Census applications, NPR database or the data centres of the Registrar General of India (RGI) will be punishable by 10 years imprisonment.

The RGI notified on Monday that under Section 70 of the IT Act, the Central government declares the "computer resources relating to the Census Monitoring & Management System (CMMS) Web Portal. Self Enumeration (SE) Web Portal.

Context: The websites and applications related to the decennial Census exercise and the National Population Register (NPR) were notified as "protected system" or "Critical Information Infrastructure" under the Information Technology Act, 2008.

Critical Information Infrastructure

- **About:** The **Information Technology Act, 2000** defines **Critical Information Infrastructure (CII)** as "those computer resource, the destruction of which, shall have debilitating impact on national security, economy, public health or safety".
- **Power to declare CII:** The government, under the IT Act of 2000, has the **power to declare any data**, database, IT network or communications infrastructure as CII to protect that digital asset.
- **Nodal Agency:** **National Critical Information Infrastructure Protection Centre (NCIIPC - created in 2014)** is mandated to take all measures to protect the nation's critical information infrastructure.
 - NCIIPC is a unit of the National Technical Research Organisation (NTRO) and therefore **comes under the Prime Minister's Office (PMO)**.
- **NCIIPC has identified the following as 'Critical Sectors':**
 - Power & Energy
 - Banking, Financial Services & Insurance
 - Telecom
 - Transport
 - Government
 - Strategic & Public Enterprises

IT Act, 2000

- **About:** Primary law in India for **matters related to cybercrime and e-commerce**.
- **Origin:** Enacted by the Indian Parliament in 2000 to **give legal sanction** to electronic commerce and electronic transactions, to enable e-governance, and also to prevent cybercrime.
- **Features of the Information Technology Act, 2000:**
 - All electronic contracts created through secure electronic channels were legally valid.
 - Legal recognition for digital signatures.
 - Security measures for electronic records and conjointly digital signatures are in place.

Basmati rice blending may be capped at 15%

Move to ensure purity of Indian basmati rice does not dilute due to excessive blending

SANJEEB MUKHERJEE
New Delhi, 7 November

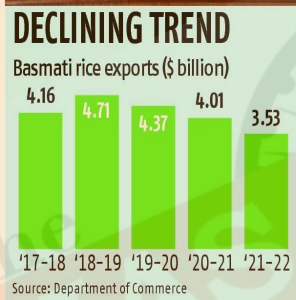
The government is likely to disallow blending of more than 15 per cent non-basmati rice with basmati that is sold as a blended product.

Sources said the Food Safety and Standards Authority of India (FSSAI) — at a meeting held recently — was believed to have approved the standards, thus putting a lid on the long-standing confusion.

At the same time, it ensures that the purity of Indian basmati rice does not get diluted due to excessive blending.

Basmati rice, which is blended with non-basmati rice in excess of 15 per cent, can be labelled only as blended rice and not as blended 'basmati' rice. This maintains the purity of the former in the minds of domestic consumers, sources said.

According to senior trade and industry representatives, the move will stop the practice of several smaller unrecognised players indulging in blending non-basmati rice with basmati. They do this



in greater proportion and sell them as blended 'basmati' rice.

"This leads to dilution of the market value of basmati rice, which is a proprietary product having some of the most unique qualities in the world. They

include grain size, texture and aroma that command a special place in the world market," an industry official said. He said once the standards are notified, this practice will be stopped.

Currently, basmati — which is meant for exports to European nations only — is allowed with up to 15 per cent blending. However, for domestic sale, the blending goes up to 30-40 per cent.

Basmati rice in India has around 35-39 different varieties and some industry players said distinguishing blended from non-basmati will be an onerous task.

"The reported move on part of FSSAI may be one of the actions to preserve the reputation of basmati rice. But more needs to be done to perpetually and perceptually protect basmati. FSSAI's actions will increase the demand for genuine basmati rice as adulterated packets are likely to disappear from retail shelves.

This could be an opportunity to transform the basmati industry from commodity to a niche product," said leading trade policy analyst and author of the book 'Basmati Rice — The Natural History Geographical Indications,' S Chandrasekaran.

He said basmati rice millers will be exposed to control and compliance costs. FSSAI will have to expedite substantial enforcement costs in implementing this standard.

BASMATI RICE

(Syllabus: GS Paper 3 - Economy & Agriculture)

Context The government is likely to disallow blending of more than 15 percent non basmati rice with basmati that is sold as a blended product.

Basmati Rice

- **About:** Long grain rice which has its origin from India and some parts of Pakistan.
- **Unique fragrance and flavour:** Due to the presence of a chemical called 2-acetyl-1-pyrroline.
 - This chemical is found in basmati rice at about 90 parts per million (ppm) which is 12 times more than non-basmati rice varieties.
- **Climate Required for Basmati Rice Farming:** Basmati rice crop requires evenly distributed rainfall throughout its growth and ideal temperature for its cultivation is 20 to 38.
 - It also requires clear sky during day and low night temperatures.
- **Soil Requirement for Basmati Rice Farming:** Basmati rice can be grown in all kinds of soils.
 - However, heavy neutral soils like clay loam, clay and loamy are excellent for its cultivation. These soils have the property of holding water for longer period.
 - The ideal pH range of soil for its better yield is 5.0 to 8.5.
 - Alkaline or Saline soils are not suitable for its cultivation.

Production of Basmati Rice in India

- **Global Status:** India is the largest producer of Basmati rice with about 70 per cent share in global production.
- **Varieties of Basmati Rice in India:** Basmati 370 & Taraori Basmati are the two mainly cultivated Basmati varieties in India. Other improved varieties are Pusa-1121, CSR-30, Pusa Basmati-1. Out of all these improved varieties, Pusa Basmati-1 yields more and H BC-19 yields less (Traditional variety). Pusa-1121 has better aroma and yields almost same as Pusa basmati -1.
- **Cultivating states:** Himachal Pradesh, Punjab, Haryana, Delhi, Uttarakhand, Madhya Pradesh, Jammu and Kashmir and western Uttar Pradesh.
 - In May 2010, Geographical Indication status was given to basmati grown only in Punjab, Haryana, Delhi, Himachal Pradesh, Uttarakhand and parts of western Uttar Pradesh and Jammu & Kashmir.

Govt says need to update NPR across country

DEEPTIMAN TIWARY
& MAHENDER SINGH
MANRAL
NEW DELHI, NOVEMBER 7

WITH THE government likely to bring a Bill to amend the Registration of Birth and Deaths Act for a centralised data management, the Home ministry in its latest annual report has underlined the need to update the National Population Register (NPR) database across the country, except Assam. This is to incorporate the changes due to birth, death, and migration for which demographic and other particulars of each family and individual are to be collected.

The ministry's annual report for 2021-22 said due to the outbreak of Covid-19 pandemic, the work of NPR updation and other related field activities got postponed. "For updating the NPR database, a three-pronged approach will be adopted. It will include self updating wherein residents will update their own data after following some authentication protocols, updating of NPR data in paper format, and mobile mode. The demographic and other particulars of each family and individual are to be

collected/updated during the exercise. No documents or biometrics will be collected during the updation," it said, adding that the Centre has already approved Rs 3,941 crore for the purpose.

The report also said the from April 1, 2021, to December 31, 2021, a total of 1,414 citizenship certificates have been granted by all authorities, including the MHA. "Out of this, 1,120 were granted by registration under Section 5, and 294 by naturalisation under Section 6 of the Citizenship Act-1955," the report added.

The annual report also said that the government has delegated its powers to grant Indian citizenship by registration or naturalisation with respect to members of Hindu, Sikh, Jain, Buddhist, Christian or Parsi communities from Pakistan, Bangladesh and Afghanistan to Collectors of 29 districts and Home Secretaries of nine states. "The delegation (of powers) will speed up the process of granting Indian citizenship," the report said.

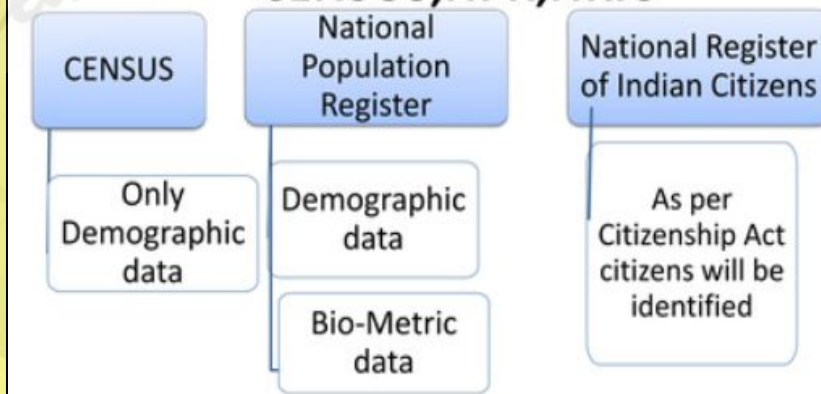
The Home ministry granted long-term visas — which is a precursor to Indian citizenship — to 2,439 members of minority communities from the three neighboring countries in the last one year, it said

Context: The Home ministry in its latest annual report has underlined the need to update the National Population Register (NPR) database across the country, except Assam.

National Population Register (NPR)

- **About:** A Register of **usual residents** of the country.
- **Usual resident:** A usual resident is defined for the purposes of NPR as:
 - Persons residing in a local area for the **past 6 months or more**, or
 - Persons intending to reside in that area for the **next 6 months or more**.
- **Origin:** NPR was first done in 2010 and was later updated in 2015 when it was linked with Aadhar.
- **Legal Provisions:** It is being prepared at the local (Village/sub-Town), sub-District, District, State and National level under provisions of the **Citizenship Act 1955 and the Citizenship (Registration of Citizens and Issue of National Identity Cards) Rules, 2003**.
- **Collection of Data:** Both **demographic data and biometric data**. Biometric data will be updated through Aadhar details.
- **Key features:**
 - It is **mandatory for every usual resident of India** to register in the NPR.
 - This includes **both Indian citizens and foreign citizens**.
 - The government has clarified that **no documents will be required** for NPR as **self-declaration** will be treated as enough for data entry in the population registrar.

Difference between CENSUS, NPR, NRIC



Fresh push for APIs under PLI scheme

Ravi Dutta Mishra &
Priyanka Sharma

NEW DELHI

The government has extended the last date for applications for manufacturing Active Pharmaceutical Ingredients (APIs) under the PLI scheme after the sops it offered failed to create the expected response, people aware of the development said.

China's dominance in APIs, an essential input for drug development of even the most basic kinds such as painkillers, has left New Delhi susceptible to supply chain disruptions, including from repeated lockdowns in China, which is the largest world's largest manufacturer and exporter of APIs.

"For 7 [kinds of] APIs, for which we don't have people (applications) yet, we are again calling for application. And the last date for applying is 21 November. We understand that PLI 2.0 is going as per the plan and the aim is to cover all the major pharma products under PLI pharma. As of now, it is too early to say anything about which PLI pharma scheme is going well because none of them have crossed the production year," said a gov-



Chinese domination in APIs has left Indian drug manufacturers susceptible to supply chain shocks. MINT

ernment official on condition of anonymity.

The Department of Pharmaceuticals rolled out three PLI schemes—bulk drugs with an outlay of ₹6,940 cr, medical devices (₹3,420 cr) and pharmaceuticals (₹15,000 cr) to help cut dependency on China.

However, the experts said the subsidy offered by the government was not enough to attract the investment required to begin large scale manufacturing. "As far as bulk drugs are concerned, about 14 projects have been commissioned with an investment of ₹612 cr. The incentive rates that we are offering is 20% for the first year, 15% for the fifth year and 5% for

Chinese active ingredients are about 20%-30% cheaper than Indian products and PLI could help, says CII

sixth year," another official said.

"Many items imported from China are in form of raw materials including APIs, drug formulations and parts of machinery which are used for producing finished goods for exports.

China accounted for over 43% of the total pharma imports worth \$4,066 mn between Apr-Sept this year. But India exported pharma products worth \$12,727 mn during the same duration," the official added.

Sanjeev Jain, MD, Akums Drugs & Pharmaceuticals said: "The scheme is expected to promote the production in the country and increase the value addition in exports as well as

create a positive impact on the pharmaceutical market revenues in the times to come. However, it's too early to see direct impact on revenue as of now."

Trade experts said India used to be self-sufficient in API production but cheaper alternatives from China resulted in the closure of those manufacturing units. "It is after covid-19 and Russia-Ukraine war that a lot of countries have realised the consequence of over-dependence on China for critical items like semi-conductors and APIs. India used to be self-sufficient in making APIs but cheaper alternatives resulted in the shutting down of manufacturing in India. Getting those back will not just happen due to the subsidy offered. An entire ecosystem to support manufacturing of critical items will be needed," a trade expert said.

As per the CII, Chinese active ingredients are about 20% to 30% cheaper than Indian products and incentives ranging up to 20% under PLI could help bridge the gap.

Queries emailed to department of pharmaceutical spokesperson and ministry of commerce remained unanswered till press time.

ravi.dutt@livemint.com

ACTIVE PHARMACEUTICAL INGREDIENTS (API)

(Syllabus: GS Paper 3 - Economy)

Context: The government has extended the last date for applications for manufacturing Active Pharmaceuticals Ingredients (APIs) under the PLI scheme after the sops it offered failed to create the expected response.

Active Pharmaceutical Ingredients (API)

- **About:** The active ingredients **contained in a medicine**.
 - It is that part of the medicine that produces the **intended therapeutic effects**.
 - For example, in a painkiller, the active ingredient relieves pain. In the OTC drug Crocin, the API is paracetamol.
 - Fixed-dose combination drugs use multiple APIs, while single-dose drugs like Crocin use just one API.
- **Components of Drugs:** All drugs contain two parts:
 - **API**
 - **Excipient:** These are **chemically inactive substances** that help deliver the API to the system. Eg. lactose, mineral oil, etc.
- **Manufacturing process:** API is not made by only one reaction from the raw materials but rather it becomes an API via several chemical compounds.
 - The chemical compound which is in the process of becoming an API from raw material is called an **intermediate**.
 - There are some APIs that pass **"through over ten kinds of intermediates"** in a process when it changes from being a raw material into an API.
 - The long manufacturing process is continued until it is purified and reaches a very high degree of purity.

Status of India

- **Self-reliant:** During the early 90s, India **was self-reliant in manufacturing APIs**.
- **Global status:** **China is the world's largest producer and exporter** of APIs and many of the Indian companies depend on imports of the ingredients to produce formulations.
 - Their cost of operation is one-fourth of India's cost. Even the cost of finance in China is 6-7 per cent against India's 13-14 per cent.

EX-PARTE INJUNCTION

Block Handles of Cong, Jodo Yatra: City Court to Twitter

Our Bureau

Bengaluru: A local court here on Monday directed Twitter to temporarily block the handles of the Indian National Congress (INC) and its Bharat Jodo Yatra, acting on a copyright infringement suit initiated by MRT Music alleging that the handles illegally used sound recordings of the film KGF-Chapter 2.

The court ruled that prima facie materials established that if the alleged illegal use of sound records was encouraged, the petitioner who was in the business of acquiring cinematography films, songs, music albums, etc. would suffer an irreparable injury and the same would also lead to encouraging piracy at large. MRT Music owns the music label of KGF-Chapter 2.

In its order of ex-parte injunction, the court directed Twitter to take down three links from its platform, besides blocking the handles of the INC and the Bharat Jodo Yatra.

Twitter didn't immediately respond to ET's email seeking comment. The Congress tweeted: "We have read on social media about an adverse order from a Bengaluru court against INC & BJY SM handles. We were neither made aware of nor present at court proceedings. No copy of the order has been received. We are pursuing all the legal remedies at our disposal."

MRT Music partner M Naveen Kumar said they got justice in round one. "We want everyone to respect our copyright," he said. MRT Music's counsel told the court that since the respondents were illegally using the company's music and infringing on its rights, it was necessary to ap-

point a commissioner to inspect and conduct an electronic audit and to preserve the infringing material on the Twitter handles of the INC and the yatra, as well as their Instagram, YouTube and Facebook accounts.

The court agreed with the demand and stated that the object of granting injunction would stand defeated if a commissioner was not appointed. It appointed an administrator of its computer section as local commissioner to visit the defendants' accounts, conduct an electronic audit and preserve infringing materials

COPYRIGHT ISSUE

Court was acting on a copyright infringement suit initiated by MRT Music alleging that the handles illegally used sound recordings of the film KGF-Chapter 2

available to prepare an inventory of the same.

The Bengaluru City Police had on Friday registered an FIR naming Congress general secretary Jairam Ramesh, its social media head Supriya Srinate and Rahul Gandhi on charges of copyright infringement by using movie songs in its Bharat Jodo Yatra without permission from the copyright owner, MRT Music. The music company had said it had filed the complaint only to enforce its statutory rights and had no intentions to tarnish the image of any political party.

COPYRIGHT LAW IN INDIA

(Syllabus: GS Paper 3 - Intellectual Property Rights)

Context: A local court here directed Twitter to temporarily block the handles of the Indian National Congress (INC) and its Bharat Jodo Yatra, acting on a copyright infringement suit initiated by MRT Music alleging that the handles illegally used sound recordings of the film KGF-Chapter.

Copyright Law in India

- **About:** A form of intellectual property protection granted under Indian law to the creators of original works of authorship such as literary works (including computer programs, tables and compilations including computer databases which may be expressed in words, codes, schemes or in any other form, including a machine readable medium), dramatic, musical and artistic works, cinematographic films and sound recordings.
- **Legal framework:** The **Copyright Act, 1957** provides copyright protection in India. It confers copyright protection in the following two forms:
 - **Economic rights of the author:** The copyright subsists in **original literary, dramatic, musical and artistic works;** cinematography films and sound recordings. The authors of copyright in the aforesaid works enjoy economic rights u/s 14 of the Act
 - **Moral Rights of the author:** Section 57 of the Act defines the **two basic 'moral rights of an author'**. These are:
 - **Right of paternity:** The right of paternity refers to a **right of an author to claim authorship** of work and a right to prevent all others from claiming authorship of his work.
 - **Right of integrity:** Right of integrity **empowers the author to prevent distortion**, mutilation or other alterations of his work, or any other action in relation to said work, which would be prejudicial to his honour or reputation.
 - **Commercial and non-commercial infringement:** The Indian Copyright Act makes a distinction between **commercial and non-commercial infringement**.
 - It allows the courts to impose a sentence of less than six months or a fine of less than Rs. 50,000. The imprisonment may extend up to three years.
 - The law criminalises those acts which grossly violate a copyrighted work. For example, Bollywood production house faces criminal investigations on the criminal complaints filed by scriptwriters.

SC upholds EWS quota in 3-2 split verdict, CJI in minority

50% Ceiling For
Reservation Not
Inviolable: Court

AmitAnand.Choudhary
@timesgroup.com

New Delhi: The Supreme Court on Monday, by a 3:2 verdict, upheld validity of the 103rd constitutional amendment carried out to provide legal sanction to the government's decision to carve out 10% reservation for the economically weaker sections from unreserved classes for admission in educational institutions and government jobs. It held that the 50% cap on quota is not inviolable and affirmative action on economic basis may go a long way in eradicating caste-based reservation.

A five-judge bench of Chief Justice U U Lalit and Justices Dinesh Maheshwari, S Ravindra Bhat, Bela M Trivedi

MAJORITY JUDGMENT

“Reservation for the EWS does not violate basic structure on account of 50% ceiling because **ceiling limit is not inflexible** —Justice Dinesh Maheshwari

Treating EWS as a separate class would be a reasonable classification. Just as equals cannot be treated unequally, unequals cannot be treated equally. **Treating unequals equally violates equality under the Constitution** —Justice Bela M Trivedi

It's necessary to take into review the manner of identification and ways of determining backward classes and also ascertain **whether the criteria adopted is relevant for today's conditions**. Though B R Ambedkar wanted it only for 10 years, it has continued for seven decades —Justice J B Pardiwala

► Why EWS quota became a tangled legal debate, P 13

di and J B Pardiwala approved the amendment by majority (3:2), which would push the total reservation to 59.5% in central institutions. However, all judges agreed that reservation on the basis of economic status was justified in the light of the constitutional amendment, while also app-

MINORITY RULING

“By excluding the poor among SC/ST/OBC... the amendment **practises constitutionally prohibited forms of discrimination**... Our Constitution does not permit exclusion and this amendment **undermines the fabric of social justice and thereby the basic structure**... the **'othering' of socially and educationally disadvantaged classes**... by excluding them from this new reservation on the ground that they enjoy pre-existing benefits is to heap **fresh injustice based on past disability** —Justice S Ravindra Bhat along with Chief Justice U U Lalit

► BJP: Victory for PM in social justice mission, P 13

roving the quantum of the quota going beyond the 50% ceiling that the apex court had laid down in the Indra Sawhney case.

In their dissenting verdict, CJI Lalit and Justice Bhat struck down the amendment holding the exclusion of SCs, STs and OBCs from the

► Outcome of process begun by MMS: Cong, P 13

purview of economic backwardness to be “discriminatory and arbitrary”. The judgment expands the grounds for affirmative action beyond social and educational backwardness to include economic backwardness.

► ‘First step...’, P 13

EWS RESERVATION

(Syllabus: GS Paper 2 - Social Justice)

Context: SC upheld EWS quota in 3-2 split verdict, CJI in minority.

EWS Reservation

- **About:** Economic reservation in jobs and admissions in educational institutes for Economically Weaker Sections (EWS).
- **Origin:** Introduced under the **103rd Constitution (Amendment) Act, 2019** by amending Articles 15 and 16.
 - It inserted **Article 15 (6) and Article 16 (6)**.
 - It **enables both the Centre and the States** to provide reservations to the EWS of society.
- **Objective:** Enacted to promote the welfare of the poor who are not covered by the 50% reservation policy.
 - This is **for all those candidates who are not covered under any reservations** (such as OBC, SC, ST and except PH and Ex-servicemen criteria) and belong to economically backward sections.
- **Eligibility conditions: Individual:**
 - should be a **‘general’ candidate** (not covered under reservation for SC, ST or OBC).
 - family's gross annual income should be **below Rs. 8 lakhs**.
 - This includes income from all sources such as agriculture, salary, business, etc. for the financial year before you apply for the exam.
 - In determining the family income for reservations, in the case of **OBC candidates, the income of the spouse is not included**. In contrast, it is **included in the case of EWS reservation**.
 - family should **not own agricultural land** of size 5 acres or more.
 - family **should not own a residential flat** of area 1000 square feet or more.
 - family **should not own a residential plot** (in notified municipalities) of an area 100 square yards or more.
 - family **should not own a residential plot** (other than in notified municipalities) of area 200 square yards or more.
 - The **land or property owned by the family in different locations** should be clubbed while checking the eligibility conditions for EWS reservations.
- **Definition of Family:** For this reservation, ‘family’ includes the following:
 - The **person** seeking the reservation.
 - His/her **parents**.
 - His/her **siblings** below the age of 18 years.
 - His/her **spouse and children** below the age of 18 years.

President's greetings on the eve of birthday of Guru Nanak Dev ji

Context: The President of India has greeted fellow-citizens on the eve of birthday of Guru Nanak Dev Ji.

Guru Nanak Dev

- **About:** born on 15 April 1469 at Nankana Sahib, Punjab, Pakistan to a Hindu family.
 - Guru Nanak referred to as **Baba Nanak** was the founder of Sikhism and is the **first of the ten Sikh Gurus**.
 - His birth is celebrated worldwide as **Guru Nanak Gurmurb on Katak Pooranmashi** ('full-moon of the Katak'), i.e. October–November.
 - He studied both Hinduism and Islam.
- **Guru Nanak's Teachings:**
 - **Ek Omkar:** There is only one god - a tenet that is stressed upon in the saying 'Ek Onkar'.
 - **Concept of god is 'Vahiguru':** An entity that is **shapeless, timeless, omnipresent and invisible**. Other names for God in the Sikh faith are Akaal Purkh and Nirankar.
 - Many concepts of Hinduism are also seen in Sikhism such as the concept of Maya, Kali Yuga, Jivamukta (salvation), reincarnation and karma.
 - Many believe Sikhism to be a bridge between Hinduism and Islam.
 - Guru Nanak **denounced idol worship and pilgrimages**.
 - He laid great **stress on purity of character and actions**.
 - Guru Nanak was **against caste-based distinctions**.
 - He also **denied the need for priests and rituals**.
 - **Concept of langar:** Guru Nanak introduced the concept of langar where **everybody partakes of a meal as equals**.
 - **Three pillars of the Sikh way of life:** Guru Nanak prescribed **three pillars of the Sikh way of life:**
 - **Naam Japo**, or keep the One God in your heart and in every breath.
 - **Kirat Karo**, or work hard and live an honest life with high moral and spiritual values.
 - **Vand Chhako** or share and consume - food, possessions, wealth and talent, with the community.
 - **Japji Sahib:** The Sikh thesis, that appears at the beginning of the **Guru Granth Sahib – the scripture of the Sikhs**.
 - It was **composed by Guru Angad**, and is mostly the writings of Guru Nanak.
 - His written compositions were **included in the Adi Granth compiled by Guru Arjan** (1563-1606), the fifth Sikh guru.
 - This came to be known as Guru Granth Sahib after the additions made by the 10th guru Guru Gobind Singh (1666-1708).

10 Sikh Guru		
1.	Guru Nanak	(1469 to 1539)
2.	Guru Angad	(1504 to 1552)
3.	Guru Amar Das	(1479 to 1574)
4.	Guru Ram Das	(1534 to 1581)
5.	Guru Arjan	(1563 to 1606)
6.	Guru Hargobind	(1595 to 1644)
7.	Guru Har Rai	(1630 to 1661)
8.	Guru Harkishan	(1656 to 1664)
9.	Guru Tegh Bahadur	(1621 to 1675)
10.	Guru Gobind Singh	(1666 to 1708)

President of India Presents National Florence Nightingale Awards 2021

Context: The President of India presented the National Florence Nightingale Awards for the year 2021 to the Nursing professionals at Rashtrapati Bhavan.

National Florence Nightingale Awards

- **Origin:** The Awards were instituted in the year 1973 by the **Ministry of Health and Family Welfare**, Government of India.
- **Named after:** The award is been named after the founder of modern nursing **Florence Nightingale**.
- **Objective:** The award is given as a mark of **recognition for the meritorious service rendered by the nursing professionals** in India.
- **Global Recognition:** To mark the 200th birth anniversary year of Florence Nightingale, the World Health Organisation (WHO) had announced the **year 2020 as the Year of the Nurse and Mid-Wife**.

Florence Nightingale

- **About:** A British **nurse, statistician, and social reformer** who is also considered as a foundational philosopher of modern nursing.
 - **Born in Florence, Italy**, on May 12, 1820.
- **Contribution:** Her signature effort came **during the Crimean War (1854-56)**, when she answered a government call for nurses and took a posting in Turkey.
 - The Crimean War was fought from October 1853 to February 1856 in which **Russia lost to an alliance of the Ottoman Empire, France, the United Kingdom and Piedmont-Sardinia**.
 - **Nightingale collected data**, calculated the mortality rate, and showed that an improvement of sanitary methods would reduce the number of deaths.
- **Lady with the Lamp:** She was **known for her night rounds** to aid the wounded, establishing her image as the 'Lady with the Lamp'.

Painting it red! Striking 'Blood Moon' to eclipse skies Nov 8

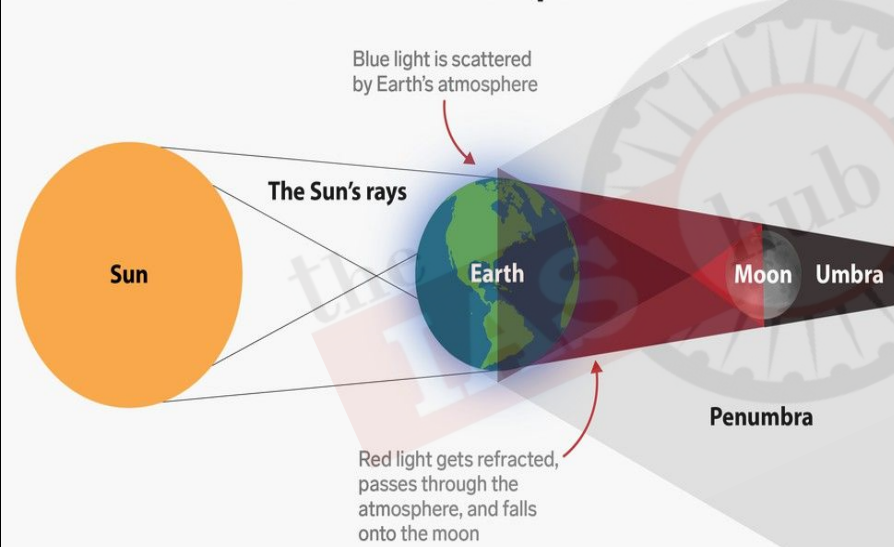
Next total lunar eclipse to happen in 2025



NEXT NEWS >

By Nandita Banerji

Published: Monday 07 November 2022

**How a total lunar eclipse works**

Context: For the second time this year, the moon will glow red in a total lunar eclipse, also called Full Beaver Blood Moon.

Lunar eclipse

- **About:** A lunar eclipse occurs when the **Moon, Earth and Sun align**, with **Earth** casting a complete shadow over the moon.
- **Total lunar eclipse:** When the **moon passes through the darkest part of the shadow**, called the umbra, it's known as a total lunar eclipse.
- **Red colour:** The red colour of the moon occurs **because of the refraction, filtering, and scattering** of light by Earth's atmosphere.
 - When the sun's rays reach the Earth, much of the blue and green light is scattered, while the orange and red colours remain visible.
- **Blood Moon:** The scattering is a phenomenon called Rayleigh scattering - named after the 19th-century British physicist John William Strutt also known as Lord Rayleigh - which also causes sunrises and sunsets.
 - This gives the moon a **reddish hue, leading to the name Blood Moon**.
- **Beaver Moon:** A November eclipse is called Beaver Moon because it happens during the month when **beavers (large, semiaquatic rodents in the genus Castor native to the temperate Northern Hemisphere)** begin taking shelter in their lodges
- **Precautions:** **No special eye protection is needed** for viewing a lunar eclipse, unlike solar eclipses (which occur during the daytime).

CLIMATE CHANGE

Loss and damage funding officially included in COP27 agenda

Loss and damage financing has been a long-standing demand of developing and vulnerable countries including India



NEXT NEWS >

By Jayanta Basu

Published: Sunday 06 November 2022

**INDIA'S CLIMATE TARGETS: EXISTING AND NEW**

Target (for 2030)	Existing: First NDC (2015)	New: Updated NDC (2022)	Progress
Emission intensity reduction	33-35 per cent from 2005 levels	45 per cent from 2005 levels	24 per cent reduction achieved in 2016 itself. Estimated to have reached 30 per cent
Share of non-fossil fuels in installed electricity capacity	40 per cent	50 per cent	41.5 per cent achieved by the end of June this year
Carbon sink	Creation of 2.5 to 3 billion tonnes of additional sink through afforestation	Same as earlier	Not clear.

Context: Countries have agreed to discuss providing financial support to address loss and damage caused by climate change at the 27th Conference of Parties (COP27) to the United Nations Framework Convention on Climate Change (UNFCCC) at Sharm El-Sheikh, Egypt.

Loss and Damage

- **About:** The term 'Loss and Damage' refers to the economic and non-economic impacts of climate change, including extreme events and slow onset events, in countries that are particularly vulnerable to the adverse effects of climate change.
- **Origin of the term:** Loss and Damage' was brought up as a demand in 1991 by the island country of Vanuatu, which was representing the Alliance of Small Island States (AOSIS).
- **Definition provided by United Nations Framework Convention on Climate Change (UNFCCC):** It refers to international efforts to avert, minimise and address loss and damage associated with climate change impacts, especially in developing countries that are particularly vulnerable to the adverse effects of climate change.
- **Relation to Climate change:** Anthropogenic climate change, or human-induced climate change, makes climate-related changes more frequent and severe. For instance, emissions from fossil fuels are one of the largest contributors to climate change.
- **India's stand:** India has stated that "Loss and damage" due to climate change will be a major topic for its discussions at COP27.
- **India's commitments:** According to the updated Nationally Determined Contributions (NDCs), India is committed to reducing the emissions intensity of its Gross Domestic Product by 45 per cent by the year 2030, from the 2005 level.
 - Additionally, India is also committed to achieving 50 percent cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030.

THANK YOU!



t.me/theiashub



[/mkyadav](https://www.youtube.com/channel/UCmkyadav)



www.theiashub.com/daily-quiz



9560082909