

Current Affairs Update (June1-6)

National

YUVA scheme

- Ministry of Education has launched "YUVA- Prime Minister's Scheme for Mentoring Young Authors".
- YUVA stands for "Young, Upcoming and Versatile Authors". The scheme is in line with PM's vision of encouraging young writers to write about India's freedom struggle.
- YUVA is a part of India@75 Project which seeks to bring perspectives of young generation of writers on themes including Freedom Fighter, Unsung Heroes, Unknown and Forgotten Places etc.
- YUVA is an Author Mentorship programme which will train young and budding authors aged below 30 years to in order to promote reading, writing and book culture in India. It will also project India and Indian writings worldwide.

SAGE project

- Social Justice and Empowerment Minister, Thaawar chand Gehlot, will launch Senior care Ageing Growth Engine or SAGE project on June 4, 2021.
- SAGE project will be launched to select, support and create "one-stop access" of elderly care products and services provided by credible start-ups.
- This scheme was required in the light of increasing share of elders. As per a survey, share of elders with respect to total population in percentage term is expected to increase from 7.5 per cent in 2001 to about 12.5 per cent by 2026.

Kaleidoscopic Effect

Recently, people of Bangalore observed a bright rainbow ring around sun for a few seconds. This is a rare optical and atmospheric phenomenon known as Kaleidoscopic Effect which is also known as "22-degree circular halo".

22-degree circular halo is observed around sun and occasionally around Moon. So, it is also called a moon ring or winter halo. This phenomenon occurs when rays from sun or moon get refracted through hexagonal ice crystals present in cirrus clouds.

Justice A.K. Mishra to head NHRC

• Former Supreme Court judge Arun Kumar Mishra will be new chairperson of **the National Human Rights Commission (NHRC).**



- The appointment was made by the selection panel consisting of Prime Minister, Home Minister, Deputy Chairman of the Rajya Sabha, Lok Sabha Speaker and the Leader of Opposition.
- NHRC, established in 1993, is an independent **statutory body** as per the provisions of **the Protection of Human Rights Act of 1993**.

AmbiTAG

- AmbiTAG is India's first indigenous temperature data logger for cold chain management.
- It is an Internet-of-Things (IoT) device that records real-time ambient temperature during the transportation of perishable products, vaccines and even body organs and blood.
- Developed by **IIT Ropar.**

Model Tenancy Act

The Union Cabinet has approved **the Model Tenancy Act (MTA).** States and Union territories can now adopt the Model Tenancy Act by enacting fresh legislation or they can amend their existing rental laws suitably.

Highlights of the Model Law:

- 1. Applicable prospectively and will not affect the existing tenancies.
- 2. Written agreement is a must for all new tenancies. The agreement will have to be submitted to the concerned district 'Rent Authority'.
- 3. The law also speaks about roles and responsibilities of landlord and tenants.
- 4. No landlord or property manager can withhold any essential supply to the premises occupied by the tenant.
- 5. If tenancy has not been renewed, the tenancy shall be deemed to be renewed on a month-tomonth basis on the same terms and conditions as were in the expired tenancy agreement, for a maximum period of six months.
- 6. **Compensation in case of non-vacancy:** On the expiry of extended period of six months of agreed tenancy period or the termination of tenancy by order or notice, the tenant shall be a tenant in default and liable to pay **compensation of double of the monthly rent for two months and four times of the monthly rent thereafter.**
- 7. A landowner or property manager may enter a premise in accordance with written notice or notice through electronic medium served to the tenant at least twenty-four hours before the time of entry.



International

What Germany recognising the colonial-era genocide in Namibia means for the African nation?

Germany for the first time has recognised that it committed **genocide against the Herero and Nama people in present-day Namibia** during its colonial rule over a century ago. Germany has also announced **a fund of €1.1 billion (\$1.2 billion) to help aid community projects in Namibia.**

Historical background: Between **1904 and 1908**, German colonial settlers killed tens of thousands of men, women and children from **the Herero and Nama tribes** after they rebelled against colonial rule in what was then called **German South West Africa**.

Important events- the Battle of Waterberg: around 80,000 Herero, including women and children, were chased across the desert by German troops. A mere 15,000 survived.

How long was the present day Namibia under the control of Germans?

Between 1884 and 1890, Germany formally colonised parts of present-day Namibia. The Germans continued to rule the region till 1915, following which it fell under South Africa's control for 75 years. Namibia finally gained independence in 1990.

Rwanda genocide

French President Emmanuel Macron has said he recognised his country's role in **the Rwandan genocide** and hoped for forgiveness. This comes after years of Rwandan accusations that France was complicit in the 1994 atrocities.

Rwanda is a landlocked country in central Africa. Its Capital is Kigali. Population composition: Hutus – majority, Tutsi – Minority.

What is Rwanda genocide?

The Rwandan genocide, also known as the **genocide against the Tutsi**, was a genocidal mass **slaughter of Tutsi in Rwanda** by members of **the Hutu majority government**. An estimated more than 800,000 Rwandans were killed during the 100-day period from April 7 to mid-July 1994.

Economic Community of West African States (ECOWAS)

The Economic Community of West African States (ECOWAS) is attempting to mediate to solve the crisis in Mali.

Since 1960, when Mali gained independence from France, there have been five coups — and only one peaceful transition from one democratically elected president to another.



Recent coup: Nine months ago, President Ibrahim Boubacar Keita was overthrown in the wake of **mass anti-government protests.** Last week, the announcement of a new cabinet was made that excluded two key military leaders. Following this, the army has detained the President and the Prime Minister.

About ECOWAS:

- It is a regional political and economic union of fifteen countries located in West Africa.
- Established in **1975**, with the signing of **the Treaty of Lagos**.
- The goal of ECOWAS is to achieve "collective self-sufficiency" for its member states by creating a single large trade bloc by building a full economic and trading union.
- It also serves as a peacekeeping force in the region.
- Considered one of the pillar regional blocs of the continent-wide African Economic Community (AEC).

New Zealand signs space agreement with NASA

New Zealand has become the latest country to sign "space agreement with NASA" with the objective of boosting nascent space industry of New Zealand.

New Zealand is the eleventh signatory to Artemis Accords. Artemis Accords is a blueprint for space cooperation and supporting NASA's plan to return humans to moon by 2024. It also supports NASA's plan of launching historic human mission to Mars.

Artemis accords are an international agreement and American-led effort which seeks to relaunch humans to Moon by 2024. Agreement was signed by governments participating in Artemis programme with the objective of expanding and deepening space exploration.

China to allow couples to have third child

Days after China's census data showed population growth slipping to its slowest rate since the 1950s, the country has announced it will now allow **three children per married couple.** Five years ago in 2016, it first relaxed its controversial **one-child policy to two.**

China embarked upon its one-child policy in 1980, when the Communist Party was **concerned that the country's growing population, which at the time was approaching one billion, would impede economic progress.** It was **enforced through several means,** including incentivising families financially to have one child, making contraceptives widely available, and imposing sanctions against those who violated the policy.



Science-Tech & Environment

H10N3 bird flu

First Human case of H10N3 bird flu was reported in eastern province of **Jiangsu** in China. H10N3 is a low pathogenic or less severe strain of virus in poultry. The risk of it transmitting on a large scale is also very low. In about 40 years, only 160 isolates of this virus were reported, in wild birds or waterfowl across Asia and North America. It has not been detected in chickens.

Reason for current outbreak: Accidental cross-species transmission

Spread and transmission: Infected birds shed avian flu in their saliva, mucus, and poop, and humans can get infected when enough of the virus gets in the eyes, nose, or mouth, or is inhaled from infected droplets or dust.

Classification: Influenza viruses are classified into subtypes based on two surface proteins, **Hemagglutinin (HA) and Neuraminidase (NA).**

History: H5N1 variant that first infected people in 1997 has been the most deadly, killing 455 people globally so far. Russia reported the first human infection with the H5N8 virus that caused huge damage on poultry farms across Europe, Russia and East Asia last winter.

Practice question: Choose correct statement among the following

- 1. Bird flu is a highly contagious bacterial disease affecting several species of food-producing birds as well as pet birds and wild birds.
- 2. If the infection is detected in animals, a policy of culling infected and contact animals is normally used in an effort to rapidly contain, control and eradicate the disease.

a) 1 only b) 2 only c) Both 1&2 d) None of the above

WHO names COVID-19 variants found in India

World Health Organisation (WHO) has recommended several names, to label emerging coronavirus variants of global concern, after four letters of Greek alphabet. It named B.1.617.2 variant, identified first in India, as Delta. 'UK variant' was named as 'Alpha'.

'World Neglected Tropical Diseases Day'

Delegates at the 74th World Health Assembly unanimously adopted a proposal by the United Arab Emirates. to declare January 30 as 'World Neglected Tropical Diseases (NTD) Day''.

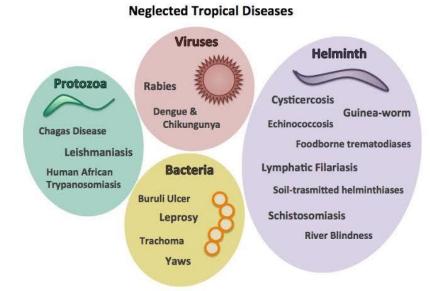
What are Neglected Tropical Diseases?



They are **infections that are most common among marginalised communities** in the developing regions of Africa, Asia and the Americas. **Caused by** a variety of pathogens such as viruses, bacteria, protozoa and parasitic worms.

They **generally receive less funding for research and treatment** than malaises like tuberculosis, HIV-AIDS and malaria. **Some examples** include snakebite envenomation, scabies, yaws, trachoma, Leishmaniasis and Chagas disease.

Why was January 30 chosen? It was on this day that the London Declaration on NTDs was adopted, January 30, 2012.



Chinese 'Artificial Sun' Experimental Fusion Reactor

China's **Experimental Advanced Superconducting Tokamak (EAST)**, also known as **'Artificial Sun' experiment**, has set **a new record in the latest experiment**, where it achieved a plasma temperature of 216 million Fahrenheit (120 million C) for 101 seconds.

It is believed that **the temperature at the core of the Sun is 15 million C**, which also means that the temperature produced by (EAST) is **nearly seven times that of the Sun.** It is a significant step in the country's quest to unlock clean and limitless energy, with minimal waste products.

What is EAST?



The mission mimics **the energy generation process of the sun.**The reactor consists of **an advanced nuclear fusion experimental research device** located in Hefei, China. It is **one of three major domestic tokamaks** that are presently being operated across the country.

The EAST project is part of **the International Thermonuclear Experimental Reactor (ITER)** facility, which will become **the world's largest nuclear fusion reactor when it becomes operational in 2035.**

The ITER project includes the contributions of several countries, including India, South Korea, Japan, Russia and the United States.

Davinci+ and Veritas

- American space agency, NASA, has announced its two new robotic missions namely Davinci+ and Veritas, to Venus to examine atmosphere and geological features on the planet.
- **Davinci+** is "Deep Atmosphere Venus Investigation of Noble gases, Chemistry, and Imaging" mission. It will measure atmosphere of Venus to gain insight into how it formed and evolved. It also seeks to determine whether Venus ever had an ocean.
- Veritas Mission is called as "Venus Emissivity, Radio Science, InSAR, Topography, and Spectroscopy". It will map surface of Venus to understand its geologic history. It will also investigate how it developed differently than Earth.

UN Decade on Ecosystem Restoration' report

- UN Environment Programme (UNEP) and Food & Agriculture Organisation of UN (FAO) launched 'UN Decade on Ecosystem Restoration' report for 2021-2030 and called on nations to meet commitments of restoring 1 billion hectares of land.
- As per the report, world is facing triple threat of climate change, loss of nature and pollution. So, world must deliver on its commitment to restore at least one billion degraded hectares of land (equal to size of China) in next decade.
- UN Decade on Ecosystem Restoration 2021-2030 has called for protection and revival of ecosystems across the world. It aims to stop degradation of ecosystems and restore them to achieve global goals.

Economics

IPO grey market

Generally, when companies wish to raise funds to fuel their growth, they sell a part of their stock on the stock market. This process is called **an initial public offering, or IPO.** But, an IPO grey market is **an unofficial market** where IPO shares or applications are bought and sold **before they become available for trading on the stock market.** It is also termed **a parallel market or an over-the-counter market.**



Is it legal? How is it governed?

Since it's unofficial, inevitably, there are no regulations that govern it. The Securities and Exchange Board of India (SEBI), stock exchanges, and brokers have no part to play in it. These transactions are undertaken in cash on a one-on-one basis.

What is the Kostak rate?

It relates to an IPO application. So, **the rate at which an investor buys an IPO application before the listing is termed** the Kostak rate.

Research Design & Standards Organization (RDSO)

Indian Railways' **Research Design & Standards Organization (RDSO)** has recently become **the nation's first institution to be declared as Standard Developing Organization (SDO)** under the mission called **"One Nation One Standard"** on Bureau of Indian Standards.

"One Nation One Standard":

- The mission was envisioned on the line of **'one nation, one ration card' scheme** in order to ensure quality products in the country.
- The purpose is **to converge multiple standards with the BIS** which is a recognised national body for standardisation in India.
- The idea is to develop one template of standard for one given product instead of having multiple agencies set it.



Current Affairs Update (June7-13)

National

SDG India Index

First launched in December 2018, the index has become the primary tool for monitoring progress on the SDGs in India. It has also fostered competition among the states and UTs by ranking them on the global goals.

The index is developed in collaboration with **the United Nations in India.** It tracks the progress of all states and UTs on 115 indicators aligned with **the National Indicator Framework (NIF)** of the Ministry of Statistics and Programme Implementation.

How are states and UTs ranked?

The SDG India Index scores range between **0–100**, higher the score of a State/UT, the greater the distance to target achieved.

States and UTs are classified in four categories based on Index score:

- 1. Aspirant: 0–49.
- 2. Performer: 50–64.
- 3. Front-runner: 65–99.
- 4. Achiever: 100.

Currently, there are no states in the aspirant and achiever category.

What are its latest findings?

- **Country's overall SDG score improved by 6 points** from 60 in 2019 to 66 in 2020-21. This improvement is on accounts of improvement in performance in providing facilities including clean water and sanitation, affordable and clean energy among others.
- Kerala retained its rank as the top with a score of 75, Himachal Pradesh and Tamil Nadu both took the second spot with a score of 74.
- Bihar, Jharkhand and Assam were the worst performing states in this year's India index.
- Chandigarh maintained its top spot among the UTs with a score of 79, followed by Delhi (68).



Performance Grading Index (PGI) 2019-20

- Education Minister, Ramesh Pokhriyal Nishank, approved release of the Performance Grading Index (PGI) 2019-20.
- PGI provides grading to States and Union Territories on the basis of 70 parameters to assess and catalyse transformational change in education.
- 5 states & union territories namely Chandigarh, Punjab, Tamil Nadu, Andaman & Nicobar Islands and Kerala attained highest grade (Grade A++) for 2019-20.
- Bihar and Meghalaya have scored the lowest in terms of infrastructure and facilities.
- Ladakh was graded for first time and was placed in Grade VII.

State of India's Environment Report 2021

- According to State of India's Environment Report 2021, India's rank has dropped by two places to 117 as compared to 2020 ranking on 17 Sustainable Development Goals (SDGs).
- SDG goals were adopted as a part of 2030 agenda by 193 United Nations member states in 2015.
- In 2020, India's rank was 115 and has dropped by two places because of major challenges pertaining to SDG2, SDG 5 and SDG 9.
- As per the report, Jharkhand & Bihar are least prepared to meet SDGs by 2030.
- Jharkhand lags in five SDGs while Bihar lags on seven factors.
- States and UTs with best overall score are Kerala, Himachal Pradesh and Chandigarh are on path of achieving SDGs.

Clean Energy Ministerial's (CEM) – Industrial Deep Decarbonization Initiative (IDDI)

India along with Govt. of United Kingdom launched new workstream to promote industrial energy efficiency under the Clean Energy Ministerial's (CEM) – Industrial Deep Decarbonization Initiative (IDDI) at the 12th Chief Energy Ministerial (CEM).

What is Industrial Deep Decarbonization Initiative (IDDI)?

• It is a global coalition of public and private organisations who are working to stimulate demand for low carbon industrial materials.



- In collaboration with national governments, IDDI works to standardise carbon assessments, establish ambitious public and private sector procurement targets, incentivise investment into low-carbon product development and design industry guidelines.
- Coordinated by United Nations Industrial Development Organization (UNIDO)
- **Members:** The IDDI is co-led by the UK and India and current members include Germany and Canada.

About Clean Energy Ministerial (CEM):

- It was established in December 2009 at the UN's Framework Convention on Climate Change conference of parties in Copenhagen.
- CEM is a high-level global forum to promote policies and programs that advance clean energy technology, to share lessons learned and best practices, and to encourage the transition to a global clean energy economy.
- 29 countries are part of CEM including India.

NTPC joins UN's CEO Water mandate

India's largest power utility, NTPC Ltd, has become a signatory of **UN Global Compact's CEO Water** Mandate.

CEO Water Mandate: It is a **UN Global Compact initiative** which demonstrates commitment and efforts of companies to enhance their water and sanitation agendas in line with **Sustainable Development Goals.**

It has been designed to assist companies in developing, implementing and disclosing comprehensive water strategies and policies.

It provides a platform for companies to link with like-minded businesses, public authorities, UN agencies, civil society organizations etc.

International

Sri Lanka braces for oil spill from sinking cargo vessel

Singapore-registered MV X-Press Pearl, carrying chemicals and plastic, has been in news since a fire incident on May 20 and subsequent explosion aboard, following which tonnes of plastic pellet deposits were found deposited along **Sri Lanka's** beaches.

OECD defines an oil spill as oil, discharged accidentally or intentionally, that floats on the surface of water bodies as a discrete mass and is carried by the wind, currents and tides. Oil spills can pollute land, air, or water, though it is mostly used for oceanic oil spills.



Effects of oil spills:

Ecosystem Destruction: Oil spills can have a major impact on the temporary animal and fish loss of habitat. Heavy oils may affect several organism functions like respiration, feeding, and **thermo-regulation.**

It can affect living beings in case of direct contact with the environment polluted with spilled oil components (some of which may persist a long time), such as drinking polluted water or breathing polluted dust particles.

Effects on flora: If the oil washes into coastal marshes, mangrove forests, or other wetlands, fibrous plants and grasses absorb oil, which can damage plants and make the area unsuitable as wildlife habitat.

On Marine Organisms: Oil spills frequently kill marine mammals such as whales, dolphins, seals, and sea otters.

On Birds: Oil spills also damage nesting grounds, potentially causing serious long-term effects on entire species.

'Sea snot' outbreak in Turkey

Turkey's Sea of Marmara, that connects the Black Sea to the Aegean Sea, has witnessed the largest outbreak of 'sea snot'. The sludge has also been spotted in the adjoining Black and Aegean seas.

What is sea snot?

It is a slimy layer of grey or green sludge, which can cause considerable damage to the marine ecosystem. It is formed when algae are overloaded with nutrients. It is also known as marine mucilage.

A 'sea snot' outbreak was **first recorded in the country in 2007.** Back then, it was also spotted in the Aegean Sea near Greece.

Overloading of nutrients happens because of warm weather caused by global warming, water pollution, uncontrolled dumping of household and industrial waste into the seas etc.

Significance of Marmara Sea: The Marmara Sea, an important ecosystem and waterway between the Aegean and the Black Sea, is home to richly diverse marine life, including mussels, crabs, clams, coral and around 230 species of fish.

What are the impacts?

- It has spread through the sea south of Istanbul and also blanketed harbours and shorelines.
- It is posing a severe **threat to the marine ecosystem of the country- it** has caused mass deaths among the fish population, and also killed other aquatic organisms such as corals and sponges.



- If unchecked, this can collapse to the bottom and cover the sea floor, causing major damage to the marine ecosystem.
- Over a period of time, it could end up poisoning all aquatic life, including fishes, crabs, oysters, mussels and sea stars.
- Besides aquatic life, the 'sea snot' outbreak has also affected the livelihoods of fishermen.
- It can also cause **an outbreak of water-borne diseases** such as cholera in cities like Istanbul.

India elected to UN Economic and Social Council

India was elected to the United Nations Economic and Social Council (ECOSOC) for 2022-2024 terms. India has been selected in Asia-Pacific States category. Other elected countries include Oman, Afghanistan and Kazakhstan.

ECOSOC is a 54-member Economic and Social Council, established in 1954 by a United Nations charter. Being the heart of United Nations system, it helps in advancing economic, social and environmental dimensions of sustainable development. It organises follow-up, major UN conferences and summits. Promotion of high standards of living, full employment, economic & social progress, identifying solutions for global economic, social & health problems etc are important functions of ECOSOC.

UN Security Council endorses Secretary General Guterres for second term

The **United Nations Security Council** has endorsed **Secretary-General** Antonio Guterres for a second five-year term- from 1 January 2022 to 31 December 2026. The Security Council recommends a candidate for the General Assembly's 193 members to appoint. Although all UN members get a voice in the secretary-general's selection, **the five permanent members of the Security Council hold the most influence.** Any one of them can eliminate a nominee with a veto.

Operation Pangea XIV

- A record number of fake online pharmacies have been shut down under Operation Pangea XIV targeting the sale of counterfeit and illicit medicines and medical products.
- The operation coordinated by **INTERPOL** involved police, customs and health regulatory authorities from 92 countries.
- It resulted in 113,020 web links including websites and online marketplaces being closed down or removed, the highest number since the first Operation Pangea in 2008.

QS World University Rankings 2022

Leading global higher education analysts QS (Quacquarelli Symonds) has released the 18th edition of one of the most-consulted international university rankings. It is the only international ranking to have received the approval of International Ranking Expert Group (IREG).



QS uses six indicators to compile the ranking: Academic reputation (AR), employer reputation (ER), citations per faculty (CPF), faculty/student ratio, international faculty ratio and international student ratio.

Top 3 in the world:

- 1. The Massachusetts Institute of Technology achieved a record-extending 10th consecutive year as world number-one.
- 2. The University of Oxford has risen to second for the first time since 2006.
- 3. The Stanford University and the University of Cambridge share third spot.

Performance of Indian Institutes: Indian Institute of Science (IISc), Bengaluru, Indian Institute of Technology (IIT) Bombay and IIT Delhi remained **the three universities from India to rank in the top-200 positions.**

Legalisation of Bitcoin in El Salvador

El Salvador, a small coastal country in Central America, has become the first in the world to make Bitcoin legal.

Science-Tech & Environment

NASA sends water bears, baby squid to the International Space Station

Nasa has sent glow-in-the-dark baby squids and about 5,000 tardigrades, also called water bears, to the International Space Station. They were part of the 22nd SpaceX cargo resupply mission.

Objectives of these new experiments:

- 1. To help scientists design improved protective measures for astronauts going on long-duration space travel.
- 2. To understand how beneficial microbes interact with animals, potentially leading to breakthroughs in improving human health on Earth.

The International Space Station: A space station is essentially a large spacecraft that remains in lowearth orbit for extended periods of time. It is a result of cooperation between the five participating space agencies that run it: NASA (United States), Roscosmos (Russia), JAXA (Japan), ESA (Europe), and CSA (Canada).



Raimona – Sixth national park of Assam

According to Chief Minister of Assam, Himanta Biswa Sarma, Raimona reserve forest in Kokrajhar district has been upgraded to sixth national park of Assam. This forest comes under Bodoland Territorial Region (BTR) across the border with Bhutan.

Assam has five national parks-

- 1. Kaziranga National Park
- 2. Manas National Park,
- 3. Nameri National Park,
- 4. Orang National Park and
- 5. Dibru-Saikhowa National Park.

Dihing Patkai is **Assam's 7th National Park. Assam now has the third most National Parks** after the 12 in Madhya Pradesh and nine in the Andaman and Nicobar Islands.

E-100 pilot project

- Prime Minister, Narendra Modi, launched E-100 pilot project on the occasion of World Environment Day in Pune. This ambitious project was launched with the aim of setting up a network for production and distribution of ethanol in India.
- Ethanol Blending in petrol is being adopted by many countries including India in a bid to reduce vehicle exhaust emissions and reduce import burden on crude petroleum. Presently, bioethanol blending in petrol stands at 5%, which can replace around 1.8 million Barrels of crude oil.
- Government resolved to achieve target of 20 percent ethanol blending in petrol by 2025.

Economics

G7 corporate tax deal

Finance ministers from wealthy G7 nations have endorsed **a new global corporate tax deal.** The agreement will now be discussed in detail at a meeting of G20 financial ministers and central bank governors in July.

Highlights of the new deal:

1. The aim is **to counter tax avoidance** to make companies pay in the countries where they do business.



2. The agreement commits states to **a global minimum corporate tax rate of 15%** to avoid countries undercutting each other.

Need for a minimum rate:

- 1. The decision to ratify a 15% floor rate follows from a declaration of war on low-tax jurisdictions around the globe by the US.
- 2. The rationale behind this move is **to discourage the shifting of multinational operations and profits overseas.**

Issues/problems with the plan:

- 1. Impinges on the right of sovereign nations to decide a nation's tax policy.
- 2. A global minimum rate would essentially take away a tool that countries use to push policies that suit them.
- 3. Also, a global minimum tax rate will do little to tackle tax evasion.

State GK

Haryana to create 80 acres of 'Oxi-van'

Chief Minister of Haryana, Manohar Lal Khattar, announced to create 80 acres of 'Oxi-van' (a forest) in Karnal district. It was announced on the occasion of World Environment Day on June 5, 2021.

On the occasion, highlighting importance of trees and encouraging promotion, protection, planting of trees Haryana Government launched four important schemes:

- 1. Prana Vayu Devta Pension Scheme
- 2. Oxi-Van in Karnal
- 3. Oxi-Van in Panchkula
- 4. Panchavati Plantation in Haryana



Current Affairs Update (June14-20)

National

The history of Tulu and the demand for official language status

- Clamour grows for **Tulu to be included in the eighth schedule of the Constitution** and given **official language status in Karnataka and Kerala.**
- Tulu is a Dravidian language spoken mainly in two coastal districts Dakshina Kannada and Udupi of Karnataka and Kasaragod district of Kerala.
- Robert Caldwell (1814-1891), in his book, A Comparative Grammar of the Dravidian or South-Indian Family of Languages, called Tulu "one of the most highly developed languages of the Dravidian family".

Eighth schedule to the Constitution: Part XVII of the Indian constitution deals with **the official languages in Articles 343 to 351.**

The Constitutional provisions related to the Eighth Schedule are:

Article 344: Article 344(1) provides for the constitution of **a Commission** by the President on expiration of five years from the commencement of the Constitution.

Article 351: It provides for the spread of the Hindi language to develop it so that it may serve as a medium of expression for all the elements of the composite culture of India.

New Policy for Declassification of War Histories

- Under this policy, Ministry of Defence (MoD) will archive, declassify, compile and publish war and operations histories.
- However, declassification of older wars like of 1962 war is not automatic.
- Declassification will be taken up on case-by-case basis by a committee which will be constituted under the new policy.
- As per policy, records should ordinarily be declassified in 25 years.
- Records which are older than 25 years should be appraised by archival experts and transferred to National Archives of India after histories of war or operations have been compiled.



'One Nation One Ration Card' scheme

The Supreme Court has asked the West Bengal government to implement **the One Nation One Ration Card scheme** "immediately" to help beneficiaries, especially migrant workers, to avail of subsidised food commodities from anywhere in the country. Apart from West Bengal, Assam, Chhattisgarh and Delhi are the other states yet to implement it.

Supreme Court closes criminal case against Italian Marines

The Supreme Court has closed a criminal case initiated against two **Italian marines** who killed two fishermen off the Kerala coast, setting the stage for the Italian government to try them in their own country as per **an international tribunal award**.

It has also accepted the additional compensation of Rupees 10 crores offered by the Republic of Italy to the victims of the 2012 sea-firing incident which took place near Kerala coast.

Article 142: The Government of India urged the Court to invoke the extraordinary power under Article 142 of the Constitution to quash the criminal cases against Marines, as the international tribunal under the United Nations Convention on Law of Seas had ruled that India lacks the jurisdiction to criminally prosecute them.

International

Pulitzer Prize 2021

- Pulitzer Prize 2021 was recently conferred recently. Megha Rajagopalan, an Indian-origin journalist, has won this top journalism award of USA on June 11, 2021.
- She has won Prize for innovative investigative reports exposing infrastructure of prisons and mass internment camps which were built secretly by China and detained Muslims in Xinjiang region.
- Other two winners are Tampa Bay Times' Neil Bedi who won for local reporting and Kathleen McGrory who has been awarded for series exposing a Sheriff's Office initiative which used computer modelling to identify some 1000 people who could be future criminals.

G7 meet

The leaders of seven nations — the U.S., Germany, the U.K., France, Canada, Japan and Italy — met in Cornwall in **south-west England**, marking the 47th edition of the "Group of seven" summit.



The United Kingdom had invited **India, Australia and South Korea** to attend the G7 summit that was scheduled to be held in June as "guest countries"

Highlights:

- G-7 leaders agreed to raise their contributions to meet an overdue spending pledge of \$100 billion a year to help poorer countries cut carbon emissions and cope with global warming.
- Addressing the First Outreach Session of G7 summit, Prime Minister Narendra Modi conveyed India's commitment to "collective" solution to global health challenges.
- Prime Minister Modi called for **"one earth, one health" approach** which aims for unity and solidarity among the states of the world to deal with the pandemic.
- The Finance Ministers of the G7 had met on June 4-5 in the run-up to the summit and had agreed to backing a minimum global tax rate of **15% for multinational corporations**, thereby setting the stage for MNCs to pay a fairer share of taxes in jurisdictions where they make money and profits, rather than playing governments in a race where they will compete on who will tax them the least and allowing MNCs to take advantage of "tax havens".

NATO Summit

NATO Summit was held recently in Brussels. It brought together the leaders of all 30 Allied nations.

Outcomes of the meet:

- The heads of the NATO countries said they "remain firmly committed to NATO's founding Washington Treaty, including that an attack against one Ally shall be considered an attack against us all, as enshrined in Article 5."
- 2. It included language about **updating Article 5 to include major cyberattacks**, which have become a significant and growing concern.

About North Atlantic Treaty Organization: It is an intergovernmental military alliance. Established by Washington treaty. Treaty that was signed on 4 April 1949.

Headquarters — Brussels, Belgium.

Composition: Since its founding, the admission of new member states has increased the alliance from the original 12 countries to 30. The most recent member state to be added to NATO was North Macedonia on 27 March 2020.

ASEAN Defence Ministers' Meeting Plus (ADMM-Plus)

8th ASEAN Defence Ministers Meeting (ADMM) Plus was held recently. It is being hosted by Brunei as it is the chair of the ASEAN grouping this year.



About ADMM- Plus: Consistent with the ADMM guiding principles of open and outward looking, the 2nd ADMM in Singapore in 2007 adopted the Concept Paper to establish the ADMM-Plus.

The **ADMM-Plus is a platform for ASEAN and its eight Dialogue Partners** to strengthen security and defence cooperation for peace, stability, and development in the region.

Eight Dialogue Partners are Australia, China, India, Japan, New Zealand, Republic of Korea, Russia and the USA (collectively referred to as **the "Plus Countries"**).

It aims to promote mutual trust and confidence between defence establishments through greater dialogue and transparency

Stockholm International Peace Research Institute (SIPRI) Year Book 2021

Swedish think tank **Stockholm International Peace Research Institute (SIPRI)** has released its Year Book 2021.

Key findings:

- India possessed an estimated 156 nuclear warheads at the start of 2021, compared with 150 at the start of last year, while Pakistan had 165 warheads, up from 160 in 2020.
- China's nuclear arsenal consisted of 350 warheads, up from 320 at the start of 2020.
- The nine nuclear armed states the U.S., Russia, the U.K., France, China, India, Pakistan, Israel and North Korea together possessed an estimated 13,080 nuclear weapons at the start of 2021.
- Russia and the U.S. together possessed over 90% of global nuclear weapons.

Naftali Bennett: New Prime Minister of Israel

49-year-old, Naftali Bennett has become new Prime Minister of Israel. He is a religious-nationalist and a multi-millionaire former tech entrepreneur who has also served as defence minister. With this win, he has ended 12 unbroken years of Prime Minister Benjamin Netanyahu at the helm.

Novak Djokovic clinches French open Men's Singles title

Novak Djokovic has won his 19th Grand Slam title in French open 2021 in Men's single category at Roland Garros in Paris. He has become the first man in Open Era to win all 4 Grand Slams at least twice. He is the third man to win all Grand Slams after Roy Emerson and Rod Laver.



Science-Tech & Environment

European Space Agency's EnVision mission to Venus

European Space Agency (ESA) has announced that it has selected EnVision as its next orbiter that will visit Venus sometime in the 2030s.

What is EnVision?

EnVision is an ESA led mission with contributions from **NASA**. It will be launched on an Ariane 6 rocket, the spacecraft will take about 15 months to reach Venus and will take 16 more months to achieve orbit circularisation.

Objectives: To study the planet's atmosphere and surface, monitor trace gases in the atmosphere and analyse its surface composition. A radar provided by NASA will help to image and map the surface.

Other missions to Venus:

- NASA recently selected two missions to the planet Venus- DAVINCI+ and VERITAS
- Previously, an ESA-led mission to Venus called **'Venus Express'** (2005-2014) focussed on atmospheric research and pointed to volcanic hotspots on the planet's surface.
- The first spacecraft to Venus was the Soviet Union's Venera series, followed by NASA's Magellan Mission that studied Venus from 1990-1994.
- As of now, Japan's Akatsuki mission is studying the planet from Orbit.

Deep Ocean Mission

- Union Cabinet has approved 'Deep Ocean Mission' proposed by **Ministry of Earth Sciences** to conduct study on biodiversity, impact of climate change and to establish an offshore marine station in order to explore source of thermal energy.
- Mission will be completed in an estimated budget of Rs 4,077 crores in five-year period. It is an Indian initiative to undertake deep ocean exploration.
- It focuses on India's exclusive economic zones and continental shelf. Mission comprise of various **manned and unmanned submersibles** to explore sea bed.
- **Main aim** of this mission is to explore & extract **polymetallic nodules** which are composed of minerals such as nickel, manganese, copper, cobalt and iron hydroxide. These metals are useful in manufacturing electronic devices, smartphones, solar panels and batteries.



What is Operation Olivia?

Operation Olivia was started by the **Indian Coast Guard** (ICG), first in early 1980s. This operation helps in protecting **Olive Ridley turtles** every year when they start nesting along Odisha coast for breeding in months of November to December. Under it, round-the-clock surveillance is conducted from November till May through Coast Guard assets like Fast patrol vessels, Interceptor craft, Air cushion vessels and Dornier aircraft.

Desertification and Land Degradation Atlas of India

- It has been published by Space Application Centre, ISRO, Ahmedabad.
- The Atlas provides state wise area of degraded lands for the time frame 2018-19.
- It was released on the occasion of the World Day to Combat Desertification and Drought, observed on 17 June.
- The theme for 2021 is "Restoration. Land. Recovery. We build back better with healthy land"

Economics

India and Pakistan's battle over basmati

India, the world's largest exporter of basmati rice, has applied for **protected geographical indication** (PGI) status from the European Union's **Council on Quality Schemes for Agricultural Products and Foodstuffs.** This would give it sole ownership of the basmati title in the EU.

What's the issue now?

Pakistan, which is the only other basmati rice exporter in the world, has opposed this move as it would adversely impact its own exports, especially as the EU is a major market for its basmati.

What has happened?

Pakistan enacted the Geographical Indications (Registration and Protection) Act in March 2020, which gives it the right to oppose Indian application for registration of Basmati rice exclusive rights.

While India has said that it is an Indian-origin product in its application, published in the EU's official journal on September 11.

About GI tag: A GI is primarily an **agricultural**, **natural or a manufactured product** (handicrafts and industrial goods) originating from a definite geographical territory.

Global Peace Index

• 15th edition of Global Peace Index (GPI) was announced by Institute for Economics and Peace (IEP) Sydney.



- Index ranks **163 independent states** and territories as per level of their peacefulness. Report provides a comprehensive data-driven analysis on trends in peace, its economic value and recommends on how to develop peaceful societies.
- **Iceland** is most peaceful country worldwide since 2008. Iceland is joined by other top countries like Denmark, New Zealand, Portugal and Slovenia.
- Afghanistan is the least peaceful country again for fourth consecutive year. Afghanistan is followed by Yemen, Syria, South Sudan, and Iraq.
- India has moved up by two positions from its last year's ranking. It has become 135th most peaceful country while, 5th in South Asia region.

World Competitiveness Index

- World Competitiveness Index was compiled by Institute for Management Development (IMD) which examine the impact of COVID-19 on economies worldwide.
- India was ranked at **43rd position** among 64 countries.
- Switzerland has topped the list and is followed by Sweden (2nd), Denmark (3rd), Netherlands (4th) and Singapore (5th).
- Among BRICS, India (43rd) is ranked second after China (16th). India is followed by Russia (45th), Brazil (57th) and South Africa (62nd).



Current Affairs Update (June 21-27)

National

Summit on Green Hydrogen Initiatives

India is hosting a summit on **Green Hydrogen initiatives** involving the BRICS nations. The event offers a platform to share their respective **Green Hydrogen initiatives** and views on how to take it to the next level in their own countries.

The event will be anchored by NTPC Ltd , a Maharatna CPSU under the Ministry of Power.

What is green hydrogen?

Hydrogen when produced by electrolysis using renewable energy is known as Green Hydrogen which has no carbon footprint.

Significance of Green Hydrogen:

- 1. Green hydrogen energy is vital for India to meet its **Nationally Determined Contribution (INDC)** Targets and ensure regional and national energy security, access and availability.
- 2. Green Hydrogen can act as an energy storage option, which would be essential to meet intermittencies (of renewable energy) in the future.
- 3. In terms of mobility, for long distance mobilisations for either urban freight movement within cities and states or for passengers, Green Hydrogen can be used in railways, large ships, buses or trucks, etc.

Applications of green hydrogen:

- 1. Green Chemicals like ammonia and methanol can directly be utilized in existing applications like fertilizers, mobility, power, chemicals, shipping etc.
- 2. Green Hydrogen blending up to 10% may be adopted in CGD networks to gain widespread acceptance.

Benefits:

• It is a clean-burning molecule, which can decarbonize a range of sectors including iron and steel, chemicals, and transportation.



Renewable energy that cannot be stored or used by the grid can be channelled to produce hydrogen.

Shifting of jurisdiction of a High Court

- The Lakshadweep administration has mooted a proposal to shift its legal jurisdiction from the Kerala High Court to the Karnataka High Court.
- The proposal was initiated by the administration after several litigations were moved before the Kerala High Court against the decisions taken by the islands' new Administrator Praful Khoda Patel.
- The jurisdiction of a High Court can be shifted only through an Act of Parliament. Article
 241 states that Parliament may by law constitute a high court for a Union Territory or declare any court in any such territory to be a high court for all or any of the purposes of this Constitution.

Challenges ahead:

- Lakshadweep is under Kerala High Court jurisdiction now. Malayalam is the spoken as well as the written language both in Kerala and Lakshadweep.
- Also, the High Court in Kerala is just 400 kms away whereas that of Karnataka is over 1,000 kms with no direct connectivity as well.

The draft Cinematograph (Amendment) Bill 2021

The draft was recently released by the Centre. It seeks to amend the Cinematograph Act of 1952.

Key Provisions:

- 1. **Revision of certification:** This provision will give the Centre "revisionary powers" and enable it to "re-examine" films already cleared by **the Central Board of Film Certification (CBFC).**
- Age-based certification: It seeks to introduce age-based categorisation and classification. It proposes to divide the existing categories (U, U/A and A) into further age-based groups: U/A 7+, U/A 13+ and U/A 16+.
- 3. **Provision against piracy:** At present, there are no enabling provisions to check film piracy. Violation shall be punishable with imprisonment and fine.
- 4. **Eternal certificate:** It proposes to certify films for perpetuity. Currently a certificate issued by the CBFC is valid only for 10 years.

Concerns associated:



- 1. **Power of the Centre to order for recertification** may lead to an additional layer of direct **government censorship** going beyond that envisaged by the existing process run by the Central Board for Film Certification (CBFC).
- 2. This provision also goes against the Supreme Court's view that the government has no right to demand censorship once the Board has certified a film has left the Centre powerless.
- 3. Various groups or individuals often object to a film just before the release, but after the certification process. with the implementation of the proposed new rules, films could be held up longer for re-certification based on random objections, even if it is already certified by the cbfc.

Mizoram announces incentives for having more children

- Sports Minister of Mizoram, Robert Romawia Royte, has announced a cash incentive of Rs 1 lakh for having more children. Rs 1 lakh would be given to living parent with highest number of children in minister's constituency to encourage population growth among the demographically small Mizo communities.
- This declaration was announced at a time when several Indian states are advocating population control policy.
- Person will also get a certificate and a trophy.
- About 52 persons live in area of per square kilometre in Mizoram. It has the second lowest population density in India, next to Arunachal Pradesh. National average is 382 per sq km.

World's first GM Rubber planted in Assam

- Rubber Board has started field trial of world's first GM (genetically modified) rubber in the state of Assam.
- GM Rubber was developed in biotechnology laboratory at Rubber Research Institute of India (RRII) in Puthuppally, Kottayam.
- It was planted at Rubber board's Sarutari research farm in Guwahati.
- GM Rubber is the second genetically modified crop for which field trial has started after Bt. Cotton. Genetic Engineering Appraisal Committee (GEAC) had allowed to open field trials of GM rubber in 2010 at Chetchackal, Thombikandom, in Kottayam.

Advantage: GM variant rubber has the capacity to withstand adverse climatic conditions. It will give a big boost to rubber production in India. The crop is resistant to reduced moisture or drought, low & high temperatures as well as high light intensity. It will also cut short the maturity period of rubber. It will result into early yielding.



Growth of young rubber gets slower in winter season in North East because plants do not get enough light during monsoon. Lack of adequate water during summer season also creates stress to plants. Thus, GM rubber can overcome these issues and result into faster growth.

Summer solstice

June 21- this day is referred to as **the summer solstice**, **the longest day of the summer season**. It occurs when the sun is directly over the Tropic of Cancer.

Solstice means "sun stands still" in Latin. Solstice is an astronomical event, caused by Earth's tilt on its axis and its motion in orbit around the sun.

Winter solstice

21st December or the Winter Solstice marks the shortest day of the year in the Northern Hemisphere. It is the shortest day and longest night of the year in the Northern Hemisphere and is also known as the 'first day of winter' in the Northern Hemisphere as well as 'Hiemal solstice or Hibernal solstice'.

International

India abstains from voting on UN's Myanmar resolution

India recently abstained from voting on **the United Nations General Assembly's (UNGA's)** resolution for an arms embargo against Myanmar.

119 countries voted 'yes', Belarus voted 'no' and 36 countries abstained, including Myanmar's neighbors China and India, along with Russia.

Reasons behind India's move:

- India said its views were not reflected in the draft resolution before the Assembly passed it.
- India also said it does not believe that the tabling of this resolution for adoption at this juncture, is "conducive to aiding the country's joint efforts towards strengthening the democratic process in Myanmar."

About the UN Resolution:

- The UN's resolution demonstrated widespread global opposition to the Myanmar military and demanded that the country's democratic transition be restored.
- The resolution called upon the Myanmar armed forces to respect the people's will as freely expressed by results of the general election of November 8, 2020.
- India is supporting ASEAN initiative on Myanmar and the 'Five-Point Consensus'



Children and Digital Dumpsites report

The new report, titled **Children and Digital Dumpsites**, was recently released by the WHO.

Key findings:

More than **18 million children** and adolescents working at e-waste dumpsites in low- and middleincome countries are potentially at the risk of severe health hazards. They face risk due to discarded **electronic devices or e-waste being dumped from high-income countries**.

What are the Concerns?

e-waste contains over 1,000 precious metals and other substances like gold, copper, mercury and polycyclic aromatic hydrocarbons.

The processing is done in low-income countries, which do not have proper safeguarding regulation and which makes the process even more dangerous.

Children are especially preferred at these dumpsites because of their small and dexterous hands.

The volume of e-waste generated is surging rapidly across the globe. About 53.6 million tonnes of ewaste was generated in 2019. Only 17.4 per cent of this e-waste was processed in formal recycling facilities. The rest of it was dumped in low- or middle-income countries for illegal processing by informal workers.

EUNAVFOR Exercise

- Maiden Indian Navy European Union Naval Force (EUNAVFOR) Exercise was held in **Gulf Of** Aden.
- **Gulf of Aden, also known as the Gulf of Berbera, is** a deepwater gulf between Yemen to the north, the Arabian Sea to the east, Djibouti to the west, and the Guardafui Channel, Socotra (Yemen), and Somalia to the south.
- In the northwest, it connects with the Red Sea through the Bab-el-Mandeb strait, and it connects with the Arabian Sea to the east. To the west, it narrows into the Gulf of Tadjoura in Djibouti.

Science-Tech & Environment

What is Gain-of-function Research?

'Gain of function' is a field of research **focused on growing generations of microorganisms, under conditions that cause mutations in a virus.** These experiments are termed 'gain of function' because they involve manipulating pathogens in a way that they gain an advantage in or through a function, such



as increased transmissibility. Such experiments allow scientists to better predict emerging infectious diseases, and to develop vaccines and therapeutics.

How is it carried out?

- 1. It involves deliberately altering an organism in the lab, altering a gene, or introducing a mutation in a pathogen to study its transmissibility, virulence and immunogenicity.
- 2. This is done by genetically engineering the virus and by allowing them to grow in different growth mediums, a technique called serial passage.

Issues related to the research:

- 1. Gain-of-function research involves manipulations that make certain pathogenic microbes more deadly or more transmissible.
- 2. There is also **'loss-of-function'** research, which involves inactivating mutations, resulting in a significant loss of original function, or no function to the pathogen.
- 3. Gain-of-function research reportedly carries **inherent biosafety and biosecurity risks** and is thus referred to as 'dual-use research of concern' (DURC).

Serial passaging involves allowing the pathogen to grow under different circumstances and then observing the changes.

Relevance to Covid-19 pandemic: The discussion around gain of function research came back to focus recently, after a report argued that the possibility of the virus accidentally leaking out of the Wuhan Institute of Virology could not be entirely dismissed.

While scientists had earlier ruled out the possibility of the virus being 'genetically engineered', a recent report said **serial passaging** may have led to the evolution of the virus during an ongoing gain of function research project in the Chinese city.

How is it regulated in India?

All activities related to genetically engineered organisms or cells and hazardous microorganisms and products are regulated as per the "Manufacture, Use, Import, Export and Storage of Hazardous Microorganisms/Genetically Engineered Organisms or Cells Rules, 1989".

In 2020, the Department of Biotechnology issued guidelines for the establishment of containment facilities, called **'Biosafety labs'.** The notification provides operational guidance on the containment of biohazards and levels of biosafety that all institutions involved in research, development and handling of these microorganisms must comply with.



Ebola Outbreak

An Ebola outbreak in Guinea that started in February, infecting 16 people and killing 12, has been declared over by **WHO**.

The Ebola outbreak in 2014-2016 killed 11,300 people, mostly in Guinea, Sierra Leone and Liberia. In May 2021, the Democratic Republic of the Congo (DRC) officially declared the end of the 12th Ebola outbreak.

Ebola virus disease (EVD), formerly known as **Ebola haemorrhagic fever,** is a severe, often fatal illness in humans.

Transmission: The virus is transmitted to people from wild animals and spreads in the human population through human-to-human transmission.

Odisha: Only state to have all three species of crocodiles

Odisha has become the only state in India to have all the three species of crocodiles. Three species in the state of Odisha are:

- 1. Reptile freshwater Gharials at Satkosia in Mahanadi,
- 2. Muggers in Bhitarkanika National Park
- 3. Saltwater crocodiles.

Yellow Gold 48

- German agrochemicals major Bayer has commercially launched first-ever yellow watermelon variety called "Yellow Gold 48" in India under Seminis brand.
- Yellow Gold 48 have enhanced yield potential, better disease & pest tolerance and higher returns which can benefit watermelon growers.
- Yellow Gold 48 variety is best suited for cultivation during October to February. Harvest can be done from April onwards after which it will be available in market until mid-July.
- Yellow Gold 48 is having high yield and income potential which will empower watermelon growers to diversify into new categories. It will also help in growing demand for exotic fruits.

UN: Great Barrier Reef should be listed as 'in danger'

UN committee recommended to add Great Barrier Reef to the list of "in danger" World Heritage Sites. However, this recommendation is opposed by Australia which is blaming political interference. Recommendation was made by United Nations Educational, Scientific and Cultural Organisation (UNESCO) committee. This committee sits under UNESCO. According to the committee, world's biggest coral reef system should be added to 'in danger' list because of impact of climate change.



Possible antibodies against Nipah virus detected in bats from Mahabaleshwar cave

A survey by **the Indian Council of Medical Research (ICMR) and the National Institute of Virology** has picked up samples with the possible presence of antibodies against **the Nipah virus** in some bat species from a cave in **Mahabaleshwar**, a popular hill station in Maharashtra.

The survey was aimed at studying the prevalence of the **Nipah virus (NiV)**– one of **the top-10 global priority list pathogens identified by the World Health Organization (WHO)** – in bats of India.

Nipah Virus outbreaks in India: India has experienced four NiV outbreaks, with the case fatality rate between 65 percent and 100 percent. The most recent outbreak started in Kerala in 2018.

About the Nipah virus:

- 1. It is a zoonotic virus, meaning that it can spread between animals and people.
- 2. The organism which causes Nipah Virus encephalitis is an RNA or Ribonucleic acid virus of the family Paramyxoviridae, genus Henipavirus, and is closely related to Hendra virus.
- 3. Fruit bats, also called flying foxes, are the animal reservoir for NiV in nature.
- 4. **Symptoms:** Infection with NiV is associated with encephalitis (swelling of the brain) and can cause mild to severe illness and even death.

What is Delta Plus, a variant of coronavirus with K417N mutation?

The Health Ministry has categorised Delta Plus variant of coronavirus as **a 'variant of concern'.** It has been detected in many states.

What is a 'variant of concern'?

It is one for which there is evidence of:

- 1. An increase in transmissibility.
- 2. More severe diseases that require hospitalisation or death.
- 3. A significant reduction in neutralisation by antibodies generated during previous infection or vaccination.
- 4. Reduced effectiveness of treatments or vaccines, or diagnostic detection failures.

In the case of the Delta Plus variant, the Health Ministry identified three characteristics — increased transmissibility; stronger binding in receptors of lung cells; and potential reduction in monoclonal antibody response.



How do variants of a virus emerge and why?

- 1. Variants of a virus have one or more mutations that differentiate it from the other variants that are in circulation.
- 2. Essentially, the goal of the virus is to reach a stage where it can cohabitate with humans because it needs a host to survive.
- 3. Errors in the viral RNA are called mutations, and viruses with these mutations are called variants. Variants could differ by a single or many mutations.

Variants of Concern so far:

'Variants of concern' include **B.1.1.7 or Alpha first identified in the UK, B.1.351 or Beta first identified in South Africa, and B.1.427 or Epsilon first identified in the US.**

Pygmy hogs

- Eight pygmy hogs released in Manas National Park, Assam. They were released by **the Pygmy Hog Conservation Programme (PHCP)**.
- By 2025, the PHCP plans to release a target of 60 pygmy hogs in **Manas** their home where their last original population still survives, albeit in declined numbers.

About Pygmy hogs:

- They are the world's rarest and smallest wild pigs. The pygmy hog is native to dense alluvial grasslands in the southern foothills of the Himalayas.
- Endemic to India, they are restricted to very few locations around Manas National Park in north-western Assam.
- With just around 250 animals in the wild, the pygmy hog is one of the world's most threatened mammals. Currently **listed as 'Critically Endangered' on the IUCN Red List of Threatened Species.**
- The pygmy hog is designated as a Schedule I species in India under the Wildlife Protection Act, 1972.

State GK



Integrated Power Development Scheme (IPDS)

- A 50 kWp Solar roof top was recently inaugurated in Solan, Himachal Pradesh under the Integrated power development scheme of the Ministry of Power, Government of India.
- The project further reinforces **the 'Go Green' Initiative** of the government envisaged in **the Urban Distribution scheme** of the government of India.
- **Power Finance Corporation(PFC)** is the Nodal agency for implementation of the scheme.
- Launched in 2014 by Ministry of Power

HCS PRELIMS TEST SERIES (OFFLINE)



HCS Prelims 2021 date announced (Aug 22)



Subject S.NO Date **General Science** 1 July 4 July 11 2 Economy 3 History July 18 4 Polity July 25 5 Geography Aug 1 Complete Mock 1 6 Aug 8 7 Complete Mock 2 | Aug 14

Timing: 12 pm (Sunday)

Fees: Rs 2,500

Contact 7341129681 for details. Registration open till June 30.



Current Affairs Update (June28-July3)

National

Task force for Mission Karmayogi

Former Infosys CEO S D Shibu Lal has been appointed chairperson of a three-member task force formed to help the government in bringing major bureaucratic reforms through its ambitious **"Mission Karmayogi".**

The task force has been constituted to draw a clear road map for the guidance and operationalisation of the 'Karmayogi Bharat' and the constitution of a Special Purpose Vehicle (SPV).

About Mission Karmayogi: The 'National Programme for Civil Services Capacity Building – Mission Karmayogi' was launched to effect a transformational shift from rule based training to role-based capacity development of all civil services in the country so as to enhance citizen experience for government services and improve availability of competent workforce.

SCO meet

National Security Advisor Ajit Doval has proposed an action plan against Pakistan-based terror groups Lashkar-e-Taiba (LeT) and Jaish-e-Mohammad (JeM) as part of the Shanghai Cooperation Organisation (SCO) NSAs meet.

Action Plan proposed:

- 1. Full implementation of UN resolutions and targeted sanctions against UN-designated terrorist individuals and entities.
- 2. Adoption of international standards to counter terror financing including an MOU between SCO and **Financial Action Task Force (FATF)**.
- 3. Monitoring new technologies used by terrorists. This included use of drones and misuse of dark web, artificial intelligence, blockchain and social media.

SCO comprises eight member states, namely the Republic of India, the Republic of Kazakhstan, the People's Republic of China, the Kyrgyz Republic, the Islamic Republic of Pakistan, the Russian Federation, the Republic of Tajikistan, and the Republic of Uzbekistan.





China launches first bullet train in Tibet, close to Indian border

- China has operationalised its first fully electrified bullet train in the remote Himalayan region of Tibet.
- It connects the provincial capital Lhasa and Nyingchi, a strategically located Tibetan border town close to Arunachal Pradesh.
- This line is a section of the Sichuan-Tibet Railway.
- The rail line crosses the Brahmaputra river locally called Yarlung Zangbo 16 times.

Indian Private Players allowed to build and operate rocket launch sites

- Government has allowed private companies to establish & operate rocket launch sites within and outside the country. However, it is subject to prior authorisation from government.
- Draft National Space Transportation Policy-2020 which was put forward by the Department of Space and IN-SPACe is the nodal agency responsible for overall approval.
- As per the policy, any orbital or sub-orbital rocket launch from Indian or overseas territory can be carried out only after authorisation from Indian National Space Promotion & Authorization Center (IN-SPACe).
- Mission can be launched from own or leased launch site or from mobile platforms like land, sea or air.

FAME scheme extended till 2024

- Initially FAME scheme was to be implemented for a period of three years from April 1, 2019. Now, it will be in force till March 31, 2024.
- Government has decided to extend adoption of electric vehicles 'Faster Adoption and Manufacturing of Electric Vehicles in India Phase II (FAME Phase II)' by 2 years.
- This scheme is a part of National Electric Mobility Mission Plan.



- It was launched in two phases. Phase 1 was started in 2015 & ended on 31st March, 2019. While, phase II was started from April 2019 and will end in 2024 (Earlier to end in 2022).
- Scheme is monitored by Department of Heavy Industries under Ministry of Heavy Industries and Public Enterprises.

WHAT IS	FAM	E?	
Faster Adoption and Manufactu Vehicles in India is a scheme und Mission Plan (NEMMP)			bility
Target of NEMMP - 2020		0)*
• 6-7 million Hybrid & Electric Ve	hicle sale by 2	020	
• 9500 million litres of estimated fuel saving	cumulative		
• 2 million tonnes reduction in po green house gas emissions	ollution &	- 🌳	4
• 65,000 Direct & 3,00,000 Indirec	et jobs	2	27

India Smart Cities Awards 2020

The Union ministry of housing and urban affairs has released the list of India smart cities awards (ISCA) 2020.

The awards were announced to commemorate six years of the central government's three initiatives to spur urban development:

- 1. Smart Cities Mission (SCM)
- 2. Atal Mission for Urban Rejuvenation and Urban Transformation (AMRUT)
- 3. Pradhan Mantri Awas Yojana-Urban (PMAY-U).

Performance of various States and cities:

- 1. Uttar Pradesh emerged on the top among all states, followed by Madhya Pradesh and Tamil Nadu.
- 2. Indore (Madhya Pradesh) and Surat (Gujarat) won the award jointly for their overall development.
- 3. Ahmedabad bagged the 'Smart Cities Leadership Award' and Chandigarh, the award for union territories, while Indore won the "Innovative Idea Award".



Attorney-General

- The Union government has extended the tenure of **Attorney-General** K.K. Venugopal by a year. He will continue as the government's top law officer till June 30, 2022.
- The Attorney General for India is the central government's chief legal advisor, and its primary lawyer in the Supreme Court of India. He is a part of the Union Executive.
- Appointment and eligibility: He is appointed by the President of India under Article 76(1) of the Constitution and holds office during the pleasure of the President

International Day against Drug Abuse and Illicit Trafficking 2021

- The day June 26 was chosen by the UN General Assembly, on December 7, 1987, as International Day against Drug Abuse and Illicit Trafficking.
- **Objective:** To create awareness about issues related to drugs and seek international cooperation to combat its effects on health, society, and governance.
- Theme and its significance: This year, the theme is 'Share Facts On Drugs, Save Lives'.

Statistics day

- Celebrated on **29th June every year.** Observed in recognition of the notable contributions made by Late **Professor Prasanta Chandra Mahalanobis** in the fields of statistics, statistical system and economic planning.
- Theme: The theme of Statistics Day, 2021 is Sustainable Development Goal (SDG)– 2 (End Hunger, Achieve Food Security and Improved Nutrition and Promote Sustainable Agriculture).

National Doctors' Day 2021

- Indian Medical Association (IMA) observed the National Doctors' Day on July 1 every year.
- This day is observed to honour birth and death anniversary Dr Bidhan Chandra Roy who was a great physician and second chief minister of West Bengal.

12-year-old Abhimanyu Mishra becomes Youngest Grandmaster

- Abhimanyu Mishra has become the youngest ever Grandmaster on June 30, 2021. He achieved this title at just 12 years, four months and 25 days.
- He leaved behind the record of Russian Grand Master **Sergey Karjakin**. Sergey had completed his GM title in 2002 at the age of 12 years and seven months.
- **Grandmaster title** was awarded to chess players by world chess organization, FIDE. Grandmaster is the highest title that a chess player can attain, apart from World Champion. This title is generally held for life once it is achieved. Title of Grandmaster, along with FIDE titles of International Master (IM) and FIDE Master (FM), is open to all players irrespective of gender.



International

Antarctic Treaty

23 June 2021- 60th anniversary of the entry into force of the Antarctic Treaty (23 June 1961).

Significance of the treaty:

- 1. Negotiated during the middle of the Cold War by 12 countries with Antarctic interests, it remains **the only example of a single treaty that governs a whole continent.**
- 2. It is also the foundation of a rules-based international order for a continent without a permanent population.

But, the treaty was negotiated in a very different era and is it still relevant today?

While the Antarctic Treaty has been able to successfully respond to a range of challenges, circumstances are radically different in the 2020s compared to the 1950s.

- 1. Antarctica is much more accessible, partly due to technology but also climate change.
- 2. More countries now have substantive interests in the continent than the original 12.
- 3. Some global resources are becoming scarce, especially oil.
- 4. There is also uncertainty as to China's intentions in Antarctica. China joined the treaty in 1983 and became a consultative party in 1985.
- 5. This will inevitably result in increased attention being given to the potential for Antarctic mining to take place sometime in the future.

Therefore, Calls to revisit the prohibition on Antarctic mining would seem inevitable.

About the Antarctic Treaty:

Signed between 12 countries in Washington on 1st December 1959 for making the Antarctic Continent a demilitarized zone to be preserved for scientific research only.

- **The twelve original signatories** are Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, the Union of Soviet Socialist Republics, the UK and the US.
- The treaty entered into force in 1961 and currently has 54 parties.
- Headquarters: Buenos Aires, Argentina.



For the purposes of the treaty system, Antarctica is defined as all of the land and ice shelves south of 60°S latitude.

Cyber Capabilities and National Power Report

The report was recently released by **the International Institute for Strategic Studies (IISS).** The report analyses the cyber ecosystem of each state and how it intersects with international security, economic competition and military affairs.

The report has divided the countries into three tiers of cyber power:

First Tier: States with world-leading strengths across all the categories in the methodology. The United States of America is the only country in this tier.

Second Tier: States that have world-leading strengths in some of the categories. Australia, Canada, China, France, Israel, Russia and the United Kingdom are in this tier.

Third Tier: States that have strengths or potential strengths in some of the categories but significant weaknesses in others. **India**, Indonesia, Iran, Japan, Malaysia, North Korea and Vietnam are in this tier.

Poson

• Also known as Poson Poya, it is an annual festival held by Sri Lankan Buddhists celebrating the arrival of Buddhism in Sri Lanka in the 3rd century BC.

Baihetan hydropower plant

- China operationalised the two units of giant Baihetan hydropower plant, which is the **largest** hydro project under construction worldwide on June 28, 2021.
- **Yangtze river** in southwest China generated electricity for the first time. It is the longest river in Asia and third-longest in world. This river is also the longest worldwide to flow entirely within one country. It originates from Jari Hill in Tanggula Mountains in Tibetan Plateau and flows for 6,300 km in east direction to drain into East China Sea. It is considered as sixth-largest river by discharge volume in world. The river drains one-fifth of China's land area.

Science-Tech & Environment

Agni P

Defence Research and Development Organisation (DRDO) successfully flight-tested a new generation nuclear-capable ballistic missile Agni P. Missile is also known as 'Agni Prime'Agni-Prime is the advanced version of Agni-1 missile.



It is a new generation advanced variant of Agni class missiles. It is a **canisterised missile** having a range of **1,000 and 2,000** kms. Missile can hit targets up to a range of 2000 kms. It is very short and light as compared to with other missiles in this class.

Shot in the arm

Agni-P's range of 1,000-2,000 km is too short to reach targets in China's mainland, but can cover all of Pakistan's territory

 Being a canisterised missile, it can be transported easily and fired at very short notice

▶ It will replace the Prithvi, Agni-1 and Agni-2 missiles in India's arsenal that were built two decades ago with tech now considered obsolete

It will enter service as a two-stage, solid propellant missile. Both stages will have composite rocket motors and guidance systems with electro-mechanical actuators

Agni-P and Agni-5 originate from the Integrated Guided Missile Development Programme launched by then DRDO chief Dr APJ Abdul Kalam in the early 1980s

Dragon Man

- Researchers from China have claimed to have found an ancient human skull that could belong to an altogether new species of humans.
- The skull was found in north-east China's Harbin city.
- It has been dubbed the "Dragon Man" or Homo longi, a name that has been derived from **the Long Jiang or Dragon river** in the Heilongjiang province of China where the city of Harbin is located. They could be over 146,000 years old.

China certified malaria-free by WHO

- Following a 70-year effort, China has been awarded a malaria-free certification from WHO a notable feat for a country that reported 30 million cases of the disease annually in the 1940s.
- China is the **first country in the WHO Western Pacific Region** to be awarded a malaria-free certification in more than 3 decades. Other countries in the region that have achieved this status include Australia (1981), Singapore (1982) and Brunei Darussalam (1987).
- Globally, 40 countries and territories have been granted a malaria-free certification from WHO including, most recently, El Salvador (2021), Algeria (2019), Argentina (2019), Paraguay (2018) and Uzbekistan (2018).



Goa: First Rabies-free state

- Goa has become the first Rabies-free state of India. According to Chief Minister, Pramod Sawant, state has not reported a single rabies case in last three years.
- As per WHO, Rabies is a vaccine-preventable viral disease that occurs in about 150 countries and territories. Dogs act as the source of majority of human rabies deaths. Dogs are responsible for contributing up to 99% of rabies transmissions to humans. In Asia and Africa regions, low awareness regarding the need of health care after dog bite takes lives of about 55000 people per year.
- India is endemic for rabies with the burden of 36% of world's deaths. 30-60% of reported rabies cases and deaths in India occur in children aged under 15 years because bite often go unrecognized and unreported.

Kadakhnath

- Kadaknath or Kali Masi is a breed of chicken originating from the Jhabua and Dhar districts of western Madhya Pradesh.
- It received GI tag in 2017.
- It is popular for its black meat which is famous for its meat quality, texture, taste, and excellent medicinal values. It is also famous for its low cholesterol and high protein content.



Economics

Project Seabird

It is the largest naval infrastructure project for India.

• The project aims at creation of a naval base at Karwar on the west coast of India.



- Upon completion, the program will provide Indian Navy with its largest naval base on the west coast and also the largest naval base east of the Suez Canal.
- This would further bolster the operational readiness of the Armed Forces and help in augmenting trade, economy & humanitarian aid operations.

New Definition of Small and medium companies (SMC)

- Ministry of corporate affairs (MCA) has expanded the definition of small and medium sized companies (SMCs).
- As per expanded definition, Small & Medium Companies is an unlisted company, a bank, an insurance or a financial institution with sales up to Rs 250 crore and borrowings up to Rs 50 crore.
- Earlier limit for sales was Rs 50 crore and for borrowings was Rs 10 crore.
- Now, SMCs are permitted to avail number of exemptions under Company (Accounting Standards) Rules 2021. It will reduce complexity of regulatory filings for smaller firms.
- Banks, insurance companies, financial institutions, and listed companies cannot be classified as SMCs.

First voyage of Green Freight Corridor-2

- Ministry of Shipping launched the maiden voyage under Green Freight Corridor-2. Green Freight Corridor-2 is a coastal shipping service.
- Voyage was launched from Cochin port to Beypore and Azhikkal ports located in north Kerala.

First voyage service was launched in line with ministry's plans to improve connectivity and synergies between major & non-major ports by promoting coastal trading. This step is also aiming to

- 1. Create intermodal & sustainable customer solutions,
- 2. Improve use of waterways,
- 3. Cut road & rail traffic and
- 4. Cut logistical expenditures.