WHAT IS INTERNATIONAL CRIMINAL COURT (ICC)?

The International Criminal Court's (ICC) prosecutor is seeking arrest warrants for Israeli Prime Minister Benjamin Netanyahu, Defence Minister Yoav Gallant, and three Hamas leaders for war crimes.

International Criminal Court (ICC) is a **permanent judicial body** established by the **Rome Statute** (1998) to investigate, prosecute and try individuals accused of genocide, war crimes, crimes against humanity and the crime of aggression and to impose prison sentences upon individuals who are found guilty of such crimes.

- **Background**: The court's **founding treaty, the Rome Statute**, was adopted in July 1998, and the court began work in 2003.
- **HQ:** Hague, Netherlands
- **Members**: **123 nations** are States Parties to the Rome Statute and recognize the ICC's authority. The notable exceptions are the US, China, Russia, and India.
- **Funding**: The Court is funded by **contributions from the States Parties and** by **voluntary contributions**from Governments, international organizations, individuals, corporations, and other entities.

Composition:

  - **Judges**: The Court has **eighteen judges**, each from a different member country, elected to **nonrenewable nine-year terms**.
  - **The Presidency**: Consists of three judges (the President and two Vice-Presidents) elected from among the judges. It represents the Court to the outside world and helps with the organization of the work of the judges.

- **Jurisdiction of ICC:**
  - Unlike the International Court of Justice, which hears disputes between states, the ICC **handles prosecutions of individuals**.
  - The ICC is only competent to hear a case if:

- the country where the offence was committed is a party to the Rome Statute; or
- the perpetrator's country of origin is a party to the Rome Statute.

- The ICC may **only exercise** its jurisdiction if the national court is unable or unwilling to do so.

- **Relation with United Nations (UN):**
  - While **not a UN organization**, the Court has a cooperation agreement with the UN.
  - When a situation is not within the Court's jurisdiction, the UN Security Council can refer the situation to the ICC, granting it jurisdiction.

INTERNATIONAL BOOKER PRIZE

Recently, Kairos' by Jenny Erpenbeck, translated by Michael Hofmann, has won the International Booker Prize 2024.

International Booker Prize is awarded **annually** for the **finest single work of fiction** from around the world which has been translated into English.

- This prize began life in 2005 as the Man Booker International Prize.
- It was **initially a biennial** prize for a body of work and there was no stipulation that the work should be written in a language other than English.
- This prize aims to **encourage more reading** of quality fiction from all over the world and has already had an impact on those statistics in the UK.
- **Eligibility:** Eligible work of long-form fiction, written originally in English by an **author of any nationality** and published in the UK and/or Ireland.

Prize money

- The prize celebrates the vital work of translators, with the **£50,000 prize money** divided equally between the author and the translator.
- In addition, the shortlisted authors and translators **each receive £2,500.**

WHAT IS AIRCRAFT TURBULENCE?

Recently, one passenger died of a suspected heart attack and 30 others were injured after a Singapore Airlines flight from London to Singapore hit severe turbulence.

- Turbulence means **disruption of airflow** over the wings of an airplane, which causes it to enter irregular vertical motion.
- These pockets of disturbed air can have many causes, most obviously the unstable weather patterns that trigger storms.
- There are at least seven kinds of turbulence that an aircraft can run into:
    - **Wind Shear:** It happens when there is a **sudden change in wind direction**, whether vertically or horizontally. Typically occurs close to thunderstorms, jet streams, etc.; tricky for pilots as tailwinds suddenly change to headwinds or vice versa.
    - **Frontal:** Created in the **frontal zone** when warm air is lifted by sloping frontal surface and friction between opposing air masses. Most palpable when warm air is moist; intensity increases with thunderstorms. Most common close to thunderstorms.
    - **Convective:** When land surface temperature rises, the air above the ground heats up and rises, creating air pockets around it. Convection currents cause difficulties during approach as they tend to affect the rate of descent.
    - **Wake:** It forms behind an aircraft when it flies through air-creating wingtip vortices.
    - **Mechanical:** This type of turbulence occurs when tall solid objects such as mountains or highrise constructions disrupt the normal airflow, causing the air for planes to fly through to become dirty.
    - **Clear air:** It occurs when an aircraft crosses from one air mass to another, which has a different direction. Clear air turbulence could also happen when an aircraft

moves out of a jet stream. Clear air turbulence is mainly caused by wind or jet streams.

- **Mountain view**: It is one of the **most severe**; these are oscillations that form on the downwind side of mountains when strong winds flow towards **mountains in a perpendicular fashion.**
- Aircraft tracking perpendicularly across, or downwind of a mountain, may experience sudden loss of altitude followed by a sudden reduction in airspeed.

WATER, AIR POLLUTION AND CARBON FOOTPRINTS OF LUXURY CONSUMPTION IN INDIA

A recent study - 'Water, air pollution and carbon footprints of conspicuous/luxury consumption in India' - highlights the environmental impact of affluent individuals.

Need for the Study:

- While climate change is a global concern, **issues such as water scarcity and air pollution are often localised** or regionalised.
- **For instance,** excessive water use in one region might not have a direct impact on water scarcity in another.
- **It is imperative to prioritise local environmental concerns**, which raises the significance of comprehending the environmental footprints of households.

What the Study Examines?

- It especially looks at the **carbon, water, and particulate matter (PM2.5) footprints** linked to the choices Indian households (across a range of income levels) make about luxury consumption.
  - **The luxury consumption basket** includes various categories such as dining out, vacations, furniture, social events, etc.
- **The analysis compares** these luxury consumption footprints with those associated with **non-luxury consumption**.

What is the Methodology of the Study?

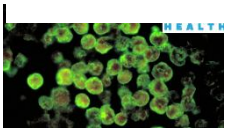
- **The study employed an input/output analysis** encompassing the entire economy to establish a connection between various aspects of household consumption and the resources required for their manufacturing.
- This methodology facilitated the identification and consolidation of the environmental impacts linked to every phase of manufacturing.
- **For example,**
    - **The water footprint** was utilised to quantify water usage throughout various stages of production of different goods and services, as well as direct water usage by households.
    - **The PM2.5 footprint** included direct emissions from household activities such as the use of fuelwood, kerosene, and vehicular fuels.
    - Similarly, **the CO2 footprint** was used to capture both embedded and direct CO2 emissions associated with household consumption.

Key Findings of the Study:

- **Increase in all three environmental footprints:**
    - **As households move from poorer to richer** economic classes all 3 environmental footprints increase.
    - **The footprints of the wealthiest 10%** of households are around twice as large as the population's average.
- **Key contributors to the rise in the environmental footprints:**
    - **Eating out/restaurants** are a significant contributor to the rise in environmental footprints across all three footprints.
    - **Fruits and nuts intake** is cited as a contributing reason to the rise in **water footprint**.
    - **Eating out, jewellery, and personal goods** are luxury consumption products that increase the **carbon and air pollution footprint.**

WHAT IS NAEGLERIA FOWLERI?

Recently, a five-year-old girl undergoing treatment for primary amoebic meningoencephalitis (PAM), a rare infection caused by Naegleria fowleri or "brain-eating amoeba", died at the Government Medical College Hospital in Kozhikode.



Naegleria fowleri is a **free-living amoeba** or a single-celled living organism.

- It lives in **warm fresh water and soil around** the world and infects people when it enters the body through the nose.
- Higher temperatures of up to 115°F (46°C) are conducive to its growth and it can survive for short periods in **warm environments.**
- The amoeba can be found in **warm freshwater, such as lakes and rivers**, swimming pools, splash pads, surf parks, or other recreational venues that are poorly maintained or minimally chlorinated.
- It enters the body through the nose, usually when people are swimming. It then travels up to the brain, where it **destroys the brain tissue** and causes swelling.

Key facts about Primary Amoebic Meningoencephalitis (PAM)

- It is a rare brain infection that is caused by Naegleria fowleri.
- It is also **non-communicable** and people cannot get infected with Naegleria fowleri from drinking water contaminated with the amoeba.
- **Symptoms**
  - In the initial stage, the symptoms include **headache, fever, nausea** and Later on, the patient may have a stiff neck and experience confusion, seizures, hallucinations and **slip into a state of coma**.
  - Most people with PAM die within 1 to 18 days after symptoms begin. It usually leads to coma and death after 5 days."
- **Treatment**
  - There are no effective treatments for the disease yet.

WHAT ARE RANGELANDS?

The recently published report, "Global Land Outlook Thematic Report on Rangelands and Pastoralists" by the United Nations Convention to Combat Desertification highlighted that rangelands are facing a 'silent demise'.

- The rangelands are category of **Earth's land cover** consists mostly of the **natural grasslands** used by livestock and wild animals to graze and forage.
- The vegetation of ranges may include **tallgrass prairies, steppes** (shortgrass prairies), desert shrublands, shrub woodlands, savannas, chaparrals and tundras.
- Rangelands are the "**Wild Open Spaces**" that cover about half of the earth's land surface and half of western North America.

Reasons for degradation

- The problem is driven largely by **converting pastures to cropland** and other land use changes due to **population growth** and urban expansion.
- Rapidly rising food, fibre and fuel demands, excessive grazing, abandonment and policies that incentivise overexploitation.

Significance of Rangelands

- These are used for **livestock forage, wildlife habitat**, water, mineral resources, wood products, wildland recreation, open space and natural beauty.
- These are an important economic engine in many countries and define cultures. Home to one quarter of the world's languages, they also host numerous World Heritage Sites and have shaped the value systems, customs and identities of pastoralists for thousands of years.
- **Two billion people** – small-scale herders, ranchers and farmers, often poor and marginalised – depend on healthy rangelands worldwide.

EMBLICA CHAKRABARTYI

Recently, scientists have reported the discovery of a new plant species Emblica chakrabartyi from Adichilthotti within the Edamalayar forest range of Kerala.

Emblica chakrabartyi species **belonging to the gooseberry** (Phyllanthaceae) family has been named after Tapas Chakrabarty, former scientist at the Botanical Survey of India, for his contribution to the study on Phyllanthaceae.

Features

- The plant attains a height of approximately 2 metres. The leaves are large with a shiny elongated oval shape of up to 13 cm.
- The flowering and fruiting occur during December to June. Male flowers are found in inflorescence whereas females ones are in single, on the leaf axils.
- Each flower bears yellowish green coloured six petals. The fruits are brown to black when they ripen and the seeds are black about 8-9 mm diameter.
- Generally growing as **shrubs in tropical rain forests**, 55 species of the genus Emblica have been recorded all around the world.
- The new plant is the eleventh from India.

WHAT IS X-CHROMOSOME?

Scientists have found a molecular link between altered X-chromosome inactivation and autoimmune diseases.

- It is one of the two sex chromosomes in humans (the other is the Y chromosome).
  - There are **23 pairs of chromosomes** in the human body.
  - This includes 22 pairs of autosomal or somatic chromosomes that are common to both men and women and one chromosome that differs according to what gender a person is (sex chromosomes).

- Each person usually has **one pair of sex chromosomes** in each cell. Females typically have **two X chromosomes,** while males typically have **one X and one Y chromosome**.
- Men inherit the X chromosome they have from their mother and the Y chromosome from their father, while women inherit one X chromosome from the mother and the other from the father.
- In women, the X chromosome represents almost 5% of the total DNA, and in men, who have only one X chromosome, it represents about 2.5% of the total DNA.
- Early in the embryonic development of people with two X chromosomes, one of the X chromosomes is randomly and permanently inactivated in cells other than egg cells. This phenomenon is called **X-inactivation or lyonization.**
    - X-inactivation ensures that people with two X chromosomes have only one functional copy of the X chromosome in each cell.
    - Because X-inactivation is random, normally, the X chromosome inherited from one parent is active in some cells, and the X chromosome inherited from the other parent is active in other cells.
- The X chromosome likely **contains 900 to 1,400 genes** that provide instructions for making proteins.

Genetic disorders that arise from missing, additional, or malformed copies **of the X chromosome are termed numerical disorders.**

- Examples include Klinefelter's syndrome, where a male has one or more extra copies; Triple X syndrome, where a female has one extra copy and Turner syndrome, where a female has one normal X chromosome and one missing or abnormal one.