CROSS & CLIMB ROHTAK
School of Research Based Learning & Competition
Current Affairs - 20 October 2024

CROSS & CLIMB
MAKING THE ELIGIBLE ENTITLED

CROSS & CLIMB
MAKING THE ELIGIBLE ENTITLED

DID GOOGLE VIOLATE ANTITRUST LAWS IN EPIC BATTLE?

- In a significant ruling on **October 7, 2024**, a U.S. District Court issued an injunction against **Google**, accusing it of **violating antitrust laws**.
- This ruling requires Google to make substantial changes to its **Play Store** policies, opening up opportunities for **third-party apps** and giving app developers the freedom to offer alternative payment methods within their apps.
- The case, initiated by a company named **Epic Games**, highlights growing concerns about **monopolistic practices** by major tech companies, including **Google** and **Apple**.

Google's Defense and Appeal:

- **Google** has appealed the ruling, expressing concerns that the court's decision could compromise **consumer privacy**, **security**, and **competition** within the app ecosystem.
- The company claimed that the injunction might make it harder for developers to promote their apps and maintain a consistent user experience.
- Despite these objections, the court's ruling is seen as a significant step in addressing **monopolistic practices** in the **app store economy**.
- It reflects broader concerns about how tech giants like Google control app distribution and impose restrictive terms on developers.

Key Differences Between the Google and Apple Cases & the Ruling:

- While **Epic Games** filed similar lawsuits against **Google** and **Apple**, the outcomes of the two cases have been different:
  - **Apple**:
    - In the case against Apple, the court ruled that while **Apple** was not a monopoly in the app market, it still imposed **anti-competitive policies**.
    - The court ordered Apple to allow developers to offer **alternative payment options**, but **Epic Games was required to pay damages for violating Apple's developer agreement**.

- o **Google**:
  - ▪ In contrast, the jury trial against **Google** provided **Epic Games** with a greater opportunity to present evidence of **Google's exclusive deals** with developers.
  - ▪ This evidence led to a unanimous jury decision that **Google had violated antitrust laws, resulting in a more substantial ruling against Google compared to Apple**.

Impact on the App Economy:

- This ruling could have profound effects on the global **app economy**, valued at over **$250 billion**. Some key implications include:
  - o **Developer-Friendly Terms**:
    - ▪ Both **Google** and **Apple** may need to revise their app store policies, allowing developers to offer **alternative payment methods** and potentially reducing the high **commissions** they charge on in-app transactions.
  - o **Increased Competition**:
    - ▪ The decision may pave the way for **alternative app stores**, breaking the near-total control that **Google** and **Apple** currently have over app distribution.
  - o **Challenges for Smaller Developers**:
    - ▪ On the flip side, smaller developers might struggle with **app discoverability**.

Conclusion:

- The **Epic Games vs. Google** lawsuit marks a turning point in the ongoing debate over **digital monopolies** and **app store dominance**.
- The injunction against **Google** is expected to lead to more **open competition** and **fairer terms** for app developers, potentially transforming the way the **app economy**

WHAT IS THE BAY OF BENGAL INITIATIVE FOR MULTI-SECTORAL TECHNICAL AND ECONOMIC COOPERATION (BIMSTEC)?

- BIMSTEC is a **regional organization** comprising **seven member states** lying in the littoral and adjacent **areas of the Bay of Bengal** constituting a contiguous regional unity.
- It came into being on 6 June **1997** through the **Bangkok Declaration.**
- It constitutes **seven Member States**: five deriving from South Asia, including **Bangladesh, Bhutan, India, Nepal, Sri Lanka,** and two from Southeast Asia, including **Myanmar and Thailand**.
- The main aim of the BIMSTEC was the **promotion of economic cooperation** between countries bordering the Bay of Bengal.
- BIMSTEC has identified **14 priority areas** of mutual cooperation where a member country takes the lead.
  - **India is the lead country for Transport & Communication, Tourism, Environment & Disaster Management and Counter Terrorism & Transnational Crime.**
- **Permanent Secretariat**: **Dhaka**, Bangladesh

WHAT IS THE CONVENTION ON BIOLOGICAL DIVERSITY (CBD)?

The 16th Conference of Parties (COP16) to the Convention on Biological Diversity (CBD) is set to begin in Cali, Colombia.

- CBD, with currently **196 contracting parties**, is the **most comprehensive binding international agreement** in the **field of nature conservation a**nd the sustainable use of natural resources.

- It was opened for signing at the UN Conference on Environment and Development in Rio de Janeiro in 1992.

- It has **three overarching objectives:**

  - The **conservation of biological diversity** (genetic diversity, species diversity, and habitat diversity).

  - The **sustainable use of biological diversity**.

  - The **fair and equitable sharing of the benefits arising out of** the **utilisation of genetic resources.**

- It **covers biodiversity at all levels: ecosystems, species, and genetic resources**.

- The **CBD's governing body is the Conference of the Parties (COP).** This ultimate authority of all governments (or Parties) that have ratified the treaty meets every two years to review progress, set priorities, and commit to work plans.

- The **Secretariat** is based in **Montreal, Canada.**

- To support implementation of the CBD objectives**, two internationally binding agreements were adopted** within the framework of the Convention on Biological Diversity.

  - The **Cartagena Protocol**, which was adopted in 2000 and entered into force in 2003, regulates the **transboundary movement of living modified organisms (LMOs).**

  - The **Nagoya Protocol**, adopted in 2010, establishes a legally binding framework for **access to genetic resources and the fair and equitable sharing of the benefits arising from their use.**

MARINE HEAT WAVE

- A marine heat wave is an **extreme weather event**.

- It occurs **when the surface temperature** of a particular region of the **sea rises to 3 or 4 degree** Celsius above the average temperature for at least five days.

- MHWs can last for weeks, months or even years, according to the US government's agency National Oceanic and Atmospheric Administration (NOAA).

- **Impacts**
  - MHWs are prolonged temperature events that can cause severe damage to marine habitats, such as impacts to **coral reefs and species displacement.**
  - These events are becoming more **frequent due to global warming**, with notable occurrences off Australia's East Coast and Tasmania, as well as the northeast Pacific coast and North Atlantic.
  - Higher ocean temperatures, which are associated with MHWs, can make storms like **hurricanes and tropical cyclones stronger.**
  - MHWs also **fuel the growth of invasive alien species**, which can be destructive to marine food webs.
  - When storms travel across hot oceans, they gather more water vapour and heat.
  - This results in more powerful winds, heavier rainfall and more flooding when storms reach the land — meaning heightened devastation for humans.

WHAT IS KALA-AZAR?

- Kala-azar, also known as **Visceral Leishmaniasis (VL),** is a severe form of leishmaniasis **caused by the protozoan parasite Leishmania donovani.**

- It is **transmitted** to humans **through the bite of an infected female sandfly**, primarily Phlebotomus argentipes in India.

- The disease **affects** some of the **world's poorest people** and is associated with malnutrition, population displacement, poor housing, a weak immune system and lack of financial resources.

- **People with HIV** and other **conditions that weaken their immune system,** are **more likely to get sick** from a Leishmania infection.
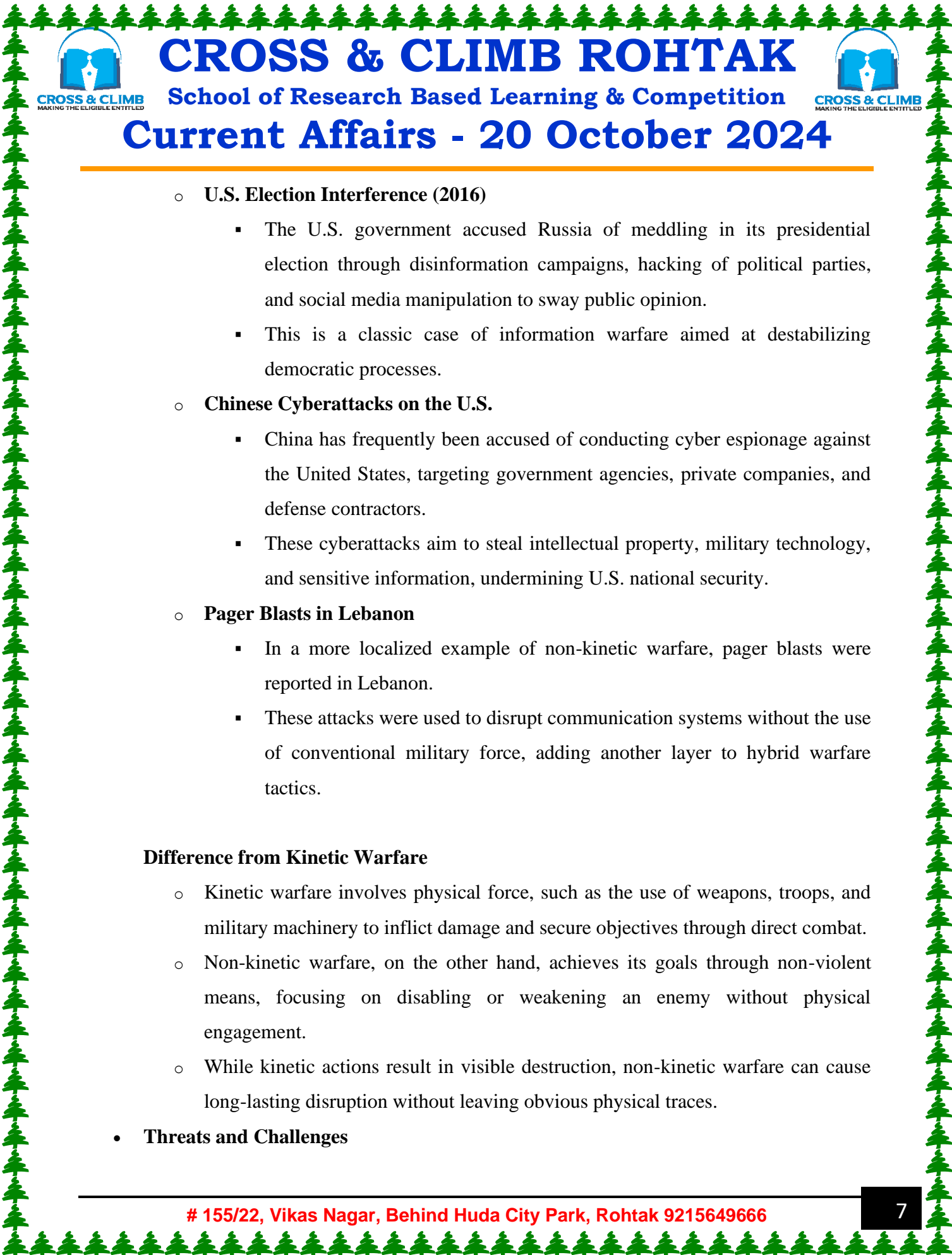
- **Symptoms**: The disease is characterized by **irregular bouts of fever**, substantial **weight loss, swelling** of the spleen and liver, and **severe anaemia** if left untreated, which can lead to death within two years.

- **Diagnosis**: Diagnosis combines clinical signs with parasitological or serological tests, such as the rK39 diagnostic kit.

- **Treatment**: There are several **anti-parasitic medications** available that treat leishmaniasis.

PARLIAMENTARY COMMITTEE TO REVIEW ARMED FORCES' READINESS FOR 'NON-KINETIC WARFARE'

- Non-kinetic warfare refers to conflict methods that do not rely on traditional military force or physical destruction.

- Instead, it employs cyberattacks, electronic warfare, psychological operations, information manipulation, economic sanctions, and other strategies to disrupt an enemy's infrastructure, economy, or morale.

- It can involve non-military actors and often targets critical infrastructure like power grids, communication networks, and financial systems.

Examples of non-kinetic warfare

- **Russia-Ukraine Conflict**
  - Alongside traditional military tactics, Russia has been accused of launching extensive cyberattacks against Ukraine's critical infrastructure. Ukraine has faced disruptions to its power grid, communication systems, and government websites, as well as disinformation campaigns aimed at destabilizing the country.

- **Israel-Hamas Conflict**
  - Israel reportedly deployed cyber measures to block Hamas's communications, while Hamas used propaganda and social media to influence public opinion and spread misinformation globally.

- o **U.S. Election Interference (2016)**
    - The U.S. government accused Russia of meddling in its presidential election through disinformation campaigns, hacking of political parties, and social media manipulation to sway public opinion.
    - This is a classic case of information warfare aimed at destabilizing democratic processes.
- o **Chinese Cyberattacks on the U.S.**
    - China has frequently been accused of conducting cyber espionage against the United States, targeting government agencies, private companies, and defense contractors.
    - These cyberattacks aim to steal intellectual property, military technology, and sensitive information, undermining U.S. national security.
- o **Pager Blasts in Lebanon**
    - In a more localized example of non-kinetic warfare, pager blasts were reported in Lebanon.
    - These attacks were used to disrupt communication systems without the use of conventional military force, adding another layer to hybrid warfare tactics.

Difference from Kinetic Warfare

- o Kinetic warfare involves physical force, such as the use of weapons, troops, and military machinery to inflict damage and secure objectives through direct combat.
- o Non-kinetic warfare, on the other hand, achieves its goals through non-violent means, focusing on disabling or weakening an enemy without physical engagement.
- o While kinetic actions result in visible destruction, non-kinetic warfare can cause long-lasting disruption without leaving obvious physical traces.

- **Threats and Challenges**

- o **Cybersecurity Risks**: Cyberattacks can cripple national infrastructure, such as power grids, financial systems, and transportation networks.
- o **Information Warfare**: Manipulating public opinion through misinformation or propaganda poses significant risks to societal stability.
- o **Economic Warfare**: Sanctions or economic destabilization can severely impact a nation's economy without direct conflict.
- o **Technology Dependence**: As more systems become digitally interconnected, the vulnerability to non-kinetic attacks increases.
- o **Detection and Response**: Non-kinetic threats are harder to detect and defend against compared to physical warfare, requiring advanced surveillance, cybersecurity measures, and technological preparedness.

AFRICAN BAOBAB

- Baobabs are **long-lived deciduous**, small to large trees from 20 to 100 ft tall with broad trunks and compact tops.
- These trees can live to become thousands of years old. The oldest baobab tree on record was the **Panke baobab in Zimbabwe**, which lived to be a venerable 2450 years old
- **Distribution:** These solitary trees are also incredibly resilient, thriving in dry, open areas such as the **savannas of southern Africa** and western Madagascar.
- **Ecological significance:**
  - o Baobab trees are fundamental to the entire dry African savanna ecosystem. They help keep **soil conditions humid, aid nutrient recycling**, and slow soil erosion with their massive root systems.
  - o It **absorbs and stores water** from the rainy season in its massive trunk, producing a nutrient-dense fruit in the dry season, which can grow up to a foot long.
  - o The **fruit contains tartaric acid and Vitamin C**, serving as a vital nutrient and food source for many species.

o These baobabs play a vital role in their ecosystem; **mitigate impacts of climate change,** providing food and shelter to animals and humans.

o Its fruit is recognised as having high fibre content, acting as a natural prebiotic that promotes the growth of beneficial bacteria in the gut.

KAVACH FOR INDIAN RAILWAYS

o Kavach is India's very own automatic protection system in development since 2012, under the name Train Collision Avoidance System (TCAS).

  ▪ Later, it got rechristened to Kavach or "armour".

o Basically, Kavach is a state-of-the-art electronic system which was designed to help the Indian Railways achieve Zero Accidents.

o It has been indigenously developed by the Research Design and Standards Organisation (RDSO) in collaboration with the Indian industry.

- **Deployment and financial implication**

o The 'Kavach' has been installed on just 2% of Indian Railways' route length by February 2024.

o Despite calls for faster implementation after the Balasore accident, the system costs ₹50 lakh per kilometre and ₹70 lakh per locomotive.

o Analysis shows that its full implementation would account for less than 2% of the Railways' annual capital expenditure.

o IR is facing criticism of the slow implementation.

- **Effectiveness of Kavach in preventing accidents**

o Since 1990-1991, the Railways has classified nearly 70% of all major accidents as derailments, but only 2% of them were due to collisions.

  ▪ Kavach is effective only in avoiding collision.

o 'Kavach' also may not have prevented the Kavaraipettai accident because the relevant error happened beyond the minimum margins 'Kavach' requires to assist.