

# Prelim Bits 23-09-2021 | UPSC Daily Current Affairs

## **Havana Syndrome**

The CIA director and a US intelligence officer have reported symptoms of Havana Syndrome while the two were in India recently.

- Havana Syndrome is a set of mental health symptoms that are experienced by US intelligence and embassy officials in other countries.
- This Syndrome traces its roots to Cuba (2016), where the US officials in their embassy began experiencing the symptoms.
- **Symptoms** are hearing certain sounds without any outside noise being present, nausea, vertigo and headaches, memory loss and issues with balance.
- The injuries in the brains of the victims resembled concussions, like those suffered by soldiers struck by roadside bombs in Iraq.
- Causes No one is entirely sure of the causes of Havana Syndrome.
- But, some studies suggest that the victims may have been subjected to high-powered microwaves that interfered with the nervous system. It has had lasting impact on mental health.

#### Microwave weapons

- They are a type of direct energy weapons, which aim highly focused energy in the form of sonic, laser, or microwaves, at a target.
- People exposed to high-intensity microwave pulses can have both acute and long-term mental effects, **without any physical damage**.
- Greater exposure to high-powered microwaves is said to
  - 1. Interfere with the body's sense of balance, and
  - 2. Impact memory and cause permanent brain damage.

#### LiFi Network

Students' Educational and Cultural Movement of Ladakh (SECMOL), India's highest altitude educational organisation, has become the  $1^{st}$  institute in the Union Territory to have an internet connection using LiFi technology.

- Light Fidelity (LiFi) is a wireless communication technology that **transmits data with a light beam spectrum** through open space in outdoor and indoor environments.
- It is a Visible Light Communications (VLC) system that has components such as,
  - 1. Solid-state lighting (SSL) such as LED bulbs,
  - 2. Photo-detector (photodiode) to receive light signals and
  - 3. Signal processing element to convert the data (embedded in the light beam) into

'stream-able' content.

- Data is fed into an LED light bulb (with signal processing technology). Then the LED bulb sends data at rapid speeds to the photo-detector.
- Uses LiFi systems provide ultra-fast, safe and cheap data connections.
- They are chiefly useful in urban areas where radio spectra are congested.
- They are also very useful in rural areas wherein Fiber Optic Cables or networks are not reachable.
- **Specialty** LiFi can be up to 100 times faster than Wi-Fi.

# **Evergrande Crisis**

A worsening fund crunch at Evergrande, China's biggest and most indebted developer, could potentially spiral into a global financial contagion.

Evergrande Crisis could be China's Lehman moment.

- Evergrande rode on a sustained property prices surge in China to expand into more than 250 Chinese cities selling home-ownership dreams to the country's middle class.
- Triggers that precipitated the cash crunch in the Evergrande crisis are,
  - 1. Chinese regulators kicked off probes into the high borrowings of property developers.
  - 2. To counter that, Evergrande tried selling off some of its business. But a progressive slowing down of China's property market and tapering demand for new houses crimped cash flows.
- Two factors of the Evergrande crisis that could trigger systemic risks are,
  - 1. China has been instrumental in the **post-pandemic global economic recovery**, as it was first off the block in controlling the Covid-19 virus spread in the first quarter of 2020.
  - 2. China's **extended property boom** that started in the mid-1990s has now ensured that nearly three quarters of the country's household wealth is locked up in housing.
- An impending collapse at the biggest real estate company could have a serious knock-on effect on the entire economy.
- This could have dragged down growth and potentially set off a cascading impact that could singe the global commodities and financial markets.
- Impact of the Evergrande crisis The key economic indices across the Asia-Pacific and Europe plummeted sharply.
- The global rout in stock markets also hit the world's biggest fortunes, with the richest 500 people losing a combined \$135 billion.
- In India's stock markets, the metals segment, which has been surging since the start of the year, tanked sharply.
- India's buoyant iron ore exports, much of which is headed to China, could also see an impact due to the crisis in China.

#### **Lehman Crisis**

• Lehman Brothers filed for bankruptcy in 2008 due to the collapse of the subprime mortgage market.

The US subprime mortgage crisis (2007-2010) was a multinational financial crisis that contributed to the 2008 global financial crisis. This occurred when the real estate

market collapsed and homeowners defaulted on their loans.

- Lehman Crisis signalled a limit to the government's ability to manage the crisis and prompted a general financial panic.
- Mutual funds saw mass withdrawal demands to avoid losses, and the interbank lending market tightened, threatening banks with imminent failure.

# **Foodgrain Production**

The Ministry of Agriculture and Farmers Welfare released the first advance estimates of production of major kharif crops for 2021-22.

- During the summer kharif season, the total food grain production estimated to reach an all time high of 150.50 million tonnes.
- **Rice** production is estimated to be 10.7 crore tonnes this year, slightly higher than the 10.4 crore tonnes produced last year.
- The acreage sown with paddy also increased by almost 1 lakh hectares.
- **Oilseeds** Both major oilseed crops (groundnut and soyabean) in the kharif season saw slight dips in production.
  - 1. Groundnut acreage dropped almost 4%, resulting in an estimated production of 82.5 lakh tonnes.
  - 2. Soyabean production (affected by patchy rainfall in Maharashtra and Madhya Pradesh) may amount to 1.27 crore tonnes, slightly lower than last year, and short of the 1.47 crore tonnes targeted.
- **Pulses** Main kharif pulse crop, toor dal, may surpass both last year's production and this year's targets, with a harvest of 44.3 lakh tonnes.
- **Coarse cereals'** production is pegged to drop to 3.4 crore tonnes in comparison to 3.6 crore last year.
- **Cash crops** are likely to see record production, with an estimate of 41.9 crore tonnes in the case of sugarcane and 3.6 crore bales of cotton.

### La Palma Island

There was volcanic eruption in the La Palma Island of the Canaries archipelago.

- La Palma Island of Spain is the most north-western island in the Canary Islands. It was formed as a result of a volcanic formation.
- **Geographical features** La Caldera de Taburiente is a large volcanic caldera (10 km in diameter). It was established as a national park named Taburiente National Park.
- Roque de los Muchachos (Highest Mountain in the island) houses the GRANTECAN (Gran Telescopio Canarias) astronomical observatory.
- Its well-watered slopes are densely wooded and deeply dissected by ravines.
- **Economy** of La Palma revolves around irrigation-based farming.
- Bananas, tomatoes, and tobacco, along with embroidery, are exported from the port of Santa Cruz de la Palma the island's capital.
- Tourism has increased in importance.

**Source: The Hindu, The Indian Express** 

