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 1st 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



SHANKAR
IAS PARLIAMENT
Information is Empowering