

Punjab's Opioid Crisis

What is the issue?

- ✓ Punjab is one of the hotbeds of drug abuse in India, has a worsening Opioid crisis.
- ✓ Punjab state government has taken various measures to enhance Opioid Substitution Therapy (OST).

What are Opioids?

- ✓ Opioids are a class of drugs that include the illegal drug heroin, synthetic opioids such as fentanyl, and pain relievers available legally by prescription.
- ✓ These drugs are chemically related and interact with opioid receptors on nerve cells in the body and brain.
- ✓ Opioid pain relievers are generally safe when taken for a short time and as prescribed by a doctor.
- ✓ As they produce euphoria in addition to pain relief they can be misused, when misused opioid pain relievers can lead to overdose incidents and deaths.

What measures were taken by Punjab to counter drug abuse?

- It is estimated that Punjab has between 1.7 lakh and 2.7 lakh addicts.
- State government has promised to end the drug menace, through policing and by medical interventions.
- State government on pilot basis had introduced Buprenorphine-based Outpatient Opioid Assisted Treatment (OOAT) programme.
- Buprenorphine is currently administered in four rehabilitation and 21 community health centres in the state.
- As of mid-January 2018, 1,712 new patients were registered in the three districts where the pilot is running, the patient retention rate currently stands at 82.13%.

What is the role of Buprenorphine in OST?

- Opioid substitution therapy (OST) is the proper procedure for the treatment endorsed by WHO, Buprenorphine is one of the OST drug given on a long-term basis.
- The treatment involves doctor-administered doses of Buprenorphine under controlled circumstances.

- The drug can play a major role in rehabilitating addicts if used under medical supervision along with psychosocial interventions.
- In India Buprenorphine is a Schedule H drug and is available at government-recognised pharmacies only.

What are the Risks involved with Buprenorphine?

- Patients may get addicted to Buprenorphine, and start consuming it in non-medical environments.
- If injected along with depressant drugs, this can even lead to death.
- In Punjab there was a boom in the demand for Buprenorphine as addicts found the drug to be an alternative.
- Private psychiatrists had started prescribing the drug in excessive quantity to addicts, and it was being sold as an alternative to heroin.

What measures were taken to address misuse of OST drugs?

- Punjab government had ordered a high-profile crackdown on drug peddlers by placing restrictions on Buprenorphine.
- The government issued orders to restrict its supply after there were reports of misuse and illegal sale.
- Its availability was restricted to government and private rehabilitation centres only.
- Buprenorphine is sold under strict regulations and cannot be purchased without the prescription of a qualified doctor.
- It is also listed as a psychotropic substance under The Narcotic Drugs Psychotropic Substances Act.

Maharashtra's Hyperloop Plan

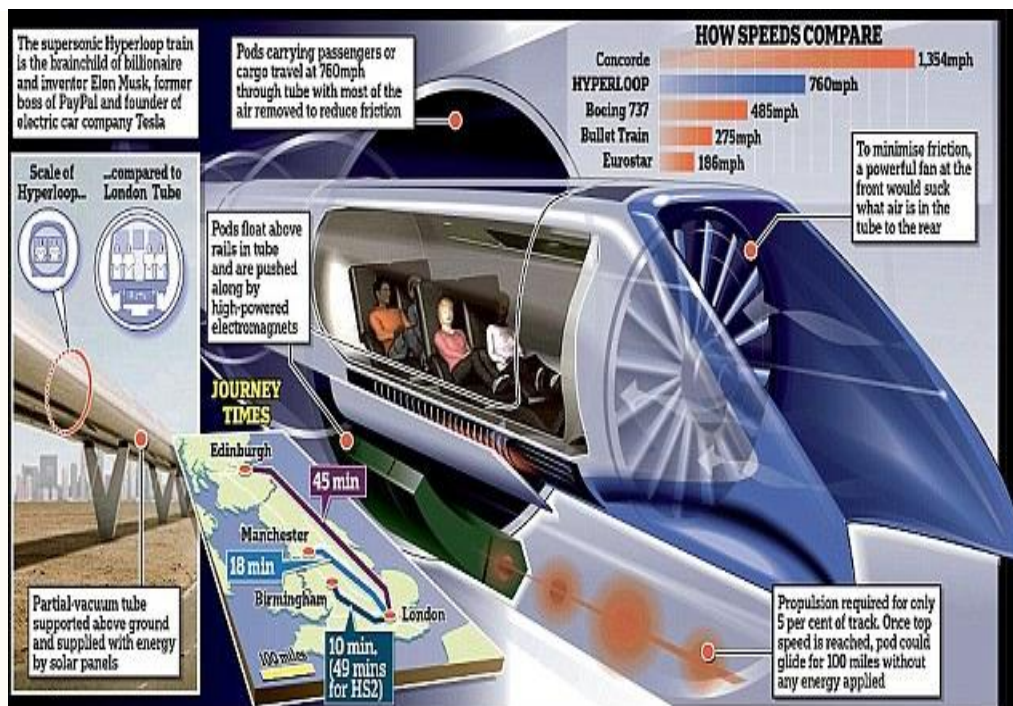
Why in news?

Maharashtra government has signed an agreement with Virgin group to build a Hyperloop.

What is Hyper loop?

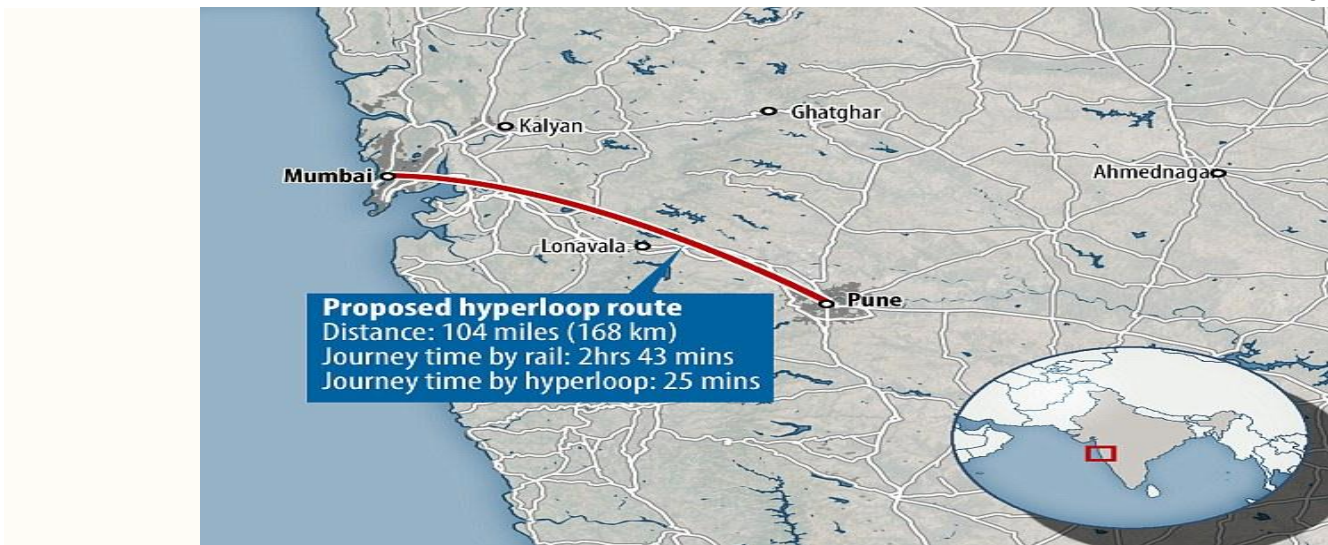
- Hyper loop is a proposed system of transport that would see pods or containers travel at high speeds through a tube that has been pumped into a near-vacuum.
- The train pods would either float using magnetic levitation technology.

- The pods would be able to travel at immense speeds with a projected top speeds of 760mph.
- The pod would initially launch using an electric motor before levitation takes place and the pod can glide at cruising speed in the low-pressure environment.
- Hyper loop One is the company which is working on this technology, has proposed routes in UK, Netherlands, Finland and Dubai, where it has backing from the governments to explore the potential of the system.



What was the proposed Hyper loop route in India?

- The proposed Hyper loop route in India will be connecting Mumbai and Pune in Maharashtra.
- The proposed system will cut travel time between Mumbai and Pune to 25 minutes from the 3 hours it now takes by road.
- Mumbai-Pune Hyperloop is estimated to connect 26 million people, support 150 million passenger trips per year, and reduce greenhouse gas emissions by up to 86,000 tonnes over 30 years.



- It is expected that the project will have operational systems in service by 2021.

What are the advantages of Hyperloop?

- The system is fully autonomous and sealed, so no driver-related error is anticipated.
- In a sealed environment with almost no air resistance, the pods are expected to reach very high speeds.
- Motion will not involve contact, so the vehicle will be virtually noiseless.
- The capital and operational costs of Hyperloop will be two-thirds that of high-speed rail.
- Tunnels for the Hyperloop would be built either above or below ground, taking up a smaller ground footprint than traditional rail and road.
- Hyperloop is “energy-agnostic”, drawing from whichever source is available, if that’s solar or wind, the system will be carbon-free.

Reactions to Indian Stock Market’s Protectionism

What is the issue?

- Indian stock markets had taken a protectionist move to safeguard its interest.
- Such restrictive moves has created a rage across global trading platforms.

What was the protectionist move of Indian stock market?

- The three Indian stock exchanges, the BSE, NSE and the MSEI, decided to stop providing market data to enable trading on foreign exchanges and platforms.

- Trading in Nifty, rupee and some stock futures have been shifting to the SGX and the Dubai Gold and Commodity Exchange (DGCX) over the last decade.
- The SGX currently accounts for more than half the trades in Nifty futures and almost one-fourth of future trades in dollar rupee futures while DGCX accounts for one-third of rupee future volume.
- To stop this migration of volume from domestic bourses the three Indian exchanges jointly decided to stop providing data feed on stock prices and indexes to foreign exchanges or trading platforms for trading once the ongoing licences with various exchanges expire.
- Without the right to use the underlying prices, trading of derivatives on overseas platforms would have to stop.

How India's move has impacted MSCI?

- Morgan Stanley Capital International (MSCI) is the global index provider, India's weight over the indices is about 25 per cent.
- MSCI's rage is mainly due to the decision by the exchanges to stop providing market data to index providers for the creation of indexes or other products.
- Based on such indices MSCI would be made available for trading or settling derivatives on foreign exchanges or trading platforms.
- With the recent restriction, MSCI will have to stop licensing data on India-specific indices to global exchanges.

What are the measures taken by MSCI?

- MSCI has already protected its back against such restrictive moves by other global exchanges through the "competitive landscape clause" in its market classification framework.
- This framework is set out to determine the classification of a market in either of the three primary buckets frontier, emerging and developed.
- One of the criteria used to determine the classification is market accessibility that includes openness to foreign ownership, ease of capital flows, efficiency of operational framework, competitive landscape and stability of institutional framework.
- MSCI also plans to consult its institutional investors to see if they would be impacted by India's action and then move to re-classify India in its indices.

How India might get affected by its measures?

- There are many India-specific MSCI indices such as the MSCI India index with futures that are listed on many global exchanges.
- The introduction of restrictive measures has led to a change in India's market classification in MSCI Inc., and will impact portfolio flows into India.
- While the Indian market scores well on most of the benchmarks used to evaluate market accessibility, the recent move will make India fall short in the competitive landscape clause.

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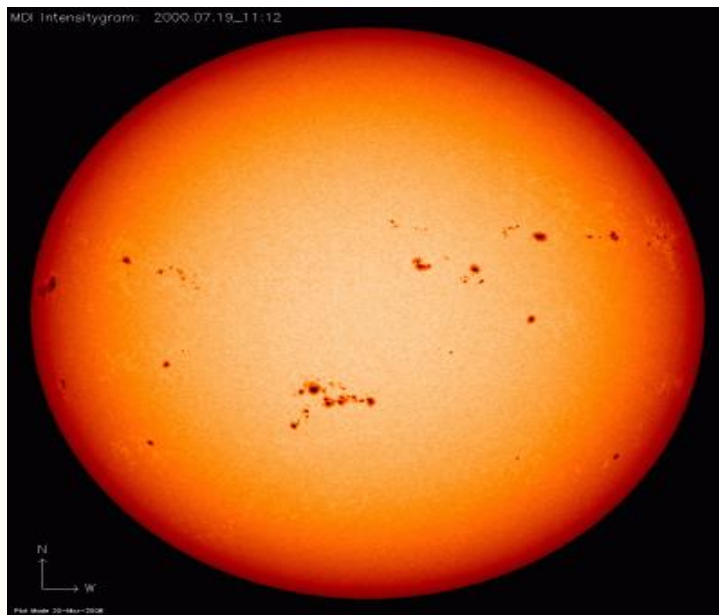
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Solar Cycles and Sun spots

- The amount of magnetic flux that rises up to the Sun's surface varies with time in a cycle called the solar cycle, which lasts 11 years on average.
- This cycle is sometimes referred to as the sunspot cycle.
- Sunspots are regions where the solar magnetic field is very strong.



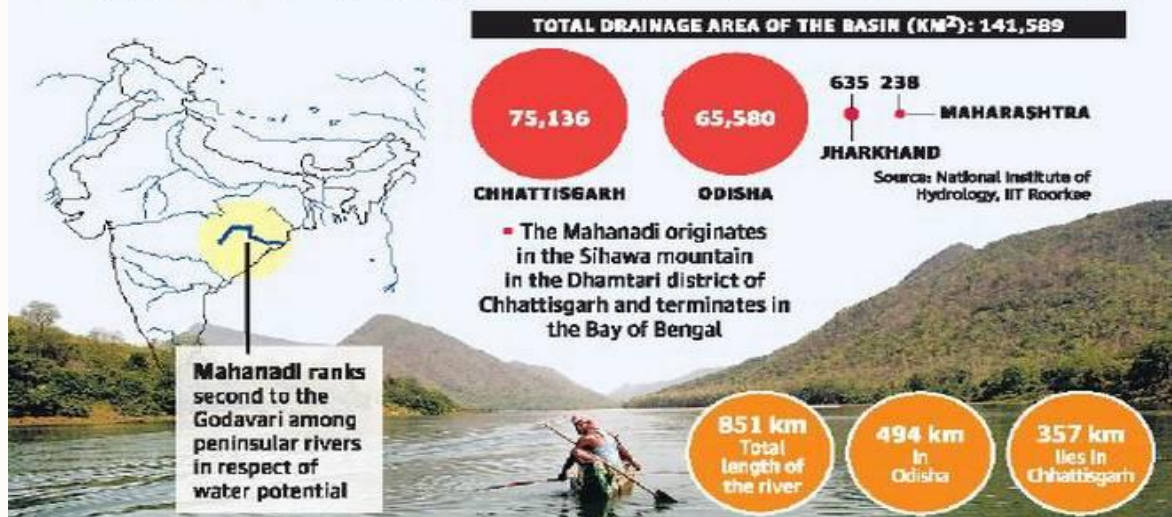
- In visible light, sunspots appear darker than their surroundings because they are a few thousand degrees cooler than their surroundings.
- They are usually concentrated in two bands, about 15 - 20 degrees wide in latitude, that go around the Sun on either side of the solar equator.

Mahanadi Tribunal

- The Union Cabinet approved the setting up of Mahanadi Water Dispute Tribunal.
- The tribunal will settle the row between Odisha and Chhattisgarh on sharing the waters of the Mahanadi River.
- The tribunal is expected to determine water sharing among basin States on the basis of the
 1. overall availability of water in the complete Mahanadi basin,
 2. contribution of each State,
 3. present utilization of water resource in each State
 4. potential for future development
- The tribunal will be setup as per the provisions of the Inter-State River Water Disputes (ISRWD) Act, 1956.

A lifeline for two States

The Odisha government had moved the SC in December, 2016, for an order asking Chhattisgarh to stop construction of barrages upstream of Mahanadi. A look at the drainage area of the Mahanadi



- The Tribunal shall consist of a Chairman and two other Members nominated by the Chief Justice of India from amongst the Judges of the Supreme Court or High Court.

National Urban Housing Fund

- The Union Cabinet has given approval for creation of National Urban Housing Fund (NUHF) for Rs.60, 000 crores.
- The motive of fund is to finance the government's Housing for All Program, which aims to build 12 million affordable housing units in urban areas by 2022.
- The newly created fund will be placed under the aegis of the Building Materials and Technology Promotion Council (BMTPC).
- BMPTC is an autonomous body registered under the Societies Registration Act, 1860, The newly created fund will be placed under the aegis of the Building Materials and Technology Promotion Council
- The fund will be raised from non-budgetary sources and help in plugging the budgetary shortfalls.

Underwater Cave in Yucatan peninsula

- Recently a biggest flooded cave was found in the Yucatan Peninsula, Mexico, by scuba divers.
- Archaeologists explored that cave and found fossils of giant sloths and an elaborate shrine of the Mayan god of commerce.
- The Yucatan peninsula is studded with monumental relics of the Maya people, whose cities drew upon an extensive network of sinkholes linked to subterranean waters known as **cenotes**.



- Researchers believe that the water level in the caves has fluctuated over time, and that they were a source of water in times of severe drought.
- Some of the animals and humans who ventured inside never made it out alive, whose remains are a treasure trove for scientists,
- It enables to piece together bits of the cave's history dating all the way back to the Pleistocene epoch (2.6 million to 11,700 years ago).
- The artifacts left inside by humans are burnt human bones, ceramics, wall etchings and more.
- Similarly the animal remains include gomphotheres — an extinct elephant-like animal — as well as giant sloths and bears, archaeologists told a press conference.

UNICEF Report- Neonatal Deaths

- The released UNICEF report states that over 6, 00,000 children died within the first month of their birth in 2016.
- The country's neonatal mortality rate at 25.4 deaths per 1,000 live births makes it 12th worst among 52 "lower middle-income countries" that pose risk for newborns.

BEST AND WORST IN BABY CARE

Riskiest nations for newborns

Newborn deaths per 1,000 live births

Pakistan	45.6
Central African Republic	42.3
Afghanistan	40
Somalia	38.8
Lesotho	38.5

Safest nations for newborns

Japan	0.9
Iceland	1.0
Singapore	1.1
Finland	1.2
Slovenia	1.3

2.6mn
babies die globally
before turning a
month old

6,40,000
of these deaths take
place in India

25.4/1,000
live births
is India's newborn
death rate

21-02-2018

- Even among states the difference is stark. For instance, Kerala and Goa's neonatal mortality stands at 10/1000 live births, whereas Bihar and Uttarakhand neonatal mortality rate is 44.
- The causes for the death are preventable and treatable as 80% of these fatalities happen for no serious reason.
- India is currently not on track to meet the Sustainable Development Goal target for neonatal mortality of 12 by 2030.
- The study also points out that India had made positive stride in Under-5 mortality rate (under-five mortality fell to 39 from 43 in the previous year).

Buried Pyramid City- Mexico

- An Ancient pyramid city was discovered underground in heartland of Mexico.



- They discovered the lost city known as Angamuco which contained 40,000 buildings by using by using lasers to sends beams of light from an aircraft to the ground in order to construct a map of the area (LIDAR Technology).
- The lost city was built by Purépecha who were rivals to the Aztecs around 1,000 years ago.
- The Purépecha are a group of indigenous people from the northwestern region of Michoacán, Mexico
- Around 100,000 people are thought to have lived in the ancient city between 1000 and 1350AD.
- The findings have implications for understanding the region's history of migration, land use and conservation and even early climate changes.

China outbids India for stake in DSE

Bangladesh has agreed to sell a large stake in its stock exchange to a Chinese consortium rebuffing a rival bid from India that raised political sensitivities.

India's NSE had offered 15 taka (\$0.18) per share during the tender process.

China's Shanghai and Shenzhen stock exchanges made a joint higher bid of 22 taka per share, or \$122 million, and offered additional technical support worth nearly \$37 million.

Prime Minister Narendra Modi's government has made big investments in Bangladesh and Indian companies have won multi-billion contracts in key sectors in recent years.

But increasingly it must counter China, which has also courted India's arch-rival Pakistan and strategic Indian Ocean nations including Sri Lanka and the Maldives.

'China deploys warships in Indian Ocean'

A Chinese naval contingent has been deployed in the East Indian Ocean for more than a week.

This is at a time when the Maldives is undergoing a political crisis according to a Chinese website sina.com.cn.

Chinese Navy's 'Blue 2018A' fleet has been training in the East Indian Ocean for a "week or so".

However, Indian defence sources denied any movement of Chinese ships near the Indian Ocean island nation.

China had earlier warned against external intervention in the Maldives after the country's exiled former President Mohamed Nasheed called for New Delhi's intervention to release political prisoners.

The detachment of the Chinese Navy comprises two 052D destroyers, a 054A frigate, and a 071 dock landing ship. A supply ship is also part of the flotilla.

An Australian website, news.com.au, underscored that the entry of Chinese warships in the Indian Ocean marks a significant shift in regional power.

More ships

The post highlighted that two additional naval groups, already deployed for anti-piracy escort missions of commercial ships, beef up the Navy's overall deployment in the Indian Ocean at this time.

Not near Maldives

Indian defence sources said no movement of Chinese ships was detected near the Maldivian waters.

A couple of weeks back, a Chinese naval task force has entered the Indian Ocean from the Sunda Strait for exercises in international waters closer to Australia and has since left via the Lombok Strait, the source explained.

China holding talks with Baloch militants'

According to a report by The Financial Times, China has been quietly holding talks with Baloch militants in Pakistan's Baluchistan Province for over five years to protect its \$60 billion China-Pakistan Economic Corridor (CPEC) initiative.

For more than half a century, Beijing has maintained a policy of non-interference in the domestic politics of other countries. But that has been tested by its desire to protect the billions of dollars it is investing around the world under its 'Belt and Road Initiative'.

China's willingness to get involved in Pakistani politics has fuelled concerns in New Delhi, which is worried about China's growing political influence in neighbouring countries, including Nepal, Myanmar and Sri Lanka, the report said.

Pak. welcomes move

Pakistani officials have welcomed the talks between Baloch rebels and Chinese envoys.

The recent decision by the U.S. to suspend security assistance to Pakistan had convinced many in Islamabad that Beijing was a more genuine partner.