Prelim Bits 21-10-2022 | UPSC Daily Current Affairs

Interpol Metaverse

The Interpol launched the first ever metaverse specifically designed for law enforcement agencies worldwide.

- The World Economic Forum has partnered with the Interpol, Meta, Microsoft and others in the initiative to define and govern the metaverse.
- The fully operational Interpol Metaverse will allow registered users to tour a virtual facsimile of the Interpol General Secretariat headquarters in Lyon, France.
- There is no restriction on geographical or physical boundaries for users and they can interact with other officers through their avatars.
- Users can also opt for an immersive training in forensic investigation and other policing capabilities.

Metaverse

- The term metaverse is used to describe the vision in which the internet evolves into a virtual world.
- This idea was for the first time conceptualised in 1992 by American novelist Neal Stephenson.
- It has been made by blending the words “meta,” that means beyond, and “universe”.
- The Metaverse combines elements of the physical world and merges them with virtual spaces.
- In Metaverse technology, internet is seen as a 3D space, where individuals can go in and out and interact with each other.
- This would mean you can talk to your co-workers even without attending office in the real world, but would be present near them virtually.
- Face book is evolving into a metaverse company from a mere social media network.
- The metaverse holds many benefits for law enforcement, notably in terms of remote work, networking, collecting and preserving evidence from crime scenes, and delivering training.

Global Crime Trends Report

- The report is released by the Interpol for the first time.
- It leverages data from the organization’s 195-country membership to map out current and emerging threats worldwide.
- According to the report, crime has increasingly moved online as the pace of digitalization has increased.
- The report, which is restricted to law enforcement, brings together data received from INTERPOL’s 195 member countries.

References

1. Interpol | Interpol launches first global police Metaverse
2. Hindustan Times | Interpol launches first global police Metaverse
3. Interpol | Global Crime Trends Report

Chandrayaan 3 (C3)

The Chandrayaan-3 mission is expected to be launched in August 2023 by Indian Space Research Organisation (ISRO).

- Chandrayaan 3 spacecraft is the 3rd lunar exploration expedition, outlined by the Indian Space Research Organisation (ISRO).
- ISRO planned this spacecraft to exhibit India's soft-landing proficiency on a stellar body.
- It will only consist of a rover and lander and will communicate to the earth via an orbiter from Chandrayaan 2.
- India aims to examine the Moon's surface, especially areas that have not been receiving sunlight in some billion years.
- Scientists and astronomers are suspecting the presence of ice and abundant mineral stocks in these darker parts of the lunar surface.
- In addition, this exploration will not limit to the surface but aim to study the sub-surface and exosphere.
- The rover will study the surface by taking images at a distance of 100km from the lunar orbit.
- **Design** - The lander of ISRO's Chandrayaan-3 will be powered by 4 throttle-able engines.
- In addition, it will be endowed with a Laser Doppler Velocimeter (LDV).

Significance of Moon's south pole

- It contains larger shadowed areas than the northern pole.
- Scientists believe that these areas on the lunar surface possibly have a permanent source of water.
- In addition, scientists also have a keen interest in the craters present in the southern pole.
- They believe these cold traps may contain mysterious fossil records of the early planetary system.

References

1. Livemint | ISRO to launch Chandrayaan 3
2. The Hindu | Chandrayaan-3 launch in June next year
3. India today | Chandrayaan-3 launches Moon Rover Somnath

Climate Transparency Report, 2022

Between 2016–2021, extreme events triggered by climate change caused damage to crops

and financial loss for farmers in the country.

- The Climate Transparency Report assesses the performance of the G20 in a comparative stocktake of climate action.
- The report provides a concise overview of the key facts and figures on the state of climate action in the G20 countries.

Findings

- India suffered an income loss of $159 billion, 5.4% of its gross domestic product, in the service, manufacturing, agriculture, and construction sectors due to extreme heat in 2021.
- Heat exposure in the country led to the loss of 167 billion potential labour hours, a 39% increase from 1990–1999.
- Labour productivity in India is projected to decline by 5% from the 1986–2006 reference period if global temperatures increase by 1.5°C.
- The decline in labour productivity will be 2.1 times more if the global temperatures increase by 2.5°C, and 2.7 times at a 3°C scenario.
- The annual damage from river flooding in the country is likely to increase by around 49% at 1.5°C of warming.
- The damage from cyclones will increase by 5.7%.
- Snowfall in India is expected to decrease under 1.5°C scenario by 13% when compared with the reference period's snowfall levels.
- At 3°C of warming, the decrease is expected to be 2.4 times the 1.5°C scenario.

References

1. Climate Transparency | Report 2022
2. Hindustan Times | Heat related loss highest in India
3. The Hindu | India suffered economic loss due to extreme heat

Scorched-Earth Tactics

German chancellor accuses Russia of using scorched-earth tactics in Ukraine.

- It is a form of a military strategy which destroys anything that could be of use to the enemy, including energy supplies, bridges, provision stores, agricultural fields, road and railway links, etc.
- The destruction could be carried out by the enemy, or by the retreating army of a country which does not want invaders to use its resources.
- Harming civilians as part of this strategy has been banned under the 1977 Geneva Convention.
- The strategy seeks to deplete the enemy's resources to sustain warfare, and also break their morale by inflicting heavy hardships on combatants and non-combatants alike.

Past Instances

- **Ancient Times –** The nomadic herders Scythians would hide in the steppes after destroying food supplies and poisoning wells.

- **Modern Era –** During the American civil war in 1864, when Union General William Tecumseh Sherman and his soldiers burnt everything in sight as they marched through Confederate areas.
- In 1915, the Imperial Russian Army, when retreating from the Imperial German Army, destroyed anything that could serve the invaders for more than 600 miles, including crops, railway lines, and dwellings.
- In 1941, the Russian army again destroyed telegraph networks and electrical and industrial resources when invaded by Germany.
- **In India –** In India, the armies of Maratha leader Chhatrapati Shivaji were known for their scorched earth tactics.

References

1. Britannica | Scorched Earth Policy
2. Indian Express | Russia is using Scorched Earth Tactics

Forest Conservation Rules

The chairperson of National Commission for Scheduled Tribes (NCST) had stated that Forest Conservation Rules infringe upon land rights of tribespeople.

- The Forest Conservation Rules deal with the implementation of the Forest Conservation Act (FCA), 1980.
- They prescribe the **procedure** to be followed for **forestland to be diverted for non-forestry uses** such as road construction, highway development, railway lines, and mining.
- The broad aims of the Forest Conservation Act are
    - To protect forest and wildlife,
    - To put brakes on State governments' attempts to hive off forest land for commercial projects and
    - To increase the area under forests.
- **Forest Advisory Committee (FAC)** - For forestland beyond 5 hectares, approval for diverting land must be given by the Central government.
- This is via a specially constituted committee, called the Forest Advisory Committee (FAC).
- Once the FAC is convinced and approves (or rejects) a proposal, it is forwarded to the concerned State government where the land is located.
- The concerned State government then has to ensure that provisions of the Forest Right Act, 2006 are complied with.
- The FAC approval also means that the future users of the land must provide compensatory land for afforestation as well as pay the net present value (ranging between Rs. 10-15 lakh per hectare.)
- **Updated rules -** The new rules make a provision for private parties to cultivate plantations and sell them as land to companies who need to meet compensatory forestation targets.
- This will help India increase forest cover as well as solve the problems of the States of not finding land within their jurisdiction for compensatory purposes.
- There is the absence of wording of what happens to tribals and forest-dwelling

communities whose land would be hived off for developmental work.

- Prior to the updated rules, state bodies would forward documents to the FAC that would also include information on the status of whether the forest rights of locals in the area were settled.
- After 2009, the Environment Ministry passed an order mandating that proposals would not be entertained by the FAC unless,
    - There was a letter from the State specifying that the forest rights in the place had been "settled" and
    - The gram sabha, or the governing body in villages in the area, had given their written consent to the diversion of forest.
- Now, the new Rules say that the consent of Gram Sabha is not needed.

References

1. The Hindu | NCST asks centre to hold Forest Conservation Rules
2. The New Indian Express | FCR will undermine rights of tribals

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