

Prelim Bits 12-07-2022 | UPSC Daily Current Affairs

International Child Sexual Exploitation Initiative

India's Central Bureau of Investigation (CBI) has joined the Interpol's International Child Sexual Exploitation (ICSE) initiative and gained access to its image and video database.

- The International Child Sexual Exploitation (ICSE) image and video database is an intelligence and investigative tool.
- It allows specialized investigators to share data on cases of child sexual abuse.
- The ICSE database uses video and image comparison to analyse Child Sex Exploitation Material (CSEM) and make connections between victims, abusers and places.
- India is the 68th country to have access to this database and software.
- The initiative will allow the CBI to collaborate with investigators in other countries for
 1. Detecting child sex abuse online and
 2. Identifying abusers, victims, and crime scenes from audio-visual clips using specialised software.

On average, the database of the ICSE initiative helps identify 7 child victims everyday globally.

- Using the image and video comparison software, the investigators attempt to identify locations of markers visible in a piece of media.
- The detectives in all 68 countries of the grouping can further exchange information across the world.

India's Actions to combat Online Child Sex Abuse

- **Interpol data** - According to Interpol data, India reported over 24 lakh instances of online child sexual abuse from 2017 to 2020, with 80% victims being girls below the age of 14 years.
- More than 60% unidentified victims were prepubescent, including infants and toddlers.
- Around 65% of unidentified victims were girls, but severe abuse images were more likely to have boys, the Interpol said on its website.
- **OCSAE** - In 2019, the CBI set up a special unit called the 'Online Child Sexual Abuse and Exploitation Prevention/Investigation (OCSAE)'.
- This special unit was set up for tracking and monitoring posting, circulation and downloads of CSEM online.
- Based on intelligence developed by the unit, the CBI started a country-wide operation against the alleged peddlers of online CSEM in 2021.
- In 2019, the National Centre for Missing and Exploited Children, a US-based non-profit organisation, had started sharing tip-offs about child sex abuse with Indian agencies.
- Received by the National Crime Records Bureau (NCRB), this information was passed on to the states where the incidents took place, to boost detection of those sharing such content.

Reference

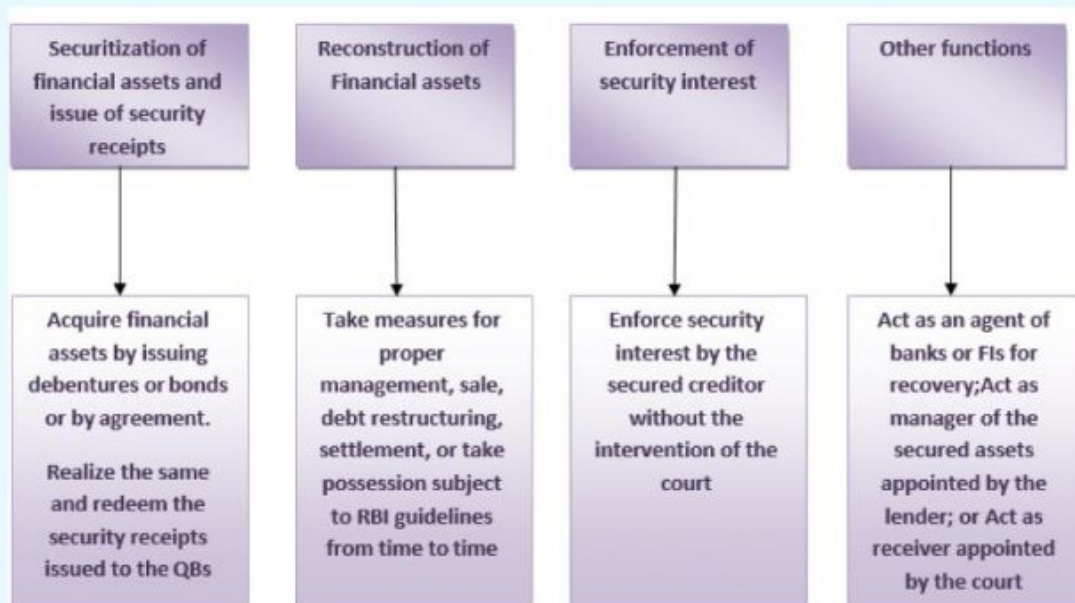
1. <https://indianexpress.com/article/explained/explained-interpol-icse-initiative-child-sex-abuse-cbi-8023121/>
2. <https://www.interpol.int/en/Crimes/Crimes-against-children/International-Child-Sexual-Exploitation-database>
3. <https://www.newindianexpress.com/nation/2022/jul/11/indias-cbi-now-has-access-to-interpols-international-child-sexual-exploitation-database-2475310.html>

Sarfaesi Act of 2002

Banks have invoked the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act against telecom infrastructure provider GTL to recover their pending dues.

- The Sarfaesi Act of 2002 is the abbreviation for the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002.
- This Act was brought in to **guard financial institutions against loan defaulters**.
- To recover their bad debts, the banks under this law can take control of securities pledged against the loan, manage or sell them to recover dues without court intervention.
- **Objectives of the Act** - Efficient or rapid recovery of non-performing assets (NPAs) of the banks and financial institutions (FIs).
- Allows banks and financial institutions to auction properties (say, commercial/residential) when the borrower fails to repay their loans.

Role of SARFAESI Act, 2002



- **Applicability** - The law is applicable throughout the country and covers all assets, movable or

immovable, promised as security to the lender.

- Under this Act, “bank” means
 1. A banking company; or
 2. A corresponding new bank; or
 3. The State Bank of India; or
 4. A subsidiary bank; or 4 [(iva) a multi-State co-operative bank; or]
 5. Such other bank which the Central Government may, by notification, specify for the purposes of this Act.
- According to a 2020 Supreme Court judgment, co-operative banks can also invoke Sarfaesi Act.
- According to the Finance Ministry, the non-banking financial companies (NBFCs) can initiate recovery in Rs 20 lakh loan default cases.
- **Powers of the banks** - The Act comes into play if a borrower defaults on his or her payments for **more than six months**.
- The lender then can send a notice to the borrower to clear the dues within 60 days.
- In case that doesn't happen, the financial institution has the right to take possession of the secured assets and **sell, transfer or manage** them.
- The defaulter, meanwhile, has a recourse to move an appellate authority set up under the law within 30 days of receiving a notice from the lender.

Reference

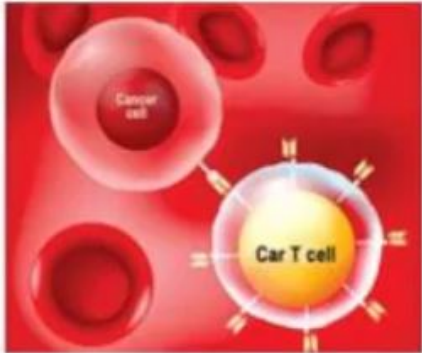
1. <https://indianexpress.com/article/explained/everyday-explainers/explained-what-is-the-sarfaesi-act-invoked-against-telecom-provider-gtl-8022947/>
2. <https://legislative.gov.in/sites/default/files/A2002-54.pdf>
3. <https://cleartax.in/s/sarfaesi-act-2002>

CAR T-cell Therapy

Indian pharmaceutical companies and start-ups may soon offer CAR T-cell therapy-based treatment for cancers at nearly one tenth of the cost in the US.

- The Chimeric Antigen Receptor (CAR) T-cells are genetically engineered to produce artificial T-cell receptors.
- CAR T-cell therapy is also sometimes talked about as a type of *cell-based gene therapy*, as it involves altering the genes inside the immune cells called T cells (a type of white blood cell) to help them attack the cancer.
- This type of treatment can be very helpful in treating some types of cancer, even when other treatments are no longer working.
- Since live cells are re-engineered to fight the disease, cellular immune therapies are considered '**living drugs**'.
- A living drug is not a pill, but a process that is personalized to the needs of the patient.
- CAR T-cell therapy for cancers like leukaemia has the potential to reduce the 3-year conventional treatment (using oral drugs, chemotherapy, bone marrow transplant, etc) to just 3 weeks.
- This will be a one-time treatment. It would start to show results within weeks, and will last for years.

CAR T-CELL THERAPY: MAKING A LIVING DRUG



T-cells are collected: T-cells are a type of white blood cells extracted from the patient's blood

Genetically modified: These are genetically engineered to find and kill cancer cells

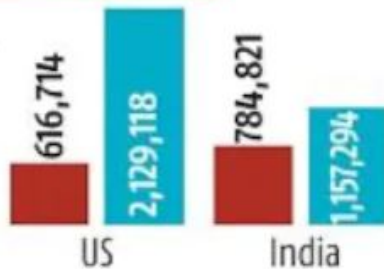
CAR T-cells multiplied: Re-engineered cells are now multiplied until there are millions of attacker cells

Infused back: CAR T-cells are infused back into the patient. These attacker cells recognise and kill cancerous cells, and help guard against recurrence

INDIA VS US CANCER BURDEN

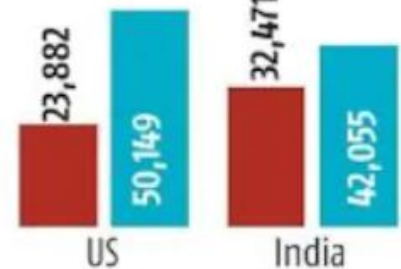
All cancers

■ Annual mortality
■ Annual incidence



Leukaemia (blood cancer)

■ Annual mortality
■ Annual incidence



Source: GLOBOCAN 2018

- **Success rate** - Success rates vary with the type of cancer and the stage of the disease. Globally, at least 40-50% patients show no disease recurrence after many years.
- Almost 85% of the cell therapies are tested on terminally ill or stage-4 cancer.
- This has the potential to become the first line of therapy for patients, and then the success rates should be better, as when the first and second line treatments fail, the patient's bone marrow is already fatigued.
- **Side-effects** - Sometimes there is cytokine release syndrome as there are several dead cancer cells in the body, which can be managed.
- Over time as cells die, they are replaced by healthy cells, and within 2 to 3 weeks, the symptoms usually go away.

Reference

1. https://www.business-standard.com/article/current-affairs/cell-therapy-treatment-for-cancer-in-india-may-cost-10-of-us-cost-122071101459_html
2. <https://www.cancer.org/treatment/treatments-and-side-effects/treatment-types/immunotherapy/car-t-cell1.html>
3. <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/car-t-cell-therapy>

World Population Prospects 2022

The 2022 edition of the United Nations' World Population Prospects (WPP) was released recently.

- **About the Report** - The WPP has been published by the Population Division of the UN in a biennial cycle since 1951.
- Each revision of the WPP provides a historical time series of population indicators starting in 1950.
- It does so by taking into account newly released national data to revise estimates of past

trends in fertility, mortality or international migration.

- **Findings** - According to the WPP 2022, India is projected to surpass China as the world's most populous country in 2023.
- It also projected the world's population to reach 8 billion on November 15, 2022.
- The world's population continues to grow, but the pace of growth is slowing down.
 1. The global population is expected to grow to around 8.5 billion in 2030, 9.7 billion in 2050 and 10.4 billion in 2100.
 2. In 2020, the global growth rate fell under 1% per year for the first time since 1950.
- Rates of population growth vary significantly across countries and regions.
 1. More than half of the projected increase in global population up to 2050 will be concentrated in just 8 countries: the Congo, Egypt, Ethiopia, India, Nigeria, Pakistan, the Philippines and Tanzania.
 2. Disparate growth rates among the world's largest countries will re-order their ranking by size.
 3. The 46 least developed countries (LDCs) are among the world's fastest-growing.
 4. Many are projected to double in population between 2022 and 2050, putting additional pressure on resources and posing challenges to the achievement of the UN's SDGs.
- The population of older persons is increasing both in numbers and as a share of the total.
- A sustained drop in fertility has led to an increased concentration of the population at working ages (between 25 and 64 years), creating an opportunity for accelerated economic growth per capita.
- International migration is having important impacts on population trends for some countries.

Reference

1. <https://www.thehindu.com/todays-paper/tp-national/india-set-to-beat-china-in-population-un-report/article65629108.ece>
2. <https://indianexpress.com/article/explained/reading-un-population-report-8023378/>

World Cities Report 2022

Recently, the UN Habitat released the World Cities Report 2022.

- **World Urban Population** - The urban population is expected to continue to grow naturally through rising birth rates, particularly in lower-income countries.
- Globally, the urban population is forecast to grow from 56% of the global total in 2021 to 68% by 2050.
- **India's Urban Population** - By 2035, the percentage of the population in India at mid-year residing in urban areas will be 43.2% (675 million). This will be the second-highest behind China's one billion.
- **Challenges** - Urban poverty and inequality remain one of the most intractable and highly complex problems confronting cities.
- Further, cities especially those in warm climates or low-lying coastal areas face existential threats due to the risks and impacts of climate change and extreme weather events.
- **Suggestions** - The report calls for greater commitment by national, regional and local governments.
- It encourages the further adoption of innovative technologies and urban living concepts such as the "15-minute city."
- "15-minute city concept" envisages that residents can meet most of their daily needs within a 15-minute journey.

Reference

1. <https://www.business-standard.com/article/markets/leasing-of-space-at-18-2-mn-sq-ft-in-top-9-cities-during-jun-quarter-122071101297.html>
2. <https://unhabitat.org/wcr/>
3. https://unhabitat.org/sites/default/files/2022/06/wcr_2022.pdf



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