Prelim Bits 07-05-2023 & 08-05-2023 | UPSC Daily Current Affairs

Vapes

Electronic Nicotine Delivery Systems-ENDS (e-cigarettes) are 95% less harmful than tobacco cigarettes claimed by a study is a myth.

- Vaping consists of inhaling the vapour of a heated liquid inside e-cigarettes.
- The liquid inside e-cigarettes normally contains nicotine, the highly addictive substance present in regular tobacco.
- **Myth -** In a 2014 paper detailing the outcomes of that meeting, the authors rated e-cigarettes as having only 4% of the maximum relative harm of cigarettes.
- Public Health England used the 95% figure in its 2015 review of e-cigarettes based on the above survey which took off the '95%' figure.
- **Effects -** E-cigarette use involves the inhalation of toxic substances and is associated with poisoning, lung injury and burns.
- Nicotine e-cigarettes can cause dependence or addiction in non-smokers.
- Young non-smokers who use e-cigarettes are more likely than non-users to initiate smoking and become regular smokers.
- E-cigarettes do not result in reduced harm if users continue to smoke.
- **In India -** Since 2019, the production, manufacture, import and export, transport, sale, distribution, storage and advertisement of vapes has been banned in India.
- **Related Topics -** Banning Single-stick Cigarettes

References

1. The Hindu - Vapes aren't 95% less harmful than cigarettes
2. Hindustan Times - India and vaping: When being lit is the problem

Donanemab

A US pharmaceutical company has released the positive results from phase 3 trials for its drug to treat Alzheimer's treatment, donanemab.

- Alzheimer's disease affects at least 55 million people worldwide.
- Alzheimer's disease is the most common form of dementia.
- Drug development for Alzheimer's disease was not taken up by pharma companies as their success rate was low and unprofitable.
- The US aims to prevent and effectively treat Alzheimer's disease by 2025 and gave "accelerated" approval for drug lecanemab.
- These gave a renewed push to find treatments for Alzheimer's.
- **Donanemab** - A drug developed to cure Alzheimer's by a US pharma company.

- Donanemab which is yet to be approved, is not a cure for Alzheimer's.
- Donanemab has similar antibody-based therapy like lecanemab, but targets different forms of amyloid-beta (Aβ) proteins.
- The drug aims to remove the plaques from the brain and slow the progression of the disease.
- **Lecanemab** is another drug for Alzheimer's, approved in the US Food and Drug Administration (FDA), but it is still under evaluation by the European Medicines Agency (EMA).
- **Comparison -** Both donanemab and lecanemab are given intravenously.
- Donanemab was given every four weeks and lecanemab every two weeks.
- Both donanemab and lecanemab have a high-risk of side effects like 'amyloid-related imaging abnormalities' (ARIA) which include swelling or bleeding in the brain.
- Donanemab slows cognitive decline by 35% whereas Lecanemab trial results showed it slowed cognitive decline by 27%.

References

1. IE - How new alzheimer drugs donanemab and lecanemab compare

Goa Forest Fires

A forest department probe into the bushfires that impacted an area of about 4 sq km in Goa in March concluded that the fires were largely triggered by natural causes.

- 74 fire incidents were reported in the first fortnight of March, out of which 32 fires affected 3 wildlife sanctuaries.
- The inquiry report suggests that a conducive environment and extreme weather conditions like deficient rainfall in the preceding season, unusually high temperatures, low moisture and humidity led to the fires.
- **Conclusion -** Prolonged dry spell, unprecedented high temperatures, and low humidity caused sporadic fire incidents in Goa.
- **Pattern -** Incidents of forest fires in Goa during the summer have been more in the years following those of poor monsoon rain.
- A similar pattern has been seen in Karnataka as well.
- Surface fires are common in moist deciduous forests of Goa but Goa does not experience crown fires which is caused by friction of trees.

An FSI study for the period 2004-21 has found that nearly 10.66% area under forests in India is 'extremely' to 'very highly' fire-prone.

Forest Fires

- Wildfire is also called forest, bush or vegetation fire.
- It can be described as any uncontrolled and non-prescribed combustion or burning of plants in a natural setting such as a forest, grassland, brush land or tundra.
- Wildfire can be incited by human actions, such as land clearing, extreme drought or

in rare cases by lightning
- **Types -** There are 3 basic types of wildfires:
  - *Crown fires* burn trees up their entire length to the top. These are the most intense and dangerous wildland fires.
  - *Surface fires* burn only surface litter and duff. These are the easiest fires to put out and cause the least damage to the forest.
  - *Ground fires* (underground or subsurface fires) occur in deep accumulations of humus, peat and similar dead vegetation that become dry enough to burn. - Very difficult to fully put out.

References

1. IE - Why did Goa see a spate of forest fires in March?
2. UN-SPIDER Knowledge Portal - Forest Fires

Chittagong Hill Tracts

Jyotirindra Bodhipriya Larma, an important leader of the Chittagong Hill Tracts (CHT) in Bangladesh has arrived in India.

- The Chittagong Hill Tracts (CHT) is located in the southeastern part of Bangladesh.
- CHT combine 3 hilly districts of Bangladesh: Rangamati, Khagrachhari and Bandarban districts.
- CHT forms a large part of the Chittagong region bordering Myanmar and India.
- CHT is bounded by Tripura on the north, Arakan Hills of Myanmar on the south, Lushai Hills of Mizoram and Arakan Hills of Myanmar on the east and by Chittagong District on the west.

- **Significance -** It is a strategically important region for Bangladesh, Myanmar and India.
- The CHT region is home to a diverse population that includes the Buddhist, Hindu and Christian minority ethnic groups.
- It is home to the Chakmas, Moghs, Lushais, Kuki and Chin communities who are common to the northeastern states as well as Bangladesh and Myanmar.
- The region witnessed decades of ethnic insurgency which came to an end through the 1997 CHT Agreement.
- **Related Topics -** Kuki-Chin Refugees, Chittagong Port at CHT, Kuki tribes

Baisabi, the festival of Chakma coincides with the Assamese festival of Bihu.

References

1. The Hindu - Chakma Leader from Chittagong Hill Tracts on India visit

Technical-term dictionaries

The Commission for Scientific and Technical Terminology (CSTT) is to create technical and scientific terminology in 10 Indian languages.

> *The national language list, when created in 1950 had 14 languages. Sindhi was added in 1967; Konkani, Manipuri, and Nepali in 1992; and Bodo, Dogri, Maithili, and Santhali in 2004.*

- Bodo, Santhali, Dogri, Kashmiri, Konkani, Nepali, Manipuri, Sindhi, Maithili, and Sanskrit are a part of the list of 22 official languages of India's Eighth Schedule.
- There is a lack of content and linguistic resources in these 10 languages, leading to a lack of availability of learning material in these languages.
- The CSTT will bring out fundamental (basic) dictionaries with 5,000 words per language, in 3-4 months.
- These will be in digital, searchable format, and free of cost.
- About 1,000-2,000 copies will be printed in each language.

Commission for Scientific and Technical Terminology

- The Commission for Scientific and Technical Terminology (CSTT) works under the aegis of the Union Ministry of Education.
- The CSTT was set up in 1961 under clause (4) of ***Article 344*** of the Constitution of India as a follow up of recommendations of a Committee in this regard.
- Its headquarters is at New Delhi and has 22 State Granth Academies / State Text-Book Boards / Universities Cells, etc.
- The CSTT has the mandate of evolving technical terminology in all Indian languages.

References

1. The Hindu - 10 Indian languages to get technical-term dictionaries
2. Commission for Scientific and Technical Terminology

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