

Prelim Bits 02-03-2017

Pneumococcal conjugate vaccine (PCV)

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- \bullet Pneumococcal vaccines are vaccines against the bacteria Streptococcus pneumonia and can prevent cases of pneumonia, meningitis, and sepsis. \n
- Pneumonia caused by the pneumococcus bacteria is supposed to be the most common.

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- It is spread from person to person through close contact.
- PCV is a mix of several bacteria of the pneumococci family, which are known to cause pneumonia — hence 'conjugate' in the name.
- Pneumonia is responsible for about 20% of under-5 child mortality in India, of which half are of pneumococcal origin.
- \bullet It estimated around 23% of the global pneumonia cases originate in India. $\ensuremath{\backslash n}$
- \bullet PCV has been introduced in the Universal Immunisation Programme recently.

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Prosopis Juliflora

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- Prosopis Juliflora is a shrub or small tree in the family Fabaceae commonly known as Seemai Karuvelam.
- It is native to Mexico, South America and the Caribbean.

- It was initially introduced in India during colonial times.
- Later in 1960s it was Seed Bombed i.e aerially seeded by helicopter in Southern Tamilnadu to meet firewood demand.
- Since then it has become invasive species.
- It causes stomach poisoning in livestock by inducing a permanent impairment of its ability to digest cellulose.
- It causes drying up of water bodies and ground water as it absorbs more than 4 litres of water to obtain one kg of biomass.
- It cannot even shelter birds as it produces less oxygen and more carbon dioxide.
- \bullet It causes land erosion due to the loss of the grasslands that are habitats for native plants and animals. $\mbox{\sc habitat}$
- Dispersal of the species is mainly through animals by endozoochory (dispersal by vertebrate animals).
- ullet Other modes of seed dispersal are \n

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- 1. Autochory Self dispersal
- 2. Barochory Dispersal by gravity
- 3. Anemochory Dispersal by air
- 4. Hyderochory Dispersal by water
- 5. Chiropterochory Dispersal by bats
- 6. Epizoochory Dispersal by Non-vertebrate animals

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Ballistic Missile Defence

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- Recently, Advanced Air Defence (AAD) is been successfully tested from Abdul Kalam Island off the coast of Odisha, intercepting the incoming enemy missile at the range of 15-30 km.
- Advanced Air Defence (AAD)/ Ashvin Advanced Defense interceptor is capable of destroying missiles at endo-atmosphere altitudes of 20-40 kilometers.

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- It is part of India's two tired ballistic missile defence.
- The other is the **Prithvi Air Defence (PAD)** / Pradyumna Ballistic Missile Interceptor capable of destroying missiles at exo-atmospheric altitudes of 50–80 kilometers which was tested last month.
- The Ballistic Missile Defence shield is expected to be achieved by 2022.

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