

## **Prelim Bits 02-03-2017**

### **Pneumococcal conjugate vaccine (PCV)**

\n\n

\n

- Pneumococcal vaccines are vaccines against the bacteria *Streptococcus pneumoniae* and can prevent cases of pneumonia, meningitis, and sepsis.

\n

- Pneumonia caused by the pneumococcus bacteria is supposed to be the most common.

\n

- It is spread from person to person through close contact.

\n

- PCV is a mix of several bacteria of the pneumococci family, which are known to cause pneumonia — hence 'conjugate' in the name.

\n

- Pneumonia is responsible for about 20% of under-5 child mortality in India, of which half are of pneumococcal origin.

\n

- It is estimated around 23% of the global pneumonia cases originate in India.

\n

- PCV has been introduced in the Universal Immunisation Programme recently.

\n

\n\n

### **Prosopis Juliflora**

\n\n

\n

- *Prosopis Juliflora* is a shrub or small tree in the family Fabaceae commonly known as Seemai Karuvelam.

\n

- It is native to Mexico, South America and the Caribbean.

\n

- It was initially introduced in India during colonial times.

\n

- Later in 1960s it was Seed Bombed i.e. aeri ally seeded by helicopter in

Southern Tamilnadu to meet firewood demand.

\n

- Since then it has become invasive species.
- \n
- It causes stomach poisoning in livestock by inducing a permanent impairment of its ability to digest cellulose.
- \n
- 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.
- \n
- It cannot even shelter birds as it produces less oxygen and more carbon dioxide.
- \n
- It causes land erosion due to the loss of the grasslands that are habitats for native plants and animals.
- \n
- Dispersal of the species is mainly through animals by endozoochory (dispersal by vertebrate animals).
- \n
- Other modes of seed dispersal are -
- \n

\n\n

\n

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

\n\n

## **Ballistic Missile Defence**

\n\n

\n

- 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.

\n

- **Advanced Air Defence (AAD)**/ Ashvin Advanced Defense interceptor is capable of destroying missiles at endo-atmosphere altitudes of 20-40 kilometers.
- It is part of India's two tiered 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.

\n

\n\n

\n

