

**04 – 11 – 2021**

**News:** Project – 15B

## **Project-15B**

- Project-15B is the **Destroyer series of Vishakhapatnam class of stealth guided missile destroyers constructed using indigenous steel DMR 249A.**
- It is **amongst the largest destroyers constructed in India.**
- **India's indigenous Destroyer construction programme commenced in the late 1990s with the three Delhi class (P-15 class) warships and this was followed by three Kolkata class (P-15A) destroyers commissioned a decade later.**
- Presently, under the **P-15B (Visakhapatnam Class), a total of four warships are planned (Visakhapatnam, Mormugao, Imphal, Surat).**
- The **Destroyers come next only to an Aircraft Carrier (INS Vikramaditya) in terms of their reach and endurance.**

## **Project-15B**

- Four Guided missile Destroyers of Project 15B (P 15B) are under construction at **M/s Mazagaon Dock Shipbuilders Limited, Mumbai.** The contract for construction of these four ships was signed in 2011.

- These ships are amongst the most technologically advanced Guided Missile Destroyers of the world, with state-of-the-art weapon/sensor package, advanced stealth features and a high degree of automation.

### **Features of the P-15B Ships**

- These ships are equipped with BrahMos supersonic cruise missiles and long range Surface-to-Air Missiles (SAM).
- The ship has several indigenous weapons systems like medium range Surface-to-Air Missile (SAMs), indigenous torpedo tube launchers, anti-submarine indigenous rocket launchers and 76-mm super rapid gun mount.

### **Other Three Ships of Project 15B**

- The second ship of P15B Mormugao was launched in 2016 and is being readied for harbour trials.
- The third ship (Imphal) was launched in 2019, and is at an advanced stage of outfitting.
- The fourth ship (Surat) is under block erection and will be launched within this current financial year (2022) .

## Role of P-15B

- The Indian Navy's responsibilities to safeguard a large coastline of 7516 Kms and about 1100 offshore islands along with 2.01 million km<sup>2</sup> Exclusive Economic Zone (EEZ) have been enhanced in the present geopolitical scenario.
- Destroyers like the P-15B class shall play an important role in the larger oceans of the Indo-Pacific, making the Indian Navy a potent force.
- The guided missile Destroyers are deployed for various responsibilities like escort duties with the Carrier Battle Group to protect the Naval fleet against any air, surface and underwater threats.

## News: Public Affairs Index (PAI)

### Public Affairs Index (PAI)

- Public Affairs Index (PAI) is a data-driven platform to rank the 30 States of India from the lens of governance.
- Public Affairs Centre (PAC) has developed PAI as a unique statistical tool to evaluate the performance of governance in the States.
- Public Affairs Index (PAI 2021), the 6<sup>th</sup> edition, ranks the states and Union Territories based on three pillars of equity, growth and sustainability along with 5 themes, 14 Sustainable Development Goals (SDGs) and 43 indicators.

- PAI 2021 highlights the state government's quality governance and especially the state's government involvement over the curb of Covid-19.
- PAI is largely based on secondary data and has been extracted from Union Government Ministries and Departments.
- Kerala tops the rankings (1.618 points) yet again in the category of large states, followed by Tamil Nadu (0.857) and Telangana (0.891).
- Sikkim tops the rankings (of Smaller states) with a score of 1.617 followed by Meghalaya (1.144) and Himachal Pradesh (1.123).
- In PAI 2021 the Large States are those with a population more than 2 Crore and Small states are those with a population of less than 2 Crore.

**News:** Central teams rush to States hit by dengue

- The Union Health Ministry has rushed high level teams to nine States and Union Territories — Haryana, Kerala, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttarakhand, Delhi and Jammu & Kashmir, reporting a high caseload of dengue to support them in control and management.
- A total of 1,16,991 cases had been reported by the States and U.T.s across the country.

# Dengue Fever

- Dengue Fever is a **mosquito-borne tropical disease caused by the dengue virus** (Genus Flavivirus), transmitted by several species of mosquito within the genus Aedes, principally **Aedes aegypti**.
- This **mosquito also transmits chikungunya, yellow fever and Zika infection**.
- There are **4 distinct, but closely related, serotypes** (separate groups within a species of microorganisms that all share a similar characteristic) of the virus that cause dengue (**DEN-1, DEN-2, DEN-3 and DEN-4**).
- Symptoms of dengue are **sudden high fever, severe headaches, pain behind the eyes, severe bone, joint, and muscle pain**, etc.
- Diagnosis of dengue infection is done with a **blood test**.
- There is **no specific medicine to treat** dengue infection.

## Status of Dengue

- **Incidence of dengue has grown dramatically around the world**, in recent decades with a vast majority of cases underreported, according to the World Health Organization.
- WHO estimates 39 crore dengue virus infections per year, of which 9.6 crore show symptoms.

- India registered over 1 lakh dengue cases in 2018 and over 1.5 lakh cases in 2019, according to the National Vector-Borne Disease Control Programme (NVBDCP).
- National Vector-Borne Disease Control Programme (NVBDCP) is the central nodal agency for prevention and control of six vector borne diseases i.e. Malaria, Dengue, Lymphatic Filariasis, Kala-azar, Japanese Encephalitis and Chikungunya in India. It works under the Ministry of Health and Family Welfare.

### **Controlling Dengue Using Bacteria**

- Recently researchers from the World Mosquito Program have used mosquitoes infected with Wolbachia bacteria to successfully control dengue in Indonesia.
- The scientists infected some mosquitoes with Wolbachia and then released them in the city where they bred with local mosquitoes, until nearly all mosquitoes in the area were carrying Wolbachia bacteria. This is called the Population Replacement Strategy.
- At the end of 27 months, the researchers found that the incidence of dengue was 77% lower in areas where Wolbachia-infected mosquitoes had been released, as compared to areas without such deployments.

## Dengue Vaccine

- The dengue vaccine CYD-TDV or Dengvaxia was approved by the US Food & Drug Administration in 2019, the first dengue vaccine to get the regulatory nod in the US.
- Dengvaxia is basically a live, attenuated dengue virus which has to be administered in people of ages 9 to 16 who have laboratory confirmed previous dengue infection and who live in endemic areas.