



C.A Dated On 07-05-2019

**Launch of Fourth Scorpene Class Submarine - VELA**

**Context:**

Vela, the fourth Scorpene class submarine being constructed by Mazagon Dock Shipbuilders Limited for the Indian Navy, was launched today.

This event reaffirms the steps taken by Mazagon Dock Shipbuilders Ltd (MDL) in the ongoing 'Make In India' programme, which is being actively implemented by the Department of Defence Production (MoD).

**About the Submarine:**

- The contract for the construction and Transfer-of-Technology for six Scorpene class submarines in series, has M/s Naval Group (formerly DCNS) of France as 'Collaborator' and are being built by MDL.
- The Scorpene class of submarines can undertake multifarious tasks typically undertaken by any modern submarine which include anti-surface as well as anti-submarine warfare.
- In 2005, India chose the *Scorpène* design; purchasing six submarines for US\$3 billion (US\$500 million per boat).
- Under a technology transfer agreement, the state-owned Mazagon Docks in Mumbai was to manufacture the submarines, and deliver them between 2012 and 2016, however the project is running six years behind schedule.
- Construction started on 23 May 2009.
- The first *Scorpène* submarine, named INS *Kalvari*, was undocked for the purpose of starting sea trials in April 2015 and will be delivered in September 2016.
- In August 2016, over 20,000 confidential pages of the submarine's manual were leaked by Australian media, stirring up a controversy about the impact to India's ambitions of fielding a blue-water navy.



C.A Dated On 07-05-2019

## **Anti-Dumping Duty:**

### **Why in News?**

The Finance Ministry has, on the recommendations of the Commerce Ministry, imposed an anti-dumping duty of \$1,633.17 per tonne on the import of saccharine from Indonesia.

### **What is Saccharine?**

- Saccharine is a compound most commonly used in sugar-substitute sweeteners. Indonesia, until recently, accounted for a large chunk of India's saccharine imports.
- In 2017-18, India imported \$4.36 million worth of saccharine from Indonesia, which is 43% of the total imports of the sugar-substitute compound.
- However, imports from Indonesia have declined since then.
- In the April 2018 to February 2019 period, India imported only \$1.48 million worth of saccharine from Indonesia, about 20% of its total imports from around the world.
- "The product under consideration has been exported to India from subject country below their normal values and consequently, the domestic industry has suffered material injury," the Department of Revenue notification said.

### **What is ADD?:**

- An anti-dumping duty is a protectionist tariff that a domestic government imposes on foreign imports that it believes are priced below fair market value.
- Dumping is a process where a company exports a product at a price lower than the price it normally charges in its own home market.
- For protection, many countries impose stiff duties on products they believe are being dumped in their national market, undercutting local businesses and markets.



C.A Dated On 07-05-2019

## **INS Vishal:**

### **Why in News?**

The [United Kingdom](#) is in talks with the Indian government on building a new state-of-the-art aircraft carrier along the lines of Britain's HMS Queen Elizabeth as part of the ongoing 'Make in India' negotiations..

The talks are under way for the Indian Navy to buy detailed plans for the 65,000-ton British warship to build a so-called "copycat supercarrier" to be named INS Vishal in 2022.

### **About the Carrier:**

- The report noted that such a new Naval carrier would serve alongside India's 45,000-ton carrier INS Vikramaditya — bought from Russia in 2004 — and the currently under-construction 40,000-ton INS Vikrant, and could give India a larger carrier fleet than Britain.
- The design for UK aircraft carriers is owned by the British and French aerospace giants BAE and Thales.
- The reported India-UK Naval deal would follow the sale of Britain's Falklands War carrier HMS Hermes to India in 1987, which was renamed INS Viraat and decommissioned two years ago.

### **Advantages of Carrier:**

- An **aircraft carrier** is a [warship](#) that serves as a seagoing [airbase](#), equipped with a full-length [flight deck](#) and facilities for [carrying, arming, deploying, and recovering aircraft](#).
- Typically, it is the [capital ship](#) of a fleet, as it allows a naval force to [project air power](#) worldwide without depending on [local bases for staging aircraft operations](#).



## C.A Dated On 07-05-2019

- Carriers have evolved since their inception in the early twentieth century from wooden vessels used to deploy [balloons](#) to [nuclear-powered](#) warships that carry numerous [fighters](#), [strike aircraft](#), [helicopters](#), and other types of aircraft.
- By its diplomatic and tactical power, its mobility, its autonomy and the variety of its means, the aircraft carrier is often the centerpiece of modern combat fleets.
- Tactically or even strategically, it replaced the [battleship](#) in the role of flagship of a fleet.
- One of its great advantages is that, by sailing in international waters, it does not interfere with any territorial sovereignty and thus obviates the need for overflight authorizations from third party countries, reduce the times and transit distances of aircraft and therefore significantly increase the time of availability on the combat zone.

## **UN Permanent Membership:**

### ***Context:***

India and nations like Germany, Brazil and Japan are “absolutely needed” as permanent members of a reformed and enlarged UN Security Council to better reflect contemporary realities and the addition of these key members to the UN high-table is among France’s “strategic” priorities, the French envoy to the UN has said.

### ***Background:***

- India is at the forefront of efforts at the UN to push for the long-pending reform of the Security Council, emphasizing that it rightly deserves a place at the UN high table as a permanent member.
- On the issue of ‘Categories of Membership’, a total of 113 Member States, out of 122 who submitted their positions in the Framework Document, support expansion in both of the existing categories specified in the Charter.



## **C.A Dated On 07-05-2019**

- In short, more than 90 % of the written submissions in the document are in favour of expansion in both categories of membership specified in the Charter.

### **Why reform needed?**

- In terms of inertia too, it has no peer.
- While the world is not what it was when we began the process, the objections to moving forward remain the same.
- While the global challenges of the 21st century have multiplied, we remain divided even about the process to adopt in order to move forward.
- France has maintained that if the crises of recent times have confirmed the centrality of the UN, they have also reinforced the need to make the organisation more effective and more representative of the current balances in the world.
- "That is why France pushes for the expansion of the Security Council by supporting the accession to a permanent seat of Germany, Brazil, India, Japan, as well as a greater presence of African countries.

### **Phasing out Diesel Vehicle:**

#### **The story so far:**

On April 25, Maruti Suzuki, India's top carmaker, announced that it would phase out production of diesel models from April 1, 2020, when stricter Bharat Stage VI emission standards come into force. What does this mean for the auto industry?

#### **Why did Maruti take this decision?**

- Explaining its rationale, the leading passenger vehicle manufacturer said the enhanced emission standards would make diesel engines costlier by up to ₹1.5 lakh, and the acquisition cost of diesel vehicles for consumers would be markedly higher than [petrol](#) equivalents.
- Given the market dynamics, it would not make business sense for the company to invest in developing new diesel engines to meet the BS VI



## **C.A Dated On 07-05-2019**

norms. Compressed Natural Gas could be a replacement for both fuels, according to Maruti.

- Environmentally, diesel is a heavy polluter and is losing ground in leading passenger vehicle markets such as the European Union.
- The rigging of emissions data by Volkswagen to show lower levels of nitrogen oxides accelerated the move away from diesel.
- Even in Germany, which is a leading maker of diesel cars, cities want to ban them.

### **Why is the move significant?**

- India has a growing vehicle-to-population ratio, although it is still lower than several other big countries.
- While Maruti's is a business decision, policy decisions on emission norms will steer the industry, and are therefore critical to improving air quality.
- Ambient air quality has deteriorated so badly that 15 Indian cities led by Gurugram are among the 20 most polluted cities globally as per the IQAir AirVisual 'World Air Quality Report' for 2018, based on fine particulate matter (PM2.5) that penetrates the lungs and bloodstream.
- Transport emissions, particularly from diesel, are a major contributor.

### **What is diesel's pollution profile?**

- The Auto Fuel Vision and Policy 2025 published by the erstwhile Planning Commission, which laid out the road map for a transition to less polluting fuels, pointed out that sulphur in diesel is a contributor to particulate matter both in the vehicular exhaust and in the atmosphere. Sulphur is found in petrol too, but for comparison, it was 2,000 parts per million (ppm) in petrol before introduction of standards in 2000, but in diesel it was 10,000 parts per million (ppm) in 1996. \
- \Sulphur content was reduced with each phase of upgradation of emission standards to touch 50 ppm under BS IV. In BS VI, which is already dispensed in Delhi, it is 10 ppm.
- Sulphur plays a key role since higher concentrations have an impact on technologies for control of other pollutants in the emissions, such as carbon monoxide, particulates, oxides of nitrogen and hydrocarbons.



## C.A Dated On 07-05-2019

- In India, the Global Burden of Disease Study 2017 attributed 8% of the disease burden, and 11% of premature deaths in people below 70 years of age to air pollution.

### **Conclusion:**

- Even with a reduction in the sulphur content in BS VI fuels, the health effects of lower emissions would be lost due to a growing number of vehicles.
- The best scenario to reduce PM2.5 exposure in India is, therefore, not just shifting to BS VI fuels but bringing about a reduction in use of private vehicles through augmented public transport and promoting alternative fuels including the use of electric vehicles.

### **ADB:**

#### **Why in News?**

The Asia-Pacific region is expected to power ahead growing at 5.7% this year but escalating trade tensions are a source of worry, according to Takehiko Nakao, President and Chairperson, Asian Development Bank.

Addressing the opening session of the Board of Governors at ADB's 52nd Annual Meeting here, Mr. Nakao said that consumer and investor behaviour could be undermined by trade tensions between countries.

#### **About ADB:**

- The **Asian Development Bank (ADB)** is a [regional development bank](#) established on 19 December 1966, which is headquartered in the [Ortigas Center](#) located in the city of [Mandaluyong](#), [Metro Manila](#), [Philippines](#).
- The company also maintains 31 field offices around the world to promote social and [economic development](#) in Asia. The bank admits the members of the [United Nations Economic and Social Commission for Asia and the Pacific](#)



## C.A Dated On 07-05-2019

(UNESCAP, formerly the Economic Commission for Asia and the Far East or ECAFE) and non-regional [developed countries](#).

- From 31 members at its establishment, ADB now has 68 members, of which 49 are from within Asia and the Pacific and 19 from outside.
- The ADB was modeled closely on the [World Bank](#), and has a similar weighted voting system where votes are distributed in proportion with members' capital subscriptions. ADB releases an annual report that summarizes its operations, budget and other materials for review by the public.
- The ADB-Japan Scholarship Program (ADB-JSP) enrolls about 300 students annually in academic institutions located in 10 countries within the Region. Upon completion of their study programs, scholars are expected to contribute to the economic and social development of their home countries.
- ADB is an official [United Nations](#) Observer.
- As of 31 December 2016, Japan and United States hold the largest proportion of shares at 15.607%. China holds 6.444%, India holds 6.331%, and Australia holds 5.786%.

## **Drying in NE India:**

### **Context:**

Northeast India, one of the wettest places on the Earth has been experiencing rapid drying, especially in the last 30 years. Some places which used to get as high as 3,000 mm of rain during the monsoon season have seen a drop of about 25-30%.

### **Pattern of fluctuations**

- Changes in the Pacific decadal oscillation (PDO) — a pattern of fluctuations in the ocean, particularly over the north Pacific basin — are mainly associated with this declined rainfall.



## **C.A Dated On 07-05-2019**

- Just like El Nino/La Nina in the tropical Pacific, PDO has a signature for a longer time (on the decadal scale) in the sea surface temperatures and its interaction with the atmosphere, which in turn affects the northeast Indian summer monsoon.”

### **Natural and manmade**

- The team used observed rainfall and sea surface temperature data for the period 1901-2014 for the study.
- The results show out that the reduction in rainfall during a major part of the last 114 years may be associated with global man-made factors, while the trend during the last 36 years is associated with natural phenomena.
- “Only about 7% of the rainfall in this region is associated with local moisture recycling, which means that anthropogenic activities can affect only this small percentage.
- The researchers note that this study can be used to predict the monsoon rainfall over the northeast region on a decadal time scale using Pacific Ocean region data.
- Previous studies have found that a dry spell may be preceded by a wet spell, so the researchers warn that “change in land cover and deforestation could potentially result in more natural disasters, for example, flash flood, landslides from torrential rains, and damage to crops and biodiversity”.

“Policymakers should take these long-term predictions into account while planning construction of dams, power plants, etc. to prevent loss of property.