

**22-08-2022**

## **Tu-160 Strategic Bomber**

### **Why in Newspapers?**

It is very important to have such a fighter jet that whenever and wherever it is needed, after bombing the enemy country, it can come back immediately. Such fighter jets are called strategic bombers. India already has tactical bombers and fighter planes capable of targeting enemy positions within its borders, but it does not have a strategic bomber.

### **Quick Issue?**

- In November last year, China had deployed a strategic bomber named H-6K on the Indian border. At that time, India did not have any break with this weapon of China. But now China needs to be a little careful, because India is planning to buy the world's deadliest strategic bomber named Tu-160 from Russia.

### **Other Key Facts?**

#### **Why didn't India have it yet?**

- In fact, the bomber often has to be used by crossing the border and entering the enemy's house. Whereas India is a peace loving country and it has always been its policy that no such act should be done by entering the border of any other country. But now due to countries like China and Pakistan, the situation is being created in such a way that it is India's compulsion to adopt such fighter planes. Let us tell you that the cost of making such a bomber is about \$ 100 billion. For this reason, for now, India will work by importing them.
- So far only 3 countries in the world - America, Russia and China have strategic bombers. In such a situation, after acquiring the S-400 air defence system from Russia, the Tu-160 bomber can prove to be another important deal for India.

### **Historical Background?**

- Bombers or bombers are fighter planes that are used to drop air-to-ground bombs, or launch air-to-air cruise missiles, to target land and naval targets. There are two types - Strategic and Tactical bombers.
- Tactical bomber is usually used to target enemy army positions or military weapons on their land during war.
- Its basic function is to target the close targets present around it to help its ground force during the war. Whereas strategic bombers are such medium or long range fighter aircraft, which are used under strategy to target cities, factories, military bases, military factories of the enemy country.
- It is capable of traveling thousands of kilometres to attack the enemy's house and return. Through these bombers, enemy targets can be attacked with cruise missiles as well as nuclear weapons.
- Recently you must have seen Russian planes dropping bombs from the air on the cities of Ukraine, they are strategic bombers. The US used the Strategic Bomber to drop the bombs



on Nagasaki and Hiroshima. The strategic bomber has more range and capability than the tactical bomber.

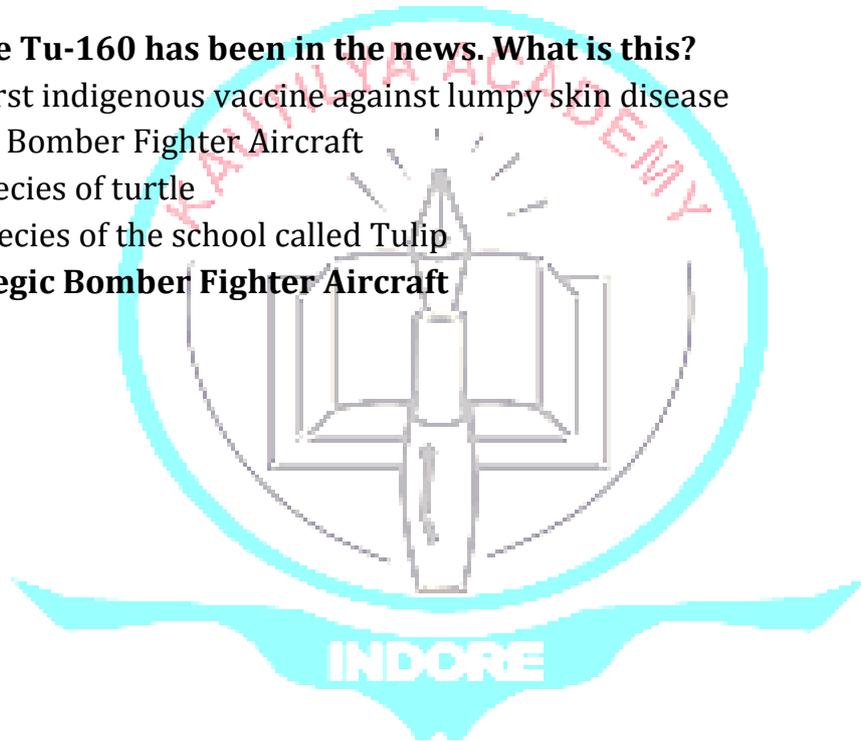
- Tu-160 Strategic Bomber - It is also called White Swan or White Swan. NATO calls it Black Jack. It was designed by the Tupolev Design Bureau in the 1970s. It is the world's largest and heaviest fighter aircraft operating at twice the speed of sound i.e. Mach-2+ speed.
- At present, America's B-1 Strategic Bomber is to some extent in comparison to it. The Tu-160 can fly up to an altitude of about 52 thousand feet and due to this it is difficult to track it on radar.
- It is capable of carrying cruise and land attack missiles as well as conventional and nuclear warheads. Bombs weighing about 40 thousand kg can also be carried from this jet.
- It made its first flight in 1981 and was inducted into the Russian Army in 1987.

### Likely Question Asked In Preliminary Exam

**Que. Recently the Tu-160 has been in the news. What is this?**

- (a) India's first indigenous vaccine against lumpy skin disease
- (b) Strategic Bomber Fighter Aircraft
- (c) a new species of turtle
- (d) a new species of the school called Tulip

**Answer: (b) Strategic Bomber Fighter Aircraft**





## Tilapia Aquaculture Project

### Why in Newspapers?

Inspired by the Pradhan Mantri Matsya Sampada Yojana (PMMSY), the Technology Development Board (TDB) has supported the Tilapia Aquaculture Project with Israeli technology.

### Quick Issue?

- Technology Development Board (TDB) is a statutory body under the Ministry of Science and Technology.

### Historical Background?

- The term aquaculture/aquaculture primarily refers to the cultivation of aquatic organisms in a controlled aquatic environment for any commercial, recreational or public purpose.
- The breeding, rearing and harvesting of plants and animals occurs in all types of water environments including ponds, rivers, lakes, oceans, and man-made "closed" systems on land.

### Historical Background:

- Tilapia, also known as aquatic chicken, has become one of the most productive and internationally traded fish foods in the world.
- Tilapia farming is commercially popular in many parts of the world and was declared as aquatic chicken due to its quick growth and low maintenance.
- Tilapia is tolerant of a variety of aquaculture environments; it can be cultivated in saline water and also in pond or closed systems.
- Fishing in India is the development of aquatic organisms in the marine, coastal and inland areas. Marine and inland fisheries, along with aquaculture, provide food, nutrition and a source of income from harvesting, processing, marketing and distribution to millions of people worldwide.
- For many people it is also part of their traditional cultural identity. Illegal, unreported and unregulated fishing is one of the biggest threats to the sustainability of global fisheries resources.

### Other Key Facts?

#### Prime Minister Matsya Sampada Yojana

- Pradhan Mantri Matsya Sampada Yojana (PMMSY) scheme was announced in September 2020 to provide financial assistance for acquisition of technologically advanced fishing vessels, deep sea fishing vessels, boats and nets for traditional fishermen.
- It is envisaged to increase the fish production to 220 lakh metric tonnes by the year 2024-25 at an average annual growth rate of about 9%.
- The ambitious plan aims to double the export earnings to Rs 1,00,000 crore and generate about 55 lakh direct and indirect employment opportunities in the fisheries sector over a period of next five years.
- India has achieved an all-time high export of marine products worth US\$ 7,165 million from April to February 2021-22, despite various challenges faced by the sector during the COVID-19 pandemic.



- Fishing is one of the fastest growing primary producing sectors.
- India is the second largest fish producer in the world, accounting for 7.56% of the global production and contributes about 1.24% to the country's Gross Value Added (GVA) and over 7.28% to the agricultural GVA.
- India is the fourth largest exporter of fish in the world as it contributes 7.7% to the global fish production.
- This sector plays a vital role in the economic and overall development of the country, also known as "Sunrise Sector", a sector with immense potential through equitable and inclusive growth.
- This sector is recognized as a powerful factor in providing employment to 5 million people and sustaining livelihood for 28 million fishermen community of the country.
- **The fisheries sector has witnessed three major changes over the years:**
  - Development of inland aquaculture, especially freshwater aquaculture.
  - Mechanization of fisheries.
  - Successful introduction of saltwater shrimp aquaculture.
- According to the Food and Agriculture Organization (FAO), about 90% of global marine fish production has either fully or over-exploited potential, which is not biologically possible to recover.
- Discharge of harmful substances like plastic and other waste in water bodies which cause disastrous consequences for aquatic life.
  - Climate change.
- **Government Initiatives for Fisheries:**
  - Fisheries and Aquaculture
  - Infrastructure Development Fund
  - blue revolution
  - Extension of Kisan Credit Card (KCC)
  - Marine Products Export Development Authority
  - Seaweed Park.

### Likely Question Asked In Preliminary Exam

**Que. For which of the following purposes short-term credit facility is provided to the farmers under the Kisan Credit Card Scheme?**

1. Working capital for maintenance of agricultural properties.
2. Purchase of combine harvesters, tractors and mini trucks.
3. Consumption requirement of agricultural households.
4. Post-harvest expenses.
5. Construction of family house and establishment of village cold storage facility.

**Select the correct answer with the help of the following code:**

- |                        |                      |
|------------------------|----------------------|
| (a) 1, 2 and 5 only    | (b) 1, 3 and 4 only  |
| (c) 2, 3, 4 and 5 only | (d) 1, 2, 3, 4 and 5 |

**Answer: (b) 1, 3 and 4 only**