

Tilapia Aquaculture Project: Fisheries

For Prelims: India's Fisheries Sector, Tilapia Aquaculture Project, Pradhan Mantri Matsya Sampada Yojna, Aquaculture.

For Mains: Significance of India's Fisheries Sector.

Why in News?

Inspired by <u>Pradhan Mantri Matsya Sampada Yojana (PMMSY)</u>, the Technology <u>Development Board</u> (TDB) has extended support to the <u>Tilapia Aquaculture Project</u> with Israeli Technology.

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

What is Pradhan Mantri Matsya Sampada Yojana?

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

What is Aquaculture?

About:

- The term aquaculture broadly refers to the **cultivation of aquatic organisms in controlled aquatic environments** for any commercial, recreational or public purpose.
- The breeding, rearing and harvesting of plants and animals takes place in all types of water environments including ponds, rivers, lakes, the ocean and man-made "closed" systems on land.

Purposes:

- Food production for human consumption,
- Rebuilding of populations of threatened and endangered species,
- Habitat restoration,
- Wild stock enhancement.

- Production of baitfish, and
- Fish culture for zoos and aquariums.

What is Tilapia?

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- Tilapia, also dubbed aquatic chicken, has emerged to be one of the most productive and internationally traded fish foods in the world.
 - The culture of tilapia has become commercially popular in many parts of the world and due to its quick growth and low maintenance cultivation, it was dubbed aquatic chicken.
 - Tilapia is tolerant of a variety of aquaculture environments, it can be farmed in brackish or salt water and also in pond or cage systems.

What is the State of Fisheries in India?

About:

- Fishing is the capture of aquatic organisms in marine, coastal and inland areas.
- Marine and inland fisheries, together with aquaculture, provide food, nutrition and a source of income to millions of people around the world, from harvesting, processing, marketing and distribution.
- For many it also forms part of their traditional cultural identity.
- One of the greatest threats to the sustainability of global fishery resources is illegal, unreported and unregulated fishing.

Significance:

- Fisheries is one of the **fastest growing sectors** amongst the primary producing sectors.
- India is the second largest fish producing country in the world accounting for 7.56% of global production and contributing about 1.24% to the country's Gross Value Added (GVA) and over 7.28% to the agricultural GVA.
 - India is the 4th largest exporter of fish in the world.
- The sector plays a vital role in economic and overall development of the country, also referred as the "Sunrise Sector", it is poised to bring in immense potential through equitable and inclusive growth.
- The sector is recognized as a powerful engine for providing employment to 14.5
 million people and sustaining livelihood for the 28 million fishermen community of the
 country.
- The fisheries sector has witnessed three major transformations in the last few years:
 - The growth of inland aquaculture, specifically freshwater aquaculture.
 - The mechanization of capture fisheries.
 - The successful commencement of brackish water shrimp aquaculture.

Challenges:

• The <u>Food and Agriculture Organization (FAO)</u> points out that **nearly 90% of the global marine fish stocks** have either been fully **exploited or overfished** or depleted

- to the extent that recovery may not be biologically possible.
- Discharge of harmful substances like plastics and other waste into water bodies that cause devastating consequences for aquatic life.
- · Changing climate.

What are the Government Initiatives for Fisheries?

- Fisheries and Aquaculture Infrastructure Development Fund (FIDF)
- Blue Revolution
- Extension of <u>Kisan Credit Card (KCC)</u>
- Marine Products Export Development Authority.
- Seaweed Park

UPSC Civil Services Examination Previous Year Question (PYQ)

Prelims

Q. Under the Kisan Credit Card scheme, short-term credit support is given to farmers for which of the following purposes? (2020)

- 1. Working capital for maintenance of farm assets
- 2. Purchase of combine harvesters, tractors and mini trucks
- 3. Consumption requirements of farm households
- 4. Post-harvest expenses
- 5. Construction of family house and setting up of village cold storage facility

Select the correct answer using the code given below:

- (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

Ans: (b)

Exp:

- The **Kisan Credit Card (KCC)** scheme was introduced in 1998 for providing adequate and timely credit support from the banking system under a single window with flexible and simplified procedure to the farmers for their cultivation and other needs like purchase of agriculture inputs such as seeds, fertilizers, pesticides etc. and draw cash for their production needs.
- The scheme was further extended in the year 2004 for the investment credit requirement of farmers viz allied and non-farm activities.
- Kisan Credit Card is provided with the following objectives:
 - The short-term credit requirements for cultivation of crops,
 - Post-harvest expenses, hence 4 is correct.
 - Produce marketing loan,
 - Consumption requirements of farmer household, hence 3 is correct.
 - Working capital for maintenance of farm assets and activities allied to agriculture, like dairy animals, inland fishery, etc., hence, 1 is correct.
 - Investment credit requirement for agriculture and allied activities like pumpsets, sprayers, dairy animals, etc. However, this segment forms the long term credit limit portion.
- The Kisan Credit Card Scheme is implemented by Commercial Banks, RRBs, Small Finance Banks and Cooperatives.
- The short-term credit support is not given to farmers for Purchase of combine harvesters, tractors

and mini trucks and Construction of family house and setting up of village cold storage facility. **Hence, 2 and 4 are not correct.**

Therefore, option (b) is the correct answer.

Mains

Q. Defining blue revolution, explain the problems and strategies for pisciculture development in India. **(2018)**

Source: PIB

