India Emerges as the World's Second-Largest Fish Producer

Mains: *GS III – Economy*

Why in News?

Recently, The Food and Agriculture Organization (FAO) in its State of World Fisheries and Aquaculture (SOFIA) 2026 report has highlighted India's remarkable progress in the fisheries sector.

What is the status of India in Global Fish Production?

- **Second-Largest Producer of Aquatic Animals –** India contributed approximately 9% of global aquatic animal production in 2024, securing the second position after China.
- This achievement reflects sustained policy support, technological interventions, and growing investment in fisheries infrastructure.
- The fisheries sector has become one of the fastest-growing agricultural sub-sectors in India, contributing significantly to agricultural GDP and export earnings.
- **Global Leader in Inland Fisheries –** India produced 2.2 million tonnes of fish from inland water bodies such as rivers, lakes, reservoirs, ponds, wetlands.
- This places India ahead of Bangladesh, which produced 1.4 million tonnes from inland fisheries.
- The success of inland fisheries is particularly significant because it supports the livelihoods of millions of small-scale fishers and rural communities while reducing pressure on marine ecosystems.
- **Second-Largest Aquaculture Producer –** India accounted for 12% of global aquaculture production, ranking second after China.
- Aquaculture includes freshwater fish farming, brackish water aquaculture
- Shrimp farming, integrated fish farming systems.
- India forms part of a five-country group—China, Indonesia, Vietnam, Bangladesh, and India—that collectively produces 82% of the world's farmed aquatic animals.

What are the factors behind india's success?

- **Pradhan Mantri Matsya Sampada Yojana (PMMSY) –** Launched in 2020, PMMSY aims to increase fish production, enhance exports, modernize fisheries infrastructure, promote sustainable fishing practices.
- **Blue Revolution Programme –** The Blue Revolution focuses on, integrated fisheries development, aquaculture expansion, fish seed production, post-harvest management.
- **Fisheries and Aquaculture Infrastructure Development Fund (FIDF) –** The FIDF

supports fishing harbours, cold storage facilities, processing units, marketing infrastructure.

- **Technological Advancements –** Improved breeding techniques, quality fish seed production, disease management, and digital monitoring systems have significantly enhanced productivity.
- **Growing Export Demand –** India is among the world's largest exporters of seafood, particularly shrimp.
- Rising international demand has encouraged investment and modernization in the sector.

What is the economic and social significance?

- **Employment Generation –** The fisheries sector supports the livelihoods of nearly 30 million people directly and indirectly.
- It provides employment opportunities in fishing, fish farming, processing, transportation, marketing, export industries
- **Contribution to Food Security –** Fish serves as an affordable and nutrient-rich source of Protein, Omega-3 fatty acids, Vitamins and Minerals.
- As India's population grows, fisheries can play a crucial role in addressing nutritional deficiencies and ensuring food security.
- **Rural Development –** Aquaculture and inland fisheries offer income diversification opportunities for farmers, particularly in regions facing agricultural distress or waterlogging issues.
- **Global Consumption Patterns –** The FAO report indicates that over 90% of aquatic animal production is used for human consumption.
- Global per capita fish availability stood at:
    - 21.1 kg in 2023
    - 21.3 kg in 2024 (estimated)
- **Regional Variations**
    - Asia – 26.3 kg per person
    - Europe – Around 20–22 kg
    - North America – Around 20–22 kg
    - Oceania – Around 20–22 kg
    - Latin America and Caribbean – 10.1 kg
    - Africa – 9.1 kg
- Despite low per capita availability, Africa derives 19% of its animal protein intake from aquatic foods, highlighting the critical role of fisheries in nutrition and food security.

Global Fisheries and Aquaculture – An Overview

• **Global production** – According to the FAO report, global fisheries and aquaculture production reached a historic high of 235 million tonnes in 2024, comprising:
  - 195 million tonnes of aquatic animals
  - 40 million tonnes of algae
• This represents a 5.2% increase compared to 2022 levels.
• **Aquaculture** – It emerged as the primary driver of growth, reaching a record 142 million tonnes and surpassing capture fisheries as the major source of aquatic food production.
• Asia continues to dominate the sector, accounting for the majority of global fish production, with China, India, Indonesia, Vietnam, and Bangladesh leading the way.

What are the sustainability concerns in global fisheries?

- **Declining Marine Fish Stocks –** A major concern highlighted by the FAO is the decline in biologically sustainable marine fish stocks.
- The proportion of marine fish stocks harvested within sustainable limits fell from 64.5% in 2021
  to 62.4% in 2023
- This decline reflects growing pressure on marine ecosystems due to, overfishing, illegal fishing, habitat destruction, climate change, and pollution
- **Impact of Climate Change –** Climate change is altering ocean temperatures, currents, and fish migration patterns.
- Rising sea levels and ocean acidification threaten marine biodiversity and fisheries-dependent communities.
- **Biodiversity Loss –** Unsustainable fishing practices can disrupt marine food chains, reduce biodiversity, and affect the long-term viability of fisheries resources.

What are the challenges and concerns?

- **Overexploitation of Coastal Resources –** Many coastal fish stocks are nearing maximum sustainable limits due to intensive fishing pressure.
- **Post-Harvest Losses –** Inadequate cold-chain infrastructure leads to significant losses and reduced profitability.
- **Disease Outbreaks in Aquaculture –** Shrimp and fish farms remain vulnerable to disease outbreaks, causing economic losses.
- **Environmental Concerns –** Expansion of aquaculture can lead to water pollution, habitat degradation, salinity intrusion, mangrove destruction.
- **Climate Vulnerability –** Cyclones, extreme weather events, and changing monsoon patterns increasingly affect fish production and fisher livelihoods.

What should be done?

- **Promote Sustainable Fisheries Management –** India must strengthen, catch regulations, fishing quotas, seasonal fishing bans, ecosystem-based management.
- **Expand Climate-Resilient Aquaculture –** Research should focus on climate-resilient fish species, sustainable feed technologies, low-impact farming practices.
- **Strengthen Blue Economy Framework –** The fisheries sector should be integrated within India's broader Blue Economy strategy, ensuring economic growth alongside environmental sustainability.
- **Improve Infrastructure –** Investments are needed in cold-chain logistics, fish processing facilities, modern fishing harbours, digital market platforms,
- **Community Participation –** Empowering fisher communities through cooperatives, capacity building, and participatory governance can improve resource management and livelihoods.

What lies ahead?

- India's emergence as the world's second-largest fish producer marks a significant milestone in its agricultural and blue economy journey.

- Leadership in inland fisheries and strong performance in aquaculture demonstrate the country's ability to meet growing food and nutritional demands while generating employment and export earnings.
- However, the FAO's warning regarding declining marine sustainability underscores the need for responsible and science-based fisheries management.
- Balancing productivity with ecological conservation will be essential for ensuring that India's fisheries sector remains resilient, inclusive, and sustainable in the decades ahead.

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Reference

Down to Earth| Inland Fisheries

