

1. What is the significance of fisheries for India's coastal economy? What further potential does commercial fishing hold as part of food processing and related commerce? Discuss.

Approach-

Candidates need to write about fisheries sector of India. And then highlight the significance of the sector. Also Write about the potential of fisheries sector in India with respect to food processing industry and its commerce and trade.

Introduction

Fisheries are the primary source of livelihood for several communities. India is the world's second-largest fish producer. Fisheries are the country's single-largest agriculture export, with a growth rate of 6 to 10 per cent in the past five years.

Body

Significance:

- Its significance is underscored by the fact that the growth rate of the farm sector in the same period is around 2.5 per cent.
- Fish constituted about 10% of total exports from India and almost 20% of agriculture exports in 2017-18.
- According to the CMFRI Census 2010, the total marine fisherfolk population was about 4 million comprising in 864,550 families. Nearly 61% of the fishermen families were under BPL category.

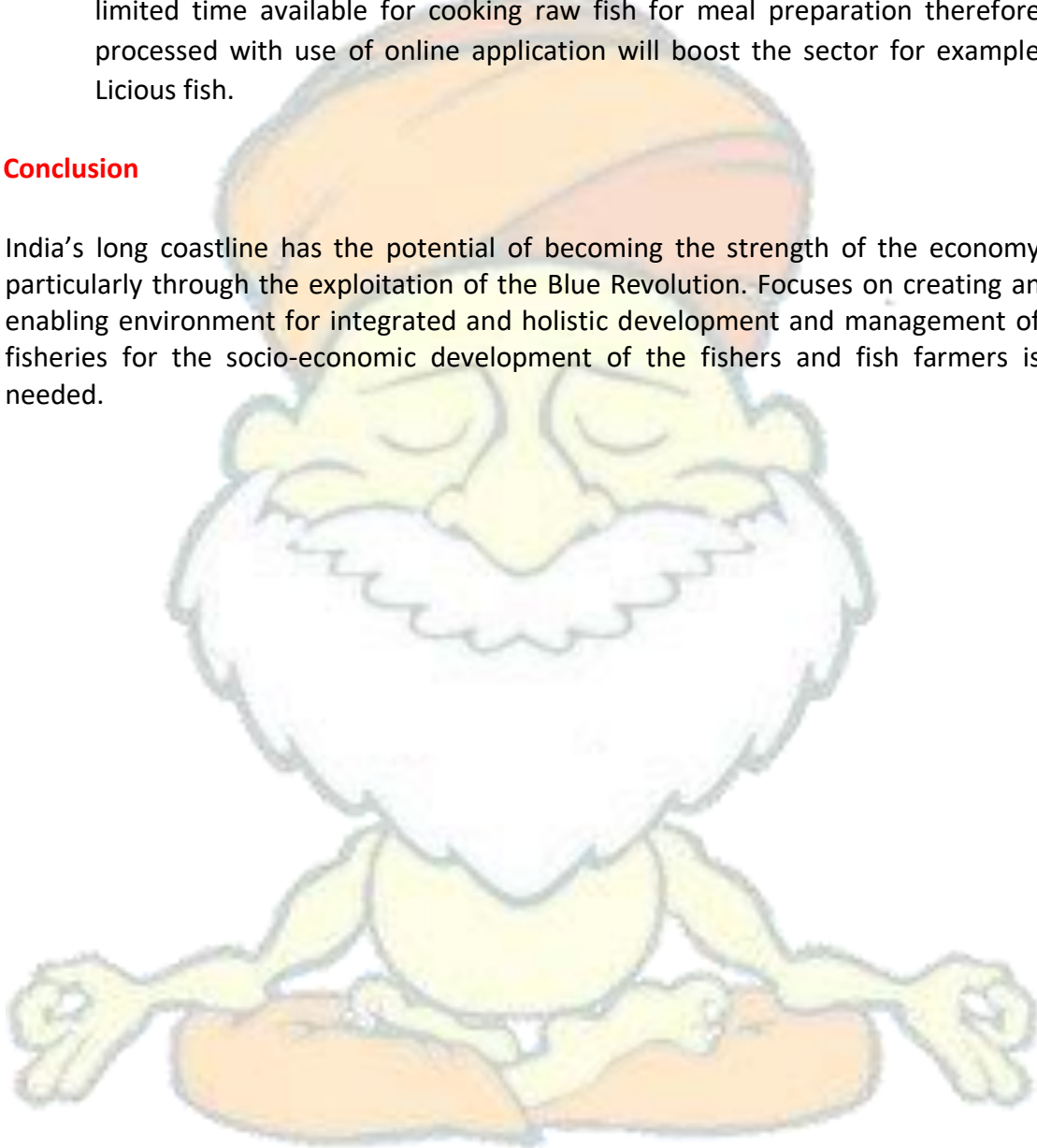
The sector has immense potential to more than double the commerce and trade as envisioned by the government:

- The geographic, base of Indian marine fisheries has 8118 km coastline, 2.02 million sq of Exclusive Economic Zone including 0.5 million sq km of the continental shelf, and 3937 fishing villages.
- India having a tropical climate cannot preserve the fish in open for longtime there is requirement capex for heavy refrigerator and deep freezing machine and to prosper the food processing industry.
- The investment of Rs 3,000 crore in the Blue Revolution is being supplemented through the Rs 7,523-crore Fisheries and Aquaculture Infrastructure Development Fund. This will meet the capital investment requirement of this sector.

- The government has invested in hatcheries to meet the ever-increasing demand for good quality fish seed it will boost commercial fishing.
- India is processing less than 10% of its agricultural output, thus, presenting immense opportunities for increasing fish processing levels and leading to investments.
- With an increase in urban working culture and fast-paced lifestyles, there is limited time available for cooking raw fish for meal preparation therefore processed with use of online application will boost the sector for example Licious fish.

Conclusion

India's long coastline has the potential of becoming the strength of the economy particularly through the exploitation of the Blue Revolution. Focuses on creating an enabling environment for integrated and holistic development and management of fisheries for the socio-economic development of the fishers and fish farmers is needed.



2. The disruption of food supply logistics during the COVID pandemic has necessitated the expansion and upgradation of existing supply chains. Comment. What will be the overall economic impact of such expansion? Examine.

Approach

Students are expected to write about the supply chain disruption due to COVID and how expansion and upgrading the sector will cater the disruption also highlight it's impact on the overall economy.

Introduction

Supply chain management (SCM) is the management of the flow of materials and goods. It will include the movement and storage of food grains and it's inventory from point of origin to point of consumption.

Body

Disruption during COVID19:

- The COVID-19 pandemic has placed unprecedented stresses on food supply chains, with bottlenecks in farm labour, processing, transport and logistics, as well as momentous shifts in demand.
- Grocery store shelves have been replenished over time, as stockpiling behaviours emerged.
- Some farm sectors are more dependent on seasonal labour fruits and vegetables are more Labour-intensive. Limits on the mobility of people have reduced the availability of seasonal workers for planting and harvesting in the fruit and vegetable sector.
- COVID-19 has led to disruptions in food processing industries, which have been affected by rules on social distancing.
- As a result of pandemic, significant number of people are now working from home which has accelerated the demand for ready-to-eat products (saw 170% increase in sales volume between March-June 2020).
- The pandemic has bolstered consumer awareness of functional foods, which is expected to provide a boost for health-orientated start-ups and micro-food processing units.
- While the impacts of COVID-19 are still unfolding, experience so far shows the importance of an open, predictable, upgraded expansion of SCM environment to ensure food can move to where it is needed.

Expansion upgradation and it's economic impact:

- The focus of expansion and upgradation should be on food availability and consumers' access to food; other important aspects, such as livelihoods of farmers and other supply chain actors, and environmental and health implications should also be covered.
- We need to find ways to increase resilience across our food systems by identifying new marketing channels like e-commerce which will result into more avenues to the farmers to sell their product in case of low demand in the local market.
- If feasible, relocate markets to larger premises, while ensuring the appropriate infrastructure it will impact into maintain health, hygiene, quality and food safety.
- It would be a good initiative to identify collection centres closer to producers, for example develop storage facilities like warehouse receipt system platforms where farmers can deliver their produce without the need to go to markets.
- It will Incentivises firms for incremental sales and branding/marketing initiatives taken abroad.
- Promoting innovation in both food products and processes will replace the staples of rice and wheat in the form of Nutri-cereals, plant-based proteins, fermented foods & health bars.

Response to Covid-19:

- Rapid up-gradation under Atma Nirbhar Bharat Scheme and Subsidized food grains under Pradhan Mantri Garib Kalyan Yojana.
- Active association and participation of all stakeholders, governments, NGOs, and private sectors was carried on.
- India has formulated a unique Production-Linked Incentive Scheme (PLIS) to boost processed food in large quantities.
- FAO new comprehensive Covid-19 Response and Recovery Programme to provide an agile and coordinated SCM response aimed at ensuring access to nutritious food for everyone.

Conclusion

With growing populations, changing food habits and unrestricted use of natural resources, nations must come together and lay out a road map for a common efficient food value chain.

3. Discuss the primary factors responsible for India's coal crisis. What short-term measures can be taken to address the crisis? What long-term measures would you recommend to address the crisis sustainably?

Approach-

Candidates need to discuss the primary factors responsible for India's coal crisis. Also mention short-term measures that can be taken to address the crisis. Also mention the long-term measures to address the crisis sustainably.

Introduction

Coal is India's primary source of electricity generation. It is estimated that around 70% of electricity is generated using thermal power plants. State-run Coal India is responsible for almost 80% of India's coal output. It is reported that they would ramp up supplies to address the coal shortages across power plants. There is a combination of factors that is causing the coal crisis in India. If we take a look at the last four years of energy consumption and compare it with the latest, we can see that the usage is increased substantially.

The primary factors responsible for India's coal crisis

- The country's industrial power demand has surged after the second coronavirus pandemic wave.
- On top of that, a widening price gap between lower domestic prices and record global coal prices has led buyers to shun imports.
- An increase in global coal prices and freight costs had led to a curtailment in power production by plants using imported coal, adding to the pressure on utilities using domestically mined coal to ramp up output.
- An increase in coal prices generally has a knock-on effect on power prices and inflation, making a hike a politically sensitive decision.
- Coal India has kept prices steady over the last year despite global coal prices rising steeply in the same period.

The short-term measures that can be taken to address the crisis

- Ramping up production and mining to reduce the gap between supply and demand.
- Coal fuelled power generation plants under the corporate insolvency resolution process can be allowed to commence operations immediately, regardless of the stage of the proceedings at NCLT. This will save

the coal transport time and quantity limitations in coal transportation to non-pit head coal plants.

- To avoid a situation where payment defaults of a state lead to supply crisis, the power ministry is devising a penalty for power generation companies states which do not pay Coal India Ltd on time.
- The Centre amended rules to allow 50% sale of coal from captive mines. It will be applicable to both private and public sector captive mines. Availability of additional coal will ease pressure on power plants and will also aid in import-substitution of coal.
- With the monsoon on its way out and winter approaching, the demand for power usually falls.

The long-term measures to address the crisis sustainably

- CIL should focus on mining. Officers from the Union Government should go down to the States, convey a value proposition and sit with State-level officers to resolve issues related to land acquisition and forest clearances.
- Non- CIL production will have to be augmented.
- The financial crisis that is brewing in the power sector needs to be addressed.
- An opportunity to transition towards gas.
- Lastly, the current crisis affords an opportunity to India to push strongly towards this cleaner alternative.

Conclusion

The current coal crisis is a wake-up call for India and the time has come to reduce its over-dependence on coal and more aggressively pursue a renewable energy strategy.

