

## Impacts of Novel Coronavirus (COVID-19) Pandemic on Fisheries Sector in India: A Minireview

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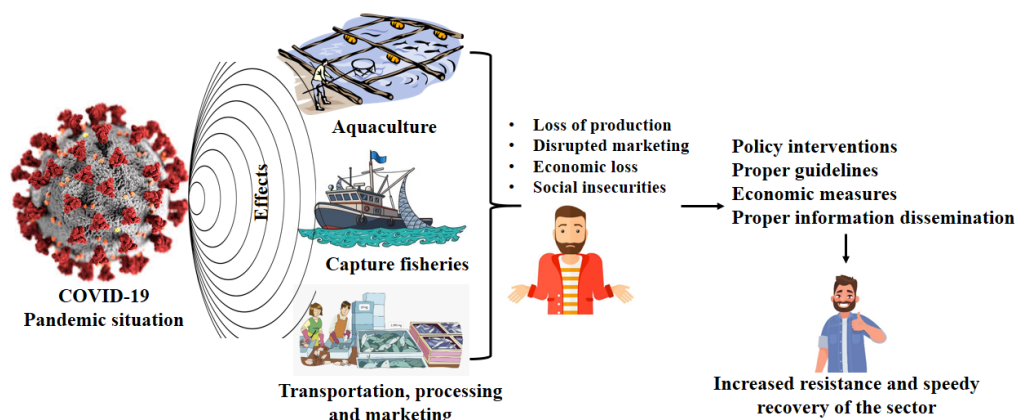
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### ABSTRACT

*In Indian context, COVID-19 pandemic is an unrivalled shock for the economy and health system as a whole. Disruption of demand and supply chain of agricultural commodity like fish and fishery products for the prolonged nation-wide lockdown will directly affect 14.5 million people associated with the sector. The magnitude of the versatile impact includes production distribution and marketing of inland fisheries, marine capture fisheries, seed supply and seafood export. This working paper aims to describe the multidirectional economic impacts of the fisheries sector from this pandemic and a set of policy recommendation to ameliorate this shock.*

**Keywords:** COVID-19, Economic downturn, Fish farming, Supply chain, Seafood export.



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## INTRODUCTION

Starting from Wuhan City, China, on December 31 2019, COVID-19 pandemic has immobilized the world by its health and economic shock (Hongzhou et al., 2020). By observing the terrible extent of the outbreak, World Health Organization (WHO) declared COVID-19 as a global emergency on January 30 2020 (Sohrabi et al., 2020). As the disease is highly transmissible and vaccine has not been developed, so the ways to ‘flatten the curve’ (Nicola et al., 2020) include the imposition of self-quarantine, social distancing, travel restrictions, closedown of different public facilities, transportation, even lockdown of the entire country (Dev & Sengupta, 2020). Though the mortality rate is 3.5percent globally (WHO, 2020a), but its psychological and economic strike is pernicious (Chohan, 2020). At the time of writing this article, there were almost 3.7 million confirmed cases with two lacks sixty five thousand deaths reported from two hundred and thirteen countries and territories throughout the world (WHO, 2020b). India was with fifty three thousand confirmed cases and seventeen hundreds of deaths (GoI, 2020a). Thus in order to curb the spread, the government of India imposed a three week long lockdown nationwide on March 24, 2020. The government of India spends only 1.5percent of the total GDP on public health (GoI, 2020b) so health system of the country is relatively weaker in comparison to other countries (Dev & Sengupta, 2020). Recent patterns of transmission show that average doubling rate of COVID-19 cases in India is 9.1 days (The Economic Times, 2020a). Thus, the government extended the lockdown up to May 3 on April 14. But on 1<sup>st</sup> may government further expanded the process by two weeks until 17 May (NDTV, 2020). Therefore it is of a big question when the lockdown will end up in the country as a whole.

World Economic Forum predicted the world economy would drop off by 6percent in 2020 with an average contraction of 1.2percent (World Economic Forum, 2020). According to Deutsche Bank, US economy will shrink by

13percent in the second quarter; while Oxford Economics puts the decline at 12percent with a loss of 1 million jobs; Capital Economics predicted a 10percent decline in GDP, TS Lombard 8.4percent and Nationwide 8percent (Bartash, 2020). For Indian economics perspective, COVID-19 might be a dire threat. The International Monetary Fund (IMF) has estimated the growth of Indian economy at 1.9percent in 2020-21, and Barclays projected 0percent growth in 2020 (Livemint, 2020). According to the Centre for Monitoring Indian Economy Pvt. Ltd. India’s unemployment rate might spike to 23percent (India Today, 2020). A report of the United Nation indicating more than four hundred million people of the informal sector in India may sink into poverty (India Today, 2020b). India is the second largest fish producing country in the world, with 6.56percent of global production (GoI, 2019). Around 14.5 million people are engaged in fisheries and its allied activities (NFDB) in India, and it has been estimated that around 60percent of the total population consume fish (Shyam, 2016). Fisheries sector of the country contributes about 1.1percent to the overall GDP and 5.23percent to the Agricultural GVA (NFDB). So, in this precarious situation, an attempt was made to examine the potential impact of COVID-19 pandemic on the fisheries sector in India and various mitigation measures to ameliorate the coronavirus shock.

### **Indian Fisheries in the pre-COVID-19 period:**

The COVID-19 shock is playing out in almost a similar manner in all around the world by squeezing out demand and supply and the consequent economic slowdown. In India, the problem might be long-lasting because before the pre-COVID-19 period Indian economy had deteriorated significantly after years of infirm performance (Dev & Sengupta, 2020). In 2018-19 India’s fish production was 13.34 million metric tonnes which was about 6percent greater than the previous year (Seafood Source, 2020). As per seafood export is concern, it is the fourth biggest exporter in the world (Seafood Source). In 2018 India

exported 13,77,244 tonnes seafood which etched \$ 7.08 billion (The Economic Times, 2018). In 2017-18 Andhra Pradesh was the leading fish producing state in the country, followed by West Bengal and Gujarat by producing 34.5, 17.42 and 8.35 lakh tonnes fish respectively (GoI, 2019). In inland production, Andhra Pradesh stood first followed by West Bengal and Uttar Pradesh. Gujarat was the first state in marine production in the country (GoI, 2019). Some major landed marine fish were hilsa, Indian oil sardine, sea catfish, lizard fish, seer fish, barracudas, silver bellies, anchovies, clupeids, mackerels, skipjack tuna, yellowfin tuna, crust crab, penaeid and non-penaeid prawn. In inland fish production, Indian major carps were the most cultured species followed by exotic carps, catfishes, minor carps and murels. As per percentage share of disposition of catch is concern, 78percent was used as fresh marketing, followed by 8percent as freezing and 4percent as curring (GoI, 2019). India produced 52,262 million fry in 2017-18 in which West Bengal was the major contributor.

#### **Impact:**

Fishes are one of the major nutritious part of the global food chain and key source of employability generation among rural coastal people. Fish and fish products are one of the most traded food products throughout the world involving 38 percent international trade (FAO, 2020). Decreased consumer demand, lower supplies, and interference in supply chains will directly affect the people engaged with the industry such as fisherman, fish processor, fish vendors, suppliers and transport workers. Postponement of various research and development programme, science and management meetings will detain the growth of this sector. Lockdown in the landing centres and harbours has severely affected the fisher folks in all nine coastal states and four coastal union territories of the country. Starting March 24, 2020 fishers have not ventured into the sea; in the meanwhile, fishing ban season started from July 15 and will continue till June 15, in east coast. For the west coast it is from June 1 to July 31. As a result marine fisherman

will not be able to fish for about 75 days in east coast and 130 days in west coast. So, there is no doubt how this pandemic is going to devastate the fishing industry even after the lockdown. Rural agricultural labour wages growth was depressed both in nominal and real terms from the pre COVID-19 period (Dev & Sengupta, 2020). In this circumstance, the corona outbreak will disrupt the fishery activity and supply through several dimensions, like crop harvesting, processing, procurement and marketing. Transportation hurdles, labour movement restriction, will directly affect the farming and processing industry. March to June is the peak season for fish farming as well as shrimp farming which will get hampered for non-availability of migrant workers. Shortage of fish seed, fertilizer and other inputs may also hamper the desire production level. Suppliers and producer will be greatly affected by reduced demand, transport constraint and closure of different restaurants and retail outlets. Lack of proper functioning of supply chains, lots of farmers are not able to sell their crop properly, leading to massive losses. Despite being essential service, fish and food supply chains are facing a lot of difficulties in marketing. Some people are not buying the fishes in afraid to get affected. India's seafood export may get retarded as it was likely to achieve \$7-billion target this year (Business Line, 2020). Most of the export markets like Japan, US are buying selectively, and European market is totally closed off. Thus, this sluggish farming sector and stagnant exports are going to put the fishery industry of the country in a severe crisis.

#### **Mitigation Measures**

Impoverish section of any society are vulnerable to any disaster or pandemic situation. India being an agriculture backbone country with 85percent small and marginal farmers, in which maximum are landless farm labours, welfare measures must be taken by both state and central government to protect them from COVID shock.

- During and beyond the lockdown, every farmer, agricultural labour, workers

involved in the supply chain have to be protected from health and financial damage. As most of them are losing their earnings from informal payment, they have to be provided with possible means of living till the economy recuperates.

- Proper awareness during farming like social distancing in harvesting, procurement, marketing, packaging, proper sanitisation, personal hygiene, wearing face mask will help to prevent the spread of the pandemic.
- Farmers with perishable products like fish need continued markets. The government should develop a strong procurement and distribution facility at MSP (Minimum Support Price) for fish and fishery products, which will be helpful for the farmers and as well as for consumer point of view. Promotion of fish vending door to door through different state fisheries corporation should be emphasized.
- The government should also take some initiation for the smooth operation of retail, wholesale, marketing, distribution, of fishes via a smooth transportation corridor.
- As our country going through the lockdown since March 24, marine fishing operation is totally stopped. The further imposition of fishing ban is tremendously affecting the sector. Thus the government should consider some alternative means to reduce ban period, particularly for this year or special financial assistance may be provided to the fisher communities.
- Financial assistance, social protection for the farmers and their families must be taken up. At present out of 140 million beneficiary farmers, only 84.6 million are under the PM-KISAN scheme (The Economic Times, 2020c); thus government should increase the inclusion as well as the number of instalments to safeguard the profession and community.
- Alongside providing advisories Government should provide a toll-free helpline to address the grievances of

farmers, solving queries related to farming and marketing.

- Institutional lending of different agricultural loans should be expanded and facilitated for smooth flow of credit for the farmers.
- Blockchain technology should be incorporated in the seafood sector, which will facilitate “smart contracts” and to increase the efficiency of supply chain which could minimise the current pain of global sea food industry.
- Moreover, a separate complete financial package along with detailed guidelines must be developed for the aquaculture and capture fisheries sector of the country for protecting the industry and associated population from tremendous effect of the pandemic. It will also ensure the speedy recovery of the sector.

### CONCLUSION

COVID-19 outbreak has been deemed a global health emergency, and its impact on developing countries like India is one of heightening concern. With 1.3 billion populations and the precarious situation of the economy in the pre-COVID period, prolonged lockdown would be ruinous for the economy. Especially agriculture and the allied sector will be in a most vulnerable condition. India, with its apt governance, took the situation as a challenge and doing in all way of possibilities to combat with the pandemic. At the same time, the government and policymakers need to be prepared to minimise the impact of the shock and V-shaped recovery of the economy in the post COVID period.

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