

Impact of COVID-19 at Sea and its Implications on the Shore: A Case Study of Alappuzha District, Kerala

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Abstract: *The COVID-19 global pandemic shook the foundation of economies worldwide and almost brought the world to a state of cessation. It spread with an alarming pace, affecting millions of people around the world. The countries were forced to impose uncompromising controls on the people to curb the speedy spread of this pandemic, bringing the global economic activities to a near-standstill position. This paper is an attempt to analyse the impact of COVID 19 on the fishing sector of Kerala, India. Every nation on the earth has directly or indirectly been hit by this pandemic. Every sector of all economies on the planet is wrestling with this pandemic, and there is no exception to the fisheries sector. The study was carried out by interviewing fishermen over phone due to the constraints that arose out of this pandemic. Every fisherman was concerned about the work days they lost, the mounting financial burden and the total balance they lost in their lives. The community which is already considered as marginalised has again fallen deeply into the trap of poverty. The paper tries to analyse the livelihood issues of fisherfolk, changes brought about in this sector and suggest some urgent measures to be taken by the authorities.*

Keywords: Global Pandemic Crisis, COVID-19, Fisheries sector, livelihood, marginalised, Economic implications, lock down, income & consumption.

1. Introduction

COVID-19 has created untold impacts on all sectors of the economy throughout the globe, with no exception to the fishing sector. The livelihoods of about 10 % of the global population depend on small-scale fisheries (FAO, 2014, 2016). This pandemic has spread with an alarming pace, infecting millions of people across the world. Countries were forced to impose uncompromising restrictions on people to curb the speedy spread of this pandemic, bringing the global economic activities to a near-standstill position. The informational paper by FAO (November, 2020) states that the lockdown and physical distancing measures have a negative externality among the informal sectors of the people, especially among the vulnerable and small-scale artisanal workers and communities in developing countries. The COVID-19 pandemic which struck the entire globe started as a regional epidemic on 31st December, 2019 (Hongzhou et al., 2020). Later WHO, on 30th December, 2020, (Sohrabi et al., 2020) declared the COVID-19 outbreak as a pandemic as the number of infected people increased outside the country of origin, China. In the first half of 2020, the pandemic spread to all regions of the world hitting one worse than the other, including many major fish producing and consuming countries. Though fishing and its allied activities are considered an essential activity in most countries, the tight measures imposed to contain the spread of infection caused many direct and indirect challenges to this sector which ended with sharp decline of earnings to the nations.

The Ministry of Statistics and Program Implementation reported that the Indian economy contracted by 7.3% in the April-May quarter of this financial year. As per this official data, it is the lowest growth trend of the Indian Economy

since the ministry has started its GDP compilation quarterly since 1996 (ToI, July 2021). Among all sectors of the economy, the swift spread of COVID-19 hit the blue economy of India. In India the fisheries sector holds a vital position by catering food and nutritional security to millions of people. The fisheries sector of India defines the cultural identity of many coastal communities and nurtures their lives. The Government of India declared a three-week nationwide lockdown on 24th March, 2020, in order to control the spread of the virus. The recent transmission pattern of COVID-19 virus in India is 9.1 days (The Economic Times 2020). Hence the government extended the lockdown till 3rd May, 2020, on 14th April, 2020. But as the number of cases reported in the country was mounting, on 1st May, 2020, government further extended the lockdown by two weeks until 17th May, 2020 (NDTV, 2020). The fisher folk stretching in all nine coastal states and four coastal union territories were severely affected due to the lockdown especially in the landing centres and harbours. Fishermen were not able to go fishing from 24th March, 2020, due to lockdown; in the meantime, their hardships were doubled because of a fishing ban that started both in the west and east coast of India. So, there is no doubt that the fishing sector would be devastated after a long span of fishing arrest in the coastal communities of India and also to the exchequer of the Indian Economy.

1.2 Objectives

- 1) To understand the Socio – Economic status of fishermen family in Alappuzha district during the COVID-19 period.
- 2) To analyse the impact of pandemic crisis on the livelihoods of the fishing community of Alappuzha district.

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- 3) To examine the transformations in the fishing sector regarding traditional methods of fishing practices during the lockdown period.

1.3 Significance of the study

As we all know, the income of the fishermen community is on daily wages system, the lock down and restricted entry imposed by the government during COVID-19 period had an adverse effect on the fishermen community. Hence, it is relevant to discuss the lock down impact of fishermen community in this context. We have considered the fisher

men from the marine sector as the following details exhibits that the size of the marine group is comparatively much higher than the Inland fisher folk. Hence the figures of fishermen population at national level throw light on the importance of this paper.

Among this total population, this paper specially addresses the issues pertaining to the marine fisherfolk as the size of this group is comparatively higher than the inland fishermen. The following is the state wise marine fisheries statistics of India.

Table 1.4: Number of Fishermen Population engaged in Marine Fisheries activities, 2019-20

State/UT	Full Time		Part Time		Occasional		Unspecified		Deep Sea	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
A and N Islands	13,369	112	1,058	300	NA	NA	NA	NA	NA	NA
Gujarat	71,777	36,840	19,348	12,362	NA	NA	NA	NA	NA	NA
Karnataka	56,871	43,030	55,599	39,662	5,973	3,684	57,139	44,655	21,388	NA
Kerala	295,787	255,502	27,178	23,477	NA	NA	NA	NA	NA	NA
Maharashtra	91,766	34,948	29,262	38,761	20,539	20,343	3,318	9,954	10,913	NA
Tamil Nadu	208,201	NA	24,253	201,286	12,815	17,645	65,170	248,663	25,000	NA
Daman and Diu	6,553	NA	82	NA	60	NA	NA	NA	NA	NA
Lakshadweep	2,348	NA	2,134	NA	562	1,380	NA	NA	NA	NA
Puducherry	24,534	11,915	6,234	4,310	1,000	800	2,814	10,056	15,084	25
All India	1,153,553		485,306		84,801		441,769		72,410	

Source: Department of Fisheries, State Govt./ UT's Administration

It is in this background this paper delves into the financial stringency experienced by this community by comparing their income during Pre-Lockdown, Lockdown and Post-Lockdown periods.

2. Materials and Methods

2.1 Study Area

Alappuzha district was officially formed on 17th August, 1957. The district lies between North latitudes 90° 05' and 90° 52' and longitudes 76° 17' and 76° 48'. It is the smallest district in Kerala having second highest density of population with 1501 per square kilometre. The coastal belt of about 82 km is connected with a wide network of inland water bodies. Alappuzha has the requisite natural endowments for emerging as a leading fish producing district in the state. There are 54 fishing villages, which are completely depending upon fishing and related jobs for their livelihood. (Panchayat level statistics 2016, Alappuzha). Fisheries sector provides occupation for the people of the coastal areas. Among the 30 fishing villages Arthunkal village in Cherthala south Panchayat and Pollethai in Mararikulam South Panchayat are selected for in depth study.

Arthunkal is a small seaside village, about 8 kilometres west of Cherthala and 22 kilometres north of Alappuzha town, in the Alappuzha district of Kerala. The Arthunkal village located in the Cherthala Taluk of the Alappuzha district is a coastal sandy zone region with more than 90 percent of fishermen community. Arthunkal is the fish-landing centre for traditional fisher folk. (Department of Fisheries Kerala 2008)

Pollethai fisheries village is spread over three wards of Mararikulam South Grama Panchayat. The coastal wards of this village are 1, 21 and 22. The village has a coastal line of 1.90 Km, out of which 0.55 Km is protected. The infrastructure facilities available for fishermen are 30 country boats and 8 mechanised boats in this fishing village. The village has one fish landing centre. The village has one ice plant and one market.

2.2. Methods

The study was carried out by collecting samples from the fishermen of Arthunkal and Pollethai fishing villages of Alappuzha district by using simple random sampling method. The first phase of the data collection began after the first wave of COVID-19 and the resultant lockdown. The data collection process was halted for a short period as the daily reported COVID-19 cases increased in Kerala. The follow up survey was conducted over phone and in person where it was possible. The second part of the survey was conducted to gather information about the long-term impact of COVID 19 among the fishermen community, as every wave of COVID-19 had a different dimension. Secondary data was also collected from various governmental, semi-governmental and other sources for facts and figures. Appropriate statistical tools have been used for data analysis and interpretation.

3. Results and Discussion

3.1 Demographic Profile of the Fishing Sector

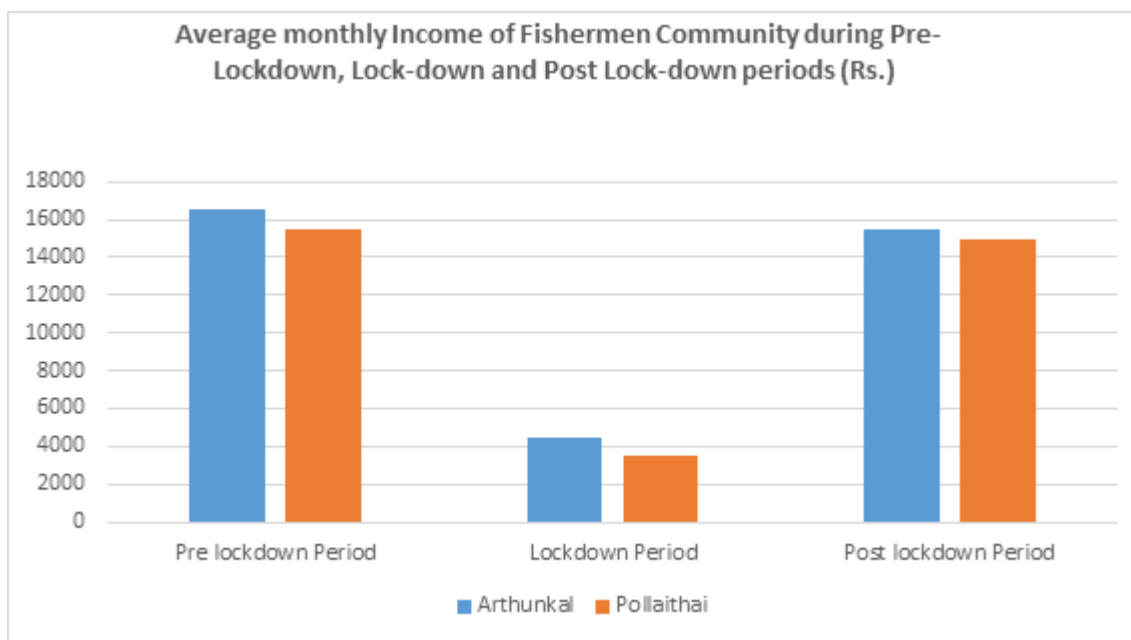
The demographic profile of the study area may be summarised as Arthunkal and Pollaitthai which are two coastal villages with more than 90% of the total population belonging to the fishermen community. Most of the people

believe in Christianity which comes under the category of Other Backward Class (OBC) which points towards the financial status of the study area. The educational status of this community is not much sound so that even the new generation of this community are forced to go fishing rather than finding any skilled employment.

3.2. Impact of COVID-19 on the Shore

COVID-19 pandemic and the resultant lockdown was an unexpected attack to the fishermen community which shook their financial security tremendously. The fishing is an

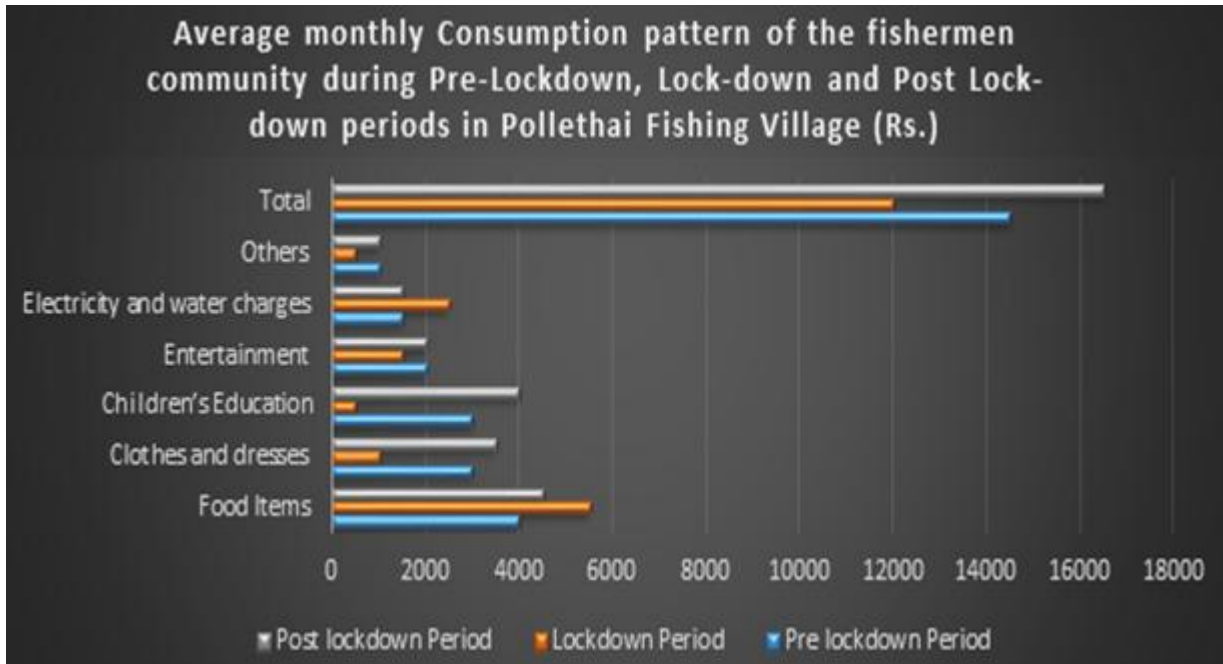
employment which does not offer any surety to get rewarded always. When the survey was conducted, it is understood that the majority of the fishermen families do not have the habit saving for the future. They always spend the money that they get daily from their employment. Since this group of people do not follow any systematic pattern of consumption, any unexpected stoppage of their earnings would naturally affect their daily life. It happened at times of lockdown when the government imposed strict laws to control the rapid spread of Coronavirus. The graph given below compares the income of this section received during Pre-Lockdown, Lockdown and Post-Lockdown Period



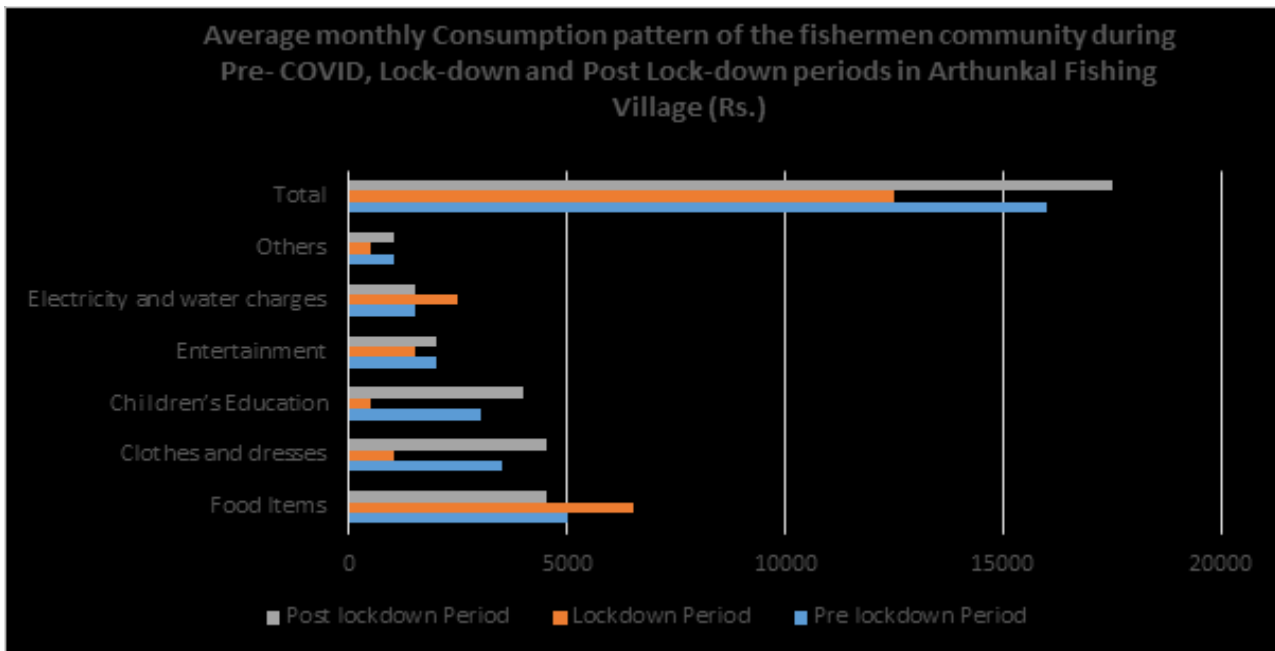
Source: Primary Data.

During the Pre and Post lockdown periods, they received an average monthly income above Rs-15000/-in both the fishing villages. The first and second phase of lockdown was strictly followed in the coastal belt of Alappuzha, hence none of the fishermen could go fishing. Its impact was very severe to this community as they lost a number of working days which has a direct relation to their income. The government has declared some relief packages for fishermen families who have active registration with Kerala State Fishermen Welfare Board. They also received some form of financial aid from other agencies like charitable societies, churches and some private agencies. This was the income of

this community during the lockdown period which is shown in the graph. The cases have been reported in the coastal belt of Alappuzha that in many parts of the coastal area fishermen tried to go fishing even when the lockdown rules were alive. And in some places, their fishing equipment was seized by the Police as it was a violation of lockdown. All these show the financial stringency faced by this community during lockdown. On the other side, the consumption expenditure has shown a rising trend in their routine spending. It is shown in the separate graph given below for each fishing village.



Source: Primary Data



Source: Primary Data

Apart from their usual spending, the expenditure on food, electricity, water and entertainment cost has slightly increased during the lockdown period. The lockdown forced them to sit at home the whole day. It was the main reason for the slight hike in their consumption expenditure. It is clear from the analysis that on the one hand, they lost a lot of working days and hence their income fell down and on the other, consumption expenditure increased. Thus, the fishermen were forced to borrow money from cooperative banks and a vast majority from the village money lenders to fill the gap between their income and expenditure.

3.3 A new model of fish sale – A lockdown impact.

COVID-19 pandemic shook the roots of every activity throughout the world. Fisheries sector was no exception in

this regard. The negative waves were alarming in the world by creating unhappy events day by day. In the midst of all these atrocities, the fishermen in Kerala had a positive vibe by the government's newly-introduced system to sell fish during the lockdown period as against the traditional bidding method which seemed to be gaining popularity among fisherfolk in fetching better returns. The government had introduced the new system in an experimental manner by entrusting a Harbour Management Society to control and monitor the sale of the catch by the fishermen. The new system completely avoided the traditional practice of bidding the catch by the middlemen who had pocketed a fair amount of the total sale in the form of commission. The middlemen are called "Tharakans" who help the poor fishermen by financing the needs of the fishermen in the form of buying new crafts, gear, engines etc. The traditional

practices of middlemen who stand between the actual fishermen and the sellers have a predominant role in fixing the price of the catch. Poor fishermen are bound to give the fish to these people at the rates that they dictate. The actual fishermen get a very low income and the people who finally buy the fish pay a much higher price. These middlemen are also responsible for adulterating fish with chemicals to preserve it for a longer period. Another noticeable issue with the traditional system was that once the daily volume of a particular type of fish is more, the price will reach its lowest level. Since fish being categorised as an easily perishable commodity, there is no system of support price as in the case of agricultural products. Hence, bidders, who have a ready supply of cash, buy fish in bulk quantity from fishermen for low rates and sell it at high rates. The new system started temporarily to avoid crowds and also to ensure social distancing in the wake of COVID-19 pandemic, which was welcoming for the fishermen as it ensured fair price for their catch. The new system entrusts the harbour management society to fix the price daily and once the price is being fixed, the fishermen can sell their catch till the end of the day. The fishermen were very happy with this new system as they got a higher price for their catch which reflected in their income too. This new venture was a blessing for the fishermen, as they were struggling out of COVID-19 and resultant lockdown measures.

4. Findings & Conclusions

Every government has initiated a variety of containment policies and economic interventions to mitigate the impacts incurred by the pandemic and associated restrictions. It is clear from the analysis that fishermen were worst hit economically due to COVID-19 pandemic. The government has supported them by declaring some health packages, but it is not sufficient enough to meet the losses they faced from COVID-19. Hence, Government should announce some supplementary packages to help these poor and marginalised sections of the society. As it is indicated earlier, they faced this pandemic situation without their daily earnings by borrowing money from various sources especially from cooperative banks and village money lenders. So, steps should be initiated by the government to write off their debts from governmental or semi-governmental agencies. Various development & welfare-oriented schemes should be implemented from time to time with the objectives of augmenting Marine, Freshwater and Coastal fishery production as well as for uplifting the socio-economic status of the fisher folk with due focus on safeguarding the interest of all sectors of fisher folk. An urgent attention of the authorities is needed in the case of replacing the traditional auction method to the newly introduced system of selling fish catch. The better implementation of this new method necessitates a proper management of fishing harbours and also to facilitate storage facilities to keep the bulk stocks properly. Thrust areas should be focused to accomplish the above goals through the successive plan periods. As a result, the socio-economic status of the fishermen would improve.

Overall, the findings of the study suggest that COVID-19 pandemic had a severe negative impact on the blue economy, especially on the livelihoods of the fisherfolk. The miserable conditions of the fisherfolk are quite evident from

the statistics available globally and regionally. Hence the policy makers should draw their attention to revive this community to the mainstream of the society by suggesting numerous ways of boosting packages within the financial constraint of the exchequer.

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