

# A Study of Socio – Economic Conditions of Fish Farming Development

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## Abstract

The studies are to examine the infrastructural, finance and marketing problems of faced by fish farmers. Inland fish production in our nation has indicated a wonderful development rate during the most recent five decades. Food, shelter and clothing are the fundamental necessities of the life and among them; food assumes a critical job in the social and financial improvement of the nation. Segment pressures sub-siding the arable terrains just as the declining factor productivity in major agriculture based trimming framework leaves no choices with the essential partners than to locate an option in contrast to customary agricultural action. Even though catch segment is on the ascent with around 3.94 million tons, the part is thought about various arrangement bottlenecks in the worth chain. Consequently, it gets imperative to gather elective and non-customary wellsprings of fisheries. Aquaculture is the quickest developing food segment on the planet and there is gigantic extent of improving it as far as level combinations by bridling increasingly more region into aquaculture notwithstanding the various approach imperatives and components required for the supportable advancement of the fisheries area to sustain the regularly developing populace.

**Keywords:** *Socio – Economic Conditions, Fish Farming Development, finance and marketing problems, fish production, financial improvement.*

## 1. INTRODUCTION

Fisheries structure one of the most significant parts for advancing monetary advancement of Kerala. Notwithstanding its commitment to a prospering fare exchange the angling business is equipped for giving modest protein nourishment to battle unhealthiness. It likewise gives work. There is a long convention to the marine angling industry in Kerala. An antiquated Malayalam treatise Valavisupuranam contains a few references to the pervasive angling strategies. Sangam Literature separated Tamizhakam into 5 tinais. One of those Neythal is waterfront region and occupants of these tinais were Parathavarie., angling network. The sangam works of art named fisher people are Minavar, Parathavar, Valainars, Nulaiyar, Pazhaiyas and Thurairans. The individuals delighted in an enormous proportion of social opportunity and uniformity. Respect of work was perceived all over and no individual were viewed with a substandard economic wellbeing. The ninth and tenth hundreds of years of early Kulasekhara rule comprises the brilliant age of the fishers networks. The presentation of China odam and China nets are the outstanding highlights of the angling area during these period. Thirteenth to seventeenth century saw feudalism in Kerala. Social disparities existed during that period. The primitive masters in the fishery segment were the headman of the angling towns. From the center of the nineteenth century the angling economy started to experience auxiliary changes. Creation turned out to be more exchange arranged and expanded. With the divisions of preparing from creation, there emerged the requirement for mediators to secure crude materials for handling and these. There mediators developed as vendors. By 1931-32, the lion portion of the result of fishers' work went to the mediators. The coming of pioneer powers brought about the orderly grouping of fish riches. The katamarams of South Travancore coast and the hole kayaks of the Malabar Coast are little, light pontoons which are worked with paddles and sails. As per the State Planning Board, in 1975 Kerala had more than one lakh dynamic fishers. The angling makes in activity included 25000 kayaks/catamarams and 2000 automated pontoons.

The South West area containing the conditions of Kerala, Karnataka and Goa with a coast line of 994 km had been the most gainful and the biggest supporter of the nation's all out marine fish arrivals. Among the various states in the district, the top level augmentation originated from Kerala: 60%, from Karnataka, it is 30% and the rest 10% from Goa. It is obvious from the report of Planning Commission of Government of India.

Kerala being an oceanic State appreciates a profitable situation as far as fisheries. As the fisheries part gives business and pay to more than one million individuals, either legitimately or in a roundabout way, it has picked up in significance. It fulfills the protein prerequisites of an impressive lump of the oppressed populace and furthermore significant income, particularly, in outside trade, to the exchequer of the state.

By and large, almost 11 lakh people were utilized in marine and inland angling exercises during 2003-04. Of these, 77% of them were occupied with marine angling. Of the all out creation in 2003-04, in excess of 87 percent represented the marine segment. Kerala has an 36000 square kilometer in the Kerala coast. In 2003-04 there were 2.20 lakh dynamic fishers, of which 82 percent was in the marine division.

Fresh water fishery assets are vital to Kerala by virtue of the way that it depends on assets spread all through the State and are fit for making significant commitment to the necessities of the truly necessary modest creature proteins for the individuals. Inland fisheries have one extraordinary favorable position in that the wellspring of creation is near the devouring focuses. This diminishes the issue of safeguarding and transportation and thusly the expense of dissemination. The whole catch of inland fish is straightforwardly used as human nourishment.

In Kerala the portion of dynamic fishers is 23 percent. Also, around 6 percent of the all out is watched, as relying upon segments other than looking for their job. The fishers are stale by temperance of their transcendent investment in angling and hesitance or lack of ability to move away. Among the absolute populace the evaluated populace of fishers in 2004 is 8.44 lakhs and that of dynamic fishers is 21.26 percent. The most noteworthy offer is in Malappuram, 11.4 percent and Thiruvananthapuram has the second situation with 10.2 percent and the least is in Kasargod-just 3.8 percent. Sex Ratio of fishers is 975.

## 2. FISHERIES SECTOR IN KERALA - SOCIO ECONOMIC ASPECTS

The bit of fishery part in the Agricultural State Domestic Product of Kerala extended from 5.18 % in the eighties to 9.36 % in nineties and starting there kept up a consistent position. The anticipated addition in part of fisheries in the rustic and joined divisions during the time develops the significance of this day break fragment. The dedication of fisheries part in the state has a yearly compound improvement pace of 13.32 % (during 1980-81 to 2004-05). Though absolute estimation of fisheries division thing is growing consistently, its idea in Net State Domestic Product is declining a result of extended duty of organizations fragment after 2001-02.

In Kerala sea base industry is getting over the years and is directed by exchanges of shrimps, cuttlefish, squids and finfish combinations. The admission has been basically planned to objectives like European Union, U. S, Japan and China. The passages in truth animated the advancement of post assemble workplaces and brisk structure improvement of fishery zone.

**Table 1: Contribution of Fishery Sector in The State Domestic Product of Kerala**

Years	Net State Domestic Product (Rs. Crore)	% contribution of fishery sector to agricultural SDP	% of FDP to NSDP
1980-81	3822.73	5.18	2.03
1990-91	12173.5	9.36	3.06
2000-01	63715.1	9.74	2.14
2004-05	89452	9.23	1.54

The division in the basic time of progress could hold liberal theory and work due to its capacity of basic toll salary and colossal degree of private market expansion. The person depending upon fisheries has reliably extended consistently. At this moment (2005) there are around 6, 02,234 people solely depending upon fisheries for their job.

The shoreline of Kerala connects with 590 Kms spreading in excess of nine ocean side districts, the most outrageous coastline being shared by Alleppey and Kannur (82 Kms)(Table 1.2). Trivandrum territory has most prominent calculating towns (42) and Kannur with least (11). Number of landing centers is found proportionate to calculating towns. Ordinary fisher families per town in the state are 543 while the most imperative is in Trivandrum (813) and least

is in Kasargod (299). Most extraordinary fisher people was seen in Trivandrum (24%) trailed by Alleppey (17 0/0) and Kozhikode (15%).

The proficiency pace of fisher society in Kerala shifts reliance proportion plainly shows that most fisher individuals need to include in one or other movement in the youthful age itself. This is fundamentally one reason for intense decrease in instructive level past auxiliary training. It might be additionally observed that the particular beach front zone of Trivandrum has high reliance proportion where still non-motorized angling is unmistakably predominant and all the more relatives need to work to squeeze out professionally.

**Table 2: District Wise Fisher Families and Population**

Districts	Length of Coast line	Fishing villages	Landing centres	Number of fishermen families	Total fishermen population	Average fisher households/village
Trivandrum	78	42	50	34,128	143,436	513
Kollam	37	26	18	11,899	43,210	458
Alleppey	82	30	13	21,799	101,341	725
Ernakulam	46	21	13	8,876	42,069	423
Trichur	54	18	19	6,598	34,078	367
Malappuram	70	23	12	10,462	79,858	455
Kozhikode	71	35	25	16,058	87,690	459
Kannur	82	11	11	5,929	36,686	539
Kasargod	70	16	17	4,777	33,866	299
Total	590	222	178	120,486	602,234	543

Source: 1. Marine Fisheries Census of CMFRI, 2005

**Table 1.3: Educational Status of Fisher Folk in Kerala (2005)**

Districts	Educated				Literacy rate
	Primary	Secondary	Above secondary	Total	
Trivandrum	36,638	47,117	9,804	93,559	65
Kollam	11,667	16,832	6,025	34,524	80
Alleppey	35,741	37,506	11,261	84,508	83
Ernakulam	13,532	17,674	5,051	36,257	86
Trichur	9,645	14,032	2,888	26,565	78
Malappuram	19,101	21,508	1,643	42,252	53
Kozhikode	24,626	36,940	5,970	67,536	77
Kannur	9,911	15,703	3,691	29,305	80
Kasargod	10,609	11,392	2,160	24,161	71
Total	171,470	218,704	48,493	438,667	73

Source: Marine Fisheries Census of CMFRI, 2005

### 3. INLAND FISHERIES

India's huge and fluctuated inland fishery assets, conceivably one of the most extravagant on the planet, can comprehensively be isolated into two classifications, viz., Fresh Waters and Brackish Waters. The last incorporate broad estuaries or stream mouths, an enormous number of tidal ponds, backwaters, salty water lakes and so forth, while the previous is comprised by the incredible waterway frameworks, freshwater lakes, an immense system of irrigation channels, tanks, stores, lakes and so on. As per their arrangement of the board, inland fisheries are of two kinds, viz.,

catch and culture fisheries, Capture fisheries are found for the most part by streams (riverine), estuaries (estuarine) and enormous lakes (lacustrine), and they are coordinated towards the protection and arranged misuse of fish with the end goal of keeping up a supported efficiency. Culture fisheries are found in littler seized waters, for example, tanks, heels, lakes, and so forth., are represented by culture tasks identifying with their administration.

#### **4. MARINE FISHERIES**

Fish as a nourishment thing is acknowledged by more than 60 percent of the individuals of India. Both as a nourishment thing for inward utilization and as an item that can procure remote trade, the significance of fish are incredible undoubtedly. Further, marine fishery is an amazing pay and business generator for the enormous mass of in reverse and monetarily more vulnerable areas of provincial and seaside individuals as it animates the development of various backup ventures. The assessment of the effect of motorization of fisheries is, hence, of principal significance for asset designation and business arrangement, and the improvement of fisheries as a sorted out industry in the Indian economy. What's more, there are different reasons that make it especially essential to consider the issue of the effect of automation on fisheries. Increment underway is for the most part by virtue of the automation of angling makes. The automation program was propelled with a sizeable government sponsorship towards the expense of marine income, angling vessels, and angling hardware. Different new sorts of motorized art have been presented through Government approach activities with the end goal of reaping assets which were so a long ways past the compass of conventional specialty. It might be that the Government never expected to supplant the customary specialty by automated art. In any case, rather than going into remote ocean, most automated vessels have decided to angle in shallow waters for different reasons and consequently rival customary art. This conflict of interests in angling exercises is particularly clear on account of trawlers and satchel seiners. As it were, Remote Ocean looking for abusing the assets which have stayed past the range of conventional fishers has not yet evolved in India. There has been a colossal increment, both as far as amount and worth, in the portion of creating countries in fish creation during 2013.

#### **5. FISHERIES TRADITION OF KERALA**

Kerala is a tropical state in India with various species angles in the marine segment. In marine fisheries there are various sorts of angling specialties and apparatuses are utilized for angling. The advancement of fisheries area in Kerala can be grouped into three stages. Before 1965-66 is the primary stage when arrivals were principally from non-automated indigenous artworks and gears and the arrivals stayed underneath one million tons during this stage. The subsequent stage is the period up to 1985-86 and the significant highlights of this stage were expanded automation, improved rigging materials, presentation of mechanization of nation makes with detachable motors, development of fare exchange and so on. The last stage is the period after 1986. This stage highlighted strengthening of automation, mechanization of nation creates, multi-day journey angling and so on. In light of that request new advancements were embraced for its gathering and preparing exercises to provide food these requests. The interest of dried fish among the coolies of espresso manor of western Ghat locale gave a decent market to the product. The carriages which cut down espresso from high ranges convey enormous measure of dried fish back. The opening of railroads by British opens new windows to fisheries segment. The dry fish deal from Travancore 1373 tons in 1854 to 2757 tons in 1864. At that point the fish oil send out from Malabar to Britain supersedes the reactions of the market. The oil sardines turned into the crude material for flourishing fish oil fares to Britain. In 1845-46 the fish oil fare to London was 34 tons. In 1864 the fare was 4212 tons. In any case, the quick consumption of whale populace due to overfishing, the world inventory of fish oil was incredibly marked down and that causes increments in the cost of fish oil. That starts prompts the quest for elective sources; at long last in 1930 Fish oil send out from Malabar was incredible.

The convention of superseding the control of Merchants or the mediators over fishers was starts at the underlying phase of angling exchanges. There was a convention of incapable to advertise the fish autonomously by the fishers himself. That made up the security among credit and promoting of produce. Once there was a security between the maker and the brokers, at that point he can't autonomously advertise his product and normally he gets less cost and plainly cuts his edge of benefit. A couple of the specialists were controlled all the exchanges of a specific area. They propelled all the cash required by the fishers dependent on the condition that the catch was offered uniquely to them. While there was an endeavor of making association which would give the power over the produce of the fishers in 1917 and enlisted them as cooperatives of fish makers They were give the credits to fishers, assume responsibility for preparing offices like restoring yards, sell fish by and large, and possessed the hardware's all things considered. In 1933 there were 95 agreeable social orders with enrollment of 8194 individuals covering about 33% of dynamic fishers. In any case,

absence of help from network pioneers and sufficient help from government to fishers hurt the presentation of agreeable social orders. There were numerous essential premises of fisheries improvement designs in the Travancore Cochin in that decade. They incorporate the inventory of wood to fishers to manufacture their Kattumarams and kayaks and supply cotton yarn to make their nets for angling. Foundation of fish relieving yards and guarantee the inventory of good salt and clean handling under the super vision of fishery officials, A program for the staged automation for existing artworks for tapping of new assets past the span of conventional specialties, development of angling organization called "West Coast Fisheries Ltd" with the investment of government to attempt the fare and different organizations identified with fisheries, Reorganization of cooperatives with the uncommon enthusiasm of the fishery officials checking out the everyday exercises. The cooperatives give the stockpile of nourishment grain, materials and different necessities of the fishers. In mid-1938 the presentation of most recent innovation of freezing by the establishment of refrigeration plant for protection of fish. That assists with angling made accessible to High ranges and Tamil Country. Around then there was additionally get the mindfulness about the immense prawn fishery assets yet to be undiscovered.

## 6. FISHERY INDUSTRY IN INDIA

India contains an unprecedented bounty of natural arranged assortment in its marine regions. Among the 21730 marine species recognized on the planet, 2546 species are found in Indian waters which are 11.7% of the world's total. India is one of the greatest calculating countries on earth, with a joined coastline of 8041 km long, and an EEZ of 2.02 million km<sup>2</sup> (FAO 2000). Around 360 million live in waterfront zones, and 6.7 million are fisherman, including full time, low support and coincidental fishers. About 2.4 million are used full time in marine catch fisheries. Indian fisheries are depicted by stepped contrasts among west and east coast similar to number of fishers and dissemination of advantages. The eastern sea board implies 55% of the hard and fast number of calculating vessel, while the western sea board implies 65% of the full scale dynamic fishers masses. Of the supreme appearances, 71% was from computerized territory, 24% from automated fragment and 5% from great division (CMFRI, 2007). In the computerized part, top level enlargement was from Gujarat (20%) trailed by Kerala (20%), Kerala (18%), Tamilnadu (12%), Karnataka (9%), West Bengal (8%), Andhra Pradesh (5%), Goa (4%), Orissa (1%) and Pondicherry (under 1%). Around 59000 mechanized task forces are sent in EEZ of India to gather the fishery resources. Around 75591 motorized craftsmanships were in movement speaking to 28.57% of indisputably the marine calculating task force size in India (CMFRI count 2005).

The west bank of India is the most critical zone without a doubt and speaks to in excess of 70 percent of national creation. This is an eventual outcome of both major upwelling regions in the south west and productive shallow water demersal resources in the North West. The Gujarat state in the North West has, for specific years, been the critical fish producer in India and in 2001 spoke to around 37% of west coast creation and 26% of national creation. India perceives two sorts of marine catch fisheries, each one controlled by its particular framework. They are: 1) waterfront fisheries and 2) remote sea fisheries. Waterfront fisheries fall under state domain and occur with the underlying 12 nautical miles from the benchmark out to the sea. Remote sea fisheries are those assignments happening between 12 nautical miles and the outside furthest reaches of the EEZ, falling under the domain of the Union Government. In down to earth terms, most seaside angling activities occur in waters under 50 meters profundity, and territory completed from little scope vessels, for the most part under 20m OAL. Remote ocean angling is by and large to demonstrate mechanical tasks, yet in down to earth term, some little scope make focusing on specific assets, are found to work right to different limits of the EEZ.

## 7. ECONOMICS OF CULTURE FISHERY ACROSS REGION

The profitability of lakes is high in the Eastern states of West Bengal, Assam and Orissa having typical productivities going from 3.54 t/hect to 2.36 t/hect. These states have little lakes, private frameworks and water available during the ideal opportunity for calculating. In any case, the most raised productivity of multi-use town lakes is found in Haryana with typical making of 4.35 t/hect. States like Gujarat which never had a show of Inland fishery have exhibited immense augmentation in typical productivities of more than 2 t/hect all through the latest couple of decades Power of calculating is seen as high if high benefit is seen nearby high stocking thickness, various harvestings, high full scale cost of creation and critical cost of manure per hectare. With these criteria, states like West Bengal, Assam and Orissa in the Eastern side and states of Haryana and Gujarat show high intensity of calculating. High calculating power is found in selective lakes when stood out from co-employable lakes. This is legitimate for the circumstance J&K where the private trout farms are indicating improvement over Sars.

The lease cost changes around 27% of hard and fast cost in West Bengal and 20% of the full scale cost in states of Orissa, J&K, Gujarat and Haryana, however it is lower than 10% of the total cost in the states of Bihar and Assam. Fish farmers in Bihar, Orissa, Haryana and Gujarat spend higher degree of their total cost on watch and ward. On the off chance that there ought to emerge an event of states like Assam and West Bengal fish farmers generally prefer to do their own watch and ward. The typical expense of fish also varies basically from state to state dependent upon the sort and size of fish harvested. In J&K, the fish farmers get noteworthy cost for trout, while in Kerala the fish farmers get huge cost by conveying the scampi gathered in their lakes. Among carp fish, the expense got for fish in the Eastern states was also higher for the Eastern states, in light of the prevalence. Gigantic size fish from AP, Haryana and Gujarat are conveyed to Kolkata where it gets a magnificent expense.

## **8. PROBLEMS FACED BY FISH FARMERS**

The essential issue clear by fish farmers was poaching. This issue was the essential issue in West Bengal, Kerala, UP, Gujarat and Haryana. It was an assistant issue in various areas like Orissa, Bihar, Jharkhand and J&K. Water availability to keep up a base level of water in the lakes for the fish to make due during the lean months was the subsequent rule issue. This issue was inescapable not simply in the completely dry zones like Gujarat and Haryana yet also in states like Assam and West Bengal. This issue is typical where the power of calculating is high and fish farmers have more stakes to keep up a base level of water for the fish to make due reliably. Capital was the third rule issue in most of the areas. This was one of the most noteworthy checks for reinforcing society fishery. Basically the issue of hurting of lakes was customary in West Bengal, UP, Kerala and Orissa. In Bihar and UP, the irregular floods was referenced to be one of the crucial issues for taking up concentrated fishery. The issues like market find a good pace, to fish and hindrance from townspeople got the less weight age over all the areas.

Fish farmers handle poaching in various habits. By far most of the fish farmers have fish lakes close to their home, while many stay close to the lake the prevent poaching. This example is particularly essential in Eastern states of Orissa, Jharkhand, Assam, and West Bengal and UP. Furthermore in most of these Eastern states, the cost of poaching is insignificant because of the high lake thickness and their little size. The little size of the lakes contemplates more control as for protection from crooks who endeavor to take the catch. Be that as it may, with huge size of the lakes the cost to hinder poaching ends up being gigantic and a singular individual can't secure a lake.

In the event that there ought to be an event of gigantic lakes the fish farmers resort to hinder poaching by contracting security for the lakes or by settling a transient fisher near the lake. He manages the day to the leading body of the lakes similarly as gatekeepers it from poachers. As was found in Gujarat the fish farmer produces a reputation of a being OK Samaritan in the town by giving for neighborhood festivities and town government assistance to build up his reputation. Then again, he may purposefully amass the image of a town toughie who strikes the fear of God in any individual who endeavors to take fish from his lake. Impacting the Sarpanch, panchayat people or enticing individuals from the town with cash and kind is another way to deal with handle the poaching risk. Such practices are ordinary in states like Haryana, Gujarat, AP, Kerala and Bihar which have low degree of fish farmers living close to their fish lakes and moreover the size of the lakes are greater.

## **9. IMPORTANCE OF THE MARINE FISHERY SECTOR IN KERALA ECONOMY**

Fish and fisheries expect a critical activity in the success to Kerala Economy. Regardless of the way that Kerala's coastline is shy of what one-tenth of the Indian coastline, the appearances set up 24 percent of the country's hard and fast marine fish creation. The organic setting of the State with a constrained segment of land interweaved with streams, lagoons and backwaters gushing into an enhancement upgraded waterfront sea ensured a ton of land and water proficient resources. This made fish a socially critical and basic bit of the eating schedule. Without a doubt, even the Hindus who are demanding veggie sweethearts in various bits of the country are excited fish customers. At the present time a populated area of India, it is evaluated that 96 percent of the 30 million masses eat fish (Srivastava et al, 1991). With rice as the rule wellspring of sugar, fish is a crucial piece of the sustenance affirmation of both the rich and needy individuals. Fish gives three-fourth of the animal protein affirmation of the State's masses and for destitute individuals it is the essential wellspring of animal protein. For instance in the calculating systems, it runs between 15-20 k.g. per capita consistently while the all India typical is 4 k. g. per capita consistently (Government of India, 1996). There are about 10 dynamic fishers for every single sq.km. of waterfront waters in Kerala, this figure is more than various occasions the all India typical, Though the thickness of fishers people is high, the ordinary fishery capacity of the

inshore see here is 30 tons for each sq.km. Against the all India typical of 13 tons for each sq. km The Marine fishery zone of the State gives the central wellspring of pay for 1, 85,000 powerful fisher men and practically a proportionate number busy with the assistance and helper works out. The State speaks to 23 percent of the supreme measure of marine things conveyed from the country and 17.6 percent of the outside exchange earned at the present time. The responsibility of the marine things to the hard and fast charge benefit of the State is 16 percent.

## 10. PRODUCTION CONSTRAINTS ON FISH EXPORT PROCESSING

Fish and Fishery send out handling industry are confronting part of challenges at the hour of creating and bundling and trading in the present time frame. Marine fare industry's profitability and effectiveness can be expanded with the goal that it can fulfill the expanding purchaser's needs just as can improve its seriousness in the worldwide market. Monetary and specialized help ought to be represented by administration of India to improve the profitability and proficiency in the nourishment preparing businesses. The venture by open private organization ought to be empowered with the goal that it can expand the intensity of the items by lessening the cost separated from the stringent SPS guidelines. Advertising access is one of the essential regions where fish and fishery 'send out preparing industry go up against issues including item separation, brand building, absence of market information, accessibility of a developing household showcase, Inadequate foundation offices, including power, water, streets, and so on and the complexities of global exchange. Fish industry is working escalated one and it spreads all through the whole beach front region of our nation. The business must place more push on new markets and new items. The business endeavors to make more esteem included items. For solid and bottomless fishery assets, exporters must improve the executives and decline the political and monetary weights that lead to over angling and exhaustion. High exchange cost and procedural defer lead to high fixed expenses.

The fish handling send out industry are confronting the issues of muddled trading methodology, high delivering costs, vicious challenge in the business, changing quality guidelines of bringing in nations, unpredictable force and crude material stock, cleanliness issues and non-accessibility of fast transportation offices from the angling port to the preparing units. Kerala is wealthy in fishery assets just as it has fish laborers more talented than different states. Conventional laborers are matured more than fifty and their successors are not ready to follow the fish preparing laborers as it is additional tedious and harder than different works because of the cool temperature upkeep. In addition, individuals in Kerala are relatively a lot of taught than different states and the youthful populace are not ready to work in the territory of fish handling trade industry in light of the fact that their chance expense is a lot higher in other occupation territories. In Kerala, age gathering of in excess of forty experiences medical issues. Greater part of the fish handling laborers in Kerala are from the Northern States of nation and they have restricted requests than the Keralites, and are not made a big deal about their privileges and are happy to work at low wages.

## 11. CONCLUSION

From the present study it is found that the study Kerala has vast fisheries resources, which may be utilized to increase the production of fish and reduces the gap of demand and supply of fish in the state and can also export fish to the neighboring states. Fish production and marketing holds a huge potential, it is still highly unorganized and unregulated in the study area. It has been long neglected for many reasons and necessary efforts have not been made on production and marketing of fish. The improvement in fish production and marketing system and distribution would not only reduce demand-supply gap of fishes across the state, but would also contribute to food and nutritional security of a vast population. The farmers in the study area are adopting traditional techniques of fish farming and harvesting only once in year. There are number of organization and policies related to promotion of fish production and marketing in the country, there is need to formulate a uniform market policy for fishes. More training should be organized in the rural areas so that modern technique of fish farming are teach to the fish farmers and to increase fish production in the state. There are certain production and marketing problems faced by the fish farmers. The problems faces by fish farmers obstruct the development process. The three main serious problems i.e. transportation, high cost of inputs and storage problem should be solved to increase the production and marketing of fish in the state. Kerala has a large potential of inland fisheries and should encourage people to take fish farming as a business and develop farm entrepreneur so that employment level can be increased. Production and marketing of fish should be develop with the coordination of the government and the private sector as there are large employment opportunities in this sector and improve the livelihood of the people of Kerala. There are certain problems faced by fish farming in the state. These problems should be studied to develop fish farming and bring rural development. Farmers' problems should be starting point of research projects.

The concerned authorities should change their mind set and think in terms of the farmers; how best can he utilize his potentiality, how he contribute to its own well-being, and after that proper support should be given to the fish farmers so that they can develop fish farming as a well-established enterprise. There should be policies which ensure that small fish farmers of the state also get benefit from liberalization and any other reforms. All the fish farmers and concerned authorities should work together to bring agribusiness specially fish farming to the higher place.

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