

Inland Fisheries Statistics in Kerala

Anitha S

Assistant Professor of Commerce,

Government College, Attingal

Abstract

Inland fisheries is the farming and husbandry of aquatic creatures under regulated or semi-regulated environmental conditions. These organisms may be fishes, crustaceans, molluscs, aquatic plants and animals. Various types of aquaculture form an important component within agricultural and farming systems development. These can contribute to the alleviation of food insecurity, malnutrition and poverty through the provision of food of high nutritional value, income and employment generation. Here an attempt is made to study the facts and figures regarding Inland Fisheries in Kerala and the share of it in the State's Gross Domestic Product.

Kerala occupies an inimitable position in the fisheries map of India's principal marine fish producer and exporter state in the country. Fish and fishery resources occupy a unique position in the economy of Kerala. The contribution of this sector to the State Gross Domestic Product (SGDP) is 1.26 per cent. The fishery sector provides livelihood for more than 3 per cent of the State either directly or indirectly, with about 2 lakh fishermen directly engaged in fisheries and other related activities. The total fish production of the State is 6.34 lakh tons. Marine capture fisheries which accounts for 76 per cent of the total fish caught has been showing a stagnant/ decreasing trend. It is in this context that the importance of inland fisheries, presently contributing 1.46 lakh tons of fishes to the total fish production of the State, is bound to increase. The technological development in the inland fisheries paved the way for making use of inland water resources spread over the different districts of the State for aquaculture development.

The State of Kerala is blessed with abundant resources for the development of aquaculture. The total extent of inland water areas in Kerala is estimated to be of the order of 3,60,535 ha. Of this, the brackish water sprawl over 2,42,600 ha. and freshwater areas amounts to 1,17,935 ha. Of this potential only a small proportion is being utilized now. Aquaculture has grown into a high value activity practiced not only by small and marginal farmers but also by commercial entrepreneurs. The change is more visible in the case of coastal aquaculture, where, culture of shrimp constitute the major component both in terms of area under culture and value of output. The rivers, streams etc., originated from the Western Ghats are well known for their prosperity of biodiversity including fresh water fish species. Altogether 210 primary fishes (excluding the marine migrants) are found in the inland waters, of which 53 species are endemic. Majority of these fish species have ornamental value also. The brackish water fishes of Kerala include 75 species, which include 57 fish species, 6

species of shrimp, 1 species of prawn, 5 species of crabs and 6 species of bivalves. Among this 28 species are commercially important. This includes some species of mullets, catfishes, perches, pearl spot, shrimp, prawn, the green mussel brown mussel, the Indian backwater Oyster locally known as 'Kadalmuringa' and mud crabs like *Scylla Serrata* and *Scylla tranquibarrica*. Many of these species are suitable for aquaculture. There are about 106 species of fishes in the inland waters of Kerala that have importance as ornamental species. The important ornamental fishes of Kerala are Red line torpedo fish, Aurulibarb, Rosy barb, Tiger barb, Tictobarb, Kooliebarb, Melon barb, Glass fish, Yellow cat fish etc.

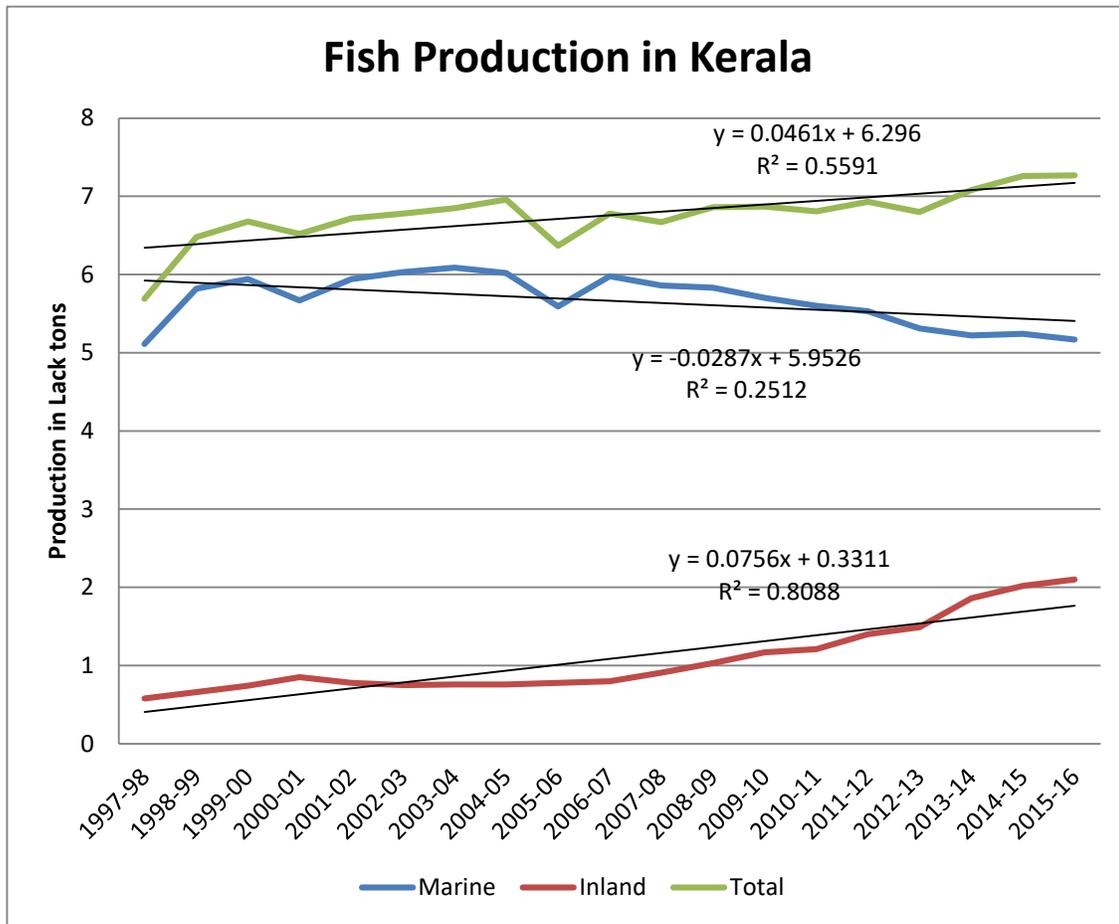
Table 1. Fish production in Kerala from the year 1997-98 to 2015-16 (In lakh tons)

Year	Marine	Inland	Total
1997-98	5.11	0.58 (10.19)	5.69
1998-99	5.82	0.66 (10.19)	6.48
1999-00	5.94	0.74 (11.08)	6.68
2000-01	5.67	0.85 (13.04)	6.52
2001-02	5.94	0.78 (11.61)	6.72
2002-03	6.03	0.75 (11.06)	6.78
2003-04	6.09	0.76 (11.09)	6.85
2004-05	6.02	0.76 (11.21)	6.96
2005-06	5.59	0.78 (12.24)	6.37
2006-07	5.98	0.80 (11.80)	6.78
2007-08	5.86	0.91 (13.44)	6.67
2008-09	5.83	1.03 (15.01)	6.86
2009-10	5.70	1.17 (17.03)	6.87
2010-11	5.60	1.21 (17.77)	6.81
2011-12	5.53	1.40 (20.00)	6.93
2012-13	5.31	1.49 (21.91)	6.80
2013-14	5.22	1.86 (26.27)	7.08
2014-15	5.24	2.02 (27.82)	7.26
2015-16	5.17	2.10 (28.00)	7.27

Source: Department of Fisheries, Govt. of Kerala . (Figures in paranthesis show percentage to total production.

. The figures show that in the total quantity of fish production marine sector is dominating inland sector. But at the same time, it is seen that the rate of increase in the quantity from marine sources show a declining trend..

Figure 1. Fish Production in Kerala from the year 1997-98 to 2015-16



Source: Department of Fisheries, Government of Kerala.

Table 2. Inland Fish production and value in Kerala

Year	Quantity(MT)	Value (Lakhs)
2001	85234	29995.20
2002	78039	28867
2003	75036	30014
2004	76219	30890
2005	76451	59851.46
2006	77980	60415.54
2007	79647	67658.18
2008	91085	71813.13
2009	102842	75778.87
2010	116836	88290.28
2011	121215	102123.86
2012	140031	122390.42
2013	149098	149881.17

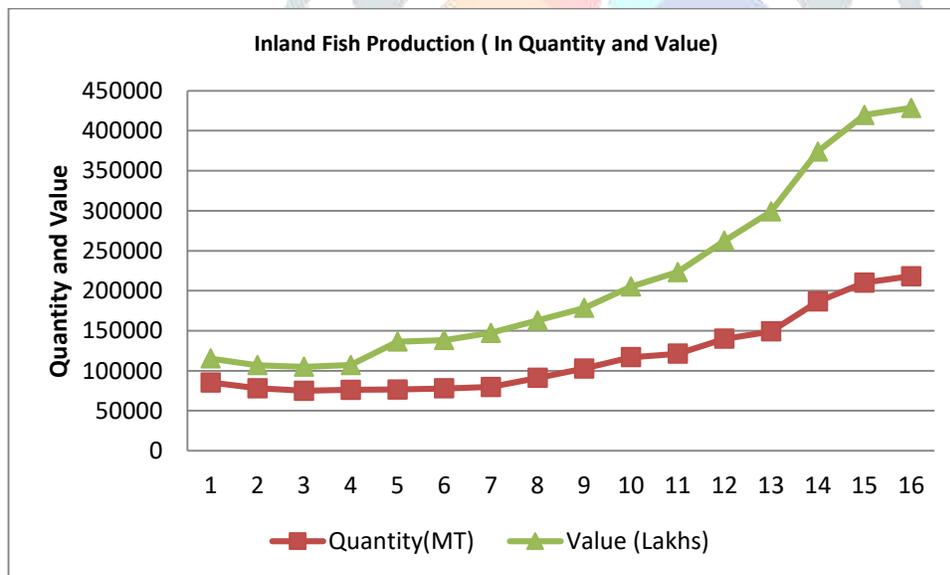
2014	186421	187591.11
2015	210210	209523.21
2016	218130	210350.21

Source: Department of Fisheries, Thiruvananthapuram

Table 2. presents both quantity and value of inland fish production of Kerala for a period from 2001 to 2016. The quantity and value shows an increasing trend during the period. The quantity increased from 85234 metric tons to 218130 metric tons showing an increase of 2.6 times. The value of product per metric ton in the year 2001 was 0.35 lakh whereas in the year 2016, the value raised to 1 lakh. The figures justify the increase in the demand for inland fish products.



Figure 2. Inland fish production in Kerala (Quantity and Value)



The figure 2.explains the change in the quantity and value of inland fish production during the period from 2001 to 2016. Both graphs show increasing trend. But the graph of value of the product has a faster growth rate than quantity of the products.

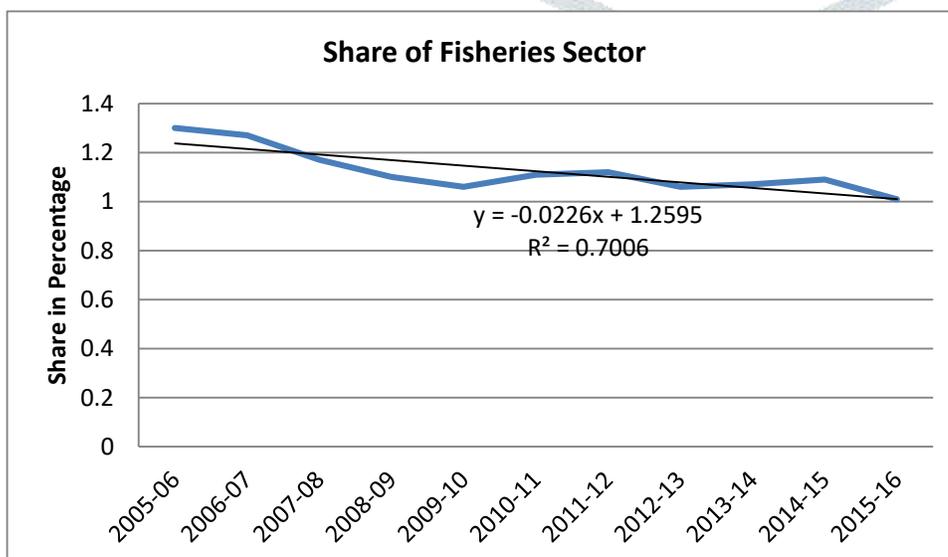
Table 3. Share of Fisheries sector in Gross State Domestic Product from the year 2005-06 to 2016-17.

Year	Share of Fisheries Sector (in percentage)
2005-06	1.30
2006-07	1.27
2007-08	1.17
2008-09	1.10
2009-10	1.06
2010-11	1.11
2011-12	1.12
2012-13	1.06
2013-14	1.07
2014-15	1.09
2015-16	1.01

Source: Economic Review, 2016.

Fisheries sector, an important component of Agricultural and Allied sector is supposed to contribute a fair share to the Gross State Domestic Product. But the figures show that the share is decreasing year after year. In the table, it is seen that in the year 2005-06, the percentage of contribution by the fisheries sector was 1.30. After that continuously till the year 2015-16, it shows a decreasing trend. Therefore An enquiry into the real problems behind this phenomena needs special significance.

Figure 3. Share of Fisheries Sector to SGDP from 2005 to 2016



Source: Economic Review, 2016.

Figure 3. clearly shows that Share of Fisheries Sector in the total Gross Domestic Products for a period from 2005-06 to 2015-16 is decreasing. The decrease is at a linear rate of .022 with a coefficient of determination of .700.

Conclusion

Kerala has immense prospects for developing the infrastructure for increasing inland fisheries production. But the figures reveal that the available resources are not fully utilized for reaping the benefits. The share of fisheries and inland fisheries in the State GDP shows decreasing trend. Therefore the authorities should take steps for finding the problems which slow down the development of the sector.

References:

- Durai, J.A. (1997) *Economics of Integrated Freshwater Aquaculture in Thanjavur District, TamilNadu- A case study*, Unpublished doctoral dissertation, University of Madras.
- Geethalekshmi, P,(2002). *Impact of Coastal Shrimp Aquaculture and Its Policy Re-examination in Tamil Nadu*, Unpublished doctoral dissertation, Universit of Madras.
- Francis, K. M. (2004) *Aquaculture Development in Kerala- A study with special reference to Integrated farming*, Unpublished doctoral dissertation, University of Kerala.
- Chahal, S.S, Singh S.Sindhu J S (2004) *Price, spread and Marketing Efficiency of Inland Fish in Punjab. A Temporal Analysis*, Indian Journal of Agricultural Economics, Vol. 39, No.3, July- September, pp 498-499.
- Godara, A.S., Singh, R. &Sharma, S,(2004). *Marketing Pattern of Fisheries in Haryana*, Indian Journal of Agricultural Economics, Vol.59, No.3. Julu- Sept,p497.
- Kappen, D.C.(2005). *An Evaluation of Extention Activities in the Development of Agriculture in Kerala*, unpublished doctoral dissertation, Cochin University of Science and Technology.