

Market structure analysis of fish markets in Ernakulam district

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Fisheries sector, being one of the major productive sectors of Kerala, contributes to about 3 per cent to the economy of the state (DoF, Kerala,

2011). Kerala has a coastline of over 590 km, covering nine coastal districts with 222 fishing villages and 187 landing centres (Marine Fisheries

Census, 2010). Ernakulam district is one of the leading coastal districts in marine fish production (26 % during 2013) with 46 km of coastline. The marine fisheries profile of Ernakulam district is given in Table 1.

Table 1 Marine Fisheries Profile of Ernakulam District

1. Total coastline (km)	46
2. No. of landing centres	20
3. No. of fishing villages	21
4. No. of fishermen families	9318
5. Total fisher folk population (lakhs)	0.42
6. No. of fish markets	198
Wholesale markets	24
Retail markets	134
7. Number of export units	66
8. Crafts in the industry	1443
No. of mechanized	82
No. of motorized boats	326
No. of non-motorized boats	1035
9. Fisheries production (2013) lakh tonnes	1.61

Source: Marine Fisheries Census (2010) CMFRI
PANFISH Book, Ernakulam District, Department of Fisheries,
Kerala



Fig. 1. Chambakkara fish market

Fish market structure analyses

The market structure analysis was based on the major dimensions namely; location, lat- long, type of market, access, timing, conduct, arrival and disposal sources, infrastructural adequacy, union and regulation and news and intelligence. The market structure of three major markets viz., Chambakkara, Thevara, and Thoppumpady was analyzed and the details are given in Table 2.

The market accessibility was found to be good for the above markets facilitating easy transportation of fish from one place to another.



Fig. 2. Thevara fish market

The nearest major landing centre for the three markets is Thoppumpady. The nearest railway station to all the three markets is Ernakulum Junction/ South situated at an average distance of 5.5 km, whereas the nearest bus station is at an average distance of 3.5 km from the markets. The Cochin International Airport is the nearest airport to the three markets which is at distance of 30.8 km. Among the three, Chambakkara and Thoppumpady markets are controlled by local bodies with an entry fee of ₹ 5-20/box paid for transaction in the market premises.



Fig. 3. Thoppumpady fish market

Market arrivals and disposal

The study of market arrivals and disposals indicate that in Chambakkara fish market, the fish arrivals are mainly from Chambakkara, Munambam, Alleppey, Vypin, Chellanam, Cochin harbor, Calicut, Karnataka etc. The Chambakkara market often disposes fishes to different landing centres and markets of the state including Alwaye, Moovatupuzha, Thodupuzha, Ettumanoor, Calicut, Malappuram, Kasargod, Trivandrum, Kunnankulam and to the neighboring states like Karnataka, Andhra Pradesh and Goa.

Table 2. Market structure analysis of fish markets

Market Dimension	Chambakkara	Thevara	Thoppumpady
A. Location			
Year of establishment	1950	1973	2004
Type of Market	Wholesale & Retail	Wholesale & Retail	Retail
Lat/Long Position	9°57'N/76°19'E	9°56'N/76°17'E	9°55'N/76°16'E
B. Market control	Cochin corporation	Cochin corporation	Cochin corporation
C. Market access			
Nearest landing centre (km)	Thoppumpady (7.4)	Thoppumpady (12.5)	Thoppumpady (1.6)
Nearest railway station/ Distance (km)	Tripunithura (3.6)	Ernakulam JN. (6.3)	Ernakulam JN (6.5)
Nearest bus station (km)	Vyttila mobility hub (3.1)	Ernakulam JN.(6.3)	Kannamali bus stand (1.1)
Nearest airport (km)	Cochin International Airport (30.9)	Cochin International Airport (30.7)	Cochin International Airport (30.7)
Nearest seaport (km)	Kochi port (12.6)	Kochi port (13.5)	Kochi port (4.6)
D. Market Timing	05.30-09.00 11.00-13.00	06.00-09.00	16.00-20.00
E. Market conduct			
Registered marketers	25	20	28
Entry fee for operation in market	10/ box	5/ box	30 / day

In the case of Thevara market, the major fish arrivals are from Kayamkulam, Alapuzha, Cochin Fisheries harbor, Chellanam, Chambakkara, Munambam and Vypin. Mostly the fish arrivals of Thoppumpady market are from Vypin, Chambakkara, Chellanam, and Cochin Harbour. The major fish disposals are done to different markets of the state including Trivandrum, Aluva, Kunnankulam, Malappuram and Kozhikode.

Nearly 25 to 30 marine fish species are marketed in Thoppumpady market, whereas 20-25 marine fish species are marketed in Chambakkara as well as Thevara markets. The most common fishes traded include Silver Pomfrets, Silver Moony, Mackerel, Sardine, Catfish, Mullet, Seer Fish, Threadfin bream, Mystus, Pearl Spot, Thryssa, Ambassis, Anchovies, False Trevally, Milk fish, Cyprinus, Barracuda, Shark, Cow nose Ray, Tilapia, Blue fin trevally, Sword fish, Congers, Prawns, Red snapper.

The trade union in the markets functions by loading, unloading, transporting and related activities. While analyzing the quantum of fish trade in the markets, the total quantity of fish traded in Chambakkara wholesale market is estimated at

around 100 tons. Whereas, in Thevara and Thoppumpady it is estimated at around 2 tons and 12 tons respectively.

Constraint analysis of markets

The constraint analysis of markets was done on the basis of the opinion of different market functionaries. Accordingly, the major constraint faced by the marketers was the high marketing cost and price discrimination. Lack of adequate infrastructure facilities like parking area, waste management, drinking water, freezers etc. were also cited as constraints. The major constraints faced by the marketers are presented in Table 3.

Table 3. Problems/ Constraints faced

Particulars	Rank
High marketing cost	I
Lack of infrastructure and amenities	II
Price Discrimination	III
High transportation cost	IV
Lack of access facilities	V
Cut-throat competition among traders	VI