# Market structure analysis of fish markets in Ramanathapuram district of Tamil Nadu

Johnson, B., Shyam.S.Salim and Narayanakumar, R. Central Marine Fisheries Research Institute. Kochi

Capture Fisheries is one of the major occupations and income provider for the people of the Ramanathapuram district. The district has 237 km coastline and covers almost 22% of the state fisher population. The district leads in marine fish production in the state and contributes for more than 20% of the fish landings in the state. The Marine fisheries profile of the Ramanathapuram district is given in Table 1.

Table 1. Marine fisheries profile of the Ramanathapuram district

4.54.164	
Total coastline	237 km
No of fishermen villages	178
Fisher population	1,93,413
No. of fishermen families	41,048
No. of Mechanized boat	4,790
No. of Motorized boat	372
No. of non-motorized boat	1926
Fish production (2011-12)	87,508 t

There are nearly 35 markets in Ramanathapuram district, out of which nine are large, seven are medium and remaining are small (Table 2).

Table 2. Fish markets in Ramanthapuram district of Tamil

Market (Large)	Market (Medium)	
Rameswaram	Thangachimadam	
Ramanathapuram	Uchipulli	
Erwadi	Periyapattinam	
Keezhakkarai	Valinokam	
Paramakuddi	Kannirajapuram	
Devipattinam	Mudukulathur	
Thondi	Sikkal	
Pamban		
Mandapam		

#### Market Structure

A market is a set of buyers & sellers, commonly referred to as agents, who through their interaction both real and potential determine the price of a good, or a set of goods. The concept of a market structure is understood as those characteristics of a market that influence the behaviour and results of the firms working in that market. Among the 3 markets, the distance from the landingcentre of the Paranakudi market is more. Among the nine larger markets in Ramanathapuram district, Rameswaram, Ramanathapuram and Paramakudi markets were selected for the market structure analysis (Fig 1). Data collection was done through interview method and the results are given.

## Ramanathapuram District



## Markets selected for the study

Fig. 1. Map showing the study area

#### Market Structure Analysis

The market structure analysis was studied based on the dimensions namely; market access, timing, conduct, arrival and disposal sources, market union and regulation. The results are presented in the Table 3.

The nearest major landing centre for the three markets is Rameswaram. The distance from the landing centre to the nearest railway and bus station for all the three markets are almost 2-3 km. The nearest airport and seaport for the three markets is Madurai and Tuticorin.

The distance from Rameswaram market to the airport and seaport is more compared to other markets. As the distance from the market to the landing centre, railway and bus stop in very less there is very good market access and transportation of fishes from one place to another takes place easily.

As the registered marketers were controlled by the local bodies, the entry fees are collected every day for operating in the market. Due to the entry fee, packing, icing, loading, unloading and transportation cost, the market price for a marine fish species is high in Paramakudi and Ramanathapuram market compared to the Rameswaram market.

The market arrival and disposal of marine fish species in terms of variety and quantity is more in Rameswaram market compared to the other two markets, because the market is closer to the landing centre. Nearly 20 to 30 marine fish species is marketed in Rameswaram market. But in Paramakudi and Ramanathapuram retail markets around 15 marine fish species are only marketed. The major marine fishes marketed were Thumbprint Emperor (Villai meen), Shrimp Scad (Parai), Crab (Nandu), Great Barracuda (Ooli), Seer Fish (Seela), Goat Fish (Nagara), Mullet (Madava), Sardine (Sooda/Thondan), Hound Needle Fish (Mural), Dorab Wolf Herring (Mullu valai), Needle Cuttle Fish (Ottukanvai), Lesser Tiger Tooth Croaker (Panna), Pick Handle Barracuda (Kara ooli), Silver Sillago (Kilangan), Giant Cat Fish (Keluthi), Large Tooth Flounder (Nakku meen), Indian Mackerel (Kumla), Spiny Cheek Grouper (Kalava) and Shrimp (eral).

### Constraint analysis of the different markets

The constraint analysis of the different markets was based on the opinion of the different marketing functionaries in the markets is given in Table 4.

Table 3 Market Structure Analysis of Rameswaram, Paramakudi and Ramanathapuram fish markets

Market dimension	Rameswaram	Ramanathapuram	Paramakudi
A. Background information			
Year of establishment	1953	2004	1979
Type of Market	Retail	Retail	Retail
Lat/Long position	9°28' N/79°30' E	9°54' N/78°59' E	9°38' N/78°83' E
Market control	Local bodies	Local bodies	Local bodies
B. Market access			
Nearest landing centre	Rameswaram (2 km)	Rameswaram (95 km)	Rameswaram (58 km)
Nearest railway station	Rameswaram (3 km)	Paramakudi (3 km)	Ramanathapuram (3 km)
Nearest bus station	Rameswaram (3 km)	Paramakudi (2 km)	Ramanathapuram (2 km)
Nearest airport	Madurai (185 km)	Madurai (90 km)	Madurai (127 km)
Nearest seaport	Tuticorin (187 km)	Tuticorin (128 km)	Tuticorin (129 km)
C. Market timing	6 am to 4 pm	4 am to 4 pm	4 am to 5 pm
D. Market conduct structure			
Number of registered marketers	21	36	38
Entry fee for operation in market	₹ 10 per day	₹ 30 per day	₹ 30 per box and 8% of
			total sale
E. Market arrivals and Disposals			
Varieties traded	Thumbprint Emperor, Shrimp Scad, Crab, Great Barracuda, Seer Fish, Goat Fish, Mullet, White Sardine, Hound Needle Fish, Dorab Wolf Herring, Needle Cuttle Fish, Lesser Tiger Tooth Croaker, Pick Handle Barracuda, Silver Sillago, Giant Cat Fish, Large Tooth Flounder, Indian Mackerel, Rainbow Sardine, Spiny Cheek Grouper, Shrimp	Thumbprint Emperor, Shrimp Scad, Crab, Great Barracuda, Seer Fish, Goat Fish, Mullet, White Sardine, Hound Needle Fish, Dorab Wolf Herring, Needle Cuttle Fish, Lesser Tiger Tooth Croaker, Shrimp	Thumbprint Emperor, Shrimp Scad, Crab, Great Barracuda, Seer Fish, Goat Fish, Gold Spot Mullet, White Sardine, Hound Needle Fish, Dorab Wolf Herring, Needle Cuttle Fish, Lesser Tiger Tooth Croaker, Silver Sillago, Giant Cat Fish, Indian Mackerel, Shrimp
F. Market union			
Name of the union	Township Market	Sri Sakthi Fishing Market Development	Town Fish Market
Number of members	21	36	38

Table 4. Problems/ Constraints faced

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

The major constraints faced by the marketers were high marketing and transportation cost followed by price discrimination and lack of infrastructure and amenities. Even though the market is controlled by the local bodies, they are not properly maintained. The infrastructure facilities like parking area, freezer, icing and drying is almost lacking in all the three markets.