Price behaviour, marketing channels and efficiency of marine fish marketing in Karnataka

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Karnataka state contributes around 13% of marine fish landings in India. More than 80% of the catch in Karnataka are landed at Mangalore, Malpe and Karwar Fisheries Harbours. While only singleday trawlers and purse seiners operated in Karwar fisheries Harbour, multiday trawlers, purse seiners and small motorized units operated in Malpe and Mangalore harbours. The catch is generally traded through auctioning at major and minor harbours in the state and the marketing channels varied for different resources. Nearly 70% of the marine fishes landed in the state is utilized in the fresh form and the rest 30% in processed forms. Processing of marine fish is mainly done for export in fresh frozen form, canned, dried or as fish meal. Shrimps, squids, cuttle fishes and other high value fishes go to the export market. Threadfin breams, ribbon fishes, lizard fishes and rockcods go to cutting sheds and *surumi* plants while oil sardines are taken by the fish meal plants.

Data on species wise prices of marine fishes were collected at landing center(LC), wholesale(WS) and retail markets(RT) in the Dakshina Kannada, Udupi and Uttara Kannada districts of Karnataka for the year 2014 and 2015. The price spread, and Fishermen's Share in the Consumer's Rupee(FSCR) in the domestic marketing channel within the state was calculated. Marketing efficiency was assessed based on Fishermen's Share in the Consumer's Rupee(FSCR) which is the ratio of price received by the fishermen at landing centre to the price paid by the consumers at retail markets expressed as percentage. The gross value of marine fish at landing centre and retail levels in Karnataka were calculated based on the species wise landings and average prices in the state.

The major channels of marine fish marketing existing in Karnataka are,

Fishermen-Auctioneer-Retailers-Consumers

Fishermen-Auctioneer-Commission Agents-Wholesalers-Retailers-Consumers

Fishermen-Auctioneer-Processors-Exporters-Consumers

Fishermen-Auctioneer- Cutting sheds-Surumi Plants-Exporters- Consumers

Fishermen-Auctioneer- Fishmeal plants- Fish feed units/Exporters- Aquaculture/ Poultry industry

Fishermen-Auctioneer-Commission Agents-Wholesalers-Interstate agents- Consumers

District wise analysis of marine fish price behaviour in Karnataka showed that in Dakshin Kannada at landing centre level in 2014, the lowest price (per kg) was recorded for short neck clam at ₹ 28 and the highest price was recorded for silver pomfrets (₹ 559/kg). At retail level, the lowest price was recorded for shortneck clam at ₹ 47 and the highest was ₹ 633 for silver pomfrets. In 2015 also the prices varied from ₹ 30 for shortneck clam to ₹ 521 for silver pomfet at landing centre level and from ₹ 53 for shortneck clam to ₹ 671 for silver pomfret at retail level. The FSCR ranged from 55% for octopus to 92% for great barracuda in 2014 and 57% for shortneck clam to 89% for barracuda in 2015.

In Udupi, at the landing centre level, the highest price was recorded for silver pomfrets at ₹ 535 and ₹ 540 per kg respectively in 2014 and 2015 at landing centre level to ₹ 616 and ₹ 639 at retail level. The lowest price (per kg) was for short neck clam at ₹ 26 and ₹23 at landing centre level to ₹ 37 and ₹ 36 at retail level. FSCR varied from 66.4% for oil sardines to 86.8% for silver pomfet in 2014 and 57.14% for oilsardines to 84.38% for silver pomfret in 2015.

In Uttara kannada, at landing centre level, the prices (per kg) varied from ₹ 43 for oilsardines to ₹ 505 for silver pomfret in 2014 and ₹ 57 for oilsardines to ₹ 521 for silver pomfret in 2015. FSCR varied from 46.24% for oilsardines to 86.24% for groupers in 2014 and from 65.52% for oilsardines to 80% for giant sea perch (Table 1).

The FSCR was higher in Mangalore (Dakshina Kannada district) when compared to Udupi and Uttara Kannada districts. The fishermen in Mangalore receive a higher share due to the high demand and competition among a large number of buyers /traders. The gross value of marine fish in Karnataka at landing centre level increased from ₹ 3565 crores in 2014 to ₹ 4617 crores in 2015 and at retail level from ₹ 6404 crores to ₹ 7694 crores in 2015. However in general FSCR showed a declining trend in 2015 when compared to 2014, in all the districts. The increase in value and average prices of marine fish at landing centre and retail levels with reduction in FSCR shows the increase in marketing costs and margins besides lower marketing efficiency.

Table 1. Fishermen's Share in the Consumers Rupee(FSCR) for commercially important resources in Karnataka 2014-15

Name of fish / District	Dakshina Kannada			Udupi			Uttara Kannada		
	2014	2015	Average	2014	2015	Average	2014	2015	Average
Black-barred Half Beak	87.74	80.15	83.95	80.14	71.26	75.70	77.78	79.67	78.73
Anchovies	80.20	71.62	75.91	75.43	80.46	77.95	70.59	70.37	70.48
False Trevally	83.56	79.73	81.65	78.54	82.46	80.50	71.17	75.00	73.09
Flathead mullet	85.37	85.71	85.54	79.36	80.48	79.92	78.51	80.12	79.32
Flower crab	83.82	73.33	78.58	84.15	75.00	79.58	83.33	66.67	75.00
Giant sea perch	81.82	80.18	81.00	83.35	72.73	78.04	76.47	80.00	78.24
Great barracuda	91.96	79.84	85.90	80.28	78.21	79.25	-	-	-
Indian halibut	79.42	69.23	74.33	68.35	70.12	69.24	67.61	66.67	67.14
Indian mackerel	75.23	68.75	71.99	79.78	72.00	75.89	77.78	67.46	72.62
Indian squid	83.69	74.38	79.04	81.27	73.33	77.30	72.86	73.79	73.33
Indian white prawn	85.76	77.31	81.54	86.58	84.15	85.37	76.14	76.47	76.31
Lesser tiger tooth croaker	74.44	83.33	78.89	75.72	75.86	75.79	68.35	68.60	68.48
Malabar tongue sole	82.54	72.22	77.38	76.92	73.68	75.30	72.31	75.43	73.87
Mangrove snapper	90.74	82.76	86.75	80.45	82.13	81.29	71.79	75.00	73.40
Sharks	85.44	87.62	86.53	78.21	78.41	80.21	-	-	-
Seer fish	85.76	76.47	81.12	84.64	78.24	81.44	78.85	79.63	79.24
Octopus	55.00	85.71	70.36	64.00	72.32	76.25			
Oil sardine	73.11	63.91	68.51	66.38	57.14	61.76	46.24	65.52	55.88
White sardine	86.49	69.23	77.86	79.65	76.24	77.95	71.24	74.26	72.75
Barracudas	86.31	89.19	87.75	78.65	82.24	80.45	76.58	80.14	78.36
Short neck clam	59.23	57.14	58.19	71.72	62.79	67.26	58.25	57.52	57.89
Skipjack tuna	81.14	77.78	79.46	86.61	71.08	78.85	-	-	-
Silver pomfret	88.38	77.64	83.01	86.76	84.38	85.57	80.16	79.66	79.91
Black pomfret	80.77	82.21	81.49	85.51	81.03	83.27	74.81	74.64	74.73
Silverbellies	73.55	73.33	73.44	76.23	74.12	75.18	71.24	69.56	70.40
Groupers	74.45	76.24	75.35	77.82	77.78	77.80	86.24	77.50	81.87
CuttleFish	76.35	80.24	78.30	78.16	81.20	79.68	75.71	75.86	75.79
Average	80.45	76.86	78.66	78.69	75.88	77.66	73.22	73.46	73.34