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Export of finfish- impact on domestic trade and production

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ABSTRACT

Finfish export from India is growing rapidly since 1991-92 and currently forms the single largest commodity in our sea food market. The major varieties exported are ribbon fish, pomfrets, seerfish, mackerel, reef cod and snappers. The total quantity of all finfishes exported during 1995-96 is to the tune of 1 lakh tonnes fetching a revenue of Rs.372 crores. This has far reaching impact on the domestic prices of almost all varieties of fish. The present analysis based on data from CMFRI and MPEDA intends to assess the trend in production and export trade of selected varieties of finfish, to compare the export and domestic market price structure and to evaluate the potentials of aquaculture to maintain the domestic

supplies and price stability. The study reveals that inspite of exporting the top quality selective fishes, the unit value realised by them from abroad are not appreciable and even less than that of the prevalent domestic prices for some varieties. The high grade seer fish exported during 1996-97 realised Rs.64 per kg as against the average domestic retail price of Rs.70 per kg. Expansion of export trade of finfish without enhancing the internal supply of quality fishes will be detrimental to the interest of domestic consumers and aquaculture alone is the viable alternative for the same. Diversified fresh and brackishwater aquaculture production of quality fishes and sea farming should be intensified to bridge the gap between demand and supply in the domestic market and to maintain the tempo of export trade of finfishes.

Introduction

Liberalisation and globalisation of Indian economy has been initiated to promote competitiveness in all spheres of production and trade mainly for the elimination of monopoly profit. The *laissez fair policy* of the country paved the promotion of export trade and forex earnings leading to comfortable balance of payments position. The seafood export trade is also not an exception to this phenomenon and it increased both in terms of volume and value. The export promotion measures coupled with the devaluation of rupee has enhanced the forex earnings of marine products which has crossed one billion dollar for the fourth consecutive time during 1998-99. Though the country's share in the global seafood export is just 1.5 per cent now, the scope for its expansion is high. The global fish eating population has enhanced to about 40 per cent during 1996-97, the consumer preference for fish and fishery products, being in an increasing trend year after year. Diversified product development and market penetration are very essential for the growth of internal and external sea food trade.

The sea food export from India has grown rapidly from a mere four crore rupees in the 60's to Rs. 4627 crore in 1998-99. There is a gradual diversification of the products exported over the years. The dried and

canned items, which were the important components during 60's, gave way to frozen and live items in course of time. Even among the frozen items, shrimps dominated the other species until early nineties when finfish over took it in terms of volume of trade. The share of frozen fin fish has increased over the years and has contributed to 40 per cent of the volume of Indian sea food export during 1998-99. (1.08 lakh tonnes exported, earning Rs.495 crores) with far reaching implications in the domestic availability of certin quality fishes and price structure of all fish varieties. Good quality finishes like seer fish, pomfrets, tunas were diverted for export market leaving the domestic consumers devoid of their preference. Besides, the little quantity of finfish that are available in our country are concentrating only the major urban and commercial centres leaving the rural markets. With this idea in focus, the present paper makes a modest attempt to (a) asses the trend in production and export trade of selected varieties of fin fish. (b) compare the export and domestic market price structure for various varieties of fish. (c) evaluate the potentials of aquaculture to maintain the domestic supplies and price stability.

Data and methodology

The data for the study were collected from the publications of Central Marine Fisheries Research Institute (CMFRI) and Marine Products Export Development Authority (MPEDA), Cochin. Percentage analysis was employed for the study.

Findings

Trends in fin fish production and export

Table 1 presents the finfish production and export from India during the period 1993 to 1998.

Table 1. Finfish production and export from India 1993-1998

(in tonnes)

Year	Production	Exports	Percent
1993	1823452	93219	5.11
1994	1816484	122529	6.74
1995	1790645	100093	5.58
1996	191103	173005	9.05
1997	2109345	188029	8.91
1998	2063309	108556	5.26

The export of finfish has been increasing both in terms of quantity and in value in our sea food exports since 1991-92 (Table 2). The share of finfish export has been increasing both in terms of quantity and value in our sea food export increased from 28.7 per cent (1991-92) to 35.80 per cent (1998-99) with the maximum share being 48.47 per cent (1997-98). The share in terms of value increased marginally during the corresponding period. The importance of finfish in Indian seafood export is increasing. This may be because of the change in consumption pattern or consumer preference of the importers, product diversification and promotion measures of MPEDA and other agencies involved in sea food export.

Table 2 Growth of finfish export in India 1991-92 to 1998-99

(Q=Quantity in tonnes, V=Value in Rs. Crores)

Year	Fin fish export	Growth in export (annual)	Percentage of growth	Share in the total sea food export (%)
1991-92	Q: 49119	+6779	16.01	28.7
	V: 142.66	+51.84	57.08	10.41
1992-93	Q: 74076	+24957	50.81	35.44
	V: 222.10	+79.44	55.68	12.56

1993-94	Q: 93213	+19137	25.83	3.21
	V: 289.12	+67.02	30.18	11.5
1994-95	Q: 122529	+29316	31.45	39.78
	V: 446.57	+157.45	54.46	12.50
1995-96	Q: 100093	-22436	-18.31	33.78
	V: 372.26	-74.31	-16.64	10.63
1996-97	Q: 173005	+72912	72.84	45.74
	V: 636.92	+264.66	71.10	15.45
1997-98	Q: 188029	+15024	8.68	48.74
	V: 726.73	+89.81	14.10	15.47
1998-99	Q: 108556	-79473	-42.27	35.80
	V: 495.03	-231.7	-31.88	10.69

Structure of finfish export

Of the different varieties of finfish, ribbon fish, pomfrets, yellow fin tuna, fresh water fish and reef cods are the major ones that are exported (Table 3). Among them, ribbon fish ranks first in quantity and value followed by pomfrets. Though ribbon fish ranks first in volume/value pomfrets fetch high per unit price compared to ribbon fish, tuna and fresh fish (Table 4). The unit value realisation of the different varieties has generally shown an increasing trend between 1991 and 1998 except for a drop in 1995-96 which was because of the poor landings in the west coast.

Table 3. Structure of fin fish export (Percentage share)

Varieties		1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
Ribbon fish	Q	41.92	51.83	74.64	37.66	38.83	57.76	64.36
	V	18.97	23.30	52.65	15.15	23.00	38.03	45.52
Pomfrets	Q	14.15	12.42	10.59	7.40	9.27	5.39	4.41
	V	35.59	37.75	36.39	30.09	27.33	22.24	19.74

Tuna (YF)	Q	0.43	0.88	1.26	0.45	0.56	0.24	0.37
	V	0.38	0.76	2.40	0.33	0.47	0.19	0.36
Fresh water	Q	0.01	0.02	0.07	0.20	0.58	0.47	1.39
fish	V	0.03	0.03	0.11	0.20	0.82	0.79	1.78
Reef cod	Q	0.00	1.82	1.94	1.16	1.78	2.18	1.14
	V	0.00	2.05	2.35	1.46	2.56	2.78	1.56
Fish fillets	Q	0.68	1.53	1.58	0.77	1.22	0.65	0.48
	V	1.31	3.01	2.76	1.45	2.70	1.77	1.30
Others	Q	42.80	31.52	9.92	52.36	47.76	33.42	27.84
	V	43.72	33.11	3.33	51.31	43.12	34.20	29.73
TOTAL	Q	100.00	100.00	100.00	100.00	100.00	100.00	100.00
		(49333)	(74076)	(93213)	(122529)	(100093)	(173005)	(1888029)
	V	100.00	100.00	100.00	100.00	100.00	100.00	100.00
		(143.20)	(222.10)	(289.12)	(446.57)	(372.26)	(636.92)	(726.73)

Source: Marine Product Export Review, (Various issues), MPEDA, Cochin

Note: Figures in the brackets indicate the totals of the quantity and value.

Table 4. Unit value realisation of selected finfish varieties (Rs./kg.)

Varieties	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
White pomfrets	52.54	66.57	106.59	148.10	109.72	152.03	172.81
Black pomfrets	73.00	91.17	0.00	86.93	55.93	60.51	65.41
Ribbon fish	13.14	13.47	14.66	21.88	22.03	24.28	27.33
Yellowfin tuna	25.93	25.92	28.64	27.15	30.65	29.65	37.65
Finfish fillets	55.45	59.05	54.18	68.73	82.15	100.48	105.24
Fresh water fish	82.00	45.78	46.53	37.50	52.44	62.39	49.59

Export price and domestic price of finfish varieties

The average retail domestic price and the unit value realised for the selected finfish varieties are presented in the Table 5. It is found from the Table that the unit value realised through export is higher than the domestic retail price in all the cases. Hence the traders are concentrating on the export market leaving the domestic market deprived of such varieties. In the local market also, only those who have the purchasing power can get them. Sometimes, even if the consumers are ready to pay, the availability of such varieties is nil. Hence, development of internal market is also an essential component of the sea food trade.

Table 5. Average export and domestic retail prices of selected fin fish varieties during 1997-98

Varieties	Export Price[a]	Domestic Retail Price[b]
Ribbon fish	27	16
Pomfrets	172	120
Tuna	38	25
Mackerel	40	30
Oil sardine	34	25
Shark	41	38
Seer fish	67	73
Snappers	51	38

Source: [a] Marine Products Export Review, 1997-98, MPEDA
[b] CMFRI : SEETT Division

Aquaculture potential, domestic supplies and price stability

The production of all fish varieties from the Exclusive Economic Zone (EEZ) especially from the inshore zone 10-50m depth has reached

stagnation level. Further scope for expansion lies in the off-shore and deep-sea only (Murty and Rao, 1996, Devaraj *et al.*, 1998). With the demand for sea food including-domestic and global- and the scope for increasing production from capture fisheries limited, the attention has now turned seriously on aquaculture. The potential area available for aquaculture in India has been estimated at 11.90 lakh hectares, out of which 1.4 lakh hectares (11.9%) has been brought under shrimp culture (Table 6). It is found from the Table that, states like AP, Karnataka, Kerala and Orissa have comparatively higher area under aquaculture than other states. This indicates the vast scope existing for expansion of aquaculture in India. But it is to be noted that so far shrimp is the only species that is cultivated to a greater extent, which makes the enterprise a risky affair. Though the shrimp farming has been a highly remunerative one, presently the Supreme Court's ruling on aqua farms and the viral diseases have virtually stopped the future expansion. Under such circumstances, diversification of aqua farms to cultivate finfish varieties like groupers, snappers and mullets is the best alternative depending upon their location-specific, techno-economic feasibility. Sakthivel (2000) reported that it is time for diversification to other species like seabass, groupers, snappers and mullets because of the killer virus infection problem in shrimp culture. He added that technological development to culture the above species to be taken up on war footing to continue coastal aquaculture. He said that though the profit margin is less in finfish culture, it will be an ideal alternative to shrimp culture. Ravichandran *et al.*, (2000) expressed that the finfish fishery in the lagoons can be enhanced significantly, provided appropriate culture sites and species are selected.

Table 6. Brackish water aquaculture potential and shrimp culture in India, 1998-99

States.	Potential area (In hectares)	Area under Shrimp culture (in hectares)	Percentage of potential area	Shrimp production (tonnes)	Average productivity (kg/hectare)
West Bengal	405000	42067	10.40	18326	435.64
Orissa	31600	8000	25.30	6000	750.00
Andhra Pradesh	150000	71000	47.30	44856	631.78
Tamil Nadu	56000	1087	1.90	1820	1674.30
Pondicherry	800	22	2.80	27	1227.00
Kerala	65000	14705	22.60	7660	520.90
Karnataka	8000	3564	44.60	2690	754.77
Goa	18500	650	3.50	590	907.69
Maharashtra	80000	426	0.50	409	960.09
Gujarat	376000	316	0.10	256	810.13
TOTAL	11909000	141837	11.9	82364	580.69

Source: Aqua International, 1999

Conclusion and policy implications

The growth in the sea food export market in India has been increasing gradually which is a welcome sign in economic development of the country. At the same time, the domestic market should also be condsidered as it caters to the millions of the people. In finfish export, a substantial share of good quality fishes like seerfish, tunas, pomfrets are available in major commercial centres only leaving the rural consumers devoid of them. Such an unbalanced supply of quality fishes in the internal markets should be regularized. The existing trend of catching even the juveniles of quality finfishes to meet the domestic market demand need to be abolished preferably through law. The lifting of quantitative restrictions on imports as per the guidelines of World Trade Organisation (WTO) will boost the domestic sea food industry. The Sea food Exporters Association of India has expressed hope of constructively deploying the tremendous idle capacity in the seafood processing industry in India with the lifting of quantitative restrictions on imports. Our sea food exports mainly consist

of frozen raw materials, which the importing country processes and re-exports as value added products (VAP's). Our sea food exports presently comprise only 10 per cent of VAP, which should be increased further. As the supply from capture fishery is stagnant, the attention on coastal aquaculture should be intensified. Here, there is a need for diversification to finfish culture instead of concentrating shrimps alone. This will help to maintain the domestic supply of finfish as well as their price structure.

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