Studies on Socio-economic Status of Fish Consumers of Bhagalpur City, Bihar

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Abstract

The study indicated that maximum (44.66%) fish consumers were in service (government or private) followed by business (27.00%) in all the three income groups. Maximum (70.00%) fish consumers were Hindus followed by Muslims (12.66%). The maximum fish consumers belong to general castes followed by scheduled castes (23.33%). About 53.00% fish consumers have larger family size (>5 members). The consumers of higher income groups consume fish more often than the lower income groups and only 5.33% fish consumers have no knowledge about the freshness of fish. Among fish species, rohu *Labio rohita* was found to have been the most preferred followed by catla *Catla catla*. The lack of awareness among fish consumers about its different forms such as stuffed, pickled and canned forms was found. Present study clearly shows direct relationship between income of the fish consumer and their fish consumption pattern.

Key words: Fish consumers, socio-economic status, Bhagalpur

Introduction

Bhagalpur is the districts headquarter situated in the south-eastern part of Bihar. Bhagalpur is one of the important town of Bihar since historic period as 'CHAMPA' the capital city of 'Anga Janpada' and also well known as an important centre of commerce and trade. Presently, it is famous with the name 'SILK CITY' and considered as the main commercial centre of Eastern Bihar. Bhagalpur district has vast water resources in the form of rivers, chaurs, wetlands and ponds which are used for capture as well as culture fishery. Contributions on the socio-economic status of fish consumers have been made by several workers (Govt.of India 1961, Gao and homas 1994;Wilkie *et al*.,2005 ; Sharma nd Khjuria 2005;Iyer 1998;Aubert 2004;Thakur *et al*.,2003) The study was undertaken with the objectives of understanding the socio-economic status and consumption behaviour of fish consumers of Bhagalpur city.

Methodology

The consumption pattern of fish consumers in Bhagalpur was studied by randomly selecting 300 respondents (fish consumers) which included different socio-economic groups of the society, i.e. high (>7,500 Rs.), middle (2500-7,500 Rs.) and low income (<2500 Rs.) groups based on monthly

income. A questionnaire was specifically designed for the purpose and personal interview method was followed to collect the information regarding the consumption pattern of fish consumers and their socio-economic status, viz occupational, age, religion, caste, literacy and family size in the Bhagalpur city. The study was conducted during the year 2008-2009.

Results and discussion
The data presented in table 1 shows that maximum (44.66%) fish consumers are in service (government or private) followed by business (27.00%). Only a few respondents belong to higher income groups engaged in farming occupation. Maximum (58.33%) respondents are in the age group of 35-55 years in all the three income groups. Seventy six per cent fish consumer Hindus followed by Muslims (12.66%).

Majority of fish consumers (45.66%) belong to general caste followed by scheduled castes (23.33%), OBC (16.00%) and scheduled tribes (15.00%). The literacy level (graduate and above) was highest in higher income group (55.00%) followed by middle (46.00%), while, no respondent was found to to have been graduate and above in lower income group. Also, no respondent in higher income group was found to have been illiterate as against 4.0% in middle and 35.00% in lower income group. About fifty three per cent fish consumers have large family (>5 members) and 46.66% have small family (up to 5 members).

Frequency of fish consumption in Bhagalpur city
The data presented in table 2 clearly shows that most of the consumers (47.66%) preferred weekly consumption of fish followed by fortnightly (25%), monthly

(23.33%) and daily (4.00%). Also, the economic status of consumers have a significant effect on the frequency of fish consumption as the consumers in higher and middle income groups were found to consume fish more often and frequently than the lower income groups (Govt. of India, 1961). The higher income and education level coupled with health concerns and convenience could be the most suitable reasons for this pattern as also reported by (Gao and Thomas, 1994; Wilkie *et al.*, 2005; and Sharma and Khajuria, 2009). It is interesting to find that a small decrease in the price of meat of other domesticated animals leads a decline in the consumption of fish as also observed by Wilkie and Godoy (2001) and Sharma and Khajuria (2009). These findings reflected higher expenditure elasticity for meat, fish and egg (animal protein) as compared to cereals and pulses and showed significant effect of income and other socio-economic variables on fish consumption as reported by Aubert (2004).

Preference on the basis of weight of fishes
The data regarding the preference for weight ranged from 500-1000g followed by 250-500g (Table-3). Only 7.0% fish consumers preferred weight range above 1000g and 16% above 250g (Choudhary, 1976; Thakur *et al.*, 2003). Thus, if a fish is harvested within the above weight range, it would fetch good preference in the market.

Preference on the basis of types of fishes
The data on the type of fish preferred is given in table 4. The native Indian major carps were in great demand as compared to all other varieties. Among IMCs, rohu and catla were found to have greatly been liked by the consumers' inspite of their higher

prices owing to their nutritive value and taste, this finding is similar to the finding of Pandey *et al.,* (2001) and Sharma and Khajuria (2009).

Preference on the basis of forms of fishes

The data regarding form of fish consumed showed that the highest number of consumers (66.67%) preferred fish curry followed by fried (25.67%), pickles (5.67%), canned (1.33%) and stuffed (0.66%) (Table-5). No fish consumer in lower income group opted for stuffed, pickled and canned forms of fish. This clearly reflects the lack of awareness about its different forms among fish consumers in the study area. Therefore, value addition of fish is recommended to suit the changing needs and tastes of consumers and also creating awareness about the different fish forms e.g. fish sauce, papad, chutney, caviar, surimi and emulsion products etc. These findings were in congruence with the findings of Sharma *et al* (2005), Iyer (1998) and Sharma & Khajuria (2009).

Awareness about freshness of fish among fish consumers

The data regarding the knowledge about the freshness of fish showed that only 5.33% fish consumers have no knowledge about the freshness of fish, whereas, 98.0% consumers in lower income group were found to have good knowledge about the freshness followed by middle (96.00%) and higher (90.00%) income groups (Table 6). Maximum (58.00%) consumers were found having knowledge of fresh fish gills for examining freshness of fish followed by 28.00% consumers for eyes and only 8.66% consumers opted for organoleptic characters. Thus, it could be said that most of the fish consumers in Bhagalpur

appreciated quality in contrary to the existing view about the ignorance among fish consumers (Masette *et al.*, 1998 and Lie, 2001). Also, the lower income group consumers had shown more ability for quality perception.

Majority of fish consumers purchased fish directly from the fish market in fresh form. The second most viable alternative was the local fish booth in the vicinity of fish consumers. Only few consumers bought fish from the landing centres. Similar observations were made by Honkanen *et al*, (1999) and Sharma and Khajuria (2009).

Conclusion

It is evident that the income of fish consumers has a direct effect on their fish consumption behaviour. The people of higher and middle income groups consumed fish more often than the lower income group, though the proportion of food budget allocated to fish expenditure was higher among lower income group people. Rohu topped the list, in the order of preference. Religious belief and ethnical differences also explained variations in the fish consumption pattern. For instance, Muslim communities have strong preferences for Andhra fishes (Exported preserved fishes) whereas, local Hindu community people preferred native freshwater fishes. Also, value addition of fish is recommended to suit the changing needs and taste of consumers and also creating awareness about different fish forms e.g., fish sauce, papad, chutney, noodles, caviar, surimi and emulsion products etc., that have evolved in the world fish market. It was also observed that due to non-adoption of suitable fish preservation technologies, the quality of fish reaching the consumers deteriorates. Thus,

Table 1. Socio-economic status of fish consumers of Bhagalpur city.

		Income group (Rs./month)				
		High (>7500)	Middle (2500-7500)	Low (<2500)		
Occupation	Service	62	57	15	134	44.6
	Business	38	33	10	81	27.00
	Labour	-	-	64	64	21.33
	Farming	02	09	10	21	7.00
Age	< 35 years	18	11	36	65	21.66
	35-55 years	63	57	55	175	58.33
	> 55 years	19	32	9	60	20.00
Religion	Hindu	81	63	84	228	76.00
	Muslim	6	18	14	38	12.66
	Christian	8	7	2	17	5.66
	Sikh	5	12	-	17	5.66
Caste	General	63	48	26	137	45.66
	OBC	17	15	16	48	16.00
	ST	8	16	21	45	15.00
	SC	12	21	37	70	23.33
Literacy	Graduate and above	55	46	-	101	43.66
	Middle	16	15	23	54	18.00
	Primary	12	8	34	54	18.00
	Illiterate	-	4	35	39	13.00
Family Size	Small (< 5 members)	59	52	29	140	46.66
	Large (> 5 members)	41	48	71	60	53.33

Table 2. Distribution of respondents according to frequency of consumption.

	Frequency of consumption				
	Monthly	Fortnightly	Weekly	Daily	
High	18	24	51	7	100
Middle	19	14	62	5	100
Low	33	37	30	-	100
Total	70	75	143	12	300
%	23.33	25.00	47.67	4.0	100

Table 3. Distribution of respondents according to the weight of fish preferred.

	Weight of fish preferred				
	< 250g	250-500g	500-1000g	>1000g	
High	—	30	65	5	100
Middle	11	39	43	7	100
Low	37	38	16	9	100
Total	48	107	124	21	300
%	16.00	35.67	41.33	7.0	100

Table 4. Distribution of respondents according to the type of fish preferred.

	Type of fish preferred							
	Rohu	Catla	Mrigal	Calbasu	Catfish	Murrels	Others	
High	28	32	-	-	8	7	25	100
Middle	45	31	-	-	4	-	20	100
Low	24	20	4	1	15	-	36	100
Total	98	83	4	1	27 (9.00)	7	81	300
(%)	(32.33)	(27.67)	(1.33)	(0.33)		(2.33)	(27)	(100)

Table 5. Distribution of respondents according to the form of fish consumed.

	Form of fish consumed					
	Fried	Curry	Stuffed	Pickles	Canned	
High	19	68	2	7	4	100
Middle	23	67	-	10	-	100
Low	35	65	-	-	-	100
Total	77	200	2	17	4	300
(%)	(25.67)	(66.67)	(0.66)	(5.67)	(1.33)	(100)

Table 6. Distribution of respondents according to the knowledge about freshness of fish.

	Knowledge about freshness				
	If yes, then			No	
	Gills	Eyes	Organoleptic characters		
High	58	22	10	10	100
Middle	51	38	7	4	100
Low	65	24	9	2	100
Total	174	84	26	16	300
(%)	(58.00)	(28.00)	(8.67)	(5.33)	(100)

for maintaining proper quality of fish, it is necessary to adopt standard processing and preservation technologies for maintaining the high quality of fish for ultimate consumers.

Therefore, fish farming community can be appropriately tuned to respond to the needs of consumers in their food product approach. Some of the strategies that can be utilized for the changing needs and tastes of fish consumers are (i) creation of more awareness about different fish forms, (ii) emphasis on research and extension efforts, (iii) food regulation, (iv) good brand and packaging concepts, (v) organized retailing, and (vi) encouragement of feedback flow of information from the consumers.

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