



Marketing practices of fishery sector in Himachal Pradesh: An overview

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Abstract

The study of Marketing Practices of fishery sector in the state such as price fixation system, satisfaction level over the terms and conditions of marketing agencies and marketing distribution mechanism of reservoir fishery in Himachal Pradesh was conducted in three districts of the state. It is found that there is a lack of solidarity among fishermen's regarding authorized agencies involved in price fixation. The preponderance of the fishermen's is satisfied with methods adopted by the department for price fixation of fish, while 20.2 percent are un-satisfied with this system. Another aspect of the study reveals the fact that a large proportion of fishermen have satisfied with the prevailing terms and conditions of marketing agencies in the state.

Keywords: price fixation system, marketing channel, satisfaction level

Introduction

Marketing plays a crucial role in economic development of the country as it stimulates production and avoids unnecessary fluctuations in output and prices. A well-structured marketing system provides remunerative price to the producer besides protecting the interest of the consumer. The fish marketing is different from marketing of agricultural products, it is confronted with certain peculiar problems such as greater uncertainty in fish production, highly perishable nature, collection of fish from landing centers, too many species and as many demand pattern, frequent fluctuation in prices, difficulties in adjusting supply to variation in demand and need for transportation of fish in specialized means of transport.

Fishery sector plays an important role in the national economy and in the socio economic development of the country. Indian fisheries constitute an important sector of our national economy for various reasons. Himachal Pradesh is a land locked hilly state blessed with various lakes, several man-made reservoirs, evergreen rivers viz. Satluj, Beas, Ravi, Chenab, Yamuna and a maze of streams, tributaries-dissecting various climatic zones of the state. These linearly flowing waters are blessed with one of the richest fish fauna of the country viz. Exotic Trout, Mighty Mahseer, Carp, Cibatids, Lesses Barils and hill stream fishes. The department of fisheries came into existence in August, 1950 as a wing of the Forest Department. It was bestowed the status of an independent department during 1966. The fish production has touched the annual production figure of 14020 tons by all available fishery resources and number of registered fishermen was above 11000 at the end of the year 2019-20.

Objectives of the Study

1. To investigate the effectiveness of marketing practices adopted by the fishery industry in the state of Himachal Pradesh.
2. To find out satisfaction level of fishermen in respect of marketing system.

Methodology

One way approach was adopted to collect primary data and attention was focused on selected fishermen of fishery co-operative societies in the study area. The data pertaining to the perception of the fishermen of the sample co-operatives was obtained through pre-tested questionnaires distributed among them. The study was conducted in the reservoir area of the Bilaspur, Una and Kangra District of the state. With the view of the time and operational constraints the simple random sampling technique was adopted. Firstly a list of Fishery Co-operative Societies was prepared and 25 co-operative societies were selected out of 49 co-operative societies on the basis of convenience sampling. 20 fishermen were selected at random from each society as samples of the study. All the collected information from the fishermen were classified, grouped and interpreted according to the objectives.

Agencies Involved In Fixation of Price

Table 1 reveals that majority of the fishermen i.e. 40.6 percent think that price of fish is fixed by contractors, 32.8 percent perceive co-operative society and contractor mutually fix the fish prices, 16.4 percent observe that the Co-operative Society play a key role in price fixation of fish and only 10.2 percent considered the role of department in the price fixation of fish. The mean value of respondents opinion is noted 2.90 which shows that majority of the respondents are agreed that price of fish is fixed by contractors. The intended value of kurtosis shows that the distribution is platy kurtic which also support the above findings.

Table 1: Agencies Involved in Price Fixation

Name of Agencies	Number of Respondents	%age	Rank	Mean	SD	Skew.	Kurtosis
Co-operative Societies	82	16.4	3	2.90	1.03815	-.680	-.680
Department of Fishery	51	10.2	4				
Contractors	203	40.6	1				
Co-operative Society & Contractor	164	32.8	2				
Total	500	100					

Note: Pearson's chi-square for agencies involved in price fixation is 119.44, $P < 0.01$

Source: Various Questionnaires from the Respondents

On the application of χ^2 test, the calculated value is greater than the table value; hence, the null hypothesis is rejected with the inference that different agencies play a significant role in price fixation. It is concluded that there is a lack of solidarity among fishermen's regarding authorized agencies involved in price fixation.

Methods used in price fixation

It was observed that the views of the respondents not similar on the price fixation of the fish. Table 2 and Figure 1 reveals that 32.8 percent of the respondents opined that the price fixation depends on the quality of fish, 31.6 assumed according to open auction system, 27.6 percent found the same on the basis of demand and supply, and only 8 percent fishermen observed that commission agent determine the prices of the fish.

Table 2: Methods Used for Price Fixation of Fish

Name of Methods	Number of Respondents	%age
Forces of demand & supply	138	27.6
On quality basis of fish	164	32.8
Commission agent	40	8
Open auction system	158	31.6
Total	500	100

Figure 1
Methods Used in Price Fixation

- Forces of demand & supply
- On quality basis of fish
- Commission agent
- Open auction system

Note: Pearson's chi-square for methods of price fixation is 80.03, $P < 0.01$

Source: Various Questionnaires from the Respondents

Since the calculated value of chi-square test i.e. 80.03 is greater than the table value at 1 percent level of significance, the null hypothesis is rejected with the inference that there is a significant relationship in the opinion of the respondents regarding the methods used in the fixation of fish prices.

Satisfaction level of beneficiaries regarding price fixation methods

Table 3 and Figure 2 portrayed that preponderance of the fishermen's 79.8 percent are noted satisfied with methods adopted by the department for price fixation of fish, while 20.2 percent are found un-satisfied with this system. Further, a significant difference in the opinions of the respondents has been observed on the satisfaction level of beneficiaries regarding price fixation methods.

Table 3: Extent of Satisfaction with Price Fixation Methods

Nature of Respondents	Number of Respondents	Percentage
Satisfied	399	79.8
Un-satisfied	101	20.2
Total	500	100

Figure 2
Satisfaction Level Regarding Price Fixation

- Un-satisfied 20.2%
- Satisfied 79.8%

Note: Pearson's chi-square for satisfaction level over price fixation is 177.60, $P < 0.01$

Source: Various Questionnaires from the Respondents

Satisfaction of fishermen over the prevailing terms and conditions of marketing agencies

The fishermen were asked to rate the level of their satisfaction regarding the terms of purchasing and payment of fish on the Five Point Likert Scale i.e. satisfied to a great extent, satisfied to some extent, neither satisfied nor dissatisfied, dissatisfied to some extent and dissatisfied to a great extent. These attributes were assigned weights as 5,4,3,2 and 1 respectively and the average level of satisfaction was worked out on the basis of assigned weights.

The views of fishermen regarding the terms of purchase and payment of fish have analyzed in Table 4. It is evident from the table that the mean score of fishermen' views regarding the period of payment, rate of royalty/ commission, price of fish, membership fee, facility provided by co-operative societies, time lag between date of purchase and date of payment of fish is much higher than the standard average score i.e. 3 at five point scale. The values of skewness are negative in all cases. Thus, the above analysis shows that the opinion of the fishermen is distributed more towards the higher side of the standard average score.

Table 4: Satisfaction of Fishermen over the Prevailing Terms and Conditions of Marketing Agencies

Statements	Satisfied to great extent	Satisfied to some extent	Neither Satisfied nor dissatisfied	Dissatisfied some extent	Dissatisfied to great extent	Total	Mean	St. Devat.	Skew.	χ^2	Kurt.	P value
Period of Payment	287	75	59	44	35	500	4.070	1.29323	-1.158	446.36	.0346	<0.01
	57.4%	15%	11.8%	8.8%	7%	100%						
Rate of royalty/ commission	37	304	91	47	21	500	3.578	.91301	-1.144	547.16	1.039	<0.01
	7.4%	60.8%	18.2%	9.4%	4.2%	100%						
Price of Fish	83	253	114	39	11	500	3.716	.90829	-.746	355.36	.540	<0.01
	16.6%	50.6%	22.8%	7.8%	2.2%	100%						
Membership Fee	241	163	52	31	13	500	4.175	1.01936	-1.304	384.84	1.168	<0.01
	48.2%	32.6%	10.4%	6.2%	2.6%	100%						
Facility Provided by co-operative societies	96	205	136	39	24	500	3.620	1.03234	-.670	218.34	.146	<0.01
	19.2%	41%	27.2%	7.8%	4.8%	100%						
Time lag between date of purchase and date of payment of fish	292	63	60	50	35	500	4.054	1.31702	-1.104	465.58	-.158	<0.01
	58.4%	12.6%	12%	10%	7%	100%						

Source: Various Questionnaires from the Respondents

While applying χ^2 test goodness of fit, it is found that the calculated values are much higher than the table values at 1 percent level of significance. It rejects the null hypothesis and show that the opinion of fishermen is not equally distributed. Additionally, regarding commission and royalty on sale value of fish incurred by the co-operative societies on behalf of fishery department is customary less than the other factors mean value. The standard deviation is noted as optimum and skewness is observed negative in the above case. Hence, the above analysis shows that the opinion of the fishermen is scattered more towards the lower end to the standard average score. The application of χ^2 test goodness of fit also ropes the above analysis at 1 percent level of significance and reveals that the opinion of the fishermen is not equally distributed.

Thus, on the basis of the whole analysis above, it may be concluded that the majority of fishermen are fully satisfied with the period of payment of fish, rate of royalty, commission, price of fish, membership fee, facilities provided by the co-operative societies, time lag between date of purchase and date of payment of fish.

Fish marketing channels In Himachal Pradesh

The fish marketing system though varies from state to state, is often dominated by middlemen and wholesalers because it is not possible for the fishermen/fish farmers to undertake quick transportation and sale of fish in fresh condition in highly dispersed and distant markets. In Himachal Pradesh, fish production is either transported to the markets by the co-operative societies or is sold to the contractors from the landing centers. The fish lifted by the contractors is being sold in the fish markets of Himachal Pradesh and neighboring states /union territories. The economic conditions of fishermen and fish farmers depend on the price of fish. The price of fish varies with species, season, availability, demand and preference of consumer. The fish varieties include carps, catla, rohu, singhara, trout, morri, grass carps etc. These species are divided into two grades i.e. A and B grade in the state. Carps are low price fish and mostly consumed by the middle class community. Unlike Carps,Catla, Rohu, Singhara, Morri, and Trout are high priced fish (due to few intra-muscular spines) and are popular among the upper class. Presently the price of carp fishes varies from Rs. 25 to 50/ per kg with season and availability and that of A-grade from Rs. 50/ to 100/ per kg. The both varieties of fish are also exported to other neighboring states like Jammu & Kashmir, Punjab, Delhi, Uttar Pradesh etc.

Fish passes through several channels/intermediaries from the fishermen/fish farmers to the consumer. The intermediaries are involved in providing services of processing, preservation, packing and transporting. All these activities result in cost addition at every stage of marketing. However there is no data available regarding total market status, domestic and interstate demand, number of contractor / middlemen engaged in fish marketing and the losses due to spoilage during marketing. The key intermediaries' in fish marketing are co-operative societies,

contractors, wholesaler and retailers. The short description of fish marketing channels according to the resources in Himachal Pradesh is explained as below.

a. Reservoir Fish Marketing Channels

The co-operative societies are the first intermediary in reservoir fish marketing channels. The marketing of the fish catch by the fishermen is the job of the primary fishermen co-operative societies working in different areas of the reservoirs in the state. The entire catch is handed over by the fishermen to the primary fishery co-operative societies and co-operative societies charge own commission from 5 to 7 percent and government royalty 15 percent on sales value of fish from the fishermen. After that the fishery societies hand over the total fish to the contractor at the landing centers fixed by the department of fishery in the presence of fishery officer. After receiving the fish from the fishery co-operative societies the contractors are free to sell it within the state as well as outside the state. The contractors are free to sell the fish directly to consumers as well as through wholesaler chain. The contractors are appointed every year on the basis of open auction system in the beginning of the year.

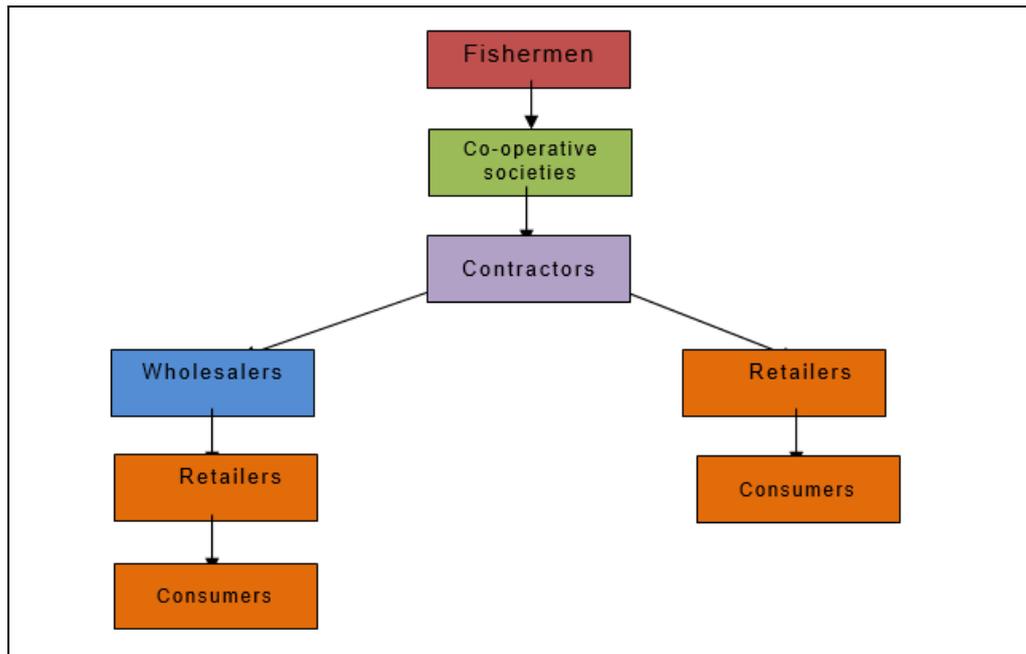


Fig 1

b. Trout/Pond Fish Marketing Channels

Trout fish produced in government farms as well as private entrepreneurs in the upper zone of the state. The marketing system of trout is totally different as compared to other fishery resources. The main reason of this is the high demand of trout in comparison to supply. The fish farmers are free to sell their product direct to consumer or to contractor and retailers.

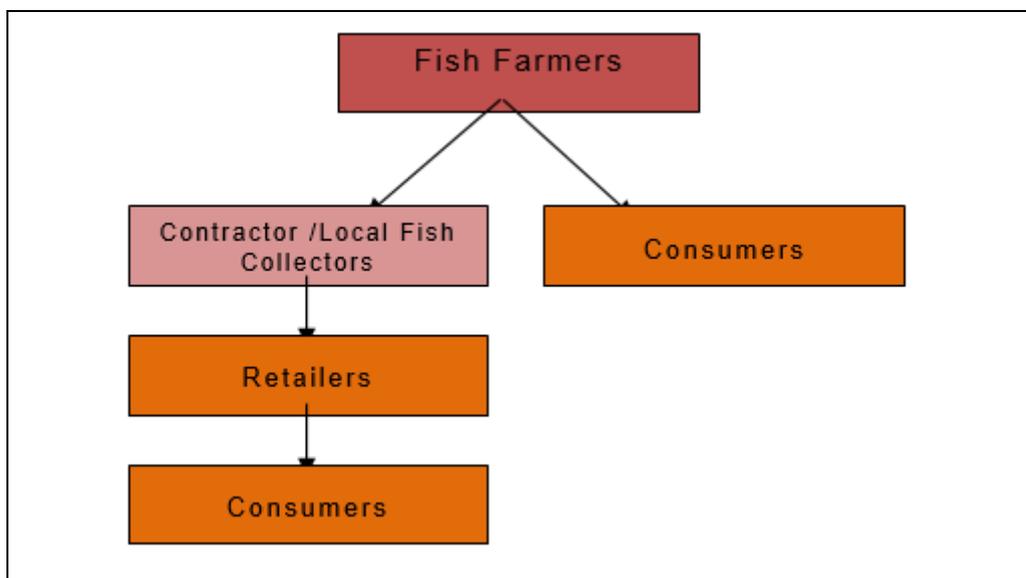


Fig 2

c. Riverine Fish Marketing Channel

The riverine fishermen are not organized. The fishermen come to the market or local area without having adequate market information. They sell their fish directly at the consumer's doorstep/local fish collector or in local markets. Most of the fishermen sell fish in local areas and no value addition in fish as grading, cleaning and icing. Riverine fishermen choose their marketing channels as per their dealing and availability of fish.

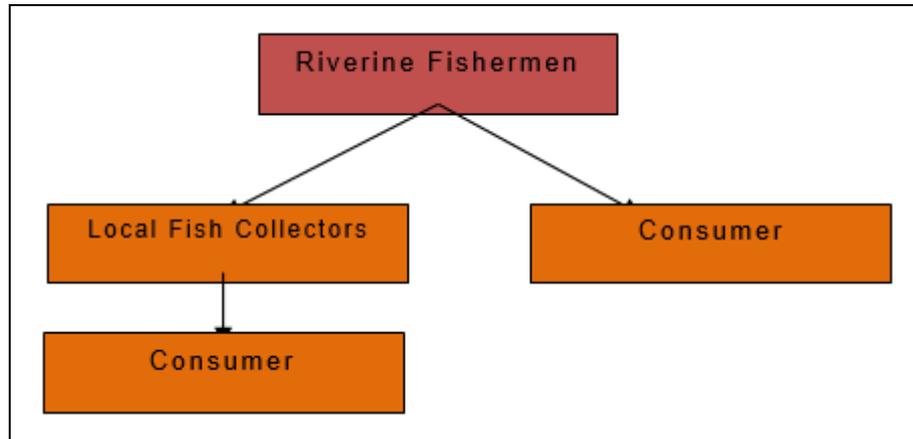


Fig 3

In case the local fish collectors is not available, than it is very difficult to reach the doorstep of right consumer. The buyers of fish are very well aware about the condition of fishermen. They have a very strong bargaining power over the unorganized fishermen. As a result they don't get premium price for their catch due to the non-availability of suitable market and reluctance of consumer. They are forced to sell all the produce on a given day, as they don't have the capacity to hold or preserve the fish. The major cost of fishermen is time consuming. Sometimes the fishermen cannot reach in the mean time in the market as a result the quality of fish would have been deteriorated and the fish is sold at throwaway price.

Conclusion

The fish marketing is different from marketing of agricultural products, it is confronted with certain peculiar problems such as greater uncertainty in fish production, highly perishable nature, collection of fish from landing centers, too many species and as many demand pattern, frequent fluctuation in prices etc. It is concluded that there is a lack of solidarity among fishermen's regarding authorized agencies involved in price fixation. Further, a significant difference in the opinions of the respondents has been observed on the satisfaction level of beneficiaries regarding price fixation methods. The mean value of the respondents' responses regarding all terms and conditions of marketing such as period of payment, rate of royalty/commission, membership fee, facility provided by co-operative societies and time lag between purchase and payment of fish is more than the standard mean score. Majority of the respondents are found satisfied with the existing marketing term fixed by the department.

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