Research Paper

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PRICE INCREMENT ANALYSIS OF INDIAN FRESH WATER FISHES IN SOME YEARS USING PAASCHE PRICE INDEX

ZOOLOGY

KEYWORDS : Paasche price index, Rohu, Catla, Mrigal, Tilapia, Catfishes.

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ABSTRACT

In the present research work some important Indian freshwater fishes and their price increment analysis is being done using Paasche price index. The Paasche price index for the year 2006 is 153.57 % and for 2014 is 232.14 %. The year 1998 is considered as base year. The findings of the present research exhibits that the percentage inflation of retail prices of fresh water fishes from 1998 to 2006 were 53.57 %, while the percentage inflation rate has increased from 2006 to 2014 by 78.57 %. The inflation rate is tremendous year after year. The present research work is a foremost research work and must be considered as a baseline research with a scope for future addition and analysis of data.

INTRODUCTION

Fish enjoys a very special position and place in human civilization from time immemorial. Its food, gastronomic, culinary and nutritional value, brings it to the fore; many species of fish rank in the category of, "gourmet par excellence". Today fish has become the staple food of Indian people. (Devdatta Gopal Lad et. al. 2013) The demand for fishes in India is mainly fulfilled by the marine fishes but in past couple of decades the prices of Indian marine fishes has increased many folds due to various reasons such as excessive demand, less supply and traditional marketing practices adding to increment of heavy cost till it reaches the consumer.

(Devdatta Gopal Lad et. al. 2014)

The marine fishes have disappeared from the platter of common Indian people because of extensive price increment. The place of marine fishes is today taken up by fresh water fishes. The prices of freshwater fishes are also increasing slowly periodically. The retail price increment of fishes is contributed to various factors such as the demand always surpasses the supply as there is decrement in catches year after year leading to the increment of prices. Also in India till date traditional system of fish marketing is being implemented rather than modern type. In traditional system the fishes passes the market through the stages viz; Fisherman --- Auctioneer ---- Wholesaler ----- Retailers ------ Consumers. Through every stage as the fish passes the market there is a 2 fold increase in the fish price. Thus the consumer has to pay heavy prices decade after decade for the same quantity of fish commodity. (R. Sathiadhas et. al. 1994)

In the present research work some important Indian freshwater fishes and their price increment analysis is being done using Paasche price index and an analysis is being done to estimate the percentage of increment. This a baseline study and there is a scope of further analysis.

MATERIAL AND METHODS

The following data is being obtained from the Reference. (FAO 2014) (Ganesh Chandra 2010)

Table 1 Indian fresh water fishes price in different years.

Fresh water fishes	Fishes					
	1998		2006		2014	
	Quantity in Kg	Price in Rs	Quantity in Kg	Price in Rs	Quantity in Kg	Price in Rs
Rohu	1	60	1	120	1	150
Catla	1	52	1	80	1	160
Mrigal	1	53	1	80	1	120
Tilapia	1	45	1	60	1	100
Catfishes	1	70	1	90	1	120

The Paasche price index formula is as follows

$$I_p = \frac{\sum P_n Q_n}{\sum P_o Q_n} \times 100$$

P = Price of the Commodity, Q = Quantity of the Commodity, o = Base year and n = Current year under study. (Santhanam S. et. al. 2010)

The above depicted formula is being implemented on the data obtained from the reference.

RESULTS

Table 2: Paasche price index for the year 1998 – 2006.

Fresh water-fishes	1998		2006		P_nQ_n	P_oQ_n
	Q_o	P_o	Q_n	P_n		
Rohu	1	60	1	120	120	60
Catla	1	52	1	80	80	52
Mrigal	1	53	1	80	80	53
Tilapia	1	45	1	60	60	45
Catfishes	1	70	1	90	90	70
Total					430	280

For the year 2006 the I_p = 153.57

Table 3: Paasche price index for the year 1998 – 2014.

Fresh water fishes	1998		2014		P_nQ_n	P_oQ_n
	Q_o	P_o	Q_n	P_n		
Rohu	1	60	1	150	150	60
Catla	1	52	1	160	160	52
Mrigal	1	53	1	120	120	53
Tilapia	1	45	1	100	100	45
Catfishes	1	70	1	120	120	70
Total					650	280

For the year 2014 the I_p = 232.14

Table 4: Percentage of inflation over the years.

Years	Paasche price index	Percentage Inflation Rate	Percentage Inflation Rate
1998	100	----------	increase from
2006	153.57	53.57	2006 to 2014
2014	232.14	132.14	is 78.57

DISCUSSION AND CONCLUSION

The Paasche price index for the year 2006 is 153.57 % and for 2014 is 232.14 %. The year 1998 is considered as base year. The findings of the present research exhibits that the percentage inflation of retail prices from 1998 to 2006 were 53.57 %, while the percentage inflation rate has increased from 2006 to 2014 by 78.57 %. The inflation rate is tremendous year after year. The present research work is a foremost research work and must be considered as a baseline research with a scope for future addition and analysis of data.

The price inflation percentage of freshwater fishes is less as compared to marine fishes because the supply of freshwater fishes today are matching up with their demand through higher aquaculture production which is not happening in marine fishes. So the prices of freshwater fishes are under control but still the increment is higher because of various reasons such increase in transportation cost, traditional marketing system in India and also increase in feed cost in freshwater aquaculture.

Some constructive measure should be taken in respect to reduce the price inflation of commercially important fresh water fishes and keep them within the reach of common man. The government agencies must intervene and exterminate the middle man in the traditional system of fish market thus it will help in reducing the cost of the fishes which increases at every stage of the traditional system of fish marketing and will surely help in transformation towards the modern method of fish marketing. Through the above implementations the fishermen and also the consumer who buys the fishes at retail price will be at benefit.

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