

CONSTRAINTS RELATED TO PRODUCTION AND MARKETING OF FRESHWATER FISH ROHU(*Labeo rohita*) IN CUTTACK DISTRICT, ODISHA

Abstract: Rohu(*Labeo rohita*) Fish is one of the major freshwater fish produced across the country. Cuttack district of Odisha was selected for the study. 98 respondents from 4 villages were selected based on the population of the villages. The present study was conducted in the year 2021-2022 years. This paper examines the constraints faced by the fish farmers while producing and marketing of the freshwater fish Rohu(*Labeo rohita*) which reveals that damage due to natural calamities in production and frequent price fluctuations in marketing are the major constraints expressed by the farmers.

Keywords: constraints, freshwater fish, Rohu(*Labeo rohita*).

Introduction

Global aquaculture production (including aquatic plants) in 2018 was 179 million tonnes, with the first-sale value estimated at USD 401 billion. The first-sale value, re-estimated with newly available information for some major producing countries is considerably higher than previous. The inland fishery sector share was 29% in 1951, has gone up to more than 50% in 2003-04, indicating increasing contribution of inland sector to the total fish production. Further, it is significant that aquaculture production has increased tremendously during the last decade. In India, two types of aquaculture are practiced viz., freshwater aquaculture and brackish water aquaculture. Freshwater aquaculture involves the breeding of freshwater fish like carp, Catla, Rohu, Magur, freshwater prawn, freshwater pearl culture and ornamental fish farming. Freshwater Aquaculture resources of the country have been estimated to be of the order of 6.23 million ha, of which 2.25 million ha are in the form of ponds/tanks, 0.827 million ha beels/jheels/ derelict water bodies and 3.15 million ha of reservoirs. The present contribution of 3.5 million tonnes from these resources are hardly commensurate with their vastness and offer the scope for realizing more production with the available technologies in the country. Indian aquaculture is mainly dominated by major carps that account for around 80% of the total inland fish production. The present study aims to reveal the major constraints faced by the fish farmers in Odisha which is one of the major fish producing state in the country. It contributes about 6.6 and 1.58 lakh tonnes in the years of 2019 and 2020 respectively through inland fisheries.

Research Methodology

The present study is conducted in Cuttack district of Odisha in the year of 2022. Multistage randomised sampling has been adopted for the study which involves in selection of Nischintakoili block and the villages Bandhakatia, Bandhupur, Isaniberhampur, Nagaspur. 98 respondents of different categories were selected randomly and data has been collected with the help of well structured and pre tested interview schedule related to the constraints in the region. Statistical tools like Garrett's ranking technique has been used for the analysis of the study and the results are ranked accordingly.

Results and Discussion

Constraints faced during production of inland fish Rohu(*Labeo rohita*)

Table 1: Constraints related to production of Rohu(*Labeo rohita*) in different size of farm groups

Sl no	Particular	Garreate Score(%)	Rank
1	High cost feed	51.357	IV
2	Damage due to natural calamities	61.041	I
3	High cost of labor	56.643	II
4	Frequent disease attack	47.796	IX
5	High initial investment	52.918	III
6	High cost of manure	43.969	XI
7	High cost of fertilizer	50.071	VI
8	High cost of seed	48.857	VIII
9	Non-availability of labor during peak period	50.388	V
10	High cost of medicines	46.622	X
11	Lack of irrigation facilities	43.367	XII
12	Lack of information about government scheme and subsidies	49.377	VII

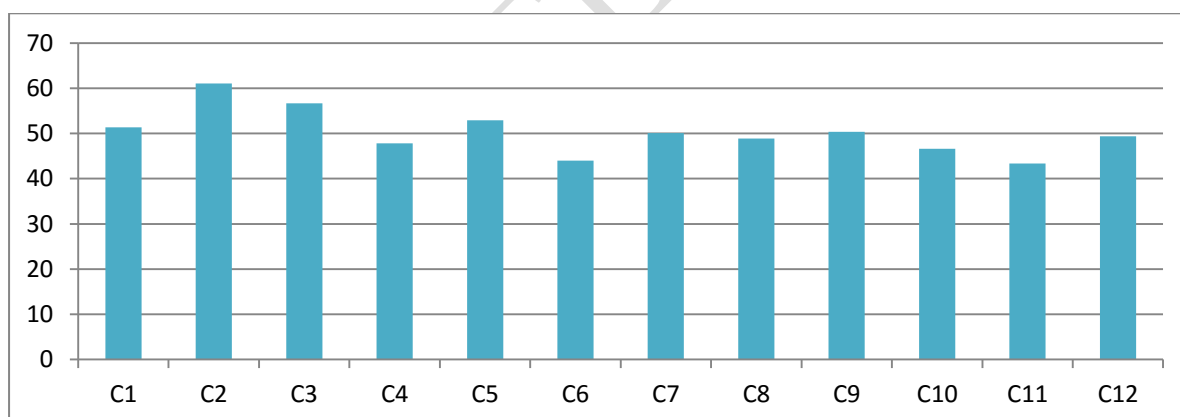


Fig.1. Constraints related to production of Rohu(*Labeo rohita*) in different size of farm groups

Table 1 shows that constraints faced by the different size of farms group in cultivation of Rohu. Most of the respondents expressed that major constraint was identified that damage due to natural calamities has been awarded with rank (I) Damage due to natural calamities, followed by High cost of labor with rank II, High initial investment with rank III, High cost feed with rank IV, Non-availability of labor during peak period with rank V, High cost of fertilizer with rank VI, Lack of information about government scheme and subsidies with rank VII, High cost of seed with rank VIII, Frequent disease attack with rank IX, High cost of medicines with rank X, High cost of manure with rank XI, Lack of irrigation facilities has been awarded with last rank .

Table 2: Constraints related to Marketing of Rohu (*Labeo rohita*) fish in different Size of Farms Group

Sl no	Particular	Garreate Score(%)	Rank
1	High commission charges	45.9898	V
2	High transportation cost	48.7449	IV
3	Frequent price fluctuations	74.0408	I
4	Lack of cooperatives in marketing societies at village level	59.7245	III
5	Lack of cold storage, refrigerated vehicle facilities and good road for quick market	44.6122	VI
6	Lack of proper infrastructure in market	41.0714	VII
7	Weighing loss during transportation	38.3367	VIII
8	Delay in cash payment	68.7959	II
9	High mortality of fish	28.6838	IX

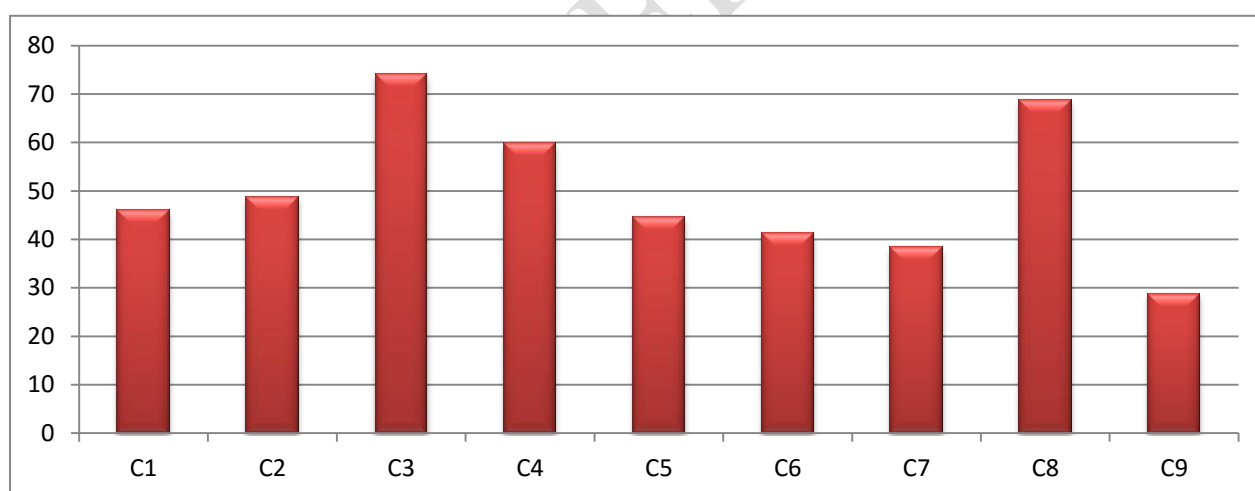


Fig.2.Constraints related to Marketing of Rohu (*Labeo rohita*) fish in different Size of Farms Group

Table 2 shows that constraints faced by the different size of farms group in marketing of Rohu. Most of the respondents expressed that major constraint was identified that frequent price fluctuations which has been awarded with rank I, followed by Delay in cash payment with rank II, Lack of cooperatives in marketing societies at village level with rank III, High transportation cost with rank IV, High commission charges with rank V, Lack of cold storage, refrigerated vehicle facilities and good road for quick market with VI, Lack of proper infrastructure in market with rank VII, Weighing loss during transportation with rank VIII and High mortality of fish with last

rank IX.

Conclusion

Findings of the present study reveal that major constraints as High cost of seed during production which contributes about one third of the production cost of inland fish and Lack of support from government when there is glut in the market was the marketing constraint faced by the fish farmers. As 85.71 percent of total 98 respondents expressed that the above mentioned constraints as most effecting factors during production and marketing of inland fish. Hence government should consider resolving these constraints.

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