

**RESEARCH PAPER**

An assessment of the socio-economic status of the fishermen along the Lendi River in Latur and Nanded district of Maharashtra, India

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Abstract : A study was carried out to assess the socio-economic status of fishermen involved in fishing activities within the Lendi River located in the districts of Latur and Nanded in the state of Maharashtra. A comprehensive survey was conducted, consisting of interviews with a total of 76 fishermen, to collect pertinent data and information. It was found that all fishermen who were engaged in fishing in Lendi River were male, the majority were Hindus, 59.21% had joint families and the majority of fishermen (48.68%) belonged to the middle age group 31-50 years. Moreover, 40.79% of fishermen were educated up to the primary level while 25.00% were illiterate. Most fishermen (51.32%) had an annual income in the range of Rs. 1.5 to 2 lakhs. The use of gill nets is common among fishermen, but a subset of fishermen employs cast net as their preferred fishing method. The findings of this research indicate that the socio-economic status of fishermen in the designated study region is undesirable. It is imperative that governmental entities, non-governmental organizations (NGOs), and other pertinent stakeholders undertake requisite measures for improving the socio-economic standing.

Key Words : Fishermen, Lendi River, Socio-economics status

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INTRODUCTION

The fisheries sector signifies a burgeoning industry on a global scale, exhibiting remarkable growth rates. It serves as an integral source of sustenance and economic

stability, providing for the food requirements and livelihoods of millions of people across the world. The fisheries and aquaculture sector is widely recognized as a growing and promising sector in the Indian economy.

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India is the third largest fish producing country in the world and accounts for 7.96 per cent of the global production. The fisheries sector serves as a prominent means of sustenance for socio-economically disadvantaged communities. In recent years, there has been a substantial change in the Indian fisheries sector, shifting from emphasizing on marine-dominated fisheries to a greater emphasis on inland fisheries. This shift has resulted in inland fisheries becoming a significant component of fish production, accounting for 70% in recent times compared to 36% in the mid-1980s. There are a total of 23.12 million inland fishermen in India, and 1.13 million living in the state of Maharashtra (Handbook of Fisheries statistics, 2022). India has 14 major, 44 medium and numerous minor rivers that run through 2.52 lakh km contributing to the current production of 1 Lakh ton. There are 17790 kilometres of rivers in the state of Maharashtra, which provides enormous potential for the development of inland fisheries. The river offers vast opportunities and potential for increasing fish production and the socio-economic security of the surrounding population. The majority of fishermen depend on fisheries resources for their livelihood. The primary source of earning for the riverside fishermen's household is fishing. Numerous studies have been conducted on the socio-economic status of fishermen and various kinds of fishing gear, with particular emphasis on rivers across the globe. Olatunji and Olah, 2012 studied the socio-economic status of artisanal fishers in Cross River, Nigeria and Mei *et al.*, 2020 studied the socio-economic and livelihood assessment of inland fishermen in Muda River basin, Malaysia. Several investigations have been done to examine the socio-economic status of fishermen living along rivers in various regions of Bangladesh (Ali *et al.*, 2014; Baki *et al.*, 2015; Reza *et al.*, 2015; Bhuyan and Islam, 2016; Kamruzzaman and Hakim, 2016; Paul *et al.*, 2018; Roy *et al.*, 2022). In India Bordoloi *et al.*, (2012); Kalita *et al.*, (2015); Roy *et al.*, (2016); Kumar *et al.*, (2018); Das *et al.*, (2022) studied the socio-economic status of river dependent fishermen. Some study has been conducted on the socio-economic status of inland fishermen in the state of Maharashtra (Kulkarni *et al.*, 2018 and Bahte *et al.*, 2022). But meagre information is available about socio-economic condition of fishermen near riverine areas of Maharashtra.

The Marathwada region of Maharashtra state is drained by Godavari river system except for the few parts in the three districts namely Beed, Latur and

Osmanabad. The Manjra river is one of the principle tributary of Godavari river and have its origin at Balaghat Range of hills. The principal tributaries of the Manjra are the Tirna, the Karanga and the Haldi joining it from right and the Lendi and the Maner which join from the left. (Dandekar, 2015 and Pradhan, 2017). There are very few studies on the socio-economic aspects of fishermen along these rivers.

The Lendi River has immense significance in the districts of Latur and Nanded. The present study focuses on analysing the socio-economic status of the fishermen, as well as the fishing craft and gear used in the Lendi River in the Latur and Nanded districts of Maharashtra. The socio-economic study has served as a valuable instrument for enhancing understanding of the living conditions prevalent among fishermen, within the framework of shifting environmental and socio-economic variables that impact their traditional means of subsistence within the region (Bathe *et al.*, 2022).

MATERIAL AND METHODS

The present study was conducted to assess the socio-economic status of the fishermen adjacent to the Lendi River in the Latur and Nanded districts of Maharashtra. The study was conducted from April 2018 to March 2019. The simple random sampling method was used to frame the target sample from the study places. An interview schedule containing structured and unstructured questions was developed to collect data through face-to-face interviews with the fishermen. The interview schedule was pretested in the non-sample areas and revised according to the feedback gained at the field level. The interview schedule was formed to obtain relevant information considering socio-demographic conditions, fishermen's income and expenditure pattern, fishing craft and gear used for fishing and other relevant aspects of river fisheries. Planning was made for field visits combined with resource persons and elderly persons and the purpose and objectives of the study were made clear to them. Further inquiries and observations were made during subsequent visits to several villages and fish markets adjacent to the Lendi River in the Latur and Nanded districts of Maharashtra.

RESULTS AND DISCUSSION

Several parameters such as age, gender, religion, family type, family size, educational qualification, house

Table 1: Age-wise distribution of the fishermen

Sr. No.	Age group	Frequency	Percentage
1.	Young age (Up to 30 years)	28	36.84
2.	Middle age (31 to 50 years)	37	48.68
3.	Old age (above 50 years)	11	14.47
	Total	76	

type, annual income and expenditure pattern were considered to study the socio-economic condition of fishermen. The study also focused on the different kinds of boats and fishing gear used in a part of the Lendi River. The information was collected from 76 fishermen from villages and fish markets adjacent to the Lendi River in the Latur and Nanded districts of Maharashtra State.

Age of fishermen:

It referred to the chronological age of the fishermen and is categorised as young age (upto 30 years), middle age (31-50 years) and old age (above 50 years). It was found that the majority of the fishermen, 48.68% belonged to the middle age group followed by the young age group (36.84%) and the old age group (14.47 %) (Table 1). The mean age of fishermen was reported to be 38.17 years. Kulkarni *et al.* (2018) studied socio-economics conditions of fishermen in Udgir in Maharashtra state and found that a relatively higher proportion of fishermen (62.32%) were in the middle age group (31-50 years) and followed by 26.64% in the range of 20-30 years and 13.04% having age more than 50 years.

Gender :

All respondents involved in the fishing in Lendi river in Latur and Nanded district were male and it was observed that only males were engaged in fishing activities in the study area. Bathe *et al.* (2022) studied the socio-economic status of fishermen dependent on the Lanjud reservoir, near Khamgaon, Buldhana, Maharashtra and reported that the rural area fishery business is male-dominated and females do not show interest in the fishery.

Religion :

The study reveals that the majority of the fishermen 78.95 % were Hindu, followed by the Muslims 21.05 % (Fig. 1).

Family type :

The family type was considered based on the nature

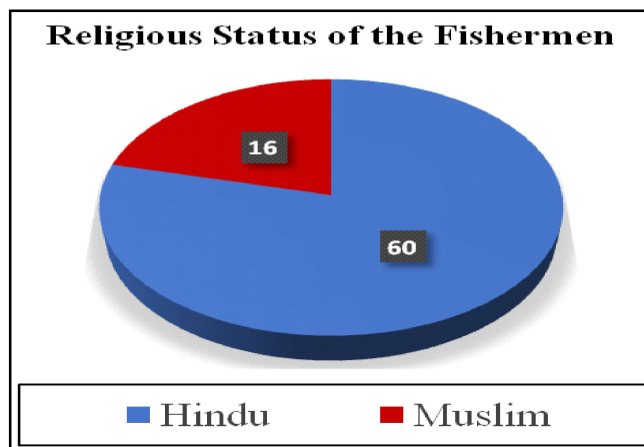


Fig. 1: Religious status of the fishermen

of the family. It was divided into two types of family, nuclear family and joint family. Fig. 2 represents the family type of respondent fishermen. It was found that 59.21% of fishermen families were joint and 40.79% of fishermen had nuclear families.

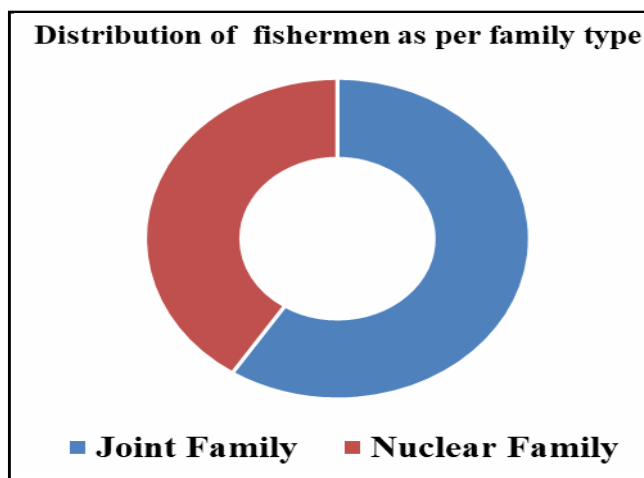


Fig. 2: Distribution of fishermen as per family type

Family size of fishermen :

According to Beegum (2006) family size is an essential factor in the fishing community. In this study, the family size of the fishermen was divided into three categories based on the number of family members. Table

Table 2: Family size of fishermen

Sr. No.	Family size	Frequency	Percentage
1.	Small family (<4 members)	6	7.89
2.	Medium family (4 - 6 members)	39	51.32
3.	Large family (> 6 members)	31	40.79
	Total	76	

2 revealed that about 51.32% of families were medium (4-6 members), 40.79 % of families were large (more than 6 members) and 7.89% of families were small (less than 4 members). The study revealed that the maximum number of familymembers was 12 and the minimum numbers were only 2. The average family size was 6.20 members. Similar findings have been reported by Kulkarni *et al.* (2018) that the majority of fishermen had medium family size.

Educational status :

The educational status of the fishermen was grouped into four categories *viz.* illiterate, primary, secondary and higher secondary as per the classification given by Ali *et al.* (2014). During the investigation, it was found that most respondents fishermen were literate (75.00%). The result of the study revealed that out of 76 fishermen, 40.79% were educated up to the primary level, 23.68% were educated up to the secondary level, 10.53% were educated up to higher secondary and out of 76 respondents 25.00% were illiterate (Fig. 3). A significant proportion of the individuals engaged in the occupation of fishing have regrettably discontinued their pursuit of formal education beyond the primary level, primarily as a result of assuming familial obligations and responsibilities.

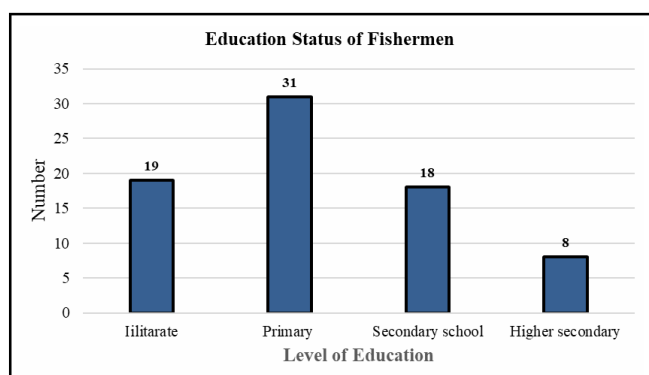


Fig. 3: Educational status of the respondent fishermen in the study area

Type of house of fishermen family :

According to Gupta and Dey (2014) housing pattern

is one of the most important indicators used to assess the economic well-being of any community. During the survey, attempts were made to find out the conditions of the living house of the fishermen. It was found that most of the fishermen (51.32%) lived in kaccha houses, whereas 34.21% lived in semi puccahouses and 14.47% lived in pucca houses (Fig. 4). This reflects the poor house conditions of the fishermen in the study area. It was found that 92.11 % of the surveyed fishermen houses had electricity facilities.

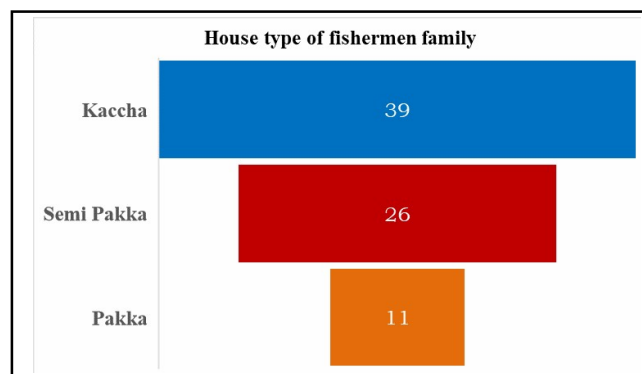


Fig. 4: Type of house of fishermen in the study area

Annual income and expenditure of fishermen family:

Fig. 5 represents the annual income and expenditure of the fishermen family in the study area. The annual income of the fishermen varied from Rs. 1,62,000 to 3,42,000. The selected fishermen were grouped into four

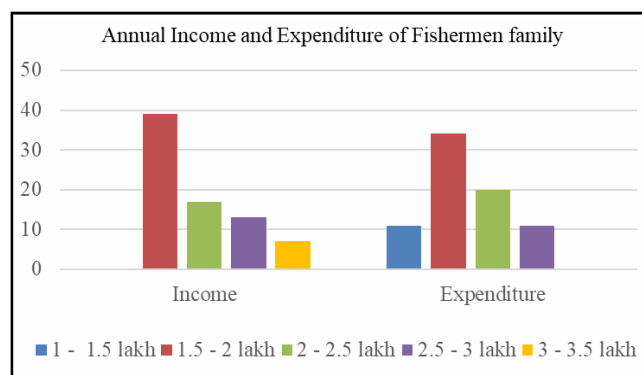


Fig. 5 : Annual income and expenditure of fishermen family

categories based on the level of annual income and it was found that 51.32% of the fishermen had an annual income in the range of Rs. 1.5 to 2 lakhs, followed by 22.37% fishermen had in the range of Rs. 2 - 2.5, 17.11% fishermen had in the range of 2.5- 3 lakhs while 9.21% fishermen had income of more than 3 lakhs. The average income was found to be Rs. 2,20,974/-. The observed income level was determined to be comparatively low as a result of an exclusive reliance on the occupation of fishing, compounded by insufficient infrastructure pertaining to both the sector of fishing and its subsequent marketing endeavours.

The study revealed that 44.74% of the fishermen had an annual expenditure in the range of Rs. 1.5 to 2 lakh, followed by 26.32 % fishermen had in the range of Rs. 2 to 2.5 lakh, 14.47 fishermen had more than Rs. 2.5 lakh while 17.47% fishermen had expenditure less than Rs.1.5 lakhs. The expenditure tends to be concentrated within the range of Rs. 1.5 to 2.5 lakh, primarily attributable to the prevalence of joint familial structures among the majority of fishermen, where in households typically consist of more than four individuals.

Other occupation :

The primary occupation of fishermen is fishing and marketing of fish in local market. Secondary occupations include agriculture labour (17.11%) and working on daily wages (28.95%). A significant proportion of fishermen (53.95%) engaged in fishing activities, specifically 53.95%, rely solely on fishing as their primary source of income and do not possess an alternative means of financial sustenance.

Co-operative society membership :

According to the study, a substantial proportion of the fishermen (78.95%) are affiliated with a fishermen's co-operative society, while the remaining 21.05% of fishermen are not registered members of any such cooperative society.

Types of fishing craft and gear used in fishing :

The majority of fishermen utilize tubes as fishing vessels for the purpose of deploying and gathering nets in river. The majority of the fishermen (86.84%) exclusively utilized gill nets with varying mesh sizes for fishing in the Lendi River. Conversely, a smaller proportion of fishermen (13.16%) employed both gill nets and cast nets to capture fish.

Conclusion :

The practice of fishing assumes a pivotal role in fostering the economic development of a nation. The enhancement of the fishing household's well-being is contingent upon the acquisition of financial resources. The primary factors contributing to the poverty encountered by fisherman families are substantial family sizes, inadequate availability of fishing nets, and an abundance of opportunities for alternate employment. The study reveals that the socio-economic circumstances of fishermen are undesirable. The current state of educational advancement is seen as unsatisfactory since it is regarded as an essential prerequisite for comprehensive development in combating social inequity. This is due to the essential role that education plays in providing individuals with economic and technical knowledge pertaining to their livelihoods.

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