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Socio-economic profile of women fish workers in Mumbai

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Abstract
Women play a crucial role in the fisheries sector and are actively engaged in the processing sector at fish landing centres and companies in the organized and unorganized sectors. A study was conducted to evaluate the socio-economic status of women fish workers in Mumbai, Maharashtra. A total of thirty women were interviewed and data were collected on various variables such as age, religion, education, marital status, number of children, type of house, drinking water and sanitation facility, monthly income, savings, monthly expenditure, etc. The study revealed that all women fish workers were Muslims and resided in rented accommodations, specifically shanties and slums in the Dana Bandar and Mankhurd areas of Mumbai. The majority of workers reported that they had migrated from the Murshidabad district in West Bengal around 20 years ago, primarily driven by the pursuit of income. The age group with the highest percentage was 41-50 years old (30%) and 43.33% of them had primary education whereas 66.66% were school dropouts. Household heads were men, 30% had three children and 26.67% had four children. The mean monthly income of women workers was ₹. 9,167 and the range was ₹. 8,147 to 10,187. In terms of expenditure, 73.33% had monthly household expenses ranging from ₹. 6,686 to 9,346. Only 23.33% of women workers had savings in the bank, while the majority (76.66%) had no savings. Women also reported occupational injuries, such as cut in the hands, shoulder pain and neck pain. Cut in hands resulted in reduced speed of peeling and reduced income. None of the women workers had received any training programmes in any field. The findings suggest a need for targeted interventions, including skill development programmes and alternative livelihoods.

Keywords: Socio-economics, women, fisheries

Introduction
The Ministry of Statistics and Programme Implementation, Government of India attaches considerable importance to coverage and quality aspects of statistics released in the country. In this context, studies on socio-economic status are of prime importance. Socio-economic status is a measure of an individual's or family's economic and social position in relation to others, based on various variables. Reza *et al*., (2015) [13]. Angela and Sharma (2023) [1], Kumari and Sharma (2022) [11] and Dhenuvakonda *et al*. (2019) [6] have also highlighted the importance of socio-economic studies.

In many coastal regions worldwide, including India, fishing stands as a cornerstone of livelihoods, providing sustenance for millions of individuals and families. The fisheries sector, a vital component of the Indian economy, employs over 28 million people, sustaining entire communities (CMFRI Census, 2021). Contrary to common perceptions of fishing as predominantly male-dominated, coastal areas reveal a more complex reality. Nearly half of the 3.52 million people residing in coastal villages are women (CMFRI Census, 2021). Katre *et al*., (2023) [10] have reported about participation of fisherwomen in inland fisheries. Yadav and Sharma (2022) [26] have performed gender analysis in ornamental fisheries. It is also stated that while men are commonly associated with direct fishing activities, women play indispensable roles in pre and post catch tasks, contributing to the sector's functionality and resilience. Despite their substantial presence and contributions, women in the Indian marine fisheries sector face enduring challenges rooted in social, cultural, and economic biases. Often confined to processing and marketing roles, women's diverse contributions remain undervalued and under reported Vipinkumar *et al*., (2013) [25]. Sharma (2004) [19] has highlighted the work of women in pre harvest, harvest and post-harvest activities. The evolution of the industry, marked by the rise of specialized processing centres, has altered the landscape of women's employment in coastal areas. While organized sectors witness shifts in demand for labour, the fate of women engaged in the unorganized shrimp peeling sector remains less documented (Gulati, 2023) [7].

This paper delves into the socioeconomic profile of women fish workers involved in shrimp peeling in Mumbai.

Materials and Methods
The present study was carried out in Mumbai, Maharashtra. Information was collected from thirty women fish workers. An interview schedule was made and information was collected on various variables such as age, religion, education, marital status, number of children, type of house, drinking water and sanitation facility, monthly income,

savings, monthly expenditure, etc. For the calculation of descriptive statistics (percentage, frequency, mean, standard deviation) MS Excel was used.

Results and Discussions
Social status
Women involvement
All fish workers were women. Sharma (2004) [19], Ashaletha *et al*., (2002) [2] have also reported similar results. Vipinkumar *et al*., (2013) [25] conducted a study in 3,288 marine fishing villages distributed among the nine maritime states and found that 89.6% of the workforce in shrimp and crab peeling consisted of women.

Religion
All the respondents who were interviewed reported they were Muslims. Ulman *et al*., (2008) [24] studied traditional fishing practices and socio-cultural activities of Koli community in Konkan region of India and reported that majority (95%) of the fisherwomen in the fishing business were Hindu.

Social status of the women workers
Women reported that they came to Mumbai from West Bengal about 10 to 30 years back. All were Muslims and spoke Bengali. They reported that they have migrated in search of livelihood and income to Mumbai from various districts of West Bengal like Murshidabad (40%), North 24 Parganas (23%), South 24 Parganas (20%), and Nadia (20%).
In a study done by Banerjee and Das (2021) [3] also reported that most of the migrants from West Bengal in Mumbai were from Murshidabad and Malda.

Daily life of women workers
Most women stayed in an area called as Dana Bundar and Mankhurd. Women who reside in Dana Bandar typically rise early, often between 3 and 4 am, to begin their day. By 5 to 6 am, they make their way to the workplace, some commuting on foot from Dana Bandar to fish market/landing centres while others residing in Mankhurd rely on the train system for transportation. During their workday, they take a single meal sourced from a nearby roadside stall located at fish market/landing centres.
Thereafter they work till 2/3/4 pm. Upon completing their work, they commute back to their homes. Once back, they engage in the preparation of the evening meal, taking on the responsibility of managing household chores themselves. In a study by Halim (2004) [8] it has been reported that women workers in shrimp processing plants in Bangladesh had to work 3 shifts a day also during the peak season. During the off-season, there was almost no work in the shrimp processing plants. The permanent workers worked from 9 a.m. to 9 p.m. and 6 days a week and could take leave for 12 days without pay. However, in the present study the work hours were different.

Education status
Majority of women workers (43.33%) had received primary education, while a notable percentage (33.33%) lacked formal schooling. Additionally, a significant portion

(23.33%) had completed secondary education. Sathiadhas *et al*., (2003) [14] also have reported that 60% women working in peeling activity had completed their primary education. It was reported that workers discontinued their schooling (66.66%).

Age group
Age group with the highest percentage was between 41-50 years (30%), followed by 31-40 years (26.66%). The 51-60 age group accounted for 23.33%, the 21-30 age group was 6.66% and the 11-20 age group accounts for 3.33% and 61-70 age group accounted for 10%. There were fewer young women. Sathiadhas *et al*., (2003) [14] conducted a study in Kerala and found that women working in peeling activity were of age 20 to 40 years.

Type of house
Most workers (73.33%) reported that they stayed in slum houses. A smaller percentage (26.66%) of workers reside in Shanties. All workers stayed in rented accommodations. In a study on women workers in dry fish processing in coastal Odisha by Singh *et al*., (2014) [22] it has been reported that majority (61.04%) were having kutcha houses and one third (32.56%) had semi pucca houses. Only 6.40% of them were in possession of pucca houses.

Number of children
Most of the workers had three (30%) and four children (26.67%). Additionally, 23.33% of workers had two children, 6.67% of workers had one child. While a smaller proportion, 6.67%, had five children. It was reported the majority of the children reside in their hometown with the rest of the family and attend school.

Marital status
Most women workers (70%) were married. A small percentage (23.33%) of workers were widowed. Only 6.66% were unmarried. Kanthimathi and Rekha (2017) [9] conducted a study in Tamil Nadu and found that 88% of fish processing women workers were married and 12% were unmarried.

Head of the family
Most women workers (70%) reported that the head of the family was a man and women headed families were 30%.

Drinking water and toilet facility
At home all had access to water through the municipality provided public tap. However, they did not have toilet facilities in the shanties and used public toilets or community toilets.

Type of family
A total of 13.33% of women workers resided in joint families. In contrast, the majority, accounting for 86.66%, were part of nuclear families. A separate study conducted by Bhargavi *et al*. in 2020 [4], focusing on the socio-economic status of the fisherwomen community in Vizianagaram district, Andhra Pradesh, India, discovered that a significant portion of the participants, 64.9%, lived in nuclear families, while the remaining 35.1% were part of joint families.

Table 1: Social status of women workers

S. No.	Variables	Category	Percentage
1.	Educational Status	Illiterate	33.33
		Primary	43.33
		Secondary	23.33
2.	School Dropout	Yes	66.66
		No	33.33
3.	Age	11 to 20 years	3.33
		21-30 years	6.66
		31-40 years	26.66
		41-50 years	30
		51-60 years	23.33
		61-70 years Mean age: 44.44	10
4.	Type of house	Shanties	26.66
		Slum House	73.33
5.	Number of children	No child	6.67
		One child	6.67
		Two children	23.33
		Three children	30
		Four children	26.66
		Five Children Mean: 2.86	6.67
6.	Marital status	Widow	23.33
		Married	6.66
		Unmarried	70
7.	Head of the family	Man	70
		Woman	30
8.	Drinking Water Facility	Municipality provided public tap	100
9.	Sanitation facility	Public/Community toilet	100
10.	Type of family	Joint family	13.33
		Nuclear family	86.66

Economic status
Monthly income
The present study observed that 67% of women workers earned a monthly income ranging from ₹8147 to ₹10187, placing them in the medium-income category. Meanwhile, 23% fell into the low-income category with earnings below ₹8147 per month. The women workers were employed by contractors who supplied them with raw materials and these contractors were responsible for compensating the workers. Sathiadhas and Biradar (2000) [15] conducted a study in Mumbai, revealing that the average monthly wage for a prawn-peeling worker was approximately ₹. 800. Similarly, Shyam et al. (2011) [20] conducted a study in Kerala and reported that the average annual income for women engaged in prawn peeling was Rs 9720.

Savings and loans
About 23.33% of workers had savings in the bank and remaining 76.66% did not. None of them had taken any loans. Bhuyan and Islam (2016) [5] studied the socio-economic conditions of the women fishing community in Bangladesh and reported that during the odd situation, they overcame the financial crisis by taking loans from somiti (45%), some of them took loans from NGO (12%) and relatives (10%).

Monthly expenditure
Maximum (73.33%) workers' families had a monthly household expenditure ranging from ₹. 6686 to ₹. 9346, placing them in the medium expenditure category.

Additionally, 23.33% of families had a monthly household expenditure below ₹. 6688, categorizing them as low-expenditure households. Similarly, Singh et al. (2014) [22] conducted research on women workers involved in fish processing. Their findings indicated that 46.9% of families had a daily household expenditure up to ₹ 300 and 43.8% of families had a daily expenditure ranging from ₹ 300 to ₹ 500, and 9.4% of families had a daily expenditure exceeding ₹ 500.

Household and communication assets
Most workers had fans and 70%, own mobile phones. Out of these, about half have smartphones, Apart from phones, 40%, also had televisions at home.
Singh et al. (2013) [21] researched fisherwomen engaged in fish drying activity in Kerala and reported that 10% had television in their houses. Only one person had a land phone, all others had mobile.

Table 2: Economic status of women workers

S. No.	Characters	Category	Percentage	Mean
1.	Monthly income	Below ₹. 8,147	23	Mean income: ₹. 9,167
		₹. 8,147 to ₹. 10,187	67	
		Higher than ₹. 10,187	10	
2.	Money Savings	Yes	23.33	
		No	76.66	
3.	Loan	Yes	0	
		No	100	
4.	Monthly Expenditure	Below ₹. 6688	23.33	Mean monthly expenditure: ₹. 8016.6
		₹. 6688 to ₹. 9346	73.33	
		Higher than ₹. 9346	3.33	
5.	Household and communication assets	Fan at home	90	
		Mobile phone	70	
		Smartphone	33.33	
		TV at home	40	
		Radio at home	10	

Women workers also reported occupational injuries, such as cut in the hands, shoulder pain and neck pain. Cut in hands resulted in reduced speed of peeling and reduced income. Prusty and Sharma (2023) [12] have studied the occupational hazards of fishers and Sharma et al. (2023) [16] studied the occupational hazards of inland fishers. Sharma & Sethulakshmi (2019) [17] assessed the occupational hazards of fishers of Kerala. A study by Sharma (2002) [18] have assessed the ergonomic problems of women prawn peelers and the results of the present study are similar.
The present study showed that women workers had an average monthly income of ₹. 9167, which seems to be higher that monthly earnings of daily laborers in their villages in West Bengal. Talwar (2018) [23]. As a result, their socio-economic status in Mumbai is relatively better than the villages in West Bengal which is the primary motivation for their migration from West Bengal to Mumbai. However, it is less than national average annual income according to the 2019 Periodic Labour Force Survey (PLFS).

Conclusion
In conclusion, the findings presented here underscore the intricate socio-economic challenges and circumstances faced by this specific group within the larger fishing

community. It is evident that the women workers form an essential part of fisheries workforce, contributing significantly to the fisheries sector. Contrary to traditional gender stereotypes associated with fishing, this study highlights the substantial presence and indispensable contributions of women in the sector.

The study reveals the unique socio-economic profile of these women workers. Most of them migrated from West Bengal in search of livelihood opportunities, reflecting the economic disparities and challenges faced. Despite their important roles, many live in slum houses or shanties, reflecting broader socio-economic scenarios prevalent in urban settings. Education wise, a significant proportion of these women workers have received only primary education, reflecting limited opportunities for skill development and higher education. Similarly, their household structures predominantly consist of nuclear families, with women often taking on significant responsibilities. Economically, these women earn a modest income. The monthly income levels reported in the study, while supporting basic needs, reflect the challenges associated with informal labour. Furthermore, the study highlights occupational hazards faced by these women, such as injuries from repetitive tasks like peeling, which can impact their productivity and income. These risks, coupled with limited access to healthcare and social security, underscore the vulnerability of this workforce.

In conclusion, this socio-economic study provides insights into the lives and challenges faced by women fish workers in Mumbai. Addressing the complex interplay of economic, social, and cultural factors influencing their livelihoods is crucial for promoting gender equity and inclusive development within the fisheries sector. Further research and targeted policy interventions are needed to uplift and empower these women, recognizing their critical contributions to the economy and society.

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