

Socio-Economic and Health Assessment of Fisherwomen in Bhimavaram, West Godavari District, Andhra Pradesh: India

Usha Rani K^{1*}, Ismal T Md², Padmaja B³

^{1*}Lecturer in Zoology, DNR (A) College, Bhimavaram, W, G, (DT), AP, India.
 ²Samagra Siksha, Vijayawada, A.P, India.
 ³Lecturer in Zoology, DNR (A) College, Bhimavaram, W, G, (DT), AP, India.

Corresponding Email: ^{1*}usha.sadhika@gmail.com

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Abstract: The study aims to comprehensively assess the socioeconomic and health status of fisherwomen residing in Bhimavaram, a locale with a profound connection to the fishing industry. Historically, fisherwomen have played a pivotal role in this sector, yet they confront multifarious challenges and are often marginalized within India's social fabric (Gadagkar, 1992). Bhimavaram, situated in Andhra Pradesh, boasts an advantageous position within the fishing sector, courtesy of abundant water resources and favorable climatic conditions, fostering diverse cultural practices. The fisheries industry holds immense significance in the state's economy, particularly in enhancing the socioeconomic well-being of small-scale fisherfolk. This research entails interviews with 150 individuals to gain insights into the current circumstances and future prospects of fisherwomen in Bhimavaram. Additionally, it seeks to evaluate their present and anticipated economic conditions. The findings from this study will not only shed light on the challenges faced by fisherwomen but also provide valuable data for policymakers and stakeholders, facilitating targeted interventions and support to uplift this community and enhance their overall well-being.

Keywords: Fisherwomen, Socio-Economic, Health Issues, Bhimavaram.

1. INTRODUCTION

According to Rao et al. (2016), the fisheries sector in India plays a pivotal role in the livelihoods of over 12 million individuals directly engaged in fishing activities, while an additional 60 million people are exclusively dependent on fisheries for their livelihoods. Every sector of the population needs fishing as it provides an accessible source of protein and vital minerals. For their survival, work, and income, a significant proportion of the population



relies on fish resources, encompassing both marine and inland sources. A strong source of income for 14.49 million people in the nation, the fishing industry makes a substantial contribution to the national economy. Currently, 5.34% of agricultural and related activities come from agriculture and aquaculture, and 1.04% of the country's GDP comes from fisheries.

In India, thousands of people have relied on the fish trade as their primary source of income, with women making up the majority of fish vendors. Fisherwomen vendors must travel with their goods to markets, in contrast to men, whose job is primarily retracted to the sea, river, or lake. They are required to work with both the general population and the law. They frequently have to overcome inherited preconceptions and other issues as a result of this procedure.Beyond fulfilling household duties from dawn to night, fisherwomen actively participate in diverse activities, including retailing, auctioning, sorting, grading, curing and drying, prawn peeling, seaweed harvesting, as well as hand-braiding and net maintenance."Platteau (1984) underscores the importance of incorporating both physical and socio-economic information into fisheries management policies to address and mitigate the adverse impacts on fishing. Similarly, Mahon and McConney (2004) propose a crucial shift in focus from technology to people as a key element in effective fisheries management."

The socioeconomic status of the households heavily influences the involvement of women in fishing. Overall, women in various fishing villages and groups suffer from poor living conditions. Long work hours, low pay relative to males, and the responsibility of maintaining the home were all part of this. Despite the difficulties they confront, fisherwomen have shown a desire to better their status in the fishing industry and give themselves more authority by attending trainings and learning new skills.

Fisherwomen in Andhra Pradesh

In fishing communities across the state of Andhra Pradesh, women are actively involved in diverse commercial activities, including fish drying, curing, and sales. In many fishing towns, hand braiding fishing nets is a significant activity as well. With the opening of shrimp processing facilities in the East Godavari and Visakhapatnam districts in recent years, more women are finding employment in the shrimp processing sector. Within the East Godavari District of Andhra Pradesh, women find employment at shrimp farms for a period of 4 to 5 months annually, where they undertake various tasks such as pond construction, seed collection and segregation, pond de-weeding, and hand-picking shrimp during harvest. In the capture of marine fish, women are not involved.

Women contribute significantly to the fisheries sector through direct engagement in tasks like cleaning, fish trading, value-added product creation, and fish curing. Ashalatha (2002) emphasizes their indirect roles in decision-making, financial management, and family welfare. Despite these multifaceted contributions, fisherwomen often face conditions of deprivation, impacting their overall quality of life."

The socio-economic status of the fisherwomen community in the West Godavari district has been relatively underexplored, despite their substantial contributions to the fishery sector.



Limited research has been conducted to date, highlighting a gap in understanding the specific challenges and opportunities faced by this vital demographic."

Fisherwomen play a significant role in general livelihood of fishermen family. They not only maintain home and daily activities however additionally make a contribution appreciably in the direction of the maximum of fisheries and aquaculture activities. Thus position of women, and contribution in the direction of the improvement of the society isn't scanty, at all (Samanta, R.K. (ED). 2005). The present study wants to focus on the socio-economic and health conditions of Fisherwomen in Bhimavaram, west Godavari District, AP, a place where fishing and culture fisheries is on a large scale

Objectives of study

- 1. To study socio- economic conditions of fisherwomen in Bhimavaram, west Godavari, District,AP
- 2. To explorate the conditions and role of fisher women in study area.
- 3. Totrace the health issues faced by fisherwomen in the focused areas.

2. MATERIALS AND METHODS

Study Area

The research took place in Bhimavaram, strategically chosen due to its concentration of the highest number of fisherwomen residents. This locale was selected as the study area given its significant and widespread engagement, both direct and indirect, in fishing activities. Bhimavaram stands out as a focal point for understanding the intricate dynamics of the fisherwomen community within the broader context of the fishing industry.

Data Collection Methods

Primary data pertaining to socio-economic and demographic factors was systematically gathered in the designated areas. A total of 150 fisherwomen were selected using an easy random sampling technique for both questionnaire administration and interviews within the chosen regions. This area was specifically chosen due to its high reliance on fishing-related occupations, with a considerable number of individuals engaged in fish dealing, selling both fresh and dry fish. Throughout the survey period, 150 fisherwomen were individually interviewed, employing a predetermined structured questionnaire to elicit the necessary information. The interviews aimed to engage the fisherwomen in discussions about their backgrounds, beliefs, and the daily challenges they encounter.

Data Analysis

The statistics required for the evaluation are collected with the help of established questionnaire. hundred fifty Aggregate of a one respondents have been interviewed primarily based totally on the predetermined questions. The most important places taken into consideration for carrying out the surveys are fish markets, fish capture areas and women selling in streets roaming. The statistics furnished via way of means of the respondents have been keenly discovered and recorded all through the survey.



Few of the favours centered are analysed beneath for a higher evaluation and interpretation of the statistics collected.

3. RESULTS AND DISCUSSIONS

The analysis on the socio-economic condition of the fisherwomen in Bhimavaram, west Godavari (DT), Ap is given below:

Family Structure

S.no	Nature of Family	Respondents	Percentage
1	Joint family	38	25.3
2	Nuclear Family	112	74.6

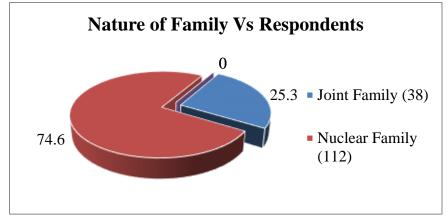


Table-1 Showing nature of family structure

Graph-1 Representingdifferent family structure

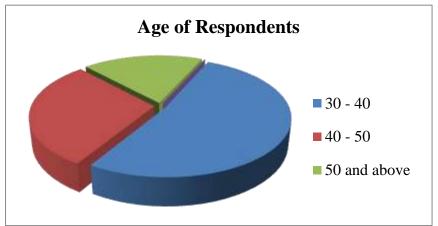
Family size stands as a crucial socio-economic indicator, exerting influence on household income, food consumption, and overall socio-economic well-being. The baseline survey indicates a prevailing larger family size, with an average of 5 members per household.. In this study we have come across 112 families are small sized, and thirty eight families are still living a joint family life mode. (Table 1).The overwhelming majority of fisherwomen, comprising 90.00%, were part of nuclear families, while the remaining 10.00% belonged to joint families (Sriharsha, 2022). The observation reveals a declining trend in the structure of joint families, signaling a shift toward smaller family units. This transformation is attributed to the escalating cost of living coupled with irregular income, leading to the fragmentation of joint families. Additionally, some joint families are transitioning into nuclear setups, driven by the pursuit of alternative employment opportunities. This aligns with findings by Kumaran et al. (2021) and is consistent with Mary et al.'s (2015) report on mussel fishery in Kanyakumari district, where 52% offishermen families had 2–4 members, followed by 4–6 members (41%), 6–8 members (4.4%), and 8–10 members (2%). The present study concurs with these established patterns



Age

S.no	Characters	Respondents	Percentage
1	30-40	78	52
2	40-50	44	29.3
3	50 and above	28	18.6

Table-2 representing age of the respondents in selected areas



Graph-2 Representing age of the respondents in selected area

The study indicates that a substantial portion of the respondents, constituting 52%, falls within the age bracket of 30 to 40 years. Furthermore, 29.3% of fisherwomen are situated in the 40-50 age group, while 18.6% are aged above 50, as illustrated in Figure 2. This distribution suggests a dominance of middle-aged individuals within the fisherwomen communities. Nevertheless, all age groups actively participate in fishing-related activities. Mary John's (2014) findings echo this pattern, noting that a majority of fishermen in various regions of Kerala belonged to the 30-40 age group, followed by the 40-50 age group, with a minimal representation from the elderly.

Sheikh and Goswami's (2013) report aligns with the current study, revealing that 52.5% of respondents were aged between 31 and 50 years, followed by 25% in the 18–30 age group, while the remaining were above 50. These results are consistent with Bhuiyan et al. (2018), who observed a prevalence of middle-aged fisherwomen in their study. Kalita et al. (2015) similarly found that 49.3% of respondents from the fishermen community in Beki River, Barpeta, Assam, fell between 31 and 40 years, and 23.91% were aged between 41 and 50 year

Educational Status

S.no	Qualification	Respondents	Percentage
1	Illiterate	72	48
2	Primary education	43	28.6

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3	Secondary education	25	16.6
4	Inter	10	6.6
5	Degree and above	0	0

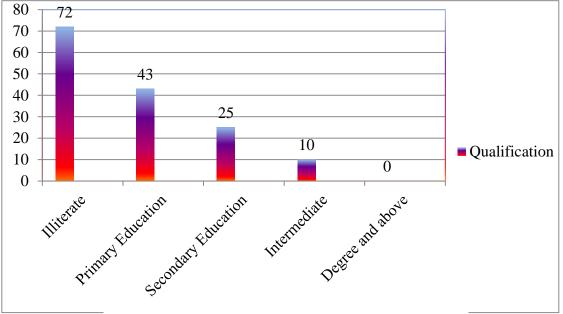


Table-3 Educational status of fisherwomen

Graph-3 Representing educational status of fisherwomen

Among the fisherwomen surveyed, a significant portion (48%) were found to be illiterate. Approximately 28% of the respondents had received primary school education, while 16% had completed high school. Only 6% had successfully completed an intermediate program. These findings underscore a predominant trend of low education levels among the majority of women. Specifically, 88.1% of the respondents were classified as illiterate, leaving only 11.9% who had attained some level of formal education. Within this educated subset, 40.9% were able to read and write, aligning with similar observations made by Kanchi Bhargav et al. (2020).

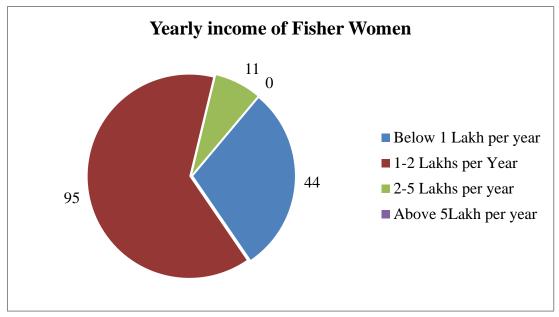
Comparable patterns were noted in a study by Mohinigadhia et al. (1999), where 76.5% of fishers were identified as illiterates, followed by those with primary (20%), secondary (2.5%), and college-level education (6.9%). The reasons behind this educational disparity may stem from factors such as low socioeconomic status, early marriage due to limited awareness, and gender bias within families. In many cases, girls might engage in household responsibilities or childcare, limiting their access to education. Additionally, factors like a lack of awareness, motivation, and family support could contribute to the prevalent illiteracy among the majority of fisherwomen.



Family Income

S.No	Annual Income	Respondents	Percentage
1	Below 1 lakh per year	44	29.3
2	1-2 lakhs per year	95	63.3
3	2-5 lakhs per year	11	7.3
4	Above 5lakh per year	Nil	Nil

Table-4 Annual income of fisher women



Graph-4 Representation of Annual income of fisher women

The annual income of fisherwomen was segmented into four categories: low (up to Rs. 1 lakh per year), middle (Rs. 1-2 lakhs per year), next high (Rs. 2-5 lakhs per year), and the highest category (above Rs. 5 lakhs per year). A significant proportion of respondents (63.3%) fell within the middle-income group, with lower representation in the low and next high-income groups. Notably, none of them fell into the highest category (above Rs. 5 lakhs per year), as depicted in Figure 4. This distribution is consistent with findings from Sah et al. (2018), where the majority of fisherwomen were classified in the low-income category.

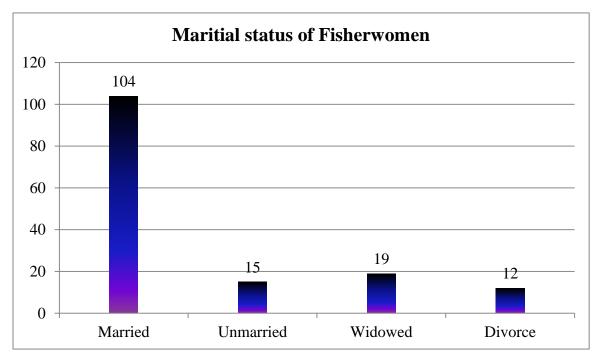
Comparable economic patterns were observed in the study by Mary et al. (2015), focusing on mussel fishery in Kanyakumari district, Tamil Nadu. Their research indicated that 55% of fisher folks had an income ranging from Rs. 5,000 to 15,000 per month, while 24% reported a monthly income of Rs. 15,000 to 25,000. These findings highlight the economic realities of fisherwomen in different regions, emphasizing the prevalence of modest income levels within this occupational group



Marital Status

S.no	Marital status	Respondents	Percentage
1	Married	104	69.3
2	Unmarried	15	10
3	Widowed	19	12.6
4	Divorce	12	8

 Table-5 Representation of Marital status



Graph-5 Marital status of respondents in west Godavari

Analysis of Table 5 indicates that the majority (69.3%) of women in the study were married, while 10% were unmarried, and widows constituted around 12.6%, followed by divorcees at 8%. Notably, a significant proportion of women belonged to the middle and young age categories.

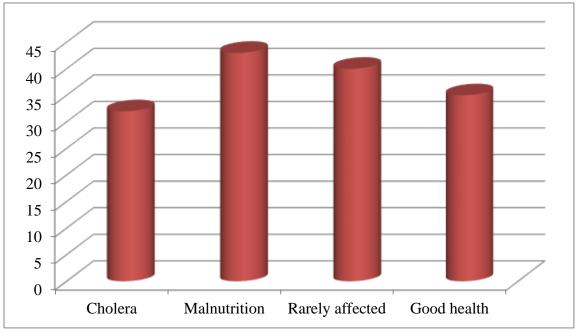
The correlation between marital status and various demographic factors is a crucial indicator of the quality of life for fisherwomen. This holds particular significance in traditional fishermen communities where women play a pivotal role in family management. Typically, due to lower socio-economic standards and limited awareness, women in both urban and rural fisher communities often enter into marriage early, commonly around the age of 18. Consequently, all respondents in this study fall under the married category. These findings align with research by Kalita et al. (2015), where a majority of women in their study were also reported as married. This underscores the prevalent societal norms and early marriage practices within fisher communities.



The marital status of the respondents reveals that majority group of 65.2 percent are married and the remaining 14.7 percent are widows, 10.2 percent are divorced and 10.0 percent are unmarried which also strengthens our finding,

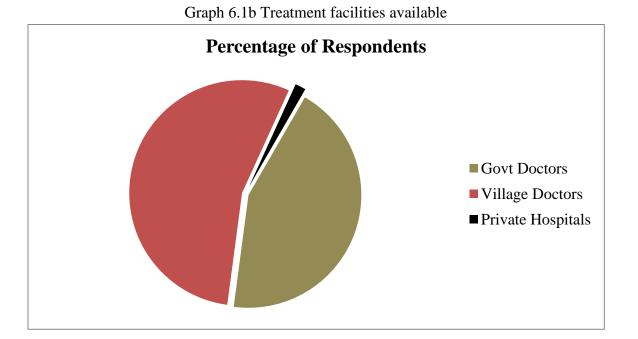
S.No.	Health Aspects Related		No of Respondents	Percentage
1	Diseases affected frequently	Cholera	32	21.3
		Malnutrition	43	28.6
		Rarely affected	40	26.6
		Good health condition	35	23.3
	Treatment faclilties	Govt doctors	60	40
2		Village doctors	75	50
		Private hospitals	15	10
2	Awareness towards govt	Yes	90	60
3	health care facilities	No	60	40

Table 6 Health status of fisherwomen

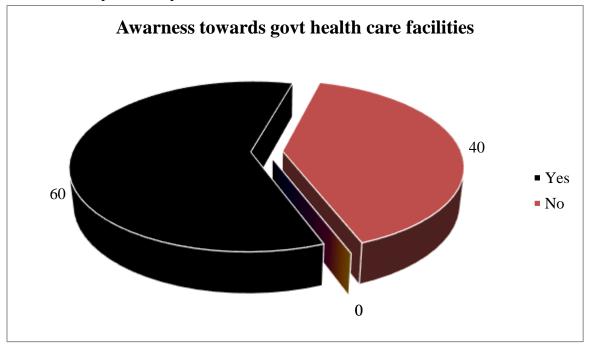


Graph 6.1a Diseases affected frequently to fisherwomen





Graph 6.1c Representation of Awareness about health care facilities



The maintenance of a balanced diet and access to nutritional food are crucial factors influencing overall health. Among fisherwomen in India, malnutrition and dietary imbalances are prevalent concerns. In our survey, it was found that 77% of the respondents reported health problems, while only 23% claimed to have no health issues. This outcome can be



attributed to the demanding daily tasks undertaken by fisherwomen, who carry loads of fish from lakes or water bodies to the nearest markets. Carrying fish, often weighing between 35-40 kgs, on their headsputs significant strain on their bodies, particularly the back. Consequently, fisherwomen are susceptible to health issues such as diarrhoea and fever. Notably, the survey revealed common health disorders among fisherwomen in the area, including deficiencies in vitamins A and B complex. Additionally, prevalent ailments such as depression, hypertension, and diabetes further contribute to the health challenges faced by this community. These study findings were more or less similar to the Kabir et al. (2012) and Ali et al. (2009).

Table 6 shows that, despite the fact that they have access to some government health programmes and services, 50% of them rely on local doctors and just 40% go to government doctors. And only 10% of people can afford to receive medical care from private practitioners. Since these services are free and the doctors are highly competent, the government should take the effort to inform the public about how to use them. However, since they have to pay extra to the village doctors for their care, this saves them money.

Only 60% of the participants in our study were aware of the central and state governments' health programmes and services, and roughly 40% were completely ignorant of the subject. Therefore, government authorities should plan ongoing efforts to inform fishers about the services offered by the government. They will no longer have to spend as much money on their health problems, which puts them in poverty. They ought to be organised by government representatives to inform the fishermen of the services the government has given for them. This will help them avoid going into debt to cover their enormous medical expenses, which makes them extremely poor.

4. CONCLUSION

This study advocates for a holistic approach to enhance the livelihoods of fisherwomen in Bhimavaram. By addressing issues of education, healthcare, income, and living conditions, and by promoting sustainable development and fisheries management, governments and NGOs can foster positive change and empower these disadvantaged communities to lead healthier, more secure lives. Ultimately, such initiatives have the potential to not only alleviate the immediate challenges but also contribute to the long-term well-being and resilience of the entire community.

5. REFERENCES

- Ali, H., Azad, M. A. K., Anisuzzaman, M., Chowdhury, M. M. R., Hoque, M., &Sharful, M. I. (2009). Livelihood status of the fish farmers in some selected areas of Tarakandaupazila of Mymensingh district. Journal of Agroforestry and Environment, 3(2), 85-89.
- 2. Ashaletha S, Ramachandran C, Immanuel S, Diwan AD, Sathiadhas R. Changing Roles of Fisherwomen of India: Issues and Perspectives. In Proceedings of International Conference on Women in Fisheries, Mumbai, 2002



- 3. Bhuiyan NAB, Kunda M, Islam MA, Rashid AHA. Socio-economic conditions of fishermen at JaintiapurUpazila in Sylhet. J. Sylhet Agril. Univ. 2018; 5(2), 203-211.
- 4. Chandra Sekhar Rao.I& SOBHASRI, T. Socio-Economic Status of Fisher Women in Srikakulam District, AP. IJCRT | Volume 10, Issue 6, June 2022 | ISSN: 2320-2882
- 5. Dr. J Mary John and Aji Diwakar (2014). Life and Work of Fish Vending Women in South Kerala: Changes and Challenges During the Past 35 Years.
- 6. Gadagkar, R.S. (1992). Women in Indian Fisheries. Proceedings of the Workshop on Women in Indian Fisheries, 27 May 1990. Special publication NO-8, Asian Fisheries Society, Indian Branch, Mangalore, India. 51pp.
- 7. Gadde Sriharsha, Dr. Annapurna Kalal, Dr. KV Basavakumar, and Dr. Shobha Nagnur. Socio-economic profile and constraints faced by fisherwomen in Guntur district of Andhra Pradesh. The Pharma Innovation Journal, 2022; SP-11(8), 417-421.
- 8. Kabir, K. M. R., Adhikary, R. K., Hossain, M. B., & Minar, M. H. (2012). Livelihood Status of Fishermen of the Old Brahmaputra River, Bangladesh. World Applied Sciences Journal, 16, 869-873.
- 9. Kalita GJ, Sarma PK, Goswami P, Rout S (2015). Socioeconomic status of fishermen and different fishing gear used in Beki River, Barpeta, Assam. Journal of Entomology and Zoology Studies, 3(1), 193–198.
- 10. Kumaran M, Anand RP, Vijayakumar S, Vimala DD, Jayanthi M, et al. Socioeconomics and livelihood status of coastal fishers in the Puducherry Union territory of India: An exploratory study. Indian Journal of Fisheries, 2021; 68(1), 82-91
- 11. Mahon, R. and McConney, P.A. (Eds) (2004). Management of Large Pelagic Fisheries in CARICOM Countries. FAO Fisheries Technical Paper. No. 464. Food and Agriculture Organization of the United Nations, Rome.
- 12. Mary MD, Kailasam S, Jansi M, Patterson J (2015). Socioeconomic status of fisher folks engaged in mussel fishery at Kanyakumari district of Tamil Nadu, India. Journal of Marine Science: Research and Development, 5, 165
- 13. Mohinigadhia B, Parimal P, Gadhia PK (1999). Socioeconomic study of fisher community and fisheries status around Kakrapar atomic station. Fishing Chimes, 19(9), 49–51.
- 14. Platteau, J.P. (1984). The drive towards mechanization of small-scale fisheries in Kerala: A study of the transformation process of traditional village societies. Economic and Political Weekly, 19, 65-103.
- 15. Rao GS, Sathianandan TV, Kuriakose S, Mini KG, Najmudeen TM, Jayasankar J, Mathew WT (2016). Demographic and socio-economic changes in the coastal fishing community of India. Indian Journal of Fisheries, 63(4), 1–9.
- 16. Shahjahan M, Miah MI, Haque MM (2001). Present status of fisheries in the Jamuna River. Pakistan Journal of Biological Sciences, 4, 1173–1176
- 17. Sheikh S, Goswami MM (2013). Socio-economic condition of fishers of Chandakhola wetland, Dhubri, Assam, India. Bulletin of Environment, Pharmacology, and Life Sciences, 3(1), 257–261.