

# Socioeconomic and Nutrition Profile of Fishermen: A Review

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## Abstract

The fishing industry is one of the fastest growing sectors in India. While fish productivity has risen, it has had no effect on the fishing industry's economic situation. Fisheries' daily income is quite modest, and it fluctuates according to the amount of fish they gather. Because fishermen provide a smaller profit margin and this activity does not last throughout the year, they also work in other occupations. According to many studies, students' educational and economic circumstances were less than ideal. Poverty among fisherman is mostly caused by large families, a lack of regularity in another occupation, and a lack of personal fishing gear. The vast majority of them were homeless, living in mud huts or kutcha houses, and were dependent on drugs or alcohol. Some research has found reduced iron absorption, protein and micronutrient deficits, and infections in fisherman, all of which contribute to their poor nutritional state. Another finding of the study was that fishermen are a distinct group with a number of undesirable lifestyle characteristics that make them particularly susceptible to injuries, skin and respiratory problems and various diseases such as filariasis. According to the research, it's clear that improving the occupational lifestyle of fishermen requires a focus on nutrition and health promotion activities, as well as addressing educational concerns.

**Keywords:** Fishermen, fishing communities, Socioeconomic Study.

### Introduction

Many industrialised and developing countries, including India, rely on the fishing and fish processing sectors for income and jobs. India has the world's greatest variety of livelihood activities, although agriculture and its associated sectors, including fisheries, employ the vast majority of the country's population. But even though modern industrialization and urbanisation have reduced farming's share of national income, the fisheries sector has grown to roughly 5.23% between 2012-17 (Kumar et al., 2018). Despite this. Generally speaking, there are two types of fishing: inland to meet local needs, and marine, which earns foreign exchange while also providing nutrition for large populations (Majumder, 2018). India is now the world's second-largest producer of fish, churning out 13.7 million metric tonnes in 2018-19, including output from the country's inland waters (65 percent).

Although fish production has risen throughout time, this has had little effect on fishermen's livelihoods. Fishermen's families make up the majority of those living below the poverty line (BPL), with an average family size of little over five people. According to numerous studies, they have an inadequate level of education and economic well-being. The primary causes of poverty in fishing towns are a lack of alternative employment, a shortage of fishing gear, and other infrastructures. It's a dreadful place to live, and they're housed in substandard facilities. Since fishing has a low profit margin and cannot provide year-round employment, someAlthough fish production has risen throughout time, this has had little effect on fishermen's livelihoods. Fishermen's families make up the majority of those living below the poverty line (BPL), with an average family size of little over five people. According to numerous studies, they have an inadequate level of education and economic well-being. The primary causes of poverty in fishing towns are a lack of alternative employment, a shortage of fishing gear, and other infrastructures. It's a dreadful place to live, and they're housed in substandard facilities. Since fishing has a low profit margin and cannot provide year-round employment, some fishermen also work other, more physically demanding activities (Kalita and Deka, 2015; Sheikh and Goswami, 2013; Mulla and Chavan, 2016). We have attempted in this research to investigate the socioeconomic, nutritional, and health status of Indian fishermen and their families in relation to the livelihood state of fishing. We do this by looking at empirical studies from all around India.



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**Anthology : The Research****Objectives**

1. To study the dietary pattern of fishermen
2. To study the living condition of the community
3. To know the health implications .
4. To know about their various addiction..

**Socio-demographic Profile Age**

In fish catching, people of all ages are participating. According to Jeeva et al. (2009), the majority of fisherman they questioned were in their mid- to late-50s (31-40 years old). 100 fishermen from the Chandakhola Wetland in Dhubri, Assam were interviewed by Sheikh and Goswami (2013), who discovered that the majority (52.5 percent) were between the ages of 31 and 50. Another 25 percent belonged to the younger 18-30 age bracket, while the remaining 50 percent were beyond the age of 50. Most of the fisherman polled by Saxena et al. (2014) were aged 40-54, according to their findings.

Additionally, Panigrahi and Bakshi (2014) conducted research on a group of fishermen and discovered that 50.83 percent of them were in the 19-40 age range. They accounted for another 26.25 percent of those surveyed who were between the ages of 41 and 60, respectively, while just 8.75 percent and 14.16 percent were polled fisherman between the ages of 12 and 18. The fishermen's age ranges from 21 to 60+ years, according to Kalita and Deka (2015). The fishermen were divided into four age categories based on the results of the study: 21 to 30 years old, 31 to 40 years old, 41 to 50 years old, and over 50 years old. Researchers discovered that half of the fisherman they polled fell into one of two age categories: those under 40 and those over 40. Kumbhar (2017) discovered that the majority of fisherman in the Ekrukh water reservoir in Maharashtra's North Solapur Tahsil were between the ages of 35 and 54.

As a result, it's safe to say that fisherman span the age spectrum, with the middle-aged making up the majority of the population. The fishing community's age demographics will differ from one to the next.

**Education**

According to the CMFRI Census (2010), 42.2% of fishermen and their families in India are illiterate. Of the remaining 57.8%, 29.9% had only completed primary school. Only 24.1% of residents had completed high school, and only 4.7% had a degree or higher in these communities. The educational attainment of men and women was nearly equal, with women having a little advantage. According to a survey conducted by Devi et al. (2012), 34% of fisherman had completed at least middle school, with a similar percentage having completed high school. According to Sheikh and Goswami (2013), 63% of fisherman are illiterate. About half of the remaining 37% had not gone on to higher education after the fourth grade.

According to Shankar (2010), the level of education among fisherman varied considerably. The illiteracy rate was 13.33 percent, although nearly half of the population (46.66 percent) had at least primary school education, according to Shankar. Only 26% and 2.6% of those polled had completed elementary or high school, respectively. The illiteracy rate among fishermen and their families was likewise high, according to Kadam (2015) (54.73 percent). Only 45.26 percent of the population was educated beyond middle school, with over half (53.48 percent) having only an elementary education. It is concluded that illiteracy is widespread among most fishing communities across different parts of India. Of the rest who are literate, most aren't educated beyond middle schooling which is a cause of concern for the society as well.

**Income**

Researchers have reported alarming levels of poverty among fishermen. The median income provided by Panigrahi and Bakshi (2014) was comparable. Nearly half of the fisherman who took part said their family's monthly income ranged from INR 2500 to 5,000.

Fishing revenue was shown to be different for young versus older fisherman according to Kadam (2015). Between 500 and 1000 INR was earned by those in their 20s and 30s, while those in their 50s and 60s made 1500 to 4000 INR a month. None of their earnings are sufficient to provide for a healthy family or even one's own needs. Fishermen in coastal communities in Andhra Pradesh were surveyed by Jacob and Rao (2016), who found that 90% of them lived

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below the poverty line. Additionally, the community had limited or no access to banking services, with households earning between 2500 and 3000 INR per month on average. Because fishing couldn't provide year-round work, fishermen often worked in agriculture and salt production to supplement their income

**Women Participants**

Women Fishermen Play A Crucial Role In Their Families And Communities. Women Participate In A Wide Range Of Fishing Tasks, From Fish Handling To Market Retailing And Tool Manufacturing To Fish Harvesting. The Number Of Indian Women Working In The Fish Processing Industry Is Estimated To Be Around 15,000. (Yadav And Juneja, 2000). Female Fish Collectors Were Also Seen Early In The Morning Bringing In Fresh Fish, Which They Later Sold In The Market Or On The Street. Some Of The Women Working At The Landing Locations Were Domestic Helpers.

**Living conditions**

According to Nayak and Mishra (2008), 90% of fishermen and their families lived in mud and straw huts in the Indian Ocean. Few people lived in pucca houses, and none of them had a semi-pucca house as their primary residence. None of the fishermen studied by Sheikh and Goswami (2013) owned a pucca house, according to the researchers. More than 8 out of 10 of them lived in mud-tiled kucchis, while the remaining 4 out of 10 were in semi-puccas. In addition, the scientists discovered appalling hygienic conditions in these residences. Nearly half (45 percent) of the fishing population in Tinsukia area of Assam lived in kuccha houses with tin roofs, according to a study by Kalita and Deka (2015). Half of the people lived in straw huts, 18% in semi-pucca houses with tin roofs, and 10% in pucca houses with concrete roofing and brick walls..

**Family Type And Size**

According To Shankar (2010), Mixed Families Were Marginally More Popular Than Nuclear Families Among The Fishermen Questioned By The Researcher. Only 42.66 Percent Of Interviewees Said They Lived In A Nuclear Family, Compared To The 57.33 Percent Who Said They Had A Combined Family. More Over Two-Thirds Of Those Surveyed Said They Were Part Of A Household With Five Or More People, According To Shankar's Research. According To Kalita And Deka (2015), 75% Of Participating Fisherman Said They Lived In A Household Of Five Or More People, While Only 25% Said They Lived In A Family Of Four Or Less People. Seventy-Five Percent Of Respondents Said They Lived With A Family Of Five Or More, With 40 Percent Having Five Or Less Individuals And 35 Percent Having Six Or More. Such Trends Of Family Size Are Confirmed By Kumar Et Al. (2018). According To The Results Of Their Poll, The Following Is The Distribution Of Family Sizes: For Example, 18.75% Of People Lived In Families With Two To Four Members, 37.5% Lived In Families With Five To Six Members, And 43.75% Of People Lived With Seven Or More Members.

**Religion and Caste**

Census data from the CMFRI (2010) shows that fishing communities have a religious demography that is roughly similar to the overall national religious distribution, with about three-fourths of fishermen being Hindus. However, among fishermen, we discover a higher proportion of Christians (15.21 percent) and a lower proportion of Muslims (9.28 percent). In Kerala, the majority of the population are Christians (42,7%). Fishermen who are Hindu or Muslim make about 29% and 28.3 percent of the total population, respectively. Early Christian missionaries from sea channels settled in coastal locations, which may explain Kerala's predominance of Christian fishermen and their higher national proportion. The spread of religion differs from one location to the next. For example, a survey of fisherman conducted by Panigrahi and Bakshi (2014) revealed 58.75 percent Hindus and 37.91 percent Muslims. The caste of fisherman was also reported in the CMFRI census. There were 166,000 marine fishermen households in India who were from the schedule castes/tribes. The majority of the SC/ST marine fishing households were found in the coastal villages of Orissa and West Bengal. In Puducherry, Andhra Pradesh, and Kerala, the share of SC/ST homes was extremely low, and according to the research, Goa had no SC/ST fishing households.

**Anthology : The Research****Types And Ownership Of Fishing Gears**

Fishing gear types and patterns of ownership are crucial indications of a fishing community's economic well-being. Traditional fisherman construct their own fishing gear, whereas commercial fishers utilise nets and mechanised gear, which increases their catch but depletes the fishery's water supply. Traditional fishermen make their own fishing gear. There were 72,559 (37.3 percent) mechanised boats in the overall number of 194,490 boats surveyed by the CMFRI in 2010. Most gears (36.7%) were motorised, while only 26% of gears (including plank boats (54%), catamaran (25%) and dugout canoes) were non-powered (9.8%).

Only 16 percent of the fishermen surveyed by Prabhavathi and Krishna (2017) reported owning their vessel. About a quarter (25%) shared ownership of their trade, while about a third (59 percent) rent it. As a result, ownership patterns vary from fishing community to fishing community. According to Sharma et al. (2010), different fishing communities use different types of fishing gear. Fishing families choose gill nets because of the lower cost. To catch vast amounts of fish on a large scale, fishing gear like drag nets, scoop nets, and hook lines is used. On the Narmada River's left bank, Sharma et al. discovered a net distribution of 110 percent scoop nets, 6 percent cast nets, 53 percent gill nets, 13 percent hook lines, and 18 percent drag nets. Scoop nets made up 17 percent of the right bank's catch, cast nets 3 percent, gill nets 34 percent, hook lines 14 percent, and drag nets 32 percent.

**Alcohol And Tobacco Addiction**

825 fishermen from Udupi Taluk in Karnataka were surveyed by Rane et al. (2016), who found that 64.2% of them were tobacco addicts and 45.6% were alcoholics. Tobacco use was detected in 35% of people, and alcohol use was identified in 28% of people. According to Prabhavathi and Krishna (2017), 86% of the fisherman were alcohol or tobacco dependent, or both. There were 40% tobacco users, according to Annadurai et al. (2018), with 17% using smoking tobacco and 22.9% using smokeless tobacco. Fishermen polled by Kadam (2015) were more likely than the general population to smoke, chew betel-but, or drink alcohol.

**Health And Nutritional Status Morbidity Pattern**

It's no secret that health is an integral part of a society's overall growth, and one way to measure that development is by looking at one's health state. As for the state of people's health, according to Parasuram et al. (2015)'s cross-sectional study of the fishing community in Tamil Nadu's Thiruvallur district, orthopaedic illnesses account for 14.4% of morbidity, respiratory illnesses account for 13.6%, digestive illnesses account for 10.9%, and skin problems account for 9.7%. A gynaecological condition accounted for 6.9% of all cases, followed by an ear, nose, and throat problem at 8.3%, and cardiovascular disease at 3.6%. About 4.2 percent of patients had an eye disorder, and about 3 percent had CNS disorders, and about 2 percent had genitourinary trace disorders. According to John et al. (2015), skeletal fluorosis affected 30.3% of the fishermen they surveyed along Gujarat's Kutch coast. 39 percent of the fishermen were hypertensive, according to a study by Annadurai and colleagues (2018), because of the excessive salt intake from dry fish consumption. Fishermen had higher rates of periodontal disease (85.4%) and dental caries (82.6%) than non-fishing population (Asawa et al., 2014).

**Health And Hygiene**

Fishermen's nutrition, health, and fitness have received little research attention despite the fact that physical fitness is critical to the profession. According to Laxmi (2018), the nutritional situation of the fishing population in Andhra Pradesh's Nellore area in terms of iron is deplorable. Laxmi showed inadequate iron absorption, infections, infestation, and anaemia due to dietary iron insufficiency.

Goa's coastline settlements, according to Modassir and Ansari (2011), have inadequate hygienic and sanitary standards. It was found that there was no proper sanitation, regular water supply, faulty drainage system, or proper toilet. Because of these environmental factors, several diseases are more likely to spread. Poor sanitation is a major contributor to the spread of diseases such as typhoid, malaria, dermatitis, gastroenteritis, and encephalitis.

**Conclusion**

Fish is a vital part of many people's diets, and fishing is a vital part of their livelihood. Despite the fishing industry's importance, the local fishing community remains underdeveloped socially and economically. There is just a little amount of research indicating that fisherman are a unique subgroup of the population who lead unhealthy lives and are more prone to sickness. The majority of the reasons were linked to their jobs, as well as their personal routines and lives. Studies on this economically significant profession are few and far between. Fishermen's health and nutritional status, as well as sanitary practises, have gotten less attention in the scientific literature. In fact, there is little research done on this particular community even in India.

A few studies from various sections of India on sociodemographic and nutritional profiles show some development, but it is insufficient. It's difficult to draw conclusions regarding fishermen's health in particular because there isn't enough study on dietary profiles that evaluate health condition and fitness for fishing. A vast number of factors contribute to poverty, such as a lack of education, the discontinuation of fish collection every year, a lack of modern fishing gear/net, and a lack of alternative work during the non-fish capture season.

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