

## A Study of Living Conditions of Fisher Men in Tiruchendur Taluk

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### Abstract

Fisheries sector occupies a very important place in the socio-economic development of the country. It has been recognized as a powerful income and employment generator as it stimulates growth of a number of subsidiary industries and is a source of cheap and nutritious food besides emerging as an important item of export trade. This sector is thus an important source of livelihood for a large section of economically backward population of the country, particularly in the coastal areas. The focus of the paper was to investigate the living conditions of fisher men in Tiruchendur taluk. In order to perform the analysis on the socio-economic status of the fisher folk, the coastal area of Tiruchendur taluk, in Thoothukudi district were selected. Percentages, tables, Gini ratio, Chi-square test and average were used owing to the constraints imposed by the nature of data. The simple random sampling technique was used. Secondary data have been collected from books, journals, newspapers, internet and periodicals. It reveals that 8.61% of the respondents satisfied monthly income between Rs.1000-2000, 19.38% of the respondent's satisfied income between Rs.2000-3000, 12.04% of the respondents' satisfied income Rs.3000-4000 and 59.97% of the respondent's satisfied income Rs.4000-5000 respectively. In order to find out whether there is any correlation between the income of the respondents and their level of satisfaction, chi-square test has been applied. As the calculated value of Chi-square is greater than the table value at 5 per cent level of significance, there is a relationship between income of the respondents and their level of satisfaction in the study area. The results obtained from this survey revealed that the living conditions of respondents remain poor and almost unchanging in recent years. Off-season unemployment is more in the selected area of Tiruchendur taluk. Concerted action by government agencies, local bodies, trade unions, and voluntary organization with the active support, co-operation and participation of the respondents is required for solving the issues and for the growth and development of the sector.

**Keywords:** Fisheries Sector; Aquatic Productivity; Prawn Culture; Pearl Chunk Fishing; Technical Guidance.

### Introduction

Fishing has been a traditional occupation of a large section of the people who are residing at the seacoast all over the world. Until the turn of the last century, not much attention was paid to exploit the wealth

from the sea. Human race has been depending largely on land resources for their welfare and survival. The land resources are rapidly getting depleted and it is believed that within the coming 25-30 years many raw materials that are at present obtained from land will be in short supply. Therefore, attention has been drawn towards the ocean which covers 71 percent of the earth.

Fishery is concerned with economic exploitation of aquatic productivity. It means the capture and processing of (sea, coastal and inland) aquatic animals and plants as an occupation for profit. Fishery includes not only the business of catching fish in the ordinary sense but also taking of shell fish

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and other resources of the sea and inland waters. The important fishing grounds are found within a few hundred miles of the coast. They lie partly on the shore-belt of shallow water which covers the continental shelf or the submerged platform surrounding the continents. Others are located in the elevated parts of the sea floor at some distance from the shore. Almost all the important fishing areas are confined to the temperate zone which may be due to the warmth of the tropical water which favours the growth of innumerable kinds of fish. The tropical regions of the Atlantic, Pacific and the Indian Ocean hold out great promise for fisheries.

Fisheries sector occupies a very important place in the socio-economic development of the country. It has been recognized as a powerful income and employment generator as it stimulates growth of a number of subsidiary industries and is a source of cheap and nutritious food besides emerging as an important item of export trade. This sector is thus an important source of livelihood for a large section of economically backward population of the country, particularly in the coastal areas.

#### **Fisheries Sector in India**

The fisheries sector in India has been recognized as a powerful generator of income and employment. India has emerged as the second harvester of Inland fish in the world with the inland fish production of 12.2 million tonnes and marine fish production of 12.7 million tonnes. India is the eight largest harvesters of fish in the world. The annual average growth rate of the sector from 2004-2005 to 2014-2015 is 15.4 per cent. But during 2015, the annual average growth rate is 13.24 per cent. India with a long coastline of 8,129 k.m., 2 million Sq. k.m. of exclusive economic zone, and 1.2 million hectares of brackish water bodies, offers vast potential for development of fisheries. As against the estimated fishery potential of 13.9 million tonnes the country has been able to tap 12.6 million tonnes. Before 1960, the markets for Indian marine products were largely shifted to neighbouring countries like Srilanka, Myanmar and Singapore. This position continued as long-as dried items dominated exports from India. When the frozen and canned items increasingly figured in exports, the sophisticated affluent countries like U.S., France, Australia, Canada and Japan became important buyers. Japan is the top importer of marine products from India.

#### **Fisheries Sector in Tamilnadu**

The state of Tamilnadu has a coastal length of 1076 k.m. which constitutes 15 per cent of India's coastal

line. There are 591 fishing villages in 13 coastal districts of Tamilnadu starting from Tiruvallur district to Kanyakumari district. The fishermen living in these coastal fishing villages are 16.79 lakh, which includes 13.58 lakh fishermen and 13.40 lakh fisherwomen during 2014-2015. The literacy rate is 66 per cent. About 12.70 lakh marine fishermen are actively engaged in fishing. The marine fishermen are taking out livelihood by fishing in the continental shelf of 41,412 Sq. Km. engaging 18,500 mechanized fishing crafts and 49,000 traditional crafts. About 13.70 lakh metric tonnes of fish are caught in Coramandal Coast, Palk Bay, Gulf of Mannar Coast throughout the year.

#### **Fisheries in Tuticorin District**

Marine fishing, Pearl and Chunk fishing are famous in this district from the time immemorial. Tuticorin is the main centre for deep sea fishing. Tuticorin has a lengthy coastline of about 140 km. Prawn culture is flourishing in this district and earning considerable amount of foreign exchange. Now, the prawn culture has been banned by the Supreme Court of India due to pollution issues. The other varieties of fishes are caught and powdered and packed and it is called as 'MASI'. The MASI is even exported to all parts of the country and to foreign countries particularly to Srilanka and other Indian Ocean countries.

The fish cakes produced here are used for feed for prawns and other fishes. There are 23 marine fishing villages in Tuticorin district. There is one Joint Director of fisheries and Assistant Director of Fisheries in charge of Pearl Chunk fishing, Fishermen Training Institute and for technical guidance. There is fish seed farm at Kadamba. Service Centre / Base workshop is situated at Tuticorin. There is a fish curing centre at Punnakayal. During the year 2010-11, the total inland fish production is 3137 tonnes. The total marine fish production for the same period is 38,400 tonnes. In the inland fisheries, 1274 fishermen are engaged.

#### **Objectives**

The main objectives of the study are mentioned below:

1. To study the socio economic background of the fisher men in Tiruchendurtaluk.
2. To know the living conditions of the respondents.
3. To examine the Primary Health Care facility of the respondents
4. To evaluate the monthly income and expenditure of the respondents

## Methodology

In order to perform the analysis on the socio - economic status of the fisher folk, the coastal area of Tiruchendurtaluk, in Thoothukudi district were selected. Primary data relating to the socio economic background of the fisherman were collected through pre-designed questionnaire from 275 fishermen families from the selected Tiruchendurtaluk villages. The data collected from these sample respondents has been carefully processed, edited and tabulated for analytical purposes. Percentages, tables, Gini ratio, Chi-square test and average were used owing to the constraints imposed by the nature of data. The simple random sampling technique was used. Secondary data have been collected from books, journals, newspapers, internet and periodicals.

## Analysis and Interpretation

The data collected from the primary source has been tabulated and this forms the major basis for the research study. The study covered 275 respondents' families from Tiruchendurtaluk chosen at random. The sample size was 15%.

From Table 1 it has been inferred that out of 275 respondents, the majority of 234 (85.09 percent) are male and rest 41 (14.91 percent) is female respectively.

In Table 2, it was found that more than a 190 of the families (69.09%) had five and above members, about 22.18% had three - four members and about 8.73% had below three members.

Table 3 reveals that about 60.00% of the respondents belonged to the age group 30 to 60 years. Among the respondents, about 24.36% were in the age class 20-29 years and 8.73% in below 19 years. Only 6.91 years belonged to the age group of above 60 years.

Table 4 reveals that about 46.91% of the respondents had primary education, about 26.55% had high school education, about 13.82% possessed higher secondary level education and 8.72% had pursued degrees. Further, only about 4% remained illiterate.

Table 5 reveals that out of 275 respondents, about 85.09% (234) were married and 14.91% (41) were unmarried.

The Table 6 clearly explains that out of 275 samples respondents, 212 i.e., 77.09% belongs to the Most Backward Community and 36 i.e., 13.09% belongs to

**Table 1:** Sex-wise analysis of the respondents

Sex	Number of Respondents	Percentage
Male	234	85.09
Female	41	14.91
Total	275	100.00

Source: Primary Data

**Table 2:** Size of the family

Size	Number of Respondents	Percentage
Below 3	24	8.73
3 - 5	61	22.18
5 and above	190	69.09
Total	275	100.00

Source: Primary Data

**Table 3:** Age group of respondents

Age (in years)	Number of Respondents	Percentage
Below 19	24	8.73
20-29	67	24.36
30-39	82	29.82
40-49	57	20.73
50-59	26	9.45
Above 60	19	6.91
Total	275	100

Source: Primary Data

**Table 4:** Educational statuses of the respondents

Education level	Number of Respondents	Percentage
Primary	129	46.91
High School	73	26.55
Higher Secondary	38	13.82
Degree	24	8.72
Illiterate	11	4.00
Total	275	100.00

Source: Primary Data

**Table 5:** Marital statuses of the respondents

Status	Number of Respondents	Percentage
Unmarried	41	14.91
Married	234	85.09
Total	275	100.00

Source: Primary Data

**Table 6:** Community wise classifications of respondents

Community	No of Respondents	Percentage
BC	36	13.09
MBC	212	77.09
SC	27	9.82
Total	275	100

Source: Primary Data

**Table 7:** Family types of the Respondents

Family Type	Number of Respondents	Percentage
Nuclear Family	208	75.64
Joint Family	67	24.36
Total	275	100.00

Source: Primary Data

**Table 8:** Access to primary health care facilities

Primary Health Care facility	Number of Respondents	Percentage
Yes	174	63.27
No	101	36.73
Total	275	100

Source: Primary Data

**Table 9:** Access to government hospital facilities

Government Hospital facility	Number of Respondents	Percentage
Yes	168	61.09
No	107	38.91
Total	275	100

Source: Primary Data

**Table 10:** Monthly family income of the respondents

Monthly Personal Income (Rs.)	No. of respondents	Percentage
Less than Rs.4,000	82	29.82
Rs.4,001 - Rs.8,000	136	49.45
Rs.8,001 and above	57	20.73
Total	275	100.00

Backward Community. Further, only about 9.82% remained Scheduled caste.

Table 7 exhibits that, 75.64 percent of the respondents belonging to the nuclear family. This clearly indicates the declining trend of the Joint family system.

Table 8 reveals that out of 275 respondents, majority of 174(63.27 per cent) of them have Primary Health Care facility and 101(36.73 per cent) of them don't have Primary Health Care facility.

Table 9 reveals that out of 275 respondents, majority of 168(61.09 per cent) of them have Government

Hospital facility and 107(38.91 per cent) of them don't have Government Hospital facility.

Table 10 shows that out of 275 respondents a majority of 136 (49.45 percent) earn a monthly family income of Rs.4,001 to Rs.8,000 followed by 82 (29.82 percent) earn less than Rs.4000 and 57 (20.73 percent) Rs.8001 and above. The mean monthly family income worked out to be Rs. 5,038.64.

### Gini Ratio

Gini co-efficient of concentration ratio was used to measure the extent of inequalities in the distribution

Gini coefficient ratio	Before fishing	After fishing
G	0.16925	0.12803

of income in the households of respondents before and after fishing in the case of those engaged in different activities in the study area.

The Gini ratio was estimated to analyse the distribution of household income of the respondents before and after fishing in the study area. The estimated values of Gini ratio before and after fishing clearly indicate that there is no perfect equality among the respondents household income. But decrease in the value of Gini ratio from 0.16925 to 0.12803 show that the income inequality between the respondents has decreased after fishing.

### Monthly Income Details of the Respondents

**Null hypothesis:** There is no significant difference between the income of the sample respondents and their level of satisfaction.

From the below table 11 reveals that 8.61% of the respondents satisfied monthly income between Rs.1000-2000, 19.38% of the respondents satisfied income between Rs.2000-3000, 12.04% of the respondents' satisfied income Rs.3000-4000 and

59.97% of the respondents satisfied income Rs.4000-5000 respectively.

In order to find out whether there is any correlation between the income of the respondents and their level of satisfaction, chi-square test has been applied. The results of the Chi-square test are furnished below.

Calculated value of Chi-square	= 38.21
Table value at 5 per cent level	= 7.815
Degrees of freedom	= 3

As the calculated value of Chi-square is greater than the table value at 5 per cent level of significance, there is a relationship between income of the respondents and their level of satisfaction in the study area.

From Table 12 it has been observed that out of 275 respondents, a maximum of 117 (42.55percent) with a family expenditure of Rs.3,001 – Rs.6 000. Followed by 86 (31.27percent) of them have a family expenditure of less than Rs.3000, 49 (17.82percent) of them have a family expenditure of Rs.6, 001 – Rs.9, 000 and 23 (8.36percent) have a monthly family

**Table 11:** Relationship between monthly income of the respondents and level of satisfaction

Monthly Income (Rs.)	Percentage of Respondents	
	Satisfied	Not Satisfied
1000- 2000	8.61	9.52
2001-3000	19.38	24.76
3001-4000	12.04	14.29
4001-5000	59.97	51.43
Total	100	100

**Source:** Computed from Primary Data

**Table 12:** Monthly family expenditure of the households

Monthly Family Expenditure (in Rs.)	No. of respondents	Percentage
Less than Rs.3,000	86	31.27
Rs.3,001 - Rs.6,000	117	42.55
Rs.6,001 - Rs.9,000	49	17.82
Above Rs. 9,001	23	8.36
Total	275	100.00

Source: Primary Data

expenditure of Rs. 9, 001 and above. The mean monthly family expenditure of the households works out to be Rs. 7,227.27.

### Conclusion

The results obtained from this survey revealed that the living conditions of respondents remain poor and almost unchanging in recent years. Off- season unemployment is more in the selected area of Tiruchendur taluk. Concerted action by government agencies, local bodies, trade unions, and voluntary organization with the active support, co-operation and participation of the respondents is required for solving the issues and for the growth and development of the sector.

### References

1. Anjum Saba. "Women Workers in Informal Sectors", The Women Press, Delhi. 2011.
2. Bhang Baba Saheb. Women vendors in urban informal sector, Akansha Publishing House, New Delhi. 2011.
3. Five Year Plan., 1988 report.
4. Fisheries development mission, 2002.
5. Harold, Lubel. Underdevelopment and employment in Calcutta, international labor review, 1973 July;19(1):28.
6. International Labor Organisation, 1991.
7. Jhabvala, R. Liberalization and women worker, EPW. 2002.
8. Joint Director of Economics and Statistics, Kokrajhar "Statistical Handbook of Bodoland Territorial Council, 2010".
9. Mukhopadhyay, Ishita. Urban informal sector and communal violence: a case study 1992 riots in Calcutta , Economic and Political weekly, August, 1994.p.22.
10. Pandey B.N. Inland Fisheries in the 21st Century which way to prosperity? Fish research vision for 21st century APH Publishing New Delhi. 2004.
11. Tamil Nadu Fisheries Statistics - 1994.
12. United Nations, 1975.