

## Socio-economic status of fishers in Allaipiddy village, Jaffna

N Ragavan\*, K Sivashanthini, S Sutharshiny

Department of Fisheries, Faculty of Science, University of Jaffna

### Abstract

The present study was carried out in Allaipiddy for a period of eight months from June 2014 to January 2015. The socio-economic data of randomly selected 53 fishermen was obtained through pre-tested structured questionnaire, in-depth guided interview and observation. Descriptive analysis of the direct social demography was done by using SPSS. All fishermen are Catholics and Sri Lankan Tamils. The sex demography of the community explicit that male is higher in percentage (54.4 %). In the fisherfolk, families with five members are higher in percentage (33 %) and most of them are nuclear families (95 %). Majority of the active fishermen fall in the 36 – 45 age-group. All the fishermen are having primary education and only 21 % of them are teetotalers. The existing fishing methods are underwater-Sirahuvalai (46 %), Seer-net fishing (21 %), Driftnet fishing (13 %), Crab-net fishing (11 %) and Arakodiyana-net fishing (9 %). Majority of fishers (90 %) are earning Rs. 20,000 to Rs. 40,000 per month, while 6 % of them earn as high as Rs. 40,000 to Rs. 60,000. The economic analysis of the Allaipiddy fisherfolk reveals that high income earning fishermen are involved in underwater-Sirahuvalai.

**Key words:** Education, Fishers, Income level, Questionnaire, Socio-economic

### Introduction

Fisheries play an important role in Sri Lankan economy in terms of employment, food and nutrition, security and foreign exchange earnings (Rahman and Habibur, 2007). Fish products are an important source of animal protein, providing about 70% of the animal protein consumed (Anonymous, 2012). Fisheries sector plays an indispensable role in the economy of Sri Lanka contributing about 1.2 % to the GDP (Anonymous, 2013a). In Sri Lanka, around 266,293 active fishermen are engaged in both marine and inland fisheries and 1,033,224 members of their household depend on the income gained through fishing and related activities (Anonymous, 2013b).

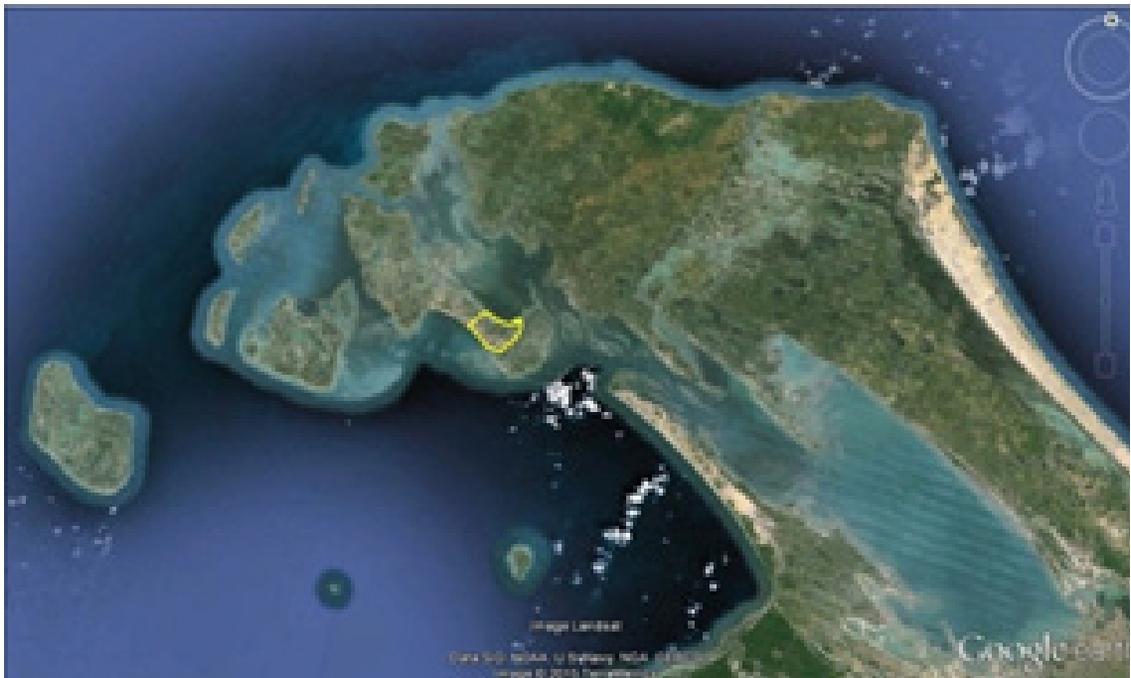
Fisheries and agriculture are the major economic activities of Northern Province of Sri Lanka. Before the civil war, North and East Provinces accounted more than half of fish captured and made substantial contribution to fisheries (FAO, 2003). Jaffna district is surrounded by rich fishing areas, viz., Palk Strait in the north, the Indian Ocean in the east, the Jaffna lagoon in the south and the Palk Bay in the west. Comparatively Jaffna peninsula has a remarkable environment suitable for fishing. The total coastal length of the district is almost 400 km which covers a relatively small land area of 1023 km<sup>2</sup> including inland waters. Encircling the peninsula is a shallow continental shelf with rich fishing banks (Point Pedro Banks, Prawn Bank, Pearl

\*Correspondence: ragavansms@gmail.com

Bank) as well as extensive areas of brackish water and mangroves (Sivasubramaniam, 1995; Sivalingam, unpublished data). Fishing activities are carried out in four main areas: the Palk Bay, the Palk Strait, Point Pedro Banks, and the Jaffna Lagoon (Normann *et al.*, 2003). In Jaffna district, fishing is done by a large number of relatively small crafts, ranging from non-mechanized or mechanized traditional wooden crafts (Vallams and Kattumarams), two kinds of medium sized, mechanized fiberglass boats (17.5 feet and 2832 feet), multi-day boats that may fish up to four weeks per trip. The predominant fishing method is gill-netting; other fishing gears types also include long lines, poles and lines, trawls, purse seines and beach seines (Chitravadivelu, 1990). Prawns, rabbit fishes, mullet, barracuda, sardine, squid, seer fish, shark, skate, silver bellies, herrings, ribbon fish, cuttlefish, pomfret,

sea cucumber and others are the dominant species in marine waters around Jaffna peninsula (Sivasubramaniam, 1995).

Allaipiddy village is situated in the Velanai Secretariat of Jaffna Peninsula, Northern Province. It is strategically located on the causeway from Jaffna towards islets of Velanai and Kayts. Majority of the residents of the village are Sri Lankan Tamils and most of them are Roman Catholics. Fisheries and agriculture are the major economic activities. A fishery is a major occupation for the village people; nearly two hundred fishing families depend on fishing (Anonymous, 2013c). They mainly engaged in drift net fishing, crab fishing, seer fishing, and underwater Sirahuvalai and Arakodiyan fishing. The present study was carried out to investigate socio-economic condition of Allaipiddy fisher folk.



**Plate 1: Location of the study area in the Jaffna District (Allaipiddy)**

## Methodology

The present investigation was performed at Allaipiddy fishing village in Jaffna district from June 2014 to January 2015.

Primary data and secondary data were collected. Primary data was collected, using a pre-tested questionnaire, which was developed to collect the objectives of the study, which included socio-economic conditions, age distribution, family size, literacy rate, occupation, and methods of fishing, housing condition and other economic activities. A total of 53 fishermen were interviewed.

In addition, face to face interviews and direct observations of the housing conditions were performed systematically.

## Data analysis

All the collected data were entered and analyzed using SPSS statistical package and then presented in textual, tubular and graphical forms.

## Results and Discussion

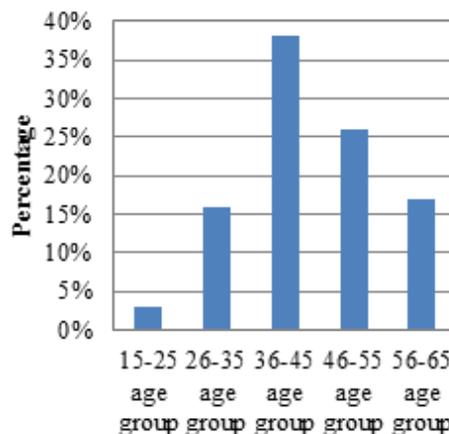
A detailed analysis was made on the following parameters.

Gender Males comprised a higher percentage (54.4 %) than the females (45.6 %) in study area, while all (100 %) the fishermen were males. However, females (12 %) were involved in marketing and processing of the caught fish.

### Religion and Age structure

All the resident peoples of the village being Sri Lankan Tamils and Catholics, tend to be involved in religious activities on Sundays, thus their fishing is not carried out on Sundays. Age groups of 15 to 25 years, 26 to 35 years, 36 to 45 years,

46 to 55 years and 56 to 65 years were considered to examine the age structure (Fig. 1).



**Fig. 1: Age distribution of fishermen in the study area.**

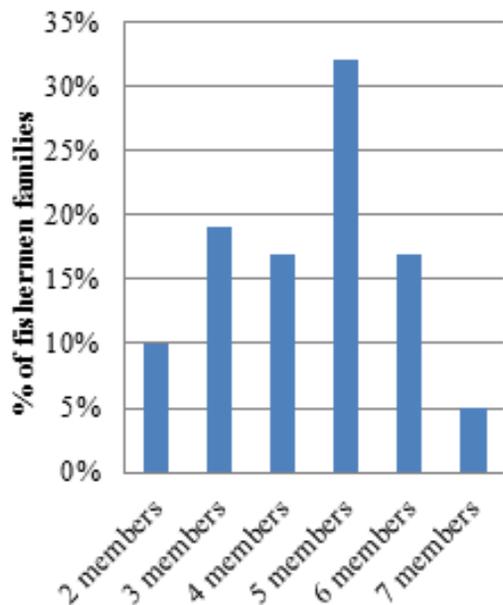
The Highest age group was 36 to 45, which contributed 38 % and followed by 46 to 55 year, (26 %). 15 to 25 years age group was the lowest (2.6 %). Age distribution indicated that fishing activities require strength, which was the reason for exclusion of children and elderly people. Fishing activities are traditionally carried out by a particular cast group in Jaffna (David, 1974; Pffaffenberger, 1982).

There is a negative perception in the society for fishers, which adversely affect the social reputation of the fishermen. In order to get a relief from the depressed mentality, they seek reputed occupations in the society other than fishing. Eventually that leads to low participation of the young in fishing activities.

### Family size and Type

Families were classified into two types as nuclear families and joint families. In the study area nuclear families were dominant (95 %).

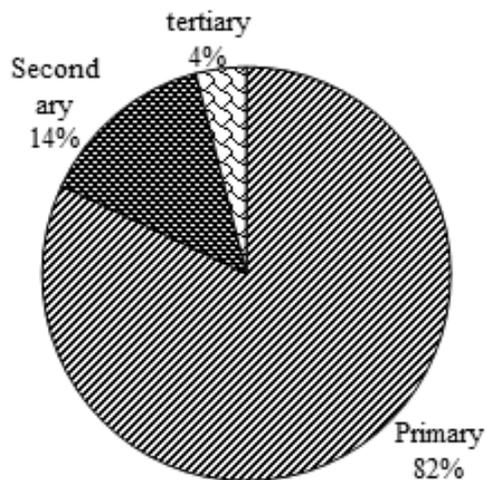
The family size has considerable influence on both family income and expenditure. Families consisting of 5 family members were dominant (33 %) in Allaipiddy village, whereas families with 2 and 7 members were the minorities in the study area (Fig. 2).



**Fig. 2: Percentage distribution of family size in Allaipiddy Village.**

### Literacy rate

Educational levels of the fishermen were categorized into three groups, which were primary, secondary and tertiary educational level. Generally educational levels of the fishermen are lower than average literacy rate of the country (Bryan, 2007).

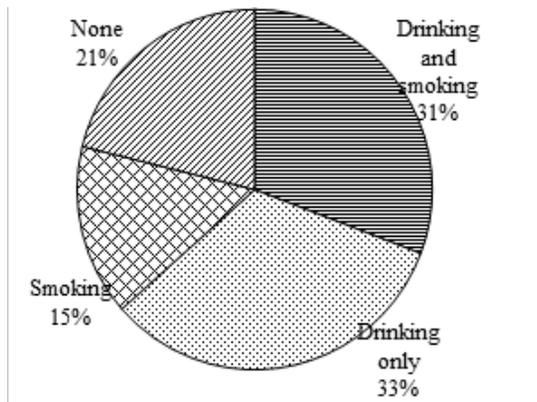


**Fig. 3: Percent educational status of fishermen.**

In brief, majority of fishermen were with primary educational level (82 %). People with tertiary education were marginal in the village. There are two major reasons for lower literacy rate of the fishermen in Allaipiddy village, which are poverty and higher income from the fishing. They have traditional fishing knowledge gained through experience since their childhood. So they are self-motivated towards fishing activities without considering their education, resulting in low literacy rate among the fisher folk.

### Liquor and narcotic consumption

In general smoking, betel chewing and use of liquor were the common habits among all the adult fishermen.



### Teetotalers

#### Figure 4: Percentage distribution of liquor and narcotic consumption habits of fishermen.

Although economic and social restrictions were imposed on the use of liquor, 37 % percent of family heads were chewing betel-nut regularly and remaining population had liquor occasionally along with smoking.

While none of the fishers families with narcotics were recorded, since the fishers having smoking and taking liquors were distributed throughout the all educational levels and age groups. There was no clear relationship found between educations. Therefore, the fishermen spent a huge amount of income for those bad habits.

### Housing condition

The nature of house indicates the social status of the people. During the survey, attempts were made to find out the condition of living houses of the people through systematic observations. Allaipiddy village is not developed as a town like Jaffna district and most of the houses were made up of clay and a few houses by cement. The fishermen community was mainly living

near to the sea. This was mainly because after tsunami disaster, government has announced a buffer zone, which is 200 m away from the sea, and as a result they have a fear in constructing a good conditioned houses in that area.

### Occupation

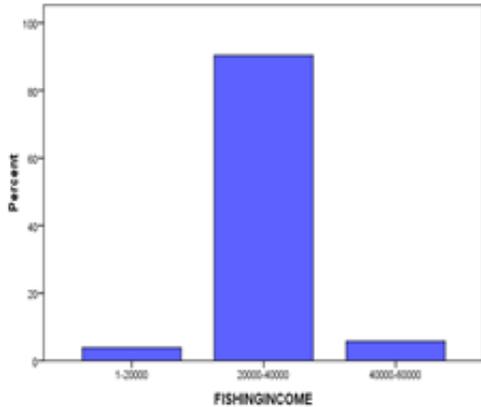
Main occupation of (90 %) fisher families was fishing, majority of the fishermen were fishing throughout the year. Rest being part-time fishermen, they were engaged in fishing and labor work. They normally took rest for a day or two in a week depending on the availability of fish and work.

### Fishing gear and crafts

Although, a variety of gear were used by the Allaipiddy area fishers, different types of gillnet (54 %), and sirahuvalai (46 %) were mainly used in mechanized boats. However, other types such as raalkoodu, and traps were also used with these main types of gear; 93 % of the fishers used 3 to 4 gear of the same type or different types in OFRB s. However, in one-day boats they handled more than ten gear types. If they used a variety of gear, the selection of the gear at the time depended on the season and availability of fish species. Normally in this area, fishers used different mesh sized gill nets and those are locally called in different names such as Seer fishnet, crab net, Arakodiyani valai and drift net. When considering the fishing crafts, 31 % of fishers had their own crafts and 69 % shared with others.

### Income level of the fishing community

Monthly income of fishermen in the study area ranged from Rs.15 000 to Rs.60 000. Fishermen were grouped into five categories based on their monthly income.



**Figure 5: Percentage of fishing income .**

Most of the fishermen were earning Rs. 20 000 to 40 000 per month followed by Rs.40 000 – 60 000. Generally, fishermen never tell their actual income to others especially for this kind of surveys because they fear that they may be refrained from the aids or benefits from other institutions like Samurdhi. However, due to lower income, majority of people are struggling to afford their day to day life expenses.

The study show that majority of fishermen families come under income group of Rs. 20, 000 to Rs. 40, 000 per month (90 %).

**Table 1:Monthly income of fishing community**

Fishing method	Mean monthly income (LKR) ± S.D.
Underwater sirahuvalai	35478 ± 4 934
Crab fishing	30 400 ± 5 113
Seer fishing	24 110 ± 5 667
Drift net fishing	22 714 ± 5 219
Arakodiyan fishing	21 000 ± 6 387

The income levels of the fishers also depended on the type of method they used for fishing. Fishing effort and the harvest indirectly affected the income of the fishermen. Of the 53 fishermen, nearly half did only underwater sirakuvalai fishing method. Those fishermen earned higher income than the other fishermen.

### Conclusion

Majority of the fishermen were fallen under 26-55 of age group and their education was up to primary educational level. However, they had medium house for their life. Income levels of fishermen depended on method of fishing. Underwater sirahuvalai fishermen earned highest income.

**References**

- Anonymous. (2012). Department of census and statistics. Food balance sheet. Sri Lanka.
- Anonymous. (2013a). Annual estimates of gross domestic production domestic production report (GDP). Sri Lanka.
- Anonymous. (2013b). Ministry of Fisheries and Aquatic resources. Fisheries sector development strategy report 2010-2013. Sri Lanka.
- Anonymous. (2013c). Northern provincial council report. Sri Lanka
- Bryan, M. (2007). 'Literacy in fishing communities'. FAO, 5 pp.
- Chitravadivelu, K. (1990). *Journal of the National Science Council*, Sri Lanka, 18: 37-52.
- David, K. (1974). 'Spatial organization and normative schemes in Jaffna, northern Sri Lanka, *Modern Ceylon Studies*, Vol. 4: 21- 52.
- FAO. (2003). Fisheries Sector Study of the North-East Province. Colombo.
- Normann, A.K., Angelsen, K. and Sivalingam, S. (2003). Restoration of Fisheries Activities in Jaffna District. Norad, Oslo.
- Pffaffenberger, B. (1982). Caste in Tamil culture: The religious foundation of Sudra domination in Tamil Sri Lanka, Vikas Publishing House Pvt Ltd, New Delhi.
- Rahman, M. and Habibur, P. (2007). Legal Regime of Marine Environment In The Bay Of Bengal. New Delhi: Atlantic Publishers & Distributors.
- Sivasubramaniam, K. (1995). Sri Lanka Fisheries Resources Development and Management in the Past. Asian Development Bank, Colombo.