



International Journal of Fisheries and Aquatic Studies

E-ISSN: 2347-5129

P-ISSN: 2394-0506

IJFAS 2023; 11(5): 208-213

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www.fisheriesjournal.com

Received: 02-07-2023

Accepted: 03-08-2023

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Socio-economic status of fishermen in Cox's Bazar district of Bangladesh

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DOI: <https://doi.org/10.22271/fish.2023.v11.i5c.2865>

Abstract

The current study has been conducted to evaluate the socio-economic profile of fishermen in Cox's Bazar district, Bangladesh through a survey method. The socioeconomic profile of fishermen has been discussed in points of family size, age structure, educational status, religious status, housing condition, daily income, health facilities, sanitation, net used by fishermen, other subsidiaries, and training facilities. It has been observed that the family size of 59% of fishers was medium, consisting of 5-6 members. Most of the fishermen belongs to the age group 31-40 years old, represented by 83% Muslim. About half of the fishermen are illiterate and only sign their names. Most of the fishers (55%) have house made of mud walls with tin roofing, connected to electricity supply. The sanitation condition of the study is not up to the mark, as 63% of fisher communities are dependent on non-MBBS village doctors. The majority of them have medium to low income. Moreover, due to less Government support regarding credit facilities and trainings, their lifestyle remains unchanged and spend the whole life in measurable socio-economic status.

Keywords: Socioeconomic status, fishermen, Cox's Bazar, health, facilities, income

1. Introduction

Fishing is one of the oldest economic activities, comes next only to Agriculture (Kumbhar, 2017) [11]. Bangladesh is considered the most convenient country for fisheries in the world with the largest Bay of Bengal. It is one of the world's leading fish-producing countries, producing 46.21 lakh MT in Fiscal Year 2020-2021, with aquaculture contributing for 57% of total fish production (DoF, 2022) [5]. The Fisheries sector is recognized as an important source of income for a large number of populations of our country and also a significance source of revenue for the state economy (FAO, 2014) [6]. Socioeconomic status is the strongest indicator of people's lives that provides social, cultural, economic, and political characteristics of people, households, community groups, and institutions (Marmot *et al.*, 1987) [12]. According to Darin-Mattsson *et al.* (2018) [3], the individual who has lower socioeconomic status (SES) die younger than those who has high SES. Education, social class, occupational complexity, and income are interlinked with each other. Low-income households prioritize satisfying their immediate wants rather than building wealth (Saifi *et al.*, 2011) [13]. Families with larger disposable incomes are better equipped to build wealth, prioritize addressing their immediate needs, indulge in indulgences, and handle emergencies. One of the elements of SES is "Occupational prestige," which includes income and educational attainment (Saifi *et al.*, 2011) [13]. The lower-income job required more effort, physical risk, and provided less autonomy (Scott and David, 2005) [10].

In Bangladesh, where artisanal small-scale fishing accounts for 82.86%, or 5.56 lakh MT. This marine fisheries account for about 15% of the country's overall fish production (DoF, 2022) [5]. Despite being of great economical, commercial, and ecological importance to Bangladesh's economy, little research has been done on the fisherman community of the coastal district of Bangladesh. For progress to be effective, people's quality of life must be improved. People of all kinds, especially the fishing community, which is the most defenseless. Understanding the local fishermen is crucial and totally required for this improvement.

The livelihood condition and socio-economic status of the Bangladeshi fishing community, however, is not well understood. Studies on the socioeconomic conditions of coastal fishermen of Bangladesh need to be conducted. In this regard, the current study focused on the socio-economic status of major fishing communities of Cox's Bazar district.

2. Methodology

Before selecting the study area, several visits were done in different regions of Cox's Bazar to acquaint with the area and fishermen community as well as their nature. The study was conducted from August 2022 to February 2023 at four regions of Cox's Bazar District (Fig 1). The areas are Charpara at

Dorianogor (21.397314 N and 91.995468 E), Mostak para at Nazirartak (21.461273 N and 91.95349 E), Jelepura at Ward 4; Choufaldondi (21.523533 N and 92.023197 E), and Jelepura at Shamlapur (21.089304 N and 92.150525 E).

Data were collected from 140 respondents including fishermen, fisherwomen, fish retailers, fish sellers, fish-related day labors, and boat owners through a well-designed questionnaire survey form. Primary data were collected through personal interviews from fishermen, focus group discussions, questionnaire surveys, direct observation, and field data collection. The data collected from 4 different sites finally compiled together to get a clear picture regarding socio-economic status of Cox's Bazar district.

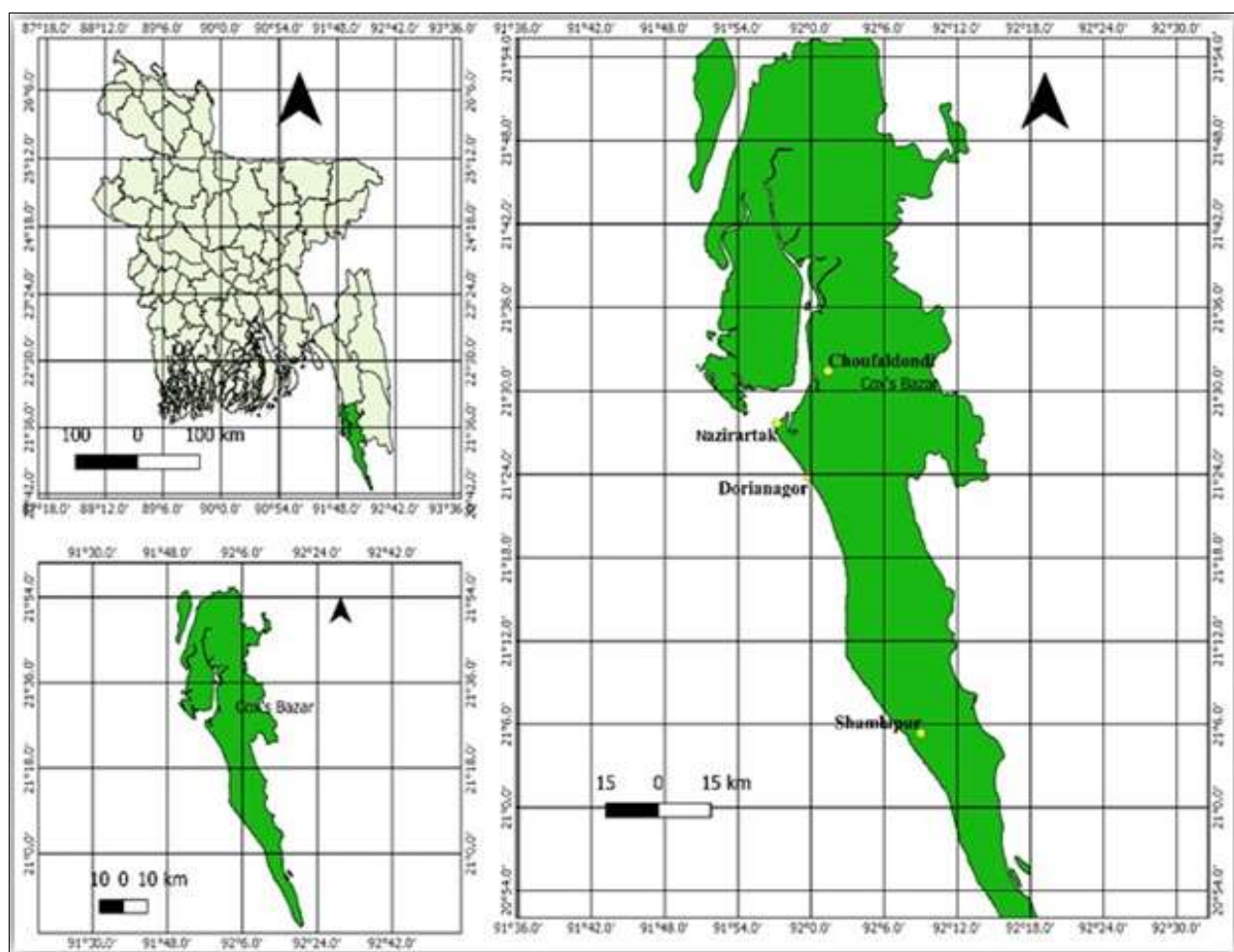


Fig 1: Map of the study area

3. Results and Discussion

3.1. Family Size

According to this study, most of the families (59%) have 5-6 members, termed as medium family. 19 % family belongs to the large family group and has 7-10 members, whereas 15% belongs to the small family (1-4 members) and only 7% belongs to the extra-large family having more than 10 members. (Fig 2a). Here, most of the medium families are nuclear family. Islam *et al.* (2021) [8] reported that, for the fishing community of Padma River, Chapai Nawabgonj district majority (72%) of family having 4-6 people. Whereas only 12% of the families consist of just 1-3 members and the rest (16%) has the member more than 6. The reason behind the majority of medium-sized families is because the fishermen thought that the more children they had, the more hands for earning.

3.2. Age Structure

The majority of the fishermen (35%) belong to the age group 31-40, whereas 25% belong to the 21-30 and 18% belong to the 41-50-year age group. Only 15% of people having more than 50 years and 7% are less than 20 years old (Fig 2b). The data reflects that most of the fishermen belonged to the middle-aged group. Islam *et al.* (2017) [9] found that 13% were in the age group 18-30 years, 40% were in the age group 31-45 and 47% were above 45 years.

3.3. Educational Status

Educational levels are the subdivision of formal learning, actually covering early childhood education, primary education, secondary education, and tertiary level education. The educational status of the respondents is classified into four groups. They are: 1. No academic education means they

had only the signature of their name; 2. Primary education-class 1 to 5; 3. Secondary education-class 6 to 10; and 4. Higher study- above secondary level. The pie chart shows that 50% of the respondents have no academic education, whereas 24% and 21% received their primary and secondary education respectively. Only 5% of respondents have higher study above the secondary level (Fig 2c). The data analysis indicated that the majority of them do not have formal learning and a few are exceptional who tried to do the higher study. The fishermen who have completed the higher than the secondary study did not want to attach to this profession. Therefore, illiterate fishermen also want that their children should be literate and they should have a better life. Islam *et al.* (2021) ^[8] mentioned that 49% of the fishermen attended below class 5 and only 7% beyond the secondary level at Dengar Beel under Melandah Upazila, Jamalpur. In another study, Islam *et al.* (2017) ^[9] found that 73% received no education, 13% attained primary education and 7% were at secondary level at Padma River in Chapai Nawabganj district.

3.4. Religious Status

The socio-economic profile of an individual is associated with individual religious affiliations and practices. The religions of our country are Islam, Hindu, Buddhist, and Christian. But in Cox's Bazar district, three types of religious people were found in the study area- Muslim, Hindu, and Buddhist. 83% of the fishermen have been reported as Muslim, 12% as Hindu and 5% as Buddhist (Fig 2d). The result is similar to Ahamed (1999) ^[11] who conducted a study in coastal areas and found that the majority of fishermen via Muslim 68%. Hindu fishermen were found at 32% of Sundarbans.

3.5. Marital Status

Marital status is the position of being married or not married. One of the options describes an individual relationship with a significant other. It is found that 73% are married and 27% are unmarried among the fishermen. The unmarried people are mostly under 18 school-going students. Child marriage or early-age marriage has not been observed in these areas. Bappa *et al.* (2014) ^[2] reported a similar result regarding the fishermen of the Marjat Baor at Kaligonj in Jhenidah district, Bangladesh.

3.6. Professions

A community that is involved in the harvest or processing of fishery resources to meet social and economic needs is called a fishing community. In the fishing community, most of the people are directly engaged in fishing activities. Some are also involved with fishing-related other professions. Such as shopkeepers, middlemen, day labors, fish retailers, businessmen, net makers etc. In these study area 71% are fishermen, 7% day labors, 4% retailers, 5% middlemen, 3% shopkeepers, 2% net makers, and 6% with other activities such as poultry rarer, farmer, cobbler, beggar etc. (Fig 2e). Day by day, it becomes very difficult for fishermen to lead their life with minimum income, as a result some of them are planning to leave this profession to start work as day labor in metropolitan areas.

3.7. Daily Income

Fishermen's daily income is not enough for them. Daily income varied from season to season. In the peak season, they

have earned a lot which is satisfactory for them, but in the lean season, they do not have any definite work to do. At that time, they earn on the basis of their types of work. Sometimes they do not get any work and pass their time hard. It has been observed that the majority (48%) of people's income is in the medium range (400-600 BDT/day). Whereas only 15% belong to the high-income range (600-1000 BDT/day). The data is represented in Fig 3a. According to Islam *et al.* (2021) ^[8], 50% of the fishermen earned 200-300 BDT/day during the full harvesting period, 32% earned taka 100-200 per day and the rest earned 100 or below 100 BDT/day.

3.8. Housing Condition

It is said that the Social status of a community is based on the nature of its house. The house of the fishermen indicates their low standard of livelihood. It is found that 55% had the mud walls and tin roofs house and 31% had tin walls and tin roofs house (Fig 3b). According to Islam *et al.* (2021) ^[8], majority of the fishermen had the house made of mud walls and tin roofs (71%), 17% had tin walls and tin roofs and 12% had other types of houses.

3.9. Sanitation

The sanitation system in the study area is not satisfactory. It has been observed that the sanitary condition of the fishermen is not up to mark. Each family does not have personal toilet facilities, as a result, they use common toilets, which are not safe and hygienic. One positive thing here is they don't use any open toilets. Islam *et al.* (2017) ^[9] reported that the coastal fishermen used kacha-toilets, semi-paka and paka toilets.

3.10. Drinking Water Facilities

Drinking water facilities means a community water system or a nonprofit non-community water system. It has been perceived that fishermen used tube wells for drinking water. Fishermen might use their own tube well or government tube well, or neighbor tube wells. It has been observed that 51% of the fishermen depended on government tube well for their drinking water source. 36% depended on neighborhood tube well and only 13% had their own tube well (Fig 3c). Das (2015) ^[4] reported that water has direct effect on the fisherman's health but among the total surveyed respondents only 89% of fishermen used tube well water for drinking purposes, 3% used pond water, 7% used river water and 1% used other sources of water for drinking and other daily activities.

3.11. Health Facilities

There is a proverb "Health is wealth". The majority of the fishermen do not get proper health treatment as government and private hospitals are far away from them. It is observed that 63% got health service from village doctors (Non-MBBS), 25% were dependent on Upazila Health Complex, and the rest 12% visits the local Kabiraj (Fig 3d). Islam *et al.* (2017) ^[9] mentioned that 47% of fishermen took treatment from village doctors, 33% went to the Upazila Health Complex and 20% went to the MBBS doctors and others.

3.12. Electricity Facilities

100% of fishermen have found connected with electricity supply. Government have ensured this facility in recent years.

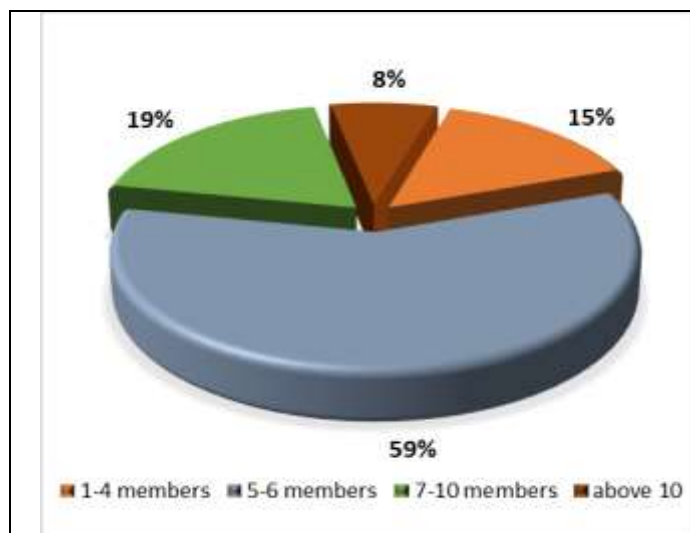


Fig 2a: Family size

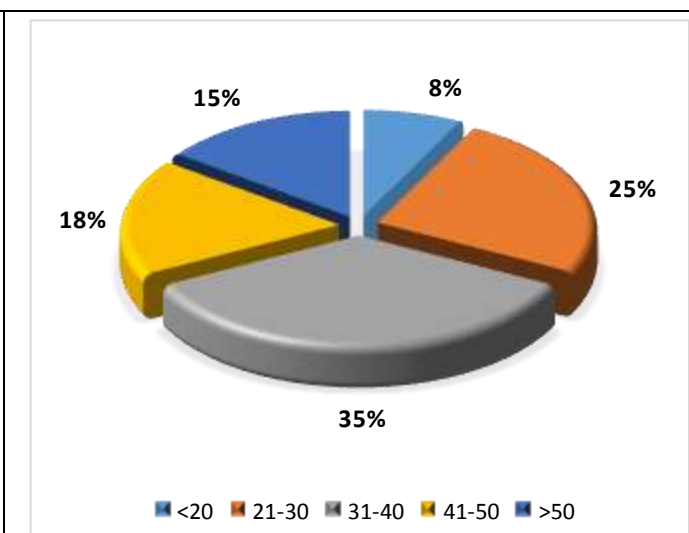


Fig 2b: Age group

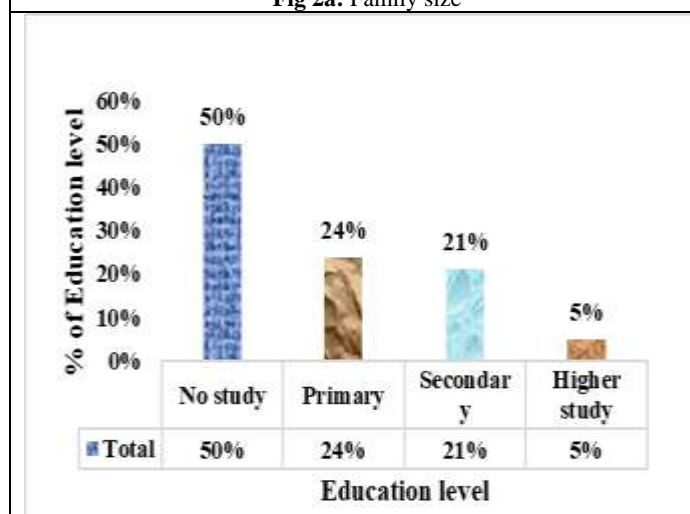


Fig 2c: Educational status

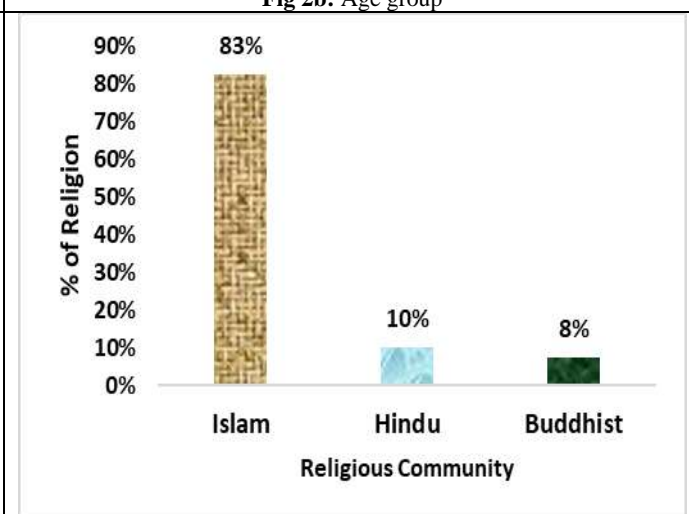


Fig 2d: Religious community

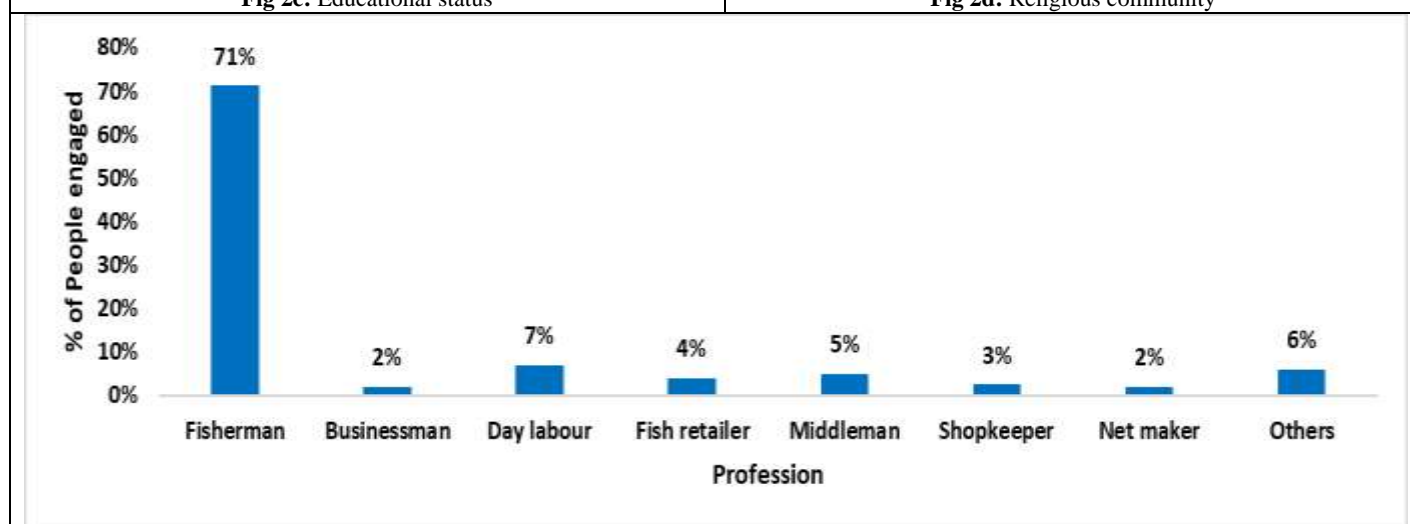


Fig 2e: Professional status

Hasan *et al.* (2016) ^[7] reported that 95% fishermen had a facility of electricity and 5% fishermen didn't get the facility to use electricity.

3.13. Training Facilities

The training is provided by government or NGO to the fishermen to teach them about the modern techniques of fishing and increase their awareness about fishing. In the present study, it is found that only 7% have received the training and others not. It indicates that they do not have

enough training to catch fish and do not know the modern techniques of catching fish. For that unintentionally they harm to the natural fisheries resources of the Bay of Bengal.

3.14. Net and Boat Used by Fishermen

Several types of nets are used in Cox's Bazar district. Such as gill nets, seine nets, cast nets, purse nets etc. Two types of nets are observed: legal and illegal net. Gill netting is the common fishing method in our country. Current jal is prohibited by the government but they use this illegal fishing gear for fishing enormously. In the study area,

different types of fishing boats have been observed. Some of them are wooden boat, balam boat, shampan, mechanized dingi nouka, kosha nouka, and wooden trawler etc. The

fishermen use these kinds of boats for artisanal fishing. Table 1 shows the list of nets and boats are used in the study area.

Table 1: Net used and fish caught by fishermen of Cox’s Bazar

Local name	Common name	Mesh size (cm)	Shape	Major species caught
Sutar jal	Gill net	4.5-5	Rectangular	Shrimp, small fish
Ber jal	Seine net	0.5-1	Rectangular	Shrimp, small fish
Tana jal	Push net	0.5-1	Rectangular	Shrimp, small fish
Moshari jal	Cast net	2.5	Conical	Shrimp, small fish
Current jal	Current net	4.5-6	Rectangular	Ilish
Jhaki jal	Seine net	0.5-1	Rectangular	Shrimp, small fish
Behundi jal	Purse net	0.5-1	Conical	Shrimp, small fish

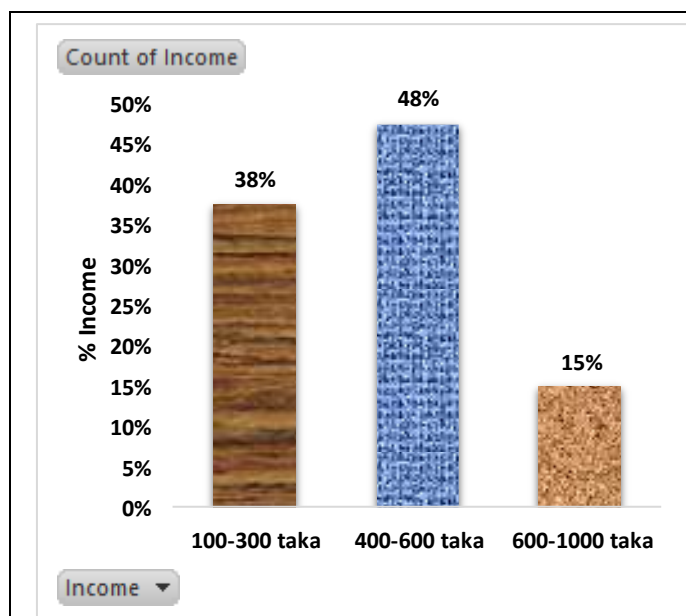


Fig 3a: Daily income status

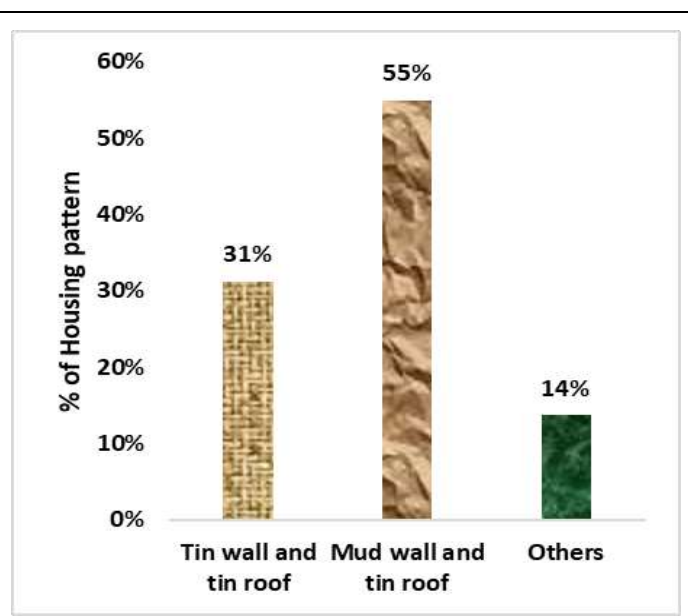


Fig 3b: Housing pattern

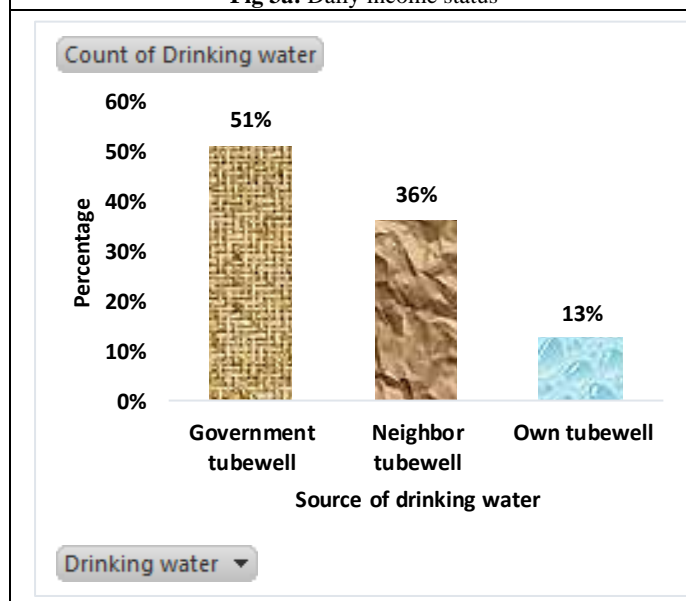


Fig 3c: Drinking water facilities

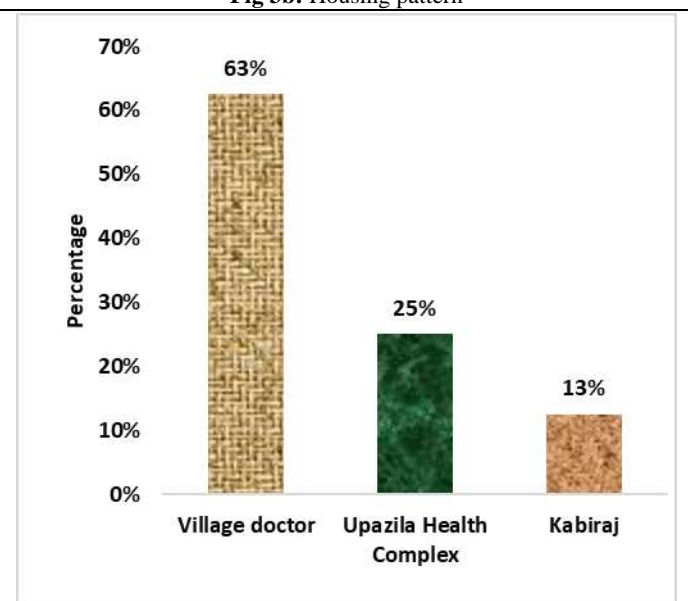


Fig 3d: Health facilities

3.15. Credit Facilities

Fishermen’s income is not enough for them. Only a few of them do not need any cooperation to lead their life but the majority of them have to borrow loans from different sources. In the study area, different organizations are involved to provide credit to the fishermen. Such as NGO, BRAC, Proshika, Grameen bank etc. They have to take loans with high interest. Some of them accessed the loans

from the Dadon or Mohajon. Purpose of receiving loan: to support their family, for Agricultural activities, for repairing houses, to repair fishing gears, nets and boats etc.

3.16. Challenges for the Fishermen

Most of the fishermen are facing various problems during fishing. The main problems were:

- No work in the lean season

- They do not have any control over the market strategies
- Political influences in the market trend make the lives of the fishermen horrible
- Lack of leadership
- Lack of marketing facilities
- Lack of knowledge of modern fishing techniques
- Lack of appropriate gears
- Lack of initiatives among fisherme

4. Conclusions

Over the centuries, little has changed in the lives of the fishermen. Considering the findings of the present work, some conclusions can be drawn. The socio-economic condition of the fishermen in the Cox's Bazar district is not up to the mark. Fishermen fall under the poverty line. These are due to their underprivileged housing conditions, low income, limitation in different living facilities, less support from the Government, and limited access to credit facilities. Most of the fishers in the study area are in economic necessity. Due to poor socioeconomic condition, a remarkable amount of fishermen is willing to convert from their profession. The fishermen have a low level of literacy, which impacted them highly in every aspect of their life. They are deprived of many basic facilities in their day-to-day life. As the small-scale fishing community contributes hugely in the Marine Fisheries Sector of Bangladesh, so the Government of Bangladesh should implement proper initiatives to enhance the livelihood- standard and socio-economic status of fishermen of the coastal community.

5. References

1. Ahamed N. A study on socio-economic aspects of coastal fishermen in Bangladesh. *Bangladesh Journal of Zoology*. 1999;24(1-2):20-6.
2. Bappa SB, Hossain MM, Dey BK, Akter S, Hasan-Uj-Jaman M. Socio-economic status of fishermen of the Marjat Baor at Kaligonj in Jhenidah district, Bangladesh. *Journal of Fisheries*. 2014 Jun 23;2(2):100-5.
3. Darin-Mattsson A. Set for life? Socioeconomic conditions, occupational complexity, and later life health. *Inst för neurobiology, vårdvetenskap och samhälle/Dept of Neurobiology, Care Sciences and Society*; 2018 Feb 22.
4. Das MR, Ray S, Kumar U, Begum S, Tarafdar SR. Livelihood assessment of the fishermen community in the south west region of Bangladesh. *Journal of Experimental Biology and Agricultural Sciences*. 2015 Aug 1;3(4):353-61.
5. DoF. Yearbook of Fisheries Statistics of Bangladesh, 2020-2021. Fisheries Resources Survey System (FRSS), Department of Fisheries. Bangladesh: Ministry of Fisheries and Livestock. 2022;38:138.
6. FAO, IFAD and WFP. The State of Food Insecurity in the World. Strengthening the enabling environment for food security and nutrition. Rome; c2014.
7. Hasan M, Afrad MS, Haque ME, Barau MH. Socioeconomic Status of Fish Farmers and Fishermen: A Comparative Study in Trishal Upazila under Mymensingh District, Bangladesh. *Bangladesh Journal of Extension Education*. ISSN. 2016;1011:3916.
8. Islam MF, Haque SA, Islam MS, Das PS, Rahman M. Socio-economic status of fisher communities in Dengar beel under Upazila, Jamalpur, Bangladesh. *Asian Journal Medical Biological Research*. 2021;7(2):164-73.
9. Islam S, Reza MS, Roknuzzaman M, Razzaq A, Joadder M. Socio-economic status of fishermen of the Padma River in Chapai Nawabganj district, Bangladesh. *International Journal of Fisheries and Aquatic Studies*. 2017;5(1):101-4.
10. Scott J, Leonhardt D. Class matters: A special edition. *New York Times*. 2005 May 14;14. <http://www.nytimes.com/2005/05/14/national/class/15MOBILITY-WEB.html>.
11. Kumbhar AC. Socio-economic status of fisherman around ekrukha water reservoir of North Solapur Tahsil dist. Solapur (ms). *Global Journal of Research Analysis*. 2017;6(6):222-3.
12. Marmot MG, Kogevinas M, Elston MA. Social/economic status and disease. *Annual review of public health*. 1987 May;8(1):111-35.
13. Saifi S, Mehmood T. Effects of socioeconomic status on students achievement. *International Journal of Social Sciences and Education*. 2011 Apr 2;1(2):119-28.