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## Present scenario on livelihood status of the fishermen in the paira river, southern Bangladesh: constraints and recommendation

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### Abstract

The present study was conducted to evaluate the livelihood status of the fishermen in the Paira river during the period from 17 April to 28 October, 2012. By the investigation, it was found that most of the fishermen were belonged to the age groups of 21 to 40 years (50%), represented by 54% Muslim. Medium sized family was the predominant (60%) among the fishermen, but maximum were in a joint family (84%). Over 86% of the fishermen's primary occupation was fishing. About 38% of the fishermen were only could write name or illiterate while 46% and 14% and 2% of the fishermen were primary, secondary and higher secondary level of education, respectively. Highest income source (31%) of the fishermen were from fishing on the overall 5000 BDT/ Month. About 14% of the fishermen received health service from kobiraj, 24% from village doctors, 40% from upazila hospital and remaining 22% got health service from MBBS doctors in Health care center, PSTU. Maximum of their house were tin shed (62%), electricity facility was 82% and their main recreation purpose were radio (46%). About 26% household used kacha, 52% household used semi-pakka, only 3 (6%) household used pakka latrines and 16% had no latrines. Lack of scientific knowledge, illiteracy, and lack of government provocation were the major constraints in this area. So, the livelihood status like education, sanitation, housing condition, health condition, earning activity is possible to increase through proper management through the Government and Non- Government Organizations.

**Keywords:** Fishermen, Livelihood Status, Present Scenario, Constrains, Paira River, Southern Bangladesh

### 1. Introduction

Fisheries sector plays an immensely significant role on the socio-economic development of Bangladesh. It is the main source of animal protein, employment opportunities, food security, foreign incomes and socio-economic improvement <sup>[1, 2]</sup>. This sector contributes 4.39% GDP and fish supplements to about 60% of our daily animal protein intake. About 10% of the population is dependent directly and indirectly on the fisheries for their living. Total fish production in Bangladesh during the 2011-2012 was about 3.26 million metric tons of which 2.68 million metric tons were produced from freshwater, including culture fisheries and 0.05 million metric tons from marine water including shrimp <sup>[3]</sup>. About 97% of this production is marketed internally for domestic consumption while the remaining 3% exported to the foreign <sup>[4, 5]</sup>. It has already been renowned as a vital income and employment-generating sector in Bangladesh, cheap sources of healthy food for the population of the country <sup>[2, 6, 7]</sup>. It generates 1.4 million full time employment and part time employment of nearly 11 million people. A large portion of rural family members are involved in part time fishing from the rivers and beels <sup>[8]</sup>. Fishermen are one of the most vulnerable communities in Bangladesh. They are poor by any standard and over the years the economic condition of the fishermen had further deteriorated. Alam and Bashar <sup>[9]</sup> appraised the average per capital annual income of the fishermen, families to be BDT 2,442 i.e. about 70% lower than the per capital income of the country as a whole. Being an isolated community fishermen are deprived of many amenities of life. Paira River in the Patuakhali district is one of the significant river in the Southern Bangladesh.

Fishing activities are occurred regularly by the fishermen in the river. This area consisting of fishery plays a very important role in the alleviation of rural poverty and supplying food to the poor fishing community. However, the livelihood status of this fishermen are not satisfactory; availability of fishes in the river are also declining day by day. Considering the above fact, the present study was carried out to assess the livelihood status of the fishermen living around this river.

## 2. Materials and Methods

### 2.1 Study Area

The present study was conducted to assess the livelihood status of the fishermen adjacent to the Paira River in the Patuakhali district, Bangladesh (Figure 1).



Fig 1: Location of the study area

### 2.2 Methodology

Both primary and secondary data were used during the study. For gathering data, a combination of several survey techniques was adopted are as follows: The data were collected from 17 April to 28 October, 2012 in the adjacent area of Paira River.

### 2.3 Secondary Data Collection

Secondary source of information consist of published material such as journals, textbooks, newspaper etc. Moreover, appropriate government and non-government organizations such as Department of Fisheries (DoF) and Local NGOs.

### 2.4 Primary Data Collection

Field surveys were used for the collection of primary data. For the confirmation of the secondary data, primary data was used also. By using questionnaire, interviews and direct observations, primary data were gathered for this survey. Primary data were collected through structured questionnaires. The questionnaire form was filled in by interviewing from 50 fishermen fishing in the Paira River.

### 2.5 Focus group discussion (FGD)

For this research one of the PRA tool, such as Focus Group

Discussion (FGD) was conducted with fish farmers. In this research, FGD was used to get an overview of the livelihood status of the fishermen of the Paira River. A total of 6 FGD sessions was conducted where each group size of FGD was 6 to 8 people. FGD session was held in front of tea stall, under the shaded area, in the open field etc.

**2.6 Crosscheck interviews**

After collecting the data through questionnaire, interviews and FGD, crosscheck interviews were conducted with Upazila Fisheries Officer, Assistant Fisheries Officer, Field Assistant and relevant NGO workers and School teacher at their offices or home.

**2.7 Data Processing and Analysis**

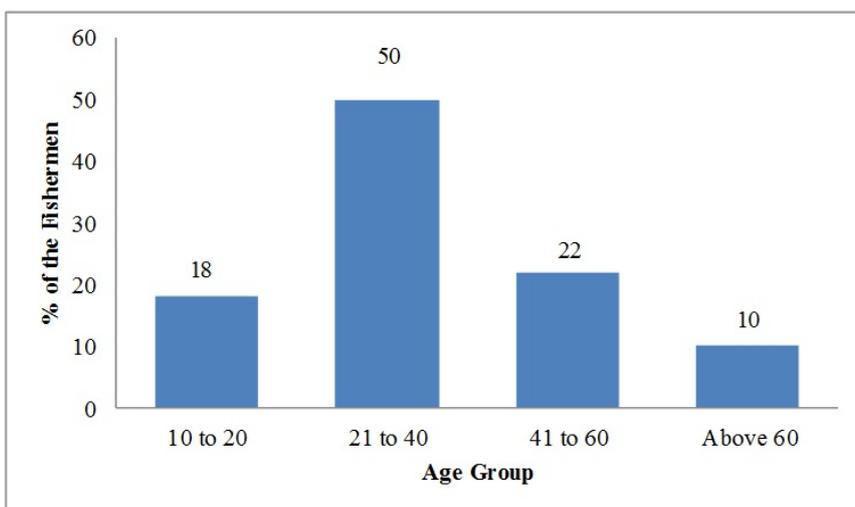
The collected data were transferred to tabular forms after careful examination and calculation. Data collected from various sources were coded and entered into a data base system using Microsoft office Software. The processed data were transferred to a master sheet from which classified tables

were prepared revealing the findings of the study. Finally, these data were analyzed by MS-Excel and then presented in textual, tabular and graphical forms to understand the present status of the livelihood status and constraints of the fishermen of the studied area.

**3. Results and Discussion**

**3.1 Age Group**

According to age structure ranged from 10 years to above 61 years. From the questionnaire interview, it was found that 9 people (18%) age group between 10-20, 25 people (50%) belong to age group between 21-40, 11 people (22%) were between 41-60, 5 people (10%) were more than 60 age group (Figure 2). Ahmed <sup>[10]</sup> in Tangail and Ahmed <sup>[4]</sup> in coastal region reported 66% and 70% under 40 years age respectively. Ali *et al.* <sup>[11]</sup> found that most of the fish farmers (50%) belong to the age group of 31 to 40 years in Mymensingh district and Ali *et al.* <sup>[2]</sup> found that most of the fishermen (60%) belong to age group of 31 to 40 years in Lohalia River, Patuakhali.

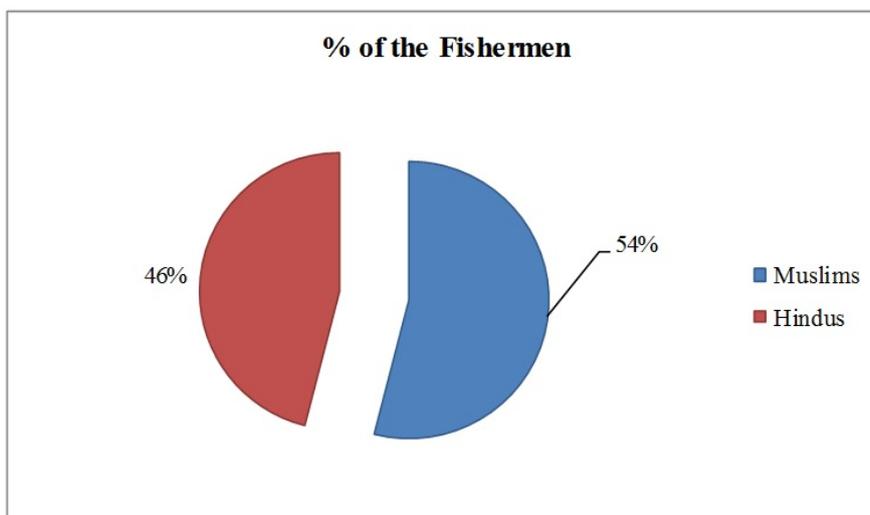


**Fig 2:** Age Distribution of the Fishermen

**3.2 Religious Status**

In the present survey, it was found that Muslims were (54%) of the fishermen and (46%) of them were Hindus (Figure 3). In the study of Ali *et al.* <sup>[2]</sup> found that most of the fishermen were

Muslim (75%) in Lohalia River, Patuakhali. Hassan and Mahmud's <sup>[12]</sup> studies on the coastal fishing community in Kuakata showed that the majority of fishermen were Muslim (93.94%). Hindu fishermen were found at (32%) at Sundarban <sup>[4]</sup>



**Fig 3:** Religious Status of the Fishermen

### 3.3 Family Type

From the study it was found that, 84% fishermen family were jointed and 16% family were unit family (Figure 4). About

42.5% of the fish farmers lived in nuclear family and the rest (57.5%) in joint family in Mymensingh district <sup>[11]</sup>.

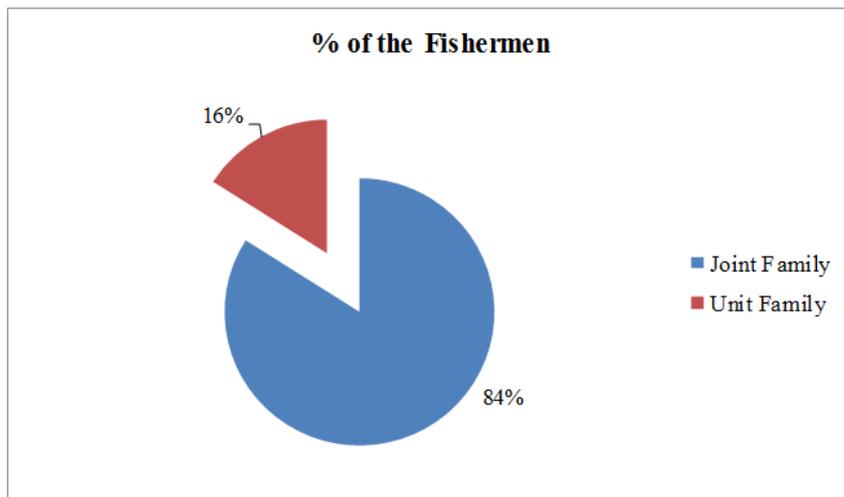


Fig 4: Family Type of the Fishermen

### 3.4 Family Size

On the basis of family size the fishermen were classified into four categories: Small family (2-4), Medium family (5-7), large family (8-10) and very large family (above 10). The highest percentage was obtained in the 5-7 members' family

(60%). The lowest percentage was obtained in the above 10 members, family (6%). 14% people lived in 2-4 members family, 20% people lived in 8-10 members in family (Figure 5). Most of the fish farmer (45%) belonged in the 4 to 5 member's family in Mymensingh district <sup>[11]</sup>.

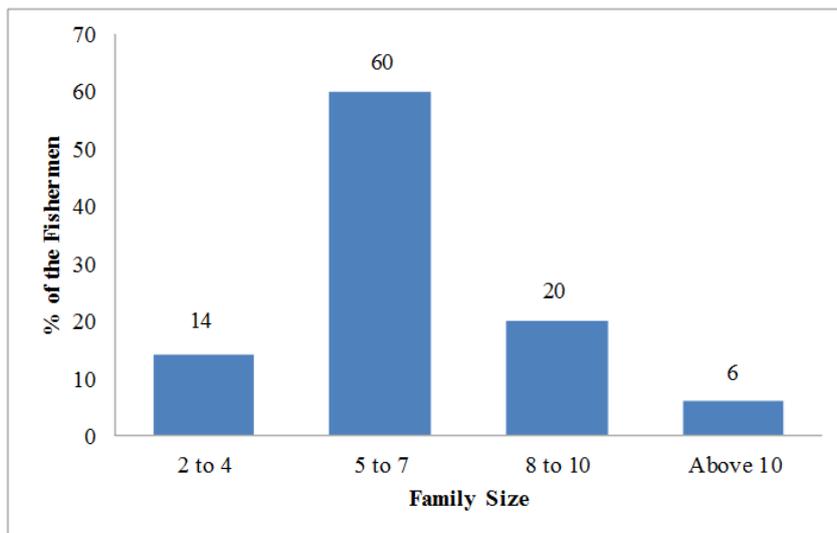


Fig 5: Family Member of the Fishermen

### 3.5 Educational Status

It was found that, most of the people in the study area were illiterate. However, ability of writing name was considered as literate (38%). There were maximum people who had passed primary (46%), 14% had passed secondary and 2% had passed higher secondary (Table 1). Literacy rate was not satisfactory in the communities of Paira River. Ahamed's study <sup>[4]</sup> in Sundarbans and Mahbubullah <sup>[13]</sup> in the polder and areas obtained literacy rates 25% and 23% respectively.

commodity. With the fishing they do some other works as agricultural work, day labor, net mending etc. The average monthly income of the fishermen was BDT 5000 (Table 2). The average annual income of fishermen in the study area was estimated at BDT 60,000 which indicating better than national average income at BDT 22,000 <sup>[14]</sup>.

### 3.6 Source of Monthly Income

The fishermen try their best to lead a smooth life, but they do not do for their lack of capital. In the present situation can't cope with the increase of the price of the daily necessary

Table 1: Educational Level of the Fishermen

Level of Education	No. of the Fishermen	% of the Fishermen
Illiterate/ Can Write Name	19	38
Primary	23	46
Secondary	7	14
Higher Secondary	1	2

**Table 2:** Source of Income of the Fishermen

Source	Average (Tk. in BDT)	% of the Fishermen
Fishing	1550	31
Agriculture	1100	22
Day Labour	1250	25
Net Mending	450	9
Other Source	650	13

**Table 3:** Credit access of the Fishermen

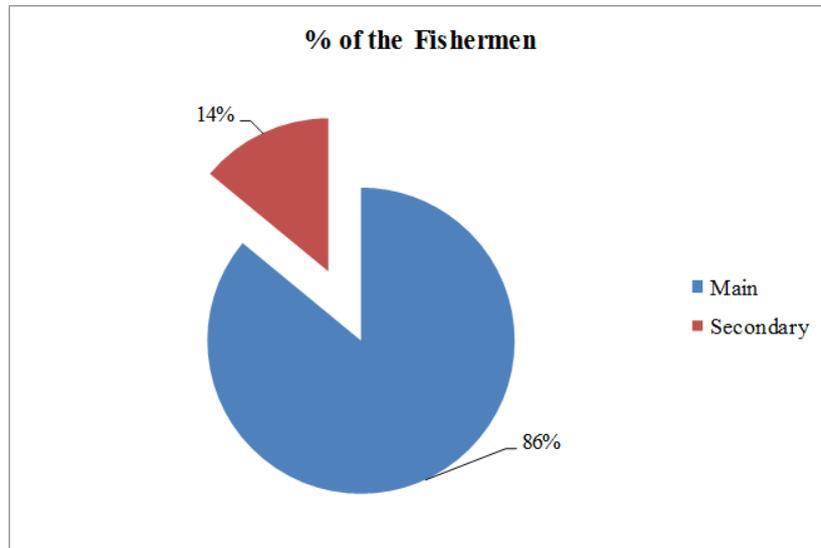
Source	No. of the Fishermen	% of the Fishermen
Self Sufficient	15	30
Borrow from Neighbors	12	24
Relatives	11	22
NGO's	8	16
Co-operatives	4	8

**3.7 Credit Access**

The national and local NGO like BRAC, FAO provide credit only to the organized poor members for purchase fishing gears and boats. After repayment only 30% became self-sufficient who did not need financial help but 24% borrow money from their neighbors, 22% from relatives, 16% from NGO's and 8% from co-operatives for their fishing business (Table 3) which was similar to the findings of Alam *et al.* [15] in Mymensigh district.

**3.8 Occupational Status**

Most of the fishermen around the study area are involved in fishing as their main occupation. It was revealed that the main occupation of the people were fishing (86%), while 14% were secondary occupation (Figure 6) which was more or less similar to the findings of [15].

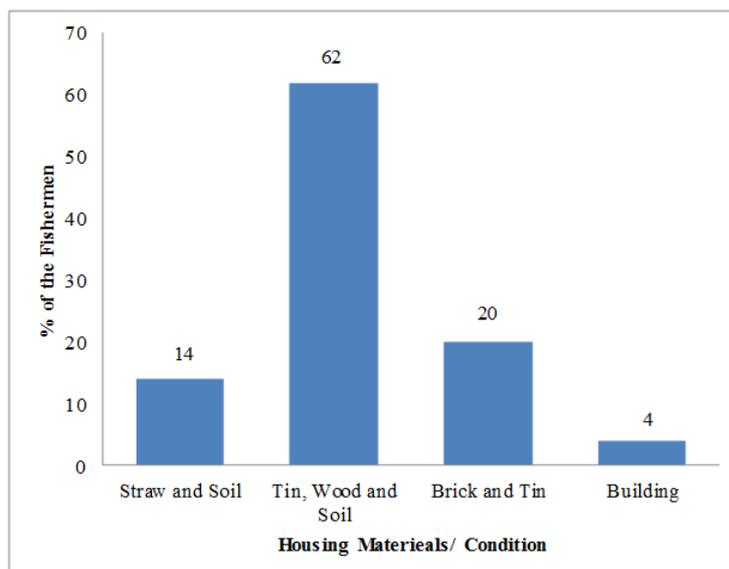


**Fig 6:** Occupation Type of the Fishermen

**3.9 Housing Condition**

The nature of the house was indicated the social status of the people. During the survey attempts were made to find out the condition of living house of the people. It was found that 14% were lived in the house made by straw and soil, 62% were

lived in the house made by tin, wood and soil, 20% were lived in the house made by brick and tin and 4% were live in Building. Samima [16] in Gallamary fishing community reported most of the fishermen's floor materials (94%) were Katcha (Figure 7).



**Fig 7:** Housing Condition of the Fishermen

### 3.10 Sanitary Condition

Most of the people in the study area, sanitation facilities were very low. The findings of the survey revealed that on the average 13 (26%) household used kacha latrines, 26 (52%) household used semi-pakka latrines and only 3 (6%) household used pakka latrines. But 8 (16%) had no latrines that

they use agricultural land, crop field, Aails (boundaries of the land), canals, bushy area and hidden place as latrine. (Figure 8). As awareness of proper sanitation is closely related to ability and education. CPP <sup>[17]</sup> in Tangail obtained 4% fishermen household had no latrines.

\*PSTU= Patuakhali Science and Technology University

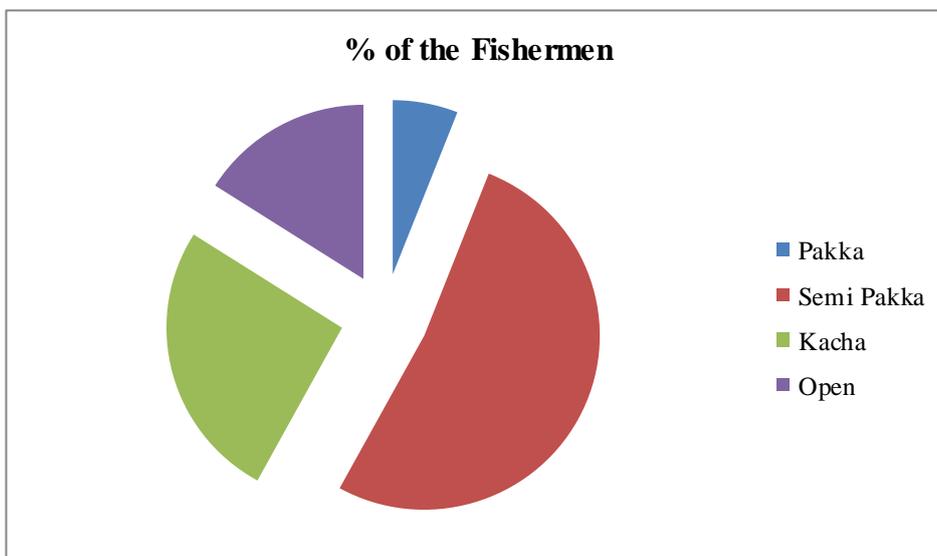


Fig 8: Sanitary Condition of the Fishermen

### 3.11 Health Facilities

The health facilities of the fishermen were moderately poor and it was found that 14% and 24% of the fishermen households were dependent on kobiraj and village doctors respectively who did not have any understanding and

knowledge of medical science. 40% of the fishermen got health service from Upazila Hospital, Dumki and remaining 22% got health service from Health Care Center, PSTU (Figure 9) which was more or less similar to the findings of <sup>[2]</sup>.

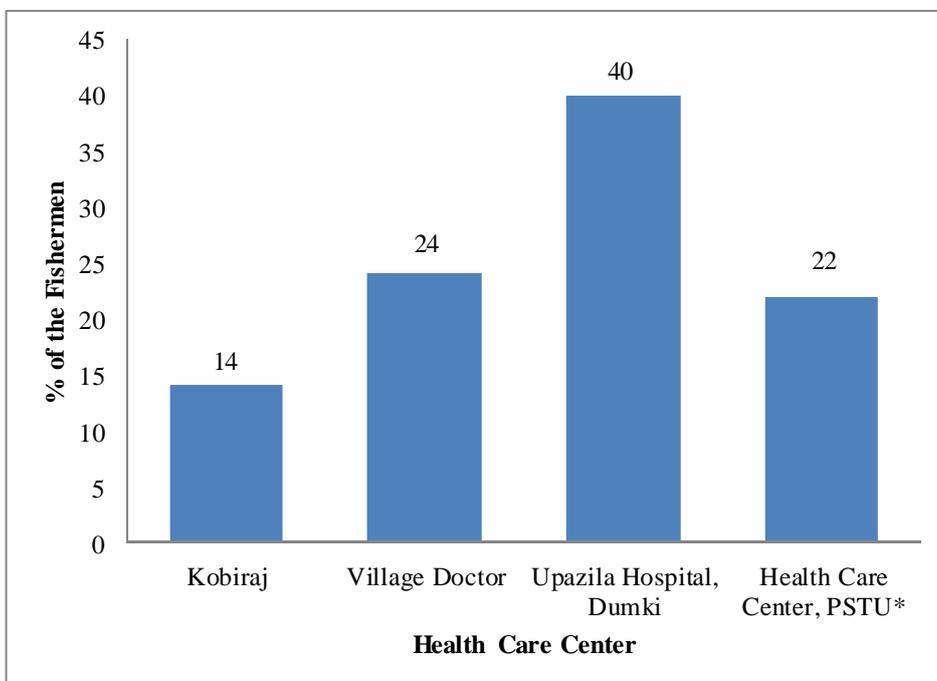
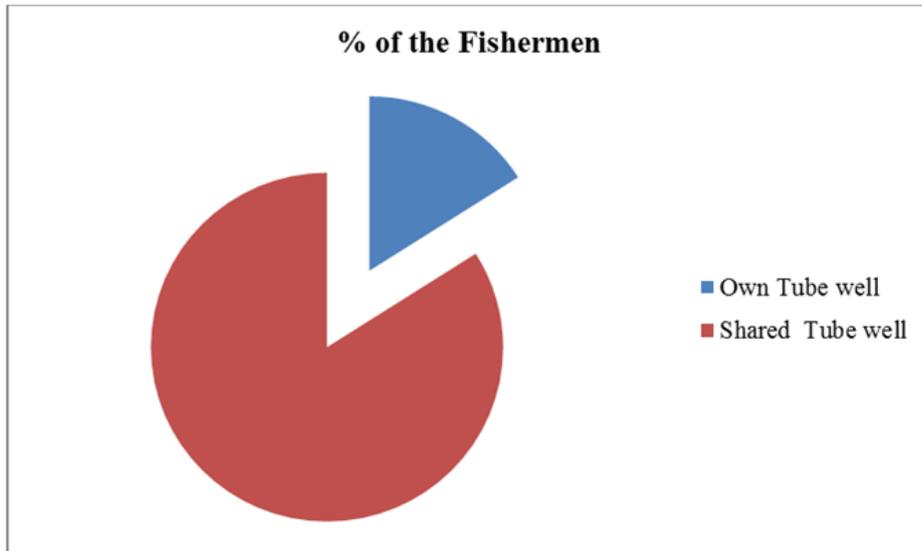


Fig 9: Health facilities of the Fishermen

### 3.12 Use of Electricity

In the survey, it was found that the majority percentage of households had an electricity connection (82%) and minority (18%) percentage of households had no electricity connection

(Figure 10). DoF <sup>[18]</sup> reported from “Third Fisheries Project” that 2% fishermen household used electricity. Samima <sup>[16]</sup> reported that 20% used electricity in Gallamary fishing community, Khulna.

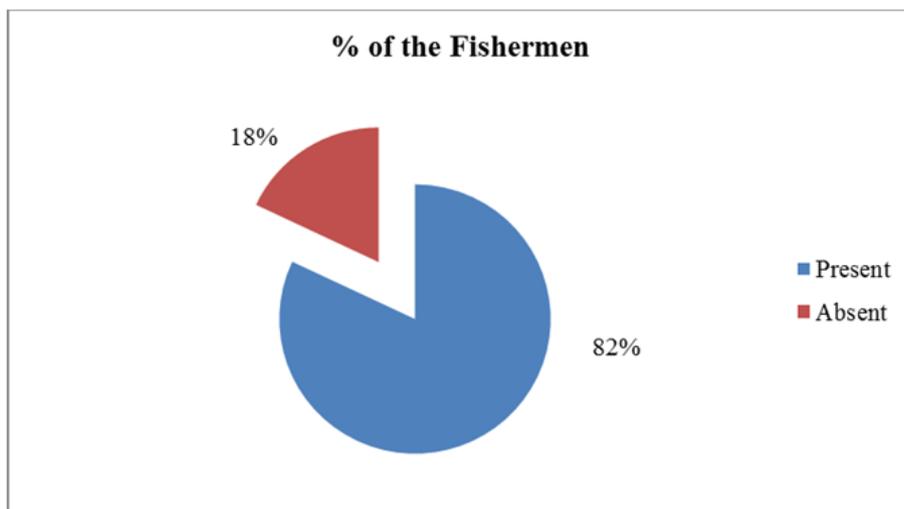


**Fig 10:** Drinking water facilities of the Fishermen

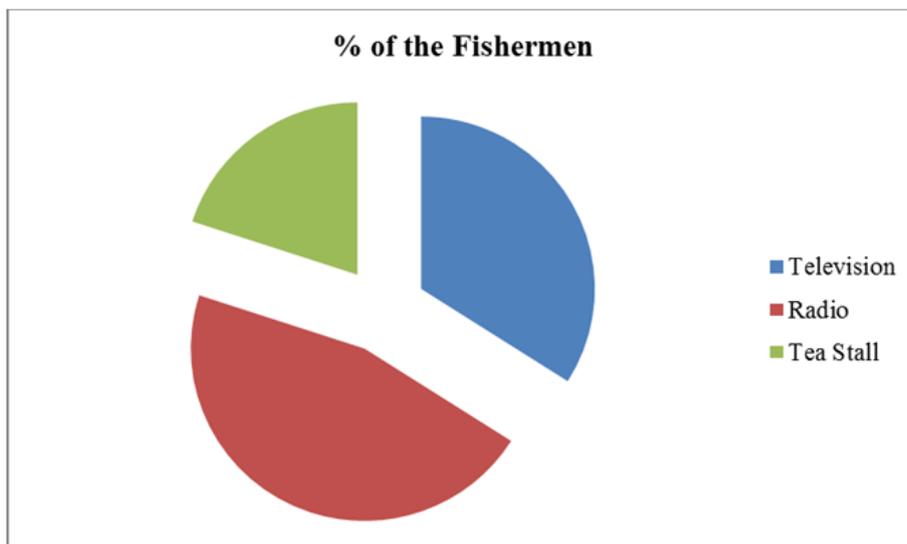
**3.13 Recreational Facilities**

In the study period, about 34% and 46% of the fishermen used own Radio and Television respectively for their recreational purpose and also for getting national news. But 20% fishermen

passed their time in the tea stall for recreation (Figure 11). Kostori <sup>[19]</sup> found 36% use radio/ Television and 64% have no way for recreation in the Chalan Beel, Sirajganj district.



**Fig 11:** Electricity facilities of the Fishermen



**Fig 12:** Recreational facilities of the Fishermen

#### 4. Livelihood Constraints of the Fishermen

Most of the fishermen were facing various problems during fishing and marketing their goods in the local market. The main problem was documented as extortion by the local extortionist, other problems were insufficient credit facility, lack of marketing facilities, lack of knowledge of fishing, lack of appropriate gears and disturbances by dacoits and thieves and sometimes by the local people themselves. Most of the fishermen were very poor and they have limited resources to buy nets and other fishing equipment's. They are ignored in all respect in the society. Most of them are illiterate and live from hand to mouth. Being very poor in their children often go for fishing rather than going to school. As a result, generation after generation, they remain illiterate and not being able to contribute for the improvement of their community.

#### 5. Conclusion and Recommendation

The livelihood status of the Fishermen in adjacent to the Paira River were not satisfactory. The education level of the Fishermen was so poor. Due to the lack of awareness as well as the poor income of the Fishermen families, the study of the poor Fishermen student doesn't go so far. The Government should take some important stage by providing some sorts of management policy as well as providing of some extra providence during the ban season of the fishing. That may be done within the providing of the VGF card. Some forms of NGO's activity must be ensured in the adjacent area for the improvement of the life leading status of the Fishermen. The NGO's must be helpful about the providence of the loan which may be used for the up gradation of the income procedure. As well as health facilities should be ensured by the government assistance. So, there is a necessity of proper administrative involvement to make proper guideline for the proper use of resources by the communal people.

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