Socio-economic Aspects on Fishery of Local People in Kamarse Sanpya Village, Thanatpin Township, Bago Region

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Abstract:- **The Kamarse creek located in Thanatpin Township of Bago Region was designated as the study area. The socio-economic survey in the chosen area is mainly based on the recorded fishery processes during the study period from August 2017 to March 2018. The survival patterns for livelihood of the locals in dry and rainy seasons were comparatively studied from the socio-economic aspects. The sampling frame was based on the list of households in Kamarse Sanpya Village. The household members were categorized into four classes of age by sex such as 5-24, 25-44, 45-64 and 65+ respectively. Educational status of household members was classified into illiterate, monastery, primary (learning), primary (passed), middle (passed), undergraduate and graduate. The occupation in two situations namely rainy season and dry season since the job category can change according to the season. In rainy season, the highest percentage of occupation is fishery which made up 37.6% of household members. In dry season, the highest percentage of occupation is general worker which is 35.9% of household members. Fishermen mainly earned their income by fishing during rainy season but they used to change their occupations especially in dry season. The two occupations, fishermen and general workers, are found as vice visa.**

Keywords:- *Socio-Economic Survey, Population, Educational Status, Occupation, Income*

I. INTRODUCTION

Fish is the world's largest wild food harvest and provides a vital source of protein and fetch sustainable income for many families in the developing countries. An estimate of 120 million people throughout the world depends on fish for all or part of the income of their livelihood for many families in the developing countries [6].

Kamarse Sanpya Village has 14 wards and 990 houses with 1022 households with a total population of 5117. Kamarse Sanpya Village is situated on the bank of the Kamarse creek which is six miles (9.66 kilometers) long and covers an area of 10.86 acres. The depth of water level in this creek is about 8 to 9 ft (2.44 to 2.74 meters) in the rainy season but the water is very low in the summer. The Kamarse creek is also connected to the Sittaung River.

Most of the local people of Kamarse Sanpya Village earn their income based on the fishery during the rainy season. They also solve their livelihood by doing other suitable occupations out of fishing season.

The objectives of this study were

➤ to record the main socio-economic status of the locals in Kamarse Sanpya Village
➤ to determine the role of fishery processes in the chosen area
➤ to seek occasional changes in ways of the livelihood of the local people

II. MATERIALS AND METHODS

A. Study Area
Kamarse Sanpya Village is located at 17 13' North, 96 37' East. Thanatpin Township is located at 17 17' North, 96 34' East.

B. Study Period
Random household surveys concerning with socio-economic aspects of the locals were made from August 2017 to March 2018.

C. Questionnaire Survey Works
The present study is based on livelihood of some villagers in this study village. The well-trained enumerators used face to face interviewed method in field operation to obtain the required information [1] and [4].

D. Collecting And Processing Of Survey Data
The sampling frame was based on the list of households in Kamarse Sanpya Village. The sample design used was simple random sampling design, and 10 per cent of the households were selected from 1022 households. The

questionnaire collected demographic, income and expenditure data. The enumerators undertook the checking, editing and coding of the filled up questionnaire forms after the interviews were completed [2] and [3]. Manual data verification and data validation by computer were done thoroughly before the computer did any tabulation [5] and [8]. Data entry and analyzing were completely carried out by using SPSS (Statistical Package for Social Sciences) for Windows Software.
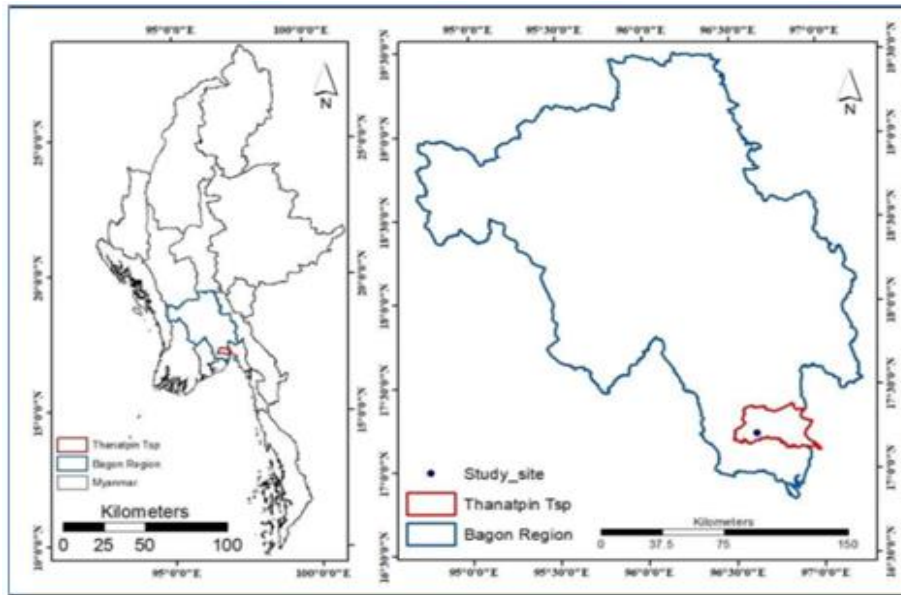

Fig 1:- Map of Kamarse Sanpya Village, Thanatpin Township, Bago Region
(Source: Google Map)

III. RESULTS

A. Age and Sex Distribution

The survey collected demographic data for all persons of 10% households in Kamarse Sanpya Village such as age by sex. The household members were categorized into four classes of age by sex. It is clear that the percentages of the working age group are very high. In the village, 56.7% of household members are of the age groups 25-44 and 45-64. There is not much different between the number of males and females. (Table 1 and Fig.2).

B. Educational Status

Educational status of household members was classified into illiterate, monastery, primary (learning), primary (passed), middle (passed), undergraduate and graduate (Table 2 and Fig.3).

According to the survey results, all the persons in Kamarse Sanpya Village are literate. The monastery educational level is found as the highest percentage among the divided classes. The percentage of monastic education is 30.2 which indicates the important role of monastic education in KamarseSanpya Village. The percentage of primary level education is 54.4 which includes 28.5% and 25.9% for learning and completed of primary level respectively. The percentage of under graduate level and graduate level are 2.6% and 3.4% respectively. The percentage of females who are the graduate level education is more than males.

Age Group	Sex		Total	Percent
	Male	Female		
5-24	70	70	140	39.9
25-44	66	68	134	38.2
45-64	35	30	65	18.5
65+	6	6	12	3.4
Total	177	174	351	100.0

Table 1:- Distribution of Household Members by Age Group and Sex
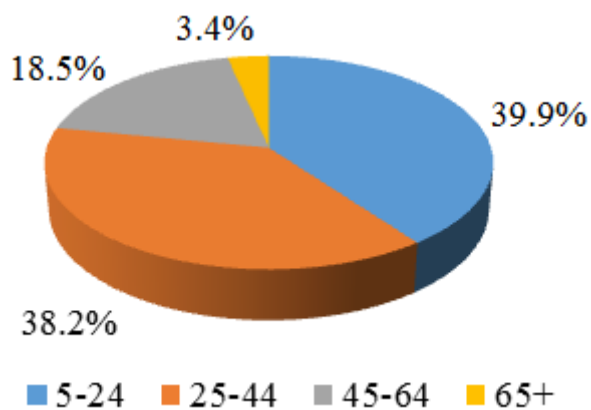
Fig 2:- Household Members for Age Group by Sex

Sr. No.	Educational Status	Sex		Total	Percent
		Male	Female		
1	Monastery	58	48	106	30.2
2	Primary (Learning)	49	51	100	28.5
3	Primary (Passed)	41	50	91	25.9
4	Middle (Passed)	22	11	33	9.4
5	Under graduate	4	5	9	2.6
6	Graduate	3	9	12	3.4
	Total	177	174	351	100.0

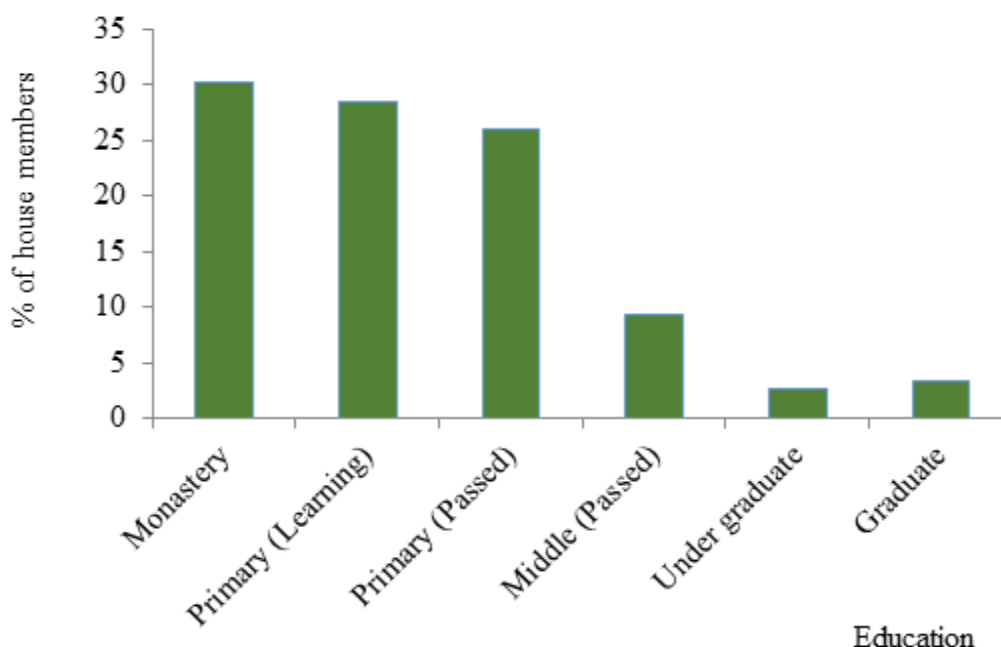Table 2:- Educational Status of Household Members by Sex

Fig 3:- Educational Level for Household Members

C. Occupation

The occupation in two situations namely rainy season and dry season since the job category can change according to the season.

➢ *Rainy Season*

In rainy season, the highest percentage of occupation is reported as fishery and which made up 37.6% of household members. 11.7% and 2.3% of household members are farmer and other ownership.

Percentage of shopkeeper, mechanic, driver and cropper are lower than the percentage of fishery. The second highest of household members are student. 9.4% of household members are dependent (Table 3, Fig. 4).

➢ *Dry Season*

In dry season, the highest percentage of occupation is reported as general worker and which is 35.9% of household members. 12% and 10.5% of household members are farmer and shopkeeper. The other household

members in the rainy season are the same of occupation of household members in the dry season (Table 4, Fig. 5).

From Tables 3-4 and Figures 4-5, fishermen mainly earned their income by fishing during rainy season (fishing season), but they used to change their occupations especially in dry season (non-fishing season). These fishermen thus are regarded as general workers in dry season. The two occupations, fishermen and general workers, are found as vice visa.

Sr. No.	Type	Sex		Total	Percent
		Male	Female		
1	Fishery	78	54	132	37.6
2	Farmer	26	15	41	11.7
3	Other animal ownership	4	4	8	2.3
4	Shopkeeper	8	24	32	9.1
5	Mechanic/Driver	14	2	16	4.5
6	Government staff	3	9	12	3.4
7	Cropper	1	0	1	0.3
8	Student	39	35	74	21.1
9	Dependent	2	31	33	9.4
10	Others	2	0	2	0.6
	Total	177	174	351	100.0

Table 3:- Occupation of Household Members by Sex in Rainy Season
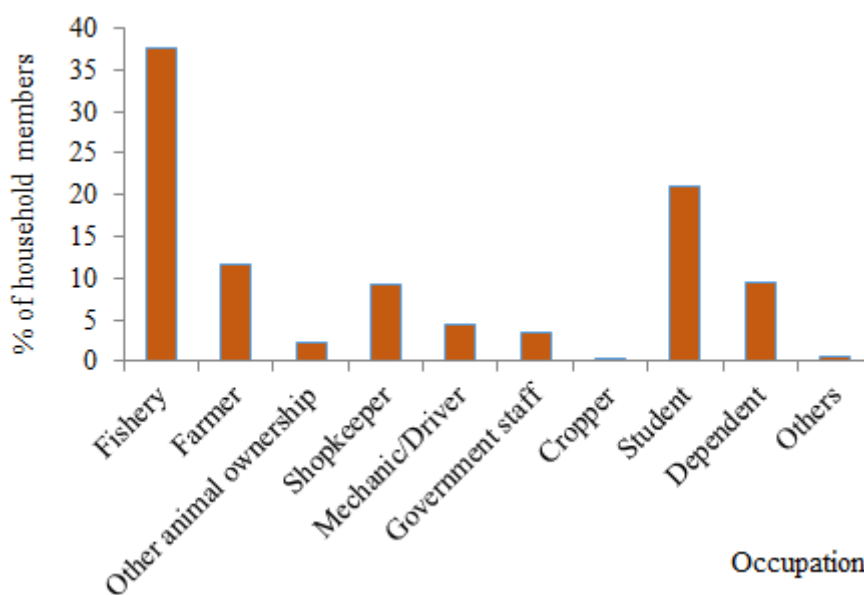
Fig 4:- Job Category of Household Members in Rainy Season

Sr. No.	Type	Sex		Total	Percent
		Male	Female		
1	General worker	75	51	126	35.9
2	Farmer	28	14	42	12.0
3	Other animal ownership	4	4	8	2.3
4	Shopkeeper	9	28	37	10.5
5	Mechanic/Driver	14	2	16	4.5
6	Government staff	3	9	12	3.4
7	Cropper	1	0	1	0.3
8	Student	39	35	74	21.1
9	Dependent	2	31	33	9.4
10	Others	2	0	2	0.6
	Total	177	174	351	100.0

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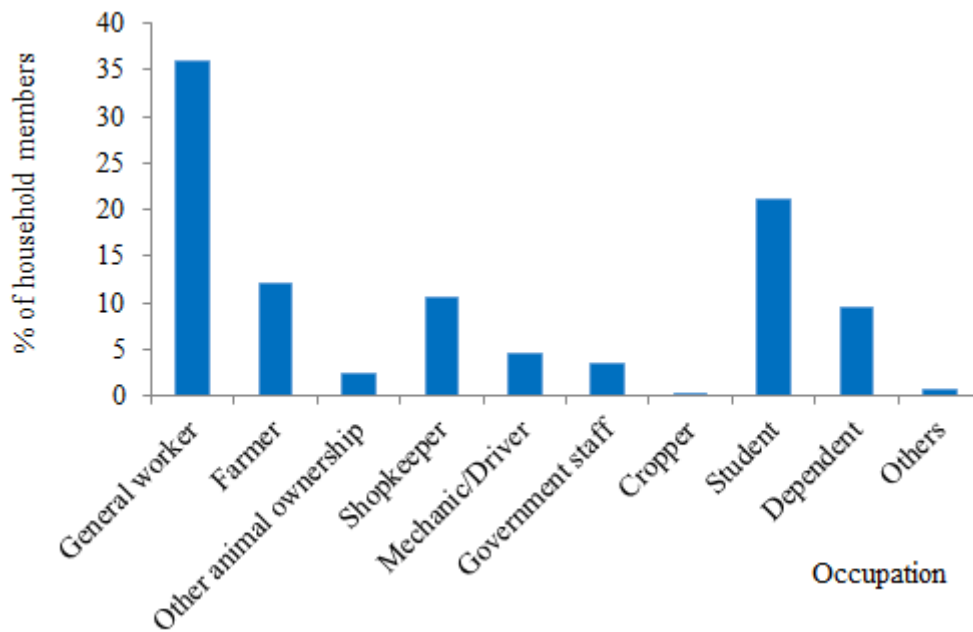
Fig 5:- Job Category of Household Members in Dry Season

D. Income and Expenditure

In the rainy season, 4% of the households are extreme values of monthly income which have more than 900000 MMK. Most of the households (63%) have the income level between 300000 MMK and 480000 MMK. In the dry season, 3% of the households are extreme values which have more than 800000 MMK for household income. Most of the households (30%) have the income level 350000 MMK.

The expenditure of 77% households is less than 300000 MMK. According to the analysis of monthly income and expenditure, the villagers in Kamarse Sanpya Village can save the part of their incomes in rainy season.

IV. DISCUSSION

The fish fauna of this Kamarse creek were studied in views of economy in the Kamarse Sanpya Village, Thanatpin Township. Small scale and large scale fishery processes are found along the Kamarse creek. In the large scale fishery, small fishes are more abundant than large fishes. Most of the fishermen and general workers participate on small scale fishery along the Kamarse creek. In the small scale fishery, large fishes are more abundant than small fishes.

Hannan [7] stated that fishermen are traditionally poor and fishing is considered as a low-class profession in Bangladesh.

Kamarse creek provided economy of the social communities in the Kamarse Sanpya Village. Nearly forty percent of the locals of Kamarse Sanpya Village mainly earned their income by catching fish. Most of the villagers keep fishing work as a traditional business. Income of fishing season (rainy season) is greater than the fetched income out fishing season for the livelihood of villagers. Fishery activities supported both home consumption and income for the local people. Most of the fishermen survive by changing jobs and adapting their livelihood. Fifteen percent of women involved in the fishery processes of this study area.

V. CONCLUSION

The monthly income levels of households in Kamarse Sanpya Village are different and the family income in rainy season is more than in dry season. From the findings of this study, it is concluded from socio-economic point of view that the villagers of Kamarse Sanpya Village can save the part of their incomes in rainy season for the future plan of their livelihood.

REFERENCES

[1]. V.Parashar, S.K. Bara, D. Damde, A. Kumar and V. Vyas., Assessment of the socioeconomic status of fishermen communities: a case study from a selected reach of River Narmada, India, 2016.
[2]. F. Alban, N. Roncin and J. Boncoeur., Methodological Guidebook For Socio-Economic Field Surveys of MPA users, 2008.
[3]. E.C. Cassel and A.M. Jallow., Report of a Socio-economic Survey of the Artisanal Fisheries along the Atlantic Coast in the Gambia, 1991.

[4]. C.S.O., Household Income and Expenditure Survey, Central Statistical Organization, Yangon, Myanmar, 1997.
[5]. F.J.Gravetter and L.B. Wallnau., Statistics for the Behavioral Sciences, State University of New York, TATA Mc-Graw-Hill Publishing Co.Ltd. New Delhi, 1985.
[6]. G.Pereira., Women in Fisheries in Latin America., 2000.
[7]. M. Hannan., Fisherfolk organization in Bangladesh. In: Socio-economic issues in Coastal Fisheries Management. Proceedings of the IPFC Symposium, Bangkok, Thailand, 1993.
[8]. J.W.Tukey., Exploratory Data Analysis, 1977.