

Socio-economic Status of Fishermen in Pone In, Hsi Hseng Township

Thida Win¹, Thant Zin²

Abstract

The socioeconomic status of fishermen from five villages around Pone In (Lake), Hsi Hseng Township, Southern Shan State was investigated from June 2019 to November 2019. A total of 120 fishermen households were engaged during the questionnaire survey. Based on the results, the fishermen community was represented with 4.17% in <20 years age group, 5.87 in >50 years age group, 14.00% in 20-30 years age group, 19.7% in 40-60 years age group and 56.66% in 30-40 years age group. The family of fisher community was represented with 5.83% on small (1-3 persons), 80.00% in the medium (4-6 persons) and 14.17% in large (7-10 persons). The educational status of fishermen ranged from no education at all to graduate level. Monthly income of fishermen household ranged from <100000 kyats in five households to >1000000 kyats in 23 households.

Key words: Socioeconomic status, fishermen, Pone In (Lake), Hsi Hseng Township

Introduction

Myanmar has terrestrial and aquatic ecosystems and marine water covers a total area of approximately 486000 km², 8.1 million hectares of inland freshwater bodies and a large number of estuaries, rivers creeks, streams, natural pond and lake (Anonymous, 2009).

Fisheries sector play an interpoint role on socio-economic development of fishermen community. Fish and fishing business is an important sector of many nations of the world from the standpoint of income and employment generation. Fishing plays an important role in supporting livelihood worldwide and also forms an important source of diet for many people.

During the monsoon season flooded plains are breeding and nursery grounds for freshwater fishes. Fisheries have major role in social and economic development because Myanmar people are largely and mainly dependent on rice and fish. Fishes and fish products are the major source of animal protein. These can be utilized as foods in many forms such as fish, dried, salted and paste for the whole country.

In Myanmar, commercial and traditional fishing as well as aquaculture are significant, providing food, income and employment for the local populations and foreign exchange.

Regional socioeconomic analysis (SEA) of fishermen is fundamental to completely understand the present conditions, define chances and risks of future developments and indicate possibilities to minimize negative impacts on human life quality (FAO, 2010).

Socio-economic development can be measured with indicators, such as gross domestic product (GDP), basic infrastructure, life expectancy, literacy, food security and levels of employment. Myanmar's socio-economic indicators have continued to decline and the country remains one of the world's least developed countries (BTI, 2016).

Pone In is a seasonal flooded plain located at Naungmon Village, HsiHseng Township, Southern Shan State. The local people of Pone In are paddy cultivators. However, some people

¹ PhD Student, Lecturer, Department of Zoology, University of Mandalay

² Professor and Head, Department of Zoology, University of Mandalay

take up full time or part time jobs in fishery. Thus, the main source of income is from paddy while the second largest income is from the freshwater 'In' fishery.

During the flooded period, water flows slowly into the In. A little water remains only during later months and it became almost dry appearing as a small canal in April and May. Fishing is done by men drawn from the surrounding villagers who work in teams, except from June to Mid-November. This research aimed to determine the socio-economic status of fishermen from Pone In,

Materials and Methods

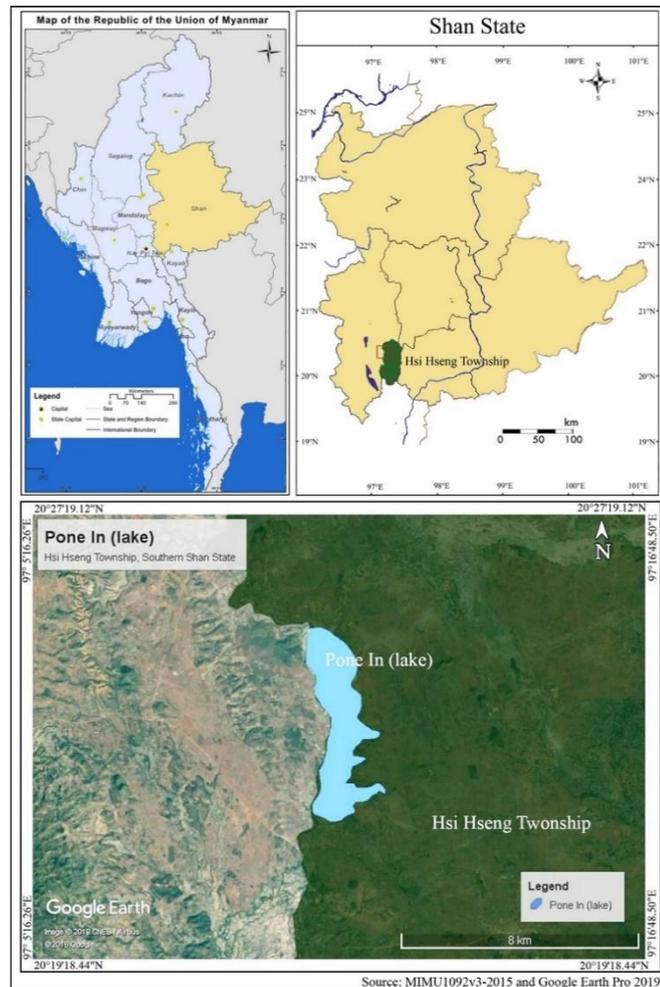


Fig. 1 Map of study area, Pone In (lake), Hsi Hseng Township, Southern Shan State

Study Area

This study was conducted in five villages, Waung Pone (at 20°28'51"N and 97°10'56"E), Wang Khun (at 20°27'02"N and 97°07'56"E), Kun Saing (at 20°33'26"N and 97°12'58"E), Sain Lae (at 20°28'19"N and 97°06'11"E) and Naung Sang (at 20°28'56"N and 97°13'25"E) Nungmon Village tract, Hsi Hseng Township (Fig. 1).

Study Period

The study period was undertaken for a period of seven months (from June, 2019 to November, 2019).

Data Collection

Random sampling method was applied to choose the respondents. Before the data collection questionnaire survey forms were prepared. Household survey form and fishery survey form were included. Questionnaire surveys were conducted in each village. Family size, age group, educational status, sex ratio, monthly income and expenditure, household sanitation, access to electricity and water sources were recorded for each of the families. Local community leader interviews provided the general information about villages.

Data Analysis

All the collected information was accumulated, grouped, summarized and interpreted according to the objective. The collected data were expressed as graphical, tabular and pie chart forms for easy observation.

Results

Social Factors

Population and Settlement Trend

Interviews were conducted 10 households in Wang Pone, 15 households in Wang Kun, five households in Kun Saing, 30 households in Sain Lae and 60 households in Naung Sang. The family size data were recorded in five villages with 120 households of the surveyed area. The recorded results of family size were 10 household with 55 individuals in Wag Pone, 15 households with 75 members in Wang Kun, five households with 33 members in Kun Saing, 30 households with 153 members in Sain Lae and 60 households with 332 members in Naung Sang respectively (Table 1).

The total number of interviewers was 645 which represent 120 households in all five villages covered. The settlements of respondents were also recorded. The results stated that all respondents are native people.

Age Groups and Gender

The age groups are officially categorized into three classes introduced by the Myanmar authorities. These are:

- 0 to 14 considered as children
- 15-60 considered as working classes and
- 61 and above considered as dependents.

The age of fishermen was classified into five groups such as <20, 20-30,30-40, 40-50 and >50.

The majority of the fishermen (56.66%) engaged in the fishing was between 30 40 years of age. Other (19.7%) of fishermen under age group (40-50 years), 14.00% of fishermen under age group (20-30 years) ad 5.87% of fishermen was (above 50 years) aged group and 4.17% of fishermen was <20 years age group (Table 3).

Family Size

The family size of the fishermen was divided into three types on the basis of the number of family members in this study. About 5.83% families were small (1-3 person), 80.00% families were medium (4-6 person) and 14.17% of families were large (7-10 persons) (Table 4).

The gender count was 296 males and 349 females. Females dominate males in the population of the study area.

Education Status

About 2.5% of fishermen had no education and 11.67% of fishermen were learners in monastery. Most of the fishermen 38.33% stopped their learning at secondary level, (33.33%) in primary level and 10.00% at high school and the least 4.17% of fishermen got graduated.

House Structure

The housing condition of fishermen was divided into four categories according to build materials. Recorded housing patterns are shown in Table 6. Of these, 35.0% of fishermen had timber house with tin roof, 15.83% fishermen had house with tin wall with tin roof, 13.33% fishermen had timber house with tin roof, 18.34% fishermen had brick house with tin roof, 11.67% fishermen had bamboo mesh house with tin roof and 5.3% fishermen had brick house with tin roof. (Table 6)

Facilities

Using and Drinking Water Facilities

It was observed that all of the fishermen used tube well water for washing and cooking and purified water for drinking in the study area.

Sanitary Facilities

The sanitary conditions of fishermen were very well. About 90% had western style toilet while 10% had simple toilet.

Electricity Facilities

It was found that 95% of the fishermen had solar cell energy and 5% used dry cell battery in the study area.

Cooking Facilities

In the study area, 70% of the fishermen communities used wood stove and 30% used charcoal stove for cooking.

Entertainment and Electronic Equipment

About 85% of fishermen has mobile phone, Radio, TV, media player and satellite disk and they were used for the pleasure and knowledge in the study area.

Food Consumption

Fishermen communities in Poe I fishing village ate more fish (60%), than vegetable (30%) and meat (10%).

Income, Expenditure and Credit

Income

Monthly income of fishermen was divided into six classes in the present study. The average monthly laborers' income was found to be lowest (84600-198675.46 kyats) and the highest (Kyats 467000-2897032.36) in the owners.

Expenditure

Monthly households' expenditure of respondent was classified into five groups. The average monthly fishermen households' expenditure ranged from 76426.37 kyats to 630000 kyats (Table 4.7).

Credit

According to interview survey, about 85% from NGO (Mya Sein Yaung) and 15% of the fishermen had no credit.

Table 1 Population distribution and gender in the surveyed area

Sr. No.	Village	Household	Male	Female	Total	
					Population	Percent
1	Waung Pone	10	26	29	55	8.53
2	Waung Khun	15	34	38	72	11.16
3	Kun Saing	5	15	18	33	5.12
4	Sain Lae	30	66	87	153	23.72
5	Naung Sang	60	155	177	332	51.47
Total		120	296	349	645	100

Table 2 Population composition in interviewed areas and whole villages

Sr. No.	Village	Interviewed		Total Villages	
		Households	Population	Households	Population
1	Waung Pone	10	55	56	362
2	Waung Khun	15	72	20	130
3	Kun Saing	5	33	27	161
4	Sain Lae	30	153	155	854
5	Naung Sang	60	332	180	1160
Total		120	645	438	2667

Table 3 Age structure of fishermen community in the study area

Sr. No.	Age classes (years)	No. of fishermen (n=120)	% of fishermen
1	<20	5	4.17
2	20-30	17	14.17
3	30-40	68	56.67
4	40-50	23	19.17
5	>50	7	5.83
Total		120	100

Table 4 Family size of the fishermen in the study area

Sr. No.	Family size	No. of Household (n=120)	% of fishermen
1	small family (1-3)	7	5.83
2	medium family (4-6)	96	80.00
3	large family (7-10)	17	14.17
Total		120	100

Table 5 Educational status of the fishermen in the study area

Sr. No.	Educational Level	No. of fishermen (n=120)	Percentage
1	Illiterate	3	2.50
2	Monastery	14	11.67
3	Primary	40	33.33
4	Secondary	46	38.33
5	High School	12	10.00
6	Graduate	5	4.17
Total		120	100

Table 6 Housing condition of the fishermen community

Type	Housing pattern	No. of houses	Percentage
One story	Bamboo mesh house with tin roof	14	11.67
	Timber house with tin roof	42	35.00
	Brick house with tin roof	7	5.83
	House within tin wall and tin roof	19	15.83
Two stories	Timber house with tin roof	16	13.33
	Brick house with tin roof	22	18.33
Total		120	100

Table 7 Monthly household's income of respondents

Sr. No.	Income class (kyats)	No. of households	Average income per household (kyats)
1	<100000	5	84600.00
2	100000-300000	69	198675.46
3	300000-500000	12	467000.00
4	500000-700000	8	657866.64
5	700000-900000	3	887000.00
6	>1000000	23	2897032.36

Table 4.8 Monthly household's expenditure of respondents

Sr. No.	Expenditure class	No. of households	Average expenditure per household (kyats)
1	<100000	6	76426.37
2	100000-250000	78	186285.00
3	250000-400000	28	323500.00
4	400000-550000	5	470000.00
5	>500000	3	630000.00

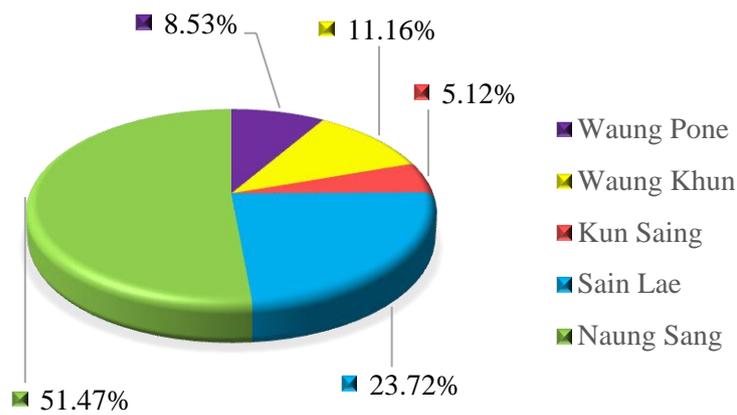


Fig. 2 Population distribution and gender in the surveyed area

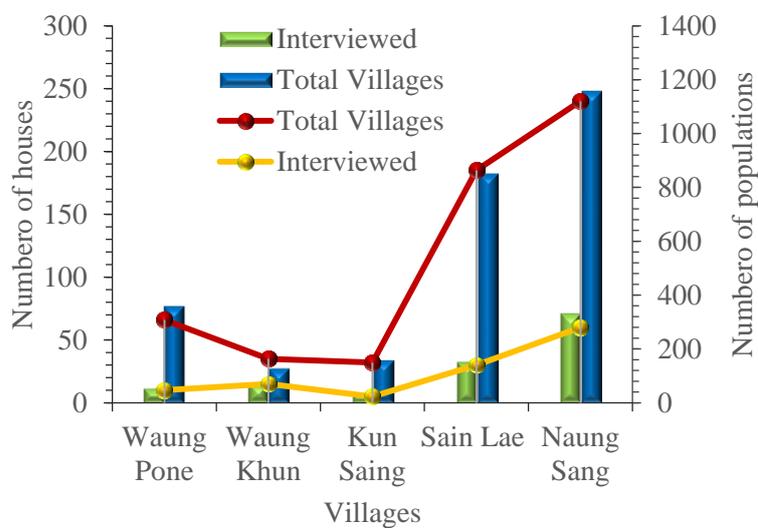


Fig. 3 Population composition in the interviewed areas and whole villages

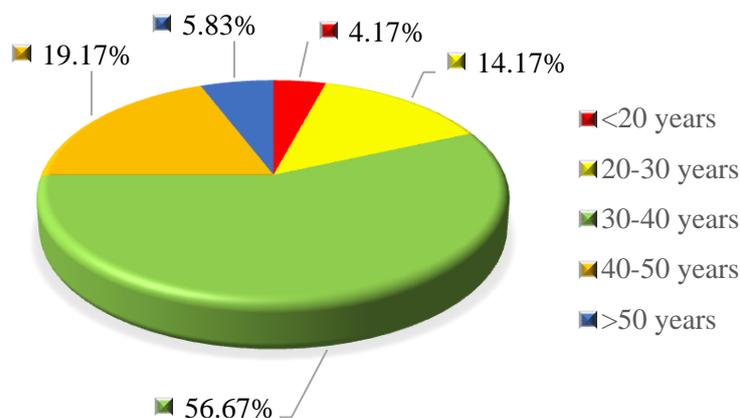


Fig. 4 Age structure of fishermen community in the study area

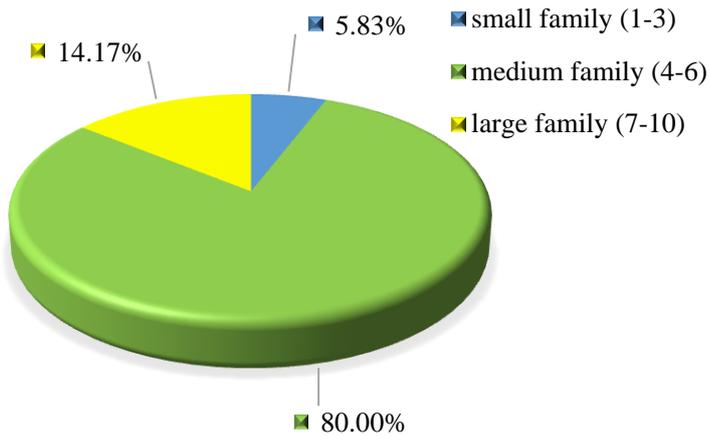


Fig. 5 Family size of the fishermen in the study area

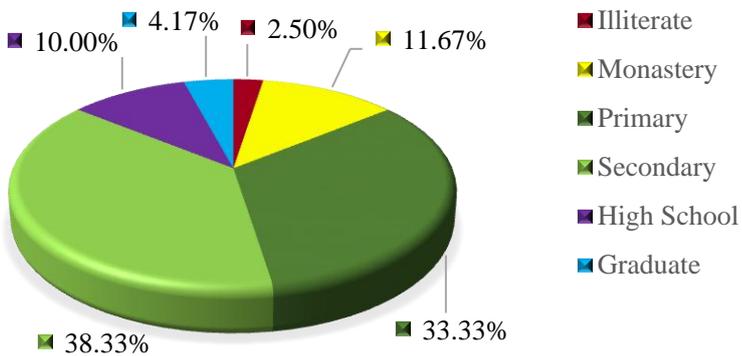


Fig. 6 Educational status of the fishermen in the study area

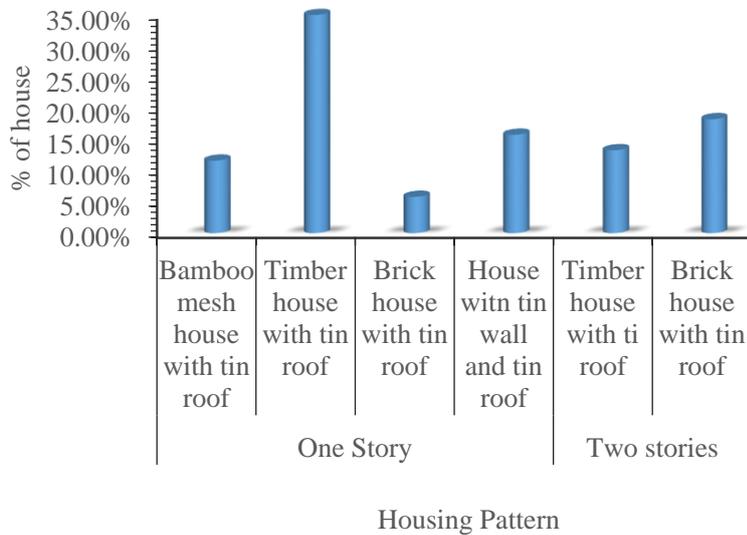


Fig. 7 Housing condition of the fishermen community

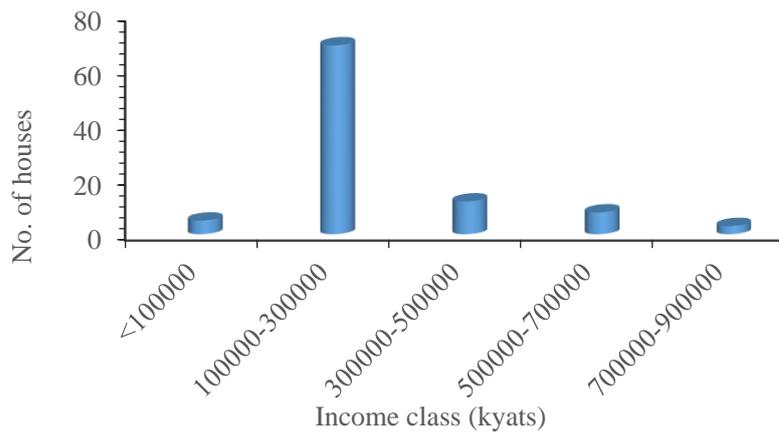


Fig. 8 Monthly household's income of respondents

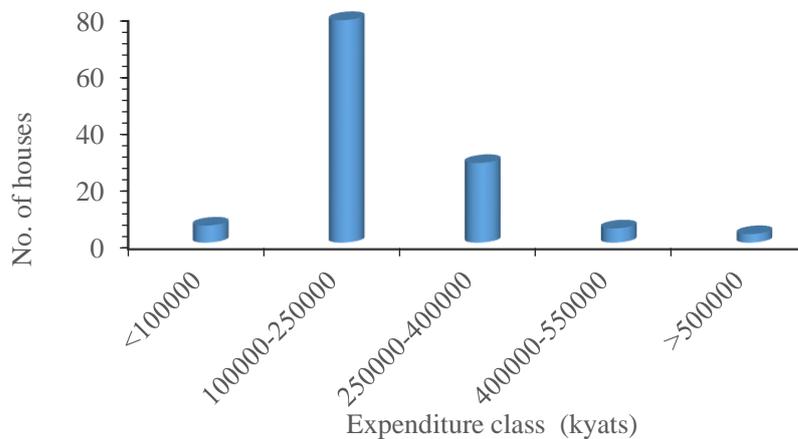


Fig. 9 Monthly household's expenditure of respondents

Discussion

Pone In is located in Hsi Hseng Township, Southern Shan State. Fishermen from five villages surrounding Pone In practiced fishing works during the season. Socioeconomic status of fishermen from these villages was investigated. Investigation was conducted based on the interviews with these fishermen. Questionnaire survey forms are prepared in advance and used in the interview. A total of 120 households was engaged in the survey of socioeconomic status.

Regarding to the age group of fishermen was the maximum percentage 56.66% of the age group of 30-40 years. In the family size, 80% of families had 4-6 person members. Females dominated in the population. Most of fishermen 38.88% were in secondary education level and 33.33% in primary level.

35.0% of fishermen family possess timber houses with tin roof. 18.34% of fishermen had brick house with tin roof. All the fishermen in the study area used tube-well water for washing and cooking and purified water for drinking.

Concerned with sanitation facilities, 90% used western style toilet and 10% used simple toilet. 95% of fishermen had solar cell energy.

About 85% of fishermen used mobile phone, TV and satellite disks. About 60% of fishermen ate fish and 30% had vegetable. The income of fishermen ranged from 84600 kyats to 2897030 kyats.

Fisheries sector play an important role on socio-economic development of fishermen community. Socioeconomic survey is fundamental to completely understand the present condition, define chances and risks of future development and indicate possibilities to minimize negative impacts on human life quality.

According to the results, the socioeconomic status of fishermen in the study area may be considered as medium class.

Acknowledgements

I would like to express my sincere thanks to Dr Thein Win, Director General, Department of Higher Education, Ministry of Education and Dr Kay Thi Thin, Dr Myin Zu Minn and Dr Mi Mi Gyi, Pro-Rectors, University of Mandalay for their permission to present this paper and encouragement. My thanks go to Dr Nwe Nwe San, Professor and Head, Department of Zoology, University of Taunggyi for allowing me to conduct field surveys.

References

- BTI, 2016. Myanmar Country Report. Available from: http://www.bti_project.org. Accessed by: 31 Jan 2020.
- Chandrasiri, K.M.D., 1986. A pre-project study of five major reservoirs in Hambantota District. Socioeconomic conditions of inland fishermen in Sri Lanka. Available from: <http://www.dl.nsf.ac.lk/ohs/harti/2200.pdf>. Accessed by: 31 January 2020.
- DOF. 2010. Guideline and standard method of data collection and fisheries indicators for fisheries management in Myanmar. Department of Fisheries, Myanmar. Southeast Asian Fisheries Development Center.
- FAO, 2016. Fishery country profile. The Union of Myanmar. Available from: <http://www.fao.org/fi/oldsite/FCP/cn/MMR/profile.htm>. Accessed by: 31 January 2020.
- FAO, 2010. Fishery and Aquaculture country Profile. The Union of Myanmar. Available from: <http://www.fao.org/fishery/facp/MMR/en>. Accessed by: 31 January 2020.
- Naing Naing Latt, Kyu Kyu Thin and Seng Aug, 2010. A geographical study of the socio-economic development of Indawgyi Lake Environment Area in Kachin State. Dagon University, Research Paper.
- Seint Seint Win, 2018. The socio-economic status of fishermen in Nampan Village tract, Inle Lake. Myanmar. *International Journal of Avian Wildlife Biology*, 3(2): 2018.
- Yel Nyan Linn, 201. Socio-economic status of fisherman in Gyeiktaw fishing village. Nagpali Town, Thandwe District, Rakhine State. *MSc Thesis*. Department of Zoology, University of Yangon.
- Yin Yin Win, 2007. Socioeconomic Studies in two villages of Maubi Township, Ayeyarwaddy Division, Myanmar. *PhD Dissertation*. University of Yangon.
- Zin Mar Than, 2011. Socio-economic analysis of Indawgyi Lake area, Mohnyin Township. University of Cologne.