CO-OPERATIVE UNIVERSITY, SAGAING DEPARTMENT OF CO-OPERATIVE STUDIES MASTER OF SOCIAL ENTERPRISE MANAGEMENT

# ANALYSIS OF SOCIO-ECONOMIC CONDITIONS IN SAGAING TOWNSHIP: A CASE STUDY ON YWARTHITGYI VILLAGE

YAMIN THU NOVEMBER, 2018

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YAMIN THU MSEM (II) – 3 (MSEM 1<sup>st</sup> BATCH) NOVEMBER, 2018 Analysis of Socio-Economic Conditions in Sagaing Township: A Case Study on Ywarthitgyi Village

This thesis is submitted to the Board of Examiners in partial fulfillment of the requirements for the degree of Master of Social Enterprise Management.

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#### ABSTRACT

This thesis is designed to investigate the socio-economic conditions of Ywarthitgyi village in Sagaing Township. Data were collected from a random sample size of (319) households in Ywarthitgyi village as a case study where the total households are (1812). In order to develop in overall sectors of the country, the development of economy and social status of rural dwellers is essential role at present situation. This study area is selected to find out the level of socio-economic conditions as a small part of the country. The purpose of this study is to examine the socioeconomic conditions of Sagaing Township by using census data 2014 and to analyze the socio-economic conditions of Ywarthitgyi village. Descriptive Method, Cross Tabulation Analysis and Multiple Regression Model are used in this study. Various types of occupation such as casual, civil servants, trading and farming are conducted. Moreover, retired government staffs get a pension every month, and some villagers manage small shop in village also got some income. Concerning educational status of household heads, most of the household heads have primary level education. The economic condition of sample households is fairly good. The village has hospital and special health care clinic. According to the cross tabulation analysis, the less people in this village reduce expenditures, the less saving money they have. According to Multiple Regression Model results, it is found that household income, number of family and taking loan are influential factors of household expenditure of each household. The majority of the household heads are engaged in casual employment due to low level of education. To generate alternative sources of livelihood, the government should encourage the casual employees for the self-employment by setting up of dairy farming, poultry farming, livestock production, etc. and in this regard the government should also provide training facility and also subsidized loan to those who will set up such farm house.

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## LIST OF ABBREVIATIONS

ADNG	=	Academy for Development of National Groups				
ADRA	=	Adventist Development and Relief Agency				
MMK	=	Myanmar Kyat				
SASE	=	Society for the Advancement of Socio-Economics				
SES	=	Socio-Economic Status				
SAZ	=	Self-Administration Zone				
TDSC	=	Township Development Support Committee				
UDNR	=	University for the Development of the National Races of				
		the Union				

#### **CHAPTER 1**

#### **INTRODUCTION**

Socio-economic analysis is fundamental to thoroughly understand present conditions, define chances and risks of future development and indicate possibilities to minimize negative impacts on human life quality.

Socio-economic is the important role in the development of a country. Socioeconomics is the social science that studies how economics activity affects and is shaped by social processes. In general it analyzes how societies progress, stagnate, or regress because of their local or regional economy, or the global economy. Societies are divided into three groups; social, cultural and economic.

Socio-economic status (SES) is an economic and sociological combined total measure of a person's work experience and of an individual's or family's economic and social position in relation to others, based on income, education, and occupation. When analyzing a family's SES, the household income, earners' education, and occupation are examined, as well as combined income, versus with an individual, when their own attributes are assessed. Or more commonly known to depict an economic difference in society as a whole. The socioeconomic character of an area includes its population, housing, and economic activity.

Myanmar has three regions according to the geographically such as Delta and costal region, Dry zone, hilly and upland region. The small farmers and landless from these areas had faced with the several issues such as under employment, price volatility, seasonal water shortages, climate change, natural disaster, conflict displacement and lack of access to affordable credit. Among these area, both the small farmers and landless of central dry zone are faced with seasonal water shortages, climate change, natural disaster, sudden loss of access to land.

Myanmar has embarked on all around national development programme by promoting the living standard of people aimed at achieving a peaceful, modern and developed nation since 1989. The government has been building infrastructure through systematic plans for all citizens to be able to enjoy a rich and secure socioeconomic life and to possess a promising future. In line with the objectives, the government has set up the township development tasks: securing smooth and better transportation in small township areas, availability of clean water in hits areas, uplift of health care for the rural people and development of the economy in the rural regions to promote the socio-economic situation of rural areas and to narrow the socio-economic gaps between urban and rural areas by alleviating poverty in rural areas. The Township Development Support Committee (TDSC) has 7-9 members drawn from the departments and specific elements of thetownship, including: a business representative, a farmers representative, and a personselected from amongst "town elders, social and economic organizations" to be the Secretary. The Notification outlines a broad mandate to discuss township development matters andadvise departments on township development and the socio-economic perspectives. It alsostates that the TDSC is "to cooperate in the implementation of the Rural Development andPoverty Reduction" programmes. In implementing rural development activities, the State plays its role as policy maker, strategy planner, and supervisor. Rural development measures are being taken to implement these strategic plans by model village approach.

#### **1.1** Rationale of the Study

Poverty in Myanmar has declined from 44.5% in 2004 to 37.5% in 2009/2010 and 32.1% in 2015, according to the recent Myanmar World Bank joint poverty analysis. However, poverty remains substantial, especially in rural area where people rely on agricultural and casual employment for their livelihoods. Those who live near the poverty line are susceptible to economic shocks. Among ASEAN countries, Myanmar has the lowest life expectancy and the second highest rate of infant and child morality. The school dropout rate is high especially in rural areas. Access to basic infrastructure and services remains a challenges in both rural and urban areas.

Key issues constraining economic growth in Myanmar are job creation, and poverty reduction is limited rural development with the poor condition of the rural road network, inadequate access to irrigation facilities and agricultural inputs, limited rural electrification, non-transparent market mechanisms and lack of market information; lack of access to credit, and an ineffective land tenure system.

As the Republic of the Union of Myanmar is an agro-based country, 70% of Myanmar people resided in rural area. In order to develop in overall sectors of the country, it is critically necessary to improve both national economy and social status throughout the country. Hence, the development of economy and social status of rural dwellers is essential role at present situation. Therefore, this study area is selected to find out the levelof socio-economic conditions as a small part of the country. It can be expected that the present study will be fulfilled the needs of local area development.

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#### **1.2** Objectives of the Study

The objectives of the study are;

- 1. To examine the socio-economic conditions of Sagaing Township by using census data 2014.
- To analyze the socio-economic conditions of Ywarthitgyi village in Sagaing Township.

#### **1.3** Method of the Study

The questionnaire survey method, descriptive method, regression analysis and cross tabulation analysis are used in this study. The secondary data is achieved from libraries, documents, articles from web sites and other relevant sources. The design of survey had been based on simple random sampling.

#### 1.4 Scope and Limitation of the Study

This study is focused on the socio-economic conditions of households in Ywarthitgyi village. This study is mainly focused on (319) households from total (1812) households of Ywarthitgyi village in Sagaing Township. Secondary data is used in the 2014 Myanmar Population and Housing Census of Sagaing Region Census Report Volume 3–E.

#### **1.5** Organization of the Study

This thesis consists of five chapters. The first chapter is introduction in which presents five sub-titles such as rationale, objectives, methodology, scope and limitation of the study and organization of the study. The chapter 2 explains literature review. The chapter 3 provides socio-economic conditions of Sagaing Township by using census data 2014. Socio-economic conditions of Yawarthitgyi village are presented in chapter 4. Finally, the chapter 5 discusses conclusion of the study and offers suggestions and recommendations.

#### **CHAPTER 2**

#### LITERATURE REVIEW

This chapter review literature from past studies on socio-economic analysis. The chapter focuses on the following.

#### 2.1 An Overview of Socio-Economics

The term socio-economics is widely used, even though it is often connoted to quite divergent understandings about what is actually describes. It sometimes appears as an umbrella term for a range of quite successful but diverse and occasionally antagonistic approaches that cannot easily be combined.

Stern, some twenty years ago, characterized socio-economics as an "interdisciplinary perspective" with uncertain future prospects to develop into a "coherent field", sustainably viable and influential (Stern, 1993). Stern however had a rather specific understanding of what socio-economics should be or become.

In fact, while the term socio-economics is sometimes used to name quite specific research programs (Lutz, 2006), it most often appears as an umbrella term for a number of partly highly successful but diverse and occasionally antagonistic approaches. While some of them are methodologically highly elaborated research endeavors that made significant contributions in fields such as new economic sociology and political economy, it is difficult to combine them to a unified paradigm for the engagement with economic phenomena. Thus, the term socio-economics does not represent an alternative way to do economics, it represents many different ways. Even the activities pursued in the context of communities such as the Society for the Advancement of Socio-Economics (SASE) have been characterized as empirically successful but lacking a sufficiently concise theoretical underpinning (Boyer 2008; Hollingsworth and Müller 2008; Müller 2014).

While the terminology of socio-economics and some key concepts appear in a number of discussions and disciplines, there is no clearly identified domain of investigation, no unifying set of tools or perhaps a general theory clearly and exclusively associated with a consensual definition of the concept 'socio-economics'. As there is no strong association to a specific canon of methods and theory, at least in comparison to other more restrictively defined approaches, socio-economics might perhaps benefit from its quality as a platform for multidisciplinary approaches (Abbott 2001; Hollingsworth and Müller 2008: 416; Moody 2004: 215–217). On the

other hand one might fear that much of its potential as a vehicle of progress in the social sciences might be forfeit, as there is no definite domain of investigation defined for socio-economics and little consensus about its mission. Most social scientists agree that socio-economics can help to curb the influence of the normative implications of the homo oeconomicus-paradigm. But fewer support the idea of socio-economics as an instrument for social engineering, i.e. a tool to design blueprints for social structures of a more productive and humane society.

With respect to its methods and theory, socio-economics is perhaps no more heterogeneous than most disciplines in the social sciences. But its undefined nature is specifically problematic because the field is lacking the institutional and structural framework that supports established disciplines in acquisition of resources, ensures control of parts of the labor market and a common socialization of its practitioners in academic training and work experiences.

Several researchers have discussed options for a future development of socioeconomics (e.g. Boyer 2008; Etzioni 2010; Hollingsworth and Mueller 2008; Müller 2014; Streeck 2010), but the paper at hand is not conceptual. Rather than to elicit from the literature a paradigm for socio-economics its primary purpose is to outline a topography of the currently existing research, to overview and systematize theoretical and methodological currents, subject-areas and understandings of the purpose of socio-economics.

Practitioners of socio-economics claim that the uniqueness of their approach lies in the definition of more realistic assumptions about human action and a capability to adequately recognize the relevancy of influences from other spheres of social life, such as culture, politics, technology and social relations on the economy and their relevancy for the explanation of economic phenomena.

Socio-economics has been called a "foundation of economics on the social sciences" (Granvogl and Perridon 1995). This means that a key element of socio-economics is the adequate supplementation of economics with help from other social sciences and humanities.

If socio-economics is considered a program to reform economics, the efforts are concentrated on two issues: 1) the improvement of action-theory, e.g. by integration of behavioral and experimental economics as auxiliary sciences and 2) the search for the social conditions, factors and mechanisms of economic action on the micro- and meso-level. Some argue that the categorization and understanding of

governance structures (such as markets, hierarchies, and political economies) might potentially become the original domain of socio-economics. This area is currently in the focus of the activities of the SASE or the "Association for Social Economics". A third field emerges if socio-economics is expanded to a general social science that conceptualizes the capitalist economic system to be core element of the social system and driving force behind social change.

Some argue that socio-economics should concentrate on the distinction and analysis of economic "governance structures" in order to develop a clearly shaped identity as an independent academic field (e.g. Boyer 2008; Hollingsworth and Müller 2008; Müller 2014). Socio-economics would focus on markets, hierarchies, business systems, political economies as well as on governmental redistribution, allocation by norms of reciprocity and on their underlying and embedding cultural, institutional and structural contexts.

Socio-economics as a whole could adopt the normative mission of economics. This is what Etzioni had in mind, when suggesting that socio-economics should engage to devise remedies against low savings rates or reveal what structures maximize the efficiency of markets (Etzioni 1988). These ideas are mostly in line with the program of economics: maximization of material abundance. Other suggestions are less closely associated with the economic program. Among them there is to devise guidelines for a fairer legal system, that could be developed from a more realistic conception of economic life or a readjustment of the role of markets and individual utility-maximization versus civic engagement (Stern 1993). Hattwick advocates the idea of a "humanistic socio-economics "as a general science set up to improve the conditions of human life in general (Lutz 2006).

#### 2.2 Socio-Economics

Lutz (2009) said that socio-economics is "a discipline studying the reciprocal relationship between economic science on the one hand and social philosophy, ethics, and human dignity on the other toward social reconstruction and improvement." Socio-economics is a branch of economics that focuses on the relationship between social behavior and economics. It examines how social norms, ethics and other social philosophies influence consumer behavior and shape an economy, and use history, politics and other social sciences to predict potential results from changes to society or the economy. Socio-economics is concerned with the relationship between social

and economic factors within a society. These are factors that influence how a particular group, or socio-economic class, behave within society including their actions as consumers. Different socio-economic classes may have varying priorities regarding how they direct their funds. A socio-economic class is defined as a group of people with similar characteristics can include social and economic standing and other factors such as the level of education, current profession, ethnic background or heritage, and other ways that individuals can be categorized.

Socio-economic status (SES) encompasses not just income but also educational attainment, financial security, and subjective perceptions of social status and social class. Socio-economic status can encompassquality of life attributes as well as the opportunities and privileges afforded to people within society. Poverty, specially, is not a single factor but rather is characterized by multiple physical and psychosocial stressors. Further, SES is a consistent and reliable predictor of a vast array of outcomes across the life span, including physical and psychological health. Thus, SES is relevant to all realms of behavioral and social science, including research, practice, education, and advocacy.

Socio-economic factors are lifestyle components and measurements of both financial viability and social privilege and level of financial independence. Factors such as health status, income, environment and education are studied by sociologists in terms of how they each affect human behaviors and circumstances. Socio-economic factors are;

- Level of education; in the most obvious way, educational levels influence economic status, as higher paying jobs tends to require advanced or specialized education. Education, however, also determines social status and allows people to trust those who are educated in their fields of employment.
- Income and Assets; Net income is a direct contributors to what a single person or family can afford to spend. Income determines neighborhood choices and living conditions. It is often the deciding factor in higher educational pursuits.
- Health and lifestyle; health status is a definite measurement of socioeconomic status. Poor health, whether brought on by genetic predispositions, accidents or lifestyle choices, is able to render a person stagnant.

• Quality of neighborhoods; Environment does not have to determine socioeconomic status, but is offer a reflection of it. An adult may choose to live in a lower income neighborhood to save money on rent. The same person may also choose to socialize with workmates instead of neighbors.

According to Gouc (2007), socio-economic background is relative standing of afamily in a society based on its income, power, background and prestige. Ovute (2009) explained that family socio-economic background includes family income, standard of house of occupied or rented, family size, parental education and level of family stability among other factors. According to Wells, Lindsay, Malpass, fishers, Turtle and Fulero (2000) pointed out that socio-economic background is a most critical variable in the determination of achievement, stressing that the opportunity to achieve success is influenced by learning, availability of special help at home, reference materials and tutors.

#### 2.3 Empirical Studies

According to the report from the Qualitative Social and Economic Monitoring of livelihoods Series, some areas such as Ayeyarwaddy Region, Chin State and remain vulnerable to frequent market and weather shocks. Wages have increased but peak season labor scarcity remains a challenge. Village across the country have benefited from greater access to low-interest loans with the expansion of government and donor-funded loans, microfinance and revolving found programs. Migration has increased consistently for migration has shifted from a coping mechanism to an economic opportunity to build capital or diversify household income.

The European Commission- Burma/Myanmar Strategy Paper (2007-2013) recognized that, after decades of armed conflicts and relative isolation from and by the international community, Myanmar is significantly lagging behind its neighbors on most socio-economic indicators on poverty, health, and education.

Zin Mar Than (2011) demonstrated that to realize such a structured approach for a sustainable socio-economic development of the Indawgyi region, collaboration of all relevant stakeholders in the area, in the region, in the country and also from the international community is mandatory. The experience of the past and the economic situation of the country, which suffers from ineffective structures in many government levels plus the constraints of many years under embargo from the western hemisphere highlight the need of international engagement. This is not only in the interest of the Myanmar people but also of the world, as natural treasures like the Indawgyi Nature Reserve have become rare in today's globalized world and their importance for the worldwide ecosystem become more obvious with each natural disaster, the world is facing.

Daw Mar Mar Aye (2012) presented socio-economic condition of salt producer in Wet-Let Township. In the olden days, most of villages in Wet-let Township chiefly relied on salt production business as they had insufficient supply of agricultural water. Nowadays, these regions have become agro-based areas as Thaphun-sate Dam, Ka-boe Dam and Kin-dut Dam provide them with adequate supply of water. Most of the household of salt producer have (from 50% to 100%) income from salt-production. It can be deduced that salt production plays an important role in the households who engage in salt business and the socio-economic condition of salt producer is fair.

Michael-N. Prince (2012) studied investigating the livelihoods of families operating small sugarcane farms in Jamaica. The scholar expressed that improvement in the livelihood of families operating on small sugarcane farms in Jamaica requires a safe and just society free from crime and violence, strengthening and expansion of the education system, and investment in domestic crops and micro business development.

Myat Su Win (2013) studied enhancement of livelihood opportunities through vocational trainings provided by ADRA Myanmar in Pakokku, Seik Phyu and Myaing Township in Dry Zone. Shedemonstrated that government and non-government organizations are providing necessary assistance including vocational training in creation of livelihood opportunities to the community in Pokokku, Seik Phyu and Myaing Township of Dry Zone, Myanmar. Through those activities, livelihood opportunities in those three townships were enhanced somehow certain level. So, She pointed out those training significantly contributed to the living standard of community improved in one hand but many challenges still remain as lack of access to advanced and higher skills trainings, technologies to the regional and state level on the other hand.

Ma Aye Aye Nyein (2014) demonstrated, to sustainable increase income for rural house people following factors should be consider (1) Introduced quality seeds hybrid, (2) Making compost green manure, (3) Subsidies for seasonal cash crops planation, (4) Technical instruction for specific crop planation, (5) more provide the technical on livelihood such as agriculture, livestock and small business training to medium framers because they faced with needs not only capital but also technical supports.

Shin Thynn Tun (2015) studied rural livelihood and agricultural reform in Chiba Village, Shwebo Towinship. Local's livelihood activities are found to have been forced to satisfy their basic needs. In the upper and middle classes most of a community's vulnerability is due to crop shock, insufficient capital, seasonality of price, insufficient inputs and weak knowledge of livelihood. Individualize, most vulnerability is caused by human health shock, food security and education. Therefore more livelihood opportunities for the locals should be created. Shin Thynn Tun (2015) also pointed out to have sustainable livelihood, all social classes should be made conscious of need to lessen the lass of natural resources, and community wise maintenance of those resources should be undertaken. The current livelihoods of the lower class, the poorest rural people, should be lessened through: vocational training to local to a regular daily income and creation of other job opportunities for a regular income.

Khin Khin Gyi, Khin Khin San and Tint Swe (2015) studied socio-economic and livelihood values of Setse and Kyaikkhami coastal areas in the Thanlwin river mouth. In this area, fishing is an important activity for the majority of households in Setse and Kyaikkhami coastal areas. Population growth, social and economic conflicts due to declining resources, increasing fishing pressure, changes in ownership and access to resources and markets are some of the issues faced in sustaining livelihoods of people living in and around Setse and Kyaikkhami coastal areas in the mouth of the Thinlwin River. Therefore, there should be required to their livelihood concerns, such as secured access to resources and basic rights to food security, jobs, education, and health care for about sustainable management of fisheries and aquatic ecosystems of Setse and Kyaikkhami coastal areas.

Daw Yin Mon Thant, Daw Han Su Su Thet, and Daw Ei Ei Aye (2016, Research Journal) presented the socio-economic status in Sagaing Township. In this study, the household expenditure is strongly and positively related to household income. The number of gender of household head, number of students, economically active member and income of each household were influential factor of food expenditure of each household. It is concluded that majority of people in rural as well as urban area are needed to improve their living standard. Many challenges have to be addressed in housing, infrastructure provisions and providing social amenities. Hnin Moh Moh Aye (2017) studied the socio-economic conditions of Min Gohn Village, Hlegu Township. The main business of households in this area worked as retail shops, general workers and labors. The rural residents always face problem of water scarcity. The street of village are not well structured. She concluded that there should be carried out for better street infrastructure in the village.

This chapter expresses an overview of socio-economics and review literatures from past studies on socio-economic analysis. Socio-economics has been called a "foundation of economics on the social sciences". This means that a key element of socio-economics is the adequate supplementation of economics with help from other social sciences and humanities. Socio-economic factors are lifestyle components and measurements of both financial viability and social privilege and level of financial independence.

#### **CHAPTER 3**

#### SOCIO-ECONOMIC CONDITIONS OF SAGAING TOWNSHIP

This chapter presents socio-economic background of Sagaing region, profile of Sagaing Township and also demonstrates descriptive statistics for households in Sagaing Township by using census data 2014.

#### 3.1 Socio-Economic Background of Sagaing Region

As in Myanmar overall, agriculture is the mainstay of the local economy in Sagaing. Sagaing Region's southern districts belong to Myanmar's historical and economic core areas, and they have benefited from the vicinity to main rivers for transportation, communication and trade. The most common crop is rice, although Sagaing is also Myanmar's main producer of wheat. Other important crops are sugarcane, sesame, millet, peanuts, pulses, cotton, and tobacco. Livestock and fresh water fisheries are also important sectors. There is also some agro-industrial activity, as the Region has many rice mills, edible oil mills, saw mills, cotton mills, and mechanized weaving factories. Natural resource extraction also takes place in the Region, with gold, coal, salt and small amounts of petroleum being produced. Nationally controlled mining and forestry interests are found throughout Sagaing. Kalewa Township hosts several coalmines, and there is a large copper mine located outside of Monywa that has been the site of several serious incidents relating the land and resource rights. Forestry products have played an important role in the economy since ancient times, especially in the northern areas, where teak and other hardwoods are extracted. However, as in other parts of Myanmar, the sustainability of forestry has been a long-standing issue of concern. A number of areas of Sagaing Region are included in national parks and wildlife sanctuaries, which are among Myanmar's most important. There are four (AlaungdawKathapa National Park, Chatthin Wildlife Sanctuary, Mahamyaing Wildlife Sanctuary and Htamanthi) Wildlife Sanctuary. The local economy and socio-economic indicators are highly diverse. In the South, where the largest part of the population lives and where urbanization is the highest, people enjoy reasonably good living standards by comparison with the rest of Myanmar. In its remote northern areas, especially in the hillsides, where infrastructure is poorly developed and the Region's ethnic minorities live, there are significantly lower standards in terms of economic activity and social sector performance. Parts of the

townships belonging to the Naga SAZ are among the poorest, most isolated and least developed of Myanmar.

#### 3.2 Profile of Sagaing Township

Sagaing is located on the bank of Ayeyarwaddy River, 20 km southwest of Mandalay city.Agriculture is the mainstay of the local economy with rice and wheat as the main crops.The economy also benefits from the main rivers for transportation, communication andtrade.

Sagaing Township, upper Myanmar, between the bend of the Irrawaddy on the east and the Mu river of the west, it lines between 21 50' N and 22 15' N and 95 38' and 96 4' E, with an area of 485 square miles. Sagaing Township has benefited from the vicinity to main rivers for transportation, communication andtrade. The most common crop is rice, although Sagaing is also Myanmar's main producerof wheat. Other important crops are sugarcane, sesame, millet, peanuts and pulses. Livestock and fresh water fisheries are also important sectors.

There were one of (200) bedsteads hospital, four of (16) bedsteads hospitals and forty seven health care centers and sub centers in this township. Eleven Basic Education High Schools, eight Affiliated Basic Education High Schools, three Basic Education Middle Schools, forty one Affiliated Basic Education Middle Schools, ninety eight Basic Education Primary Schools, two Basic Affiliated Education Primary Schools and seventeen Basic Education Post Primary Schools are in this township. The number of primary level, middle level and high school level students by sex and the teacher student ratio in Sagaing Township are shown in Table (3.1).

 Table (3.1) Basic Education Level of Students by Sex and Teacher-Students

 Ratio in Sagaing Township

Education	Students			Percentage		Teacher
Level	Male	Female	Total	(%)	Teachers	Student Ratio
Primary	11583	11028	22611	55	765	1:30
Middle	6950	7024	13974	34	903	1:16
High School	2004	2304	4308	11	221	1:20

Source: Annual Report of Department of General Administration, Sagaing Township, 2018

According to Table (3.1), fifty- five percent of the students were at primary level, thirty- four percent were at middle level and eleven percent were at high school level. The teacher-student ratio was found to be 1:30 at the primary level, 1:16 middle level and 1:20 at the high level in this township.

#### **3.3** Descriptive Statistics for Households of Census Data in Sagaing Township

According to Census data 2014, socio-economic conditions of Sagaing Township are shown with population, labour force, education status, housing condition, households by source of water, fuel for cooking, households by availability and related amenities, households by availability of transportation items.

#### 3.3.1 Population in Sagaing Township

Table (3.2) shows the population by selected age-groups of Sagaing Township in 2014 Census.

Age-Groups	Population	Percentage (%)
0-14	74,183	24.15
15-64	208,869	67.99
65 <sup>+</sup>	24,142	7.86
10-17	45,138	-
18 <sup>+</sup>	216,160	-

 Table (3.2) Population by Selected Age-Groups in Sagaing Township

Source: Census Report Volume 3-E (Sagaing), 2014

According to this table, the proportion of the total population aged between 0 to 14 years was 24.15%, and that of dependents i.e., above 65 years was 7.86%. Out of the total population, the proportion of working age i.e., between 15 to 64 years was 67.99 %. Therefore, the number of persons in working age group was larger than that of dependents in this township. One can also say that the volume of labor force was high in this township. The sex ratio was 87.6. This mean that there were 88 males per 100 females.

Table (3.3) Marital Status by Gender in Sagaing Township

Marital Status	Male	Female	Total	Total Percentage (%)
Single	34,125	45,318	79,443	34.09
Married	60,802	65,060	125,862	54.02
Widowed	2,980	11,900	14,880	6.39

Marital Status	Male	Female	Total	<b>Total Percentage (%)</b>
Divorced/Separated	957	1,660	2,617	1.12
Renounced	6,686	3,523	10,209	4.38
Total	105,550	127,461	233,011	100.00

Source: Census Report Volume 3-E (Sagaing), 2014

According to this table, there were 127,461 women in Sagaing Township during the time of the census. Of these, 65,060 were ever married. There were 105,550 men in Sagaing Township during the time of the census. Of these, 60,802 were ever married. It can be seen that married population is the highest in this township. And second is single. The lowest status is divorced and separated.

#### 3.3.2 Labour Force in Sagaing Township

Table (3.4) shows the usual activity status by gender in Sagaing Township.

Usual Activity Status	Male	Female	Total
Employee (government)	5,495	5,567	11,062
Employee (private)	25,170	14,877	40,047
Employer	3,905	1,579	5,484
Own Account Worker	45,083	31,860	76,943
Unpaid Family Worker	5,345	13,490	18,835
Sought Work	2,348	1,790	4,138
Did Not Seek Work	683	453	1,136
Full Time Student	18,520	17,855	36,375
Household Worker	1,820	39,905	41,725
Pensioner, Retired Elderly	7,414	10,933	18,347
III, Disabled	808	773	1,581

 Table (3.4) Usual Activity Status by Gender in SagaingTownship

Source: Census Report Volume 3–E (Sagaing), 2014

According to this table, total own account workers were 76,943, 45,083 were male and 31,860 were female. From total household workers, 41,725, male workers were 1,820 and female workers 39,905. Private employees were 40,047. From them, 25,170 were female and 14,877 were male. So, it can be assumed that the most usual

activity status is own account worker, the second most is household worker and the third most is private employee in Sagaing. Moreover, the least status is sought work.

#### 3.3.3 Education Status in Sagaing Township

Table (3.5) shows the educational attainments by gender (both household and institutions).

Highest Grade	Male	Female	Total
None	2,354	6,428	8,782
Primary School (grade 1-5)	39,980	58,869	98,849
Middle School (grade 6-9)	15,764	13,352	29,116
High School (grade 10-11)	9,229	7,465	16,694
Diploma	601	366	967
University/College	7,726	9,182	16,908
Post-Graduate and Above	363	704	1,067
Vocational Training	161	71	232

 Table (3.5) Educational Attainments by Gender

 (both households and institutions) in Sagaing Township

Source: Census Report Volume 3-E (Sagaing), 2014

According to this table, total population completed primary school were 98,849, 39,980 were male and 58,869 were female. Middle school level populations were 29,116 and from them, 15,764 were male and 13,352 were female. University/College level completed population were 16,908, 7,726 were male and 9,182 were female. According to these data, it can be assumed that the most population in Sagaing is primary school level. The second is middle school level and the third is University/College level. The least population has completed vocational training.

#### **3.3.4** Housing Condition in Sagaing Township

Table (3.6) shows the households by type of housing in Sagaing Township.

Table (3.6) Households by Type of Housing in Sagaing Township

Type of Housing Unit	Households	Percentage (%)
Apartment	1,268	1.95
Bungalow/Brick House	7,077	10.86
Semi-Paccar House	3,483	5.35

Type of Housing Unit	Households	Percentage (%)
Wooden House	28,416	43.62
Bamboo	23,528	36.12
Hut 2-3 Years	819	1.26
Hut 1 Year	331	0.51
Other	221	0.34
Total	65,143	100.00

Source: Census Report Volume 3-E (Sagaing), 2014

According to this table, 28,416 households lived by wooden house and its percentage was 43.62%. It can be said that the most households in Sagaing Township owns wooden house. The percentage of households who own bamboo house was 36.12% and it is the second most. The third most is the households by Bungalow/ Brick house, 10.86%. The other types of housing were apartment, semi-paccar house, Hut 2-3 years, Hut 1 year and other. The least type of housing are 0.34% and it is named other.

Type of Ownership	Households	Percentage (%)	
Owner	56,673	87.00	
Renter	2,745	4.21	
Provided Free (individually)	2,192	3.36	
Government Quarters	2,993	4.59	
Private Company Quarters	291	0.45	
Other	249	0.38	
Total	65,143	100.00	

Table (3.7) Households by Type of Ownership of Housing Unit in SagaingTownship

Source: Census Report Volume 3-E (Sagaing), 2014

According the table (3.7), most of the households (56,673) were owner, it was 87%. (2,993) households were staying in government quarters, it was (4.59) % and the second most. (2,745) households were renters and the percentage is (4.21) %. It is the third most. Therefore, most of the households in Sagaing Township live by their own houses.

Type of Toilet	Households	Percentage (%)	
Flush	1,484	2.28	
Water Seal (improved pit latrine)	51,325	78.79	
Improved Sanitation (%)	81.1	0.12	
Pit (traditional pit latrine)	1,895	2.91	
Bucket (surface latrine)	90	0.14	
Other	216	0.33	
None	10,133	15.43	
Total	65,143	100.00	

Table (3.8) Households by Type of Toilet in Sagaing Township

Source: Census Report Volume 3-E (Sagaing), 2014

According to table (3.8), most of the households (51,325) used the water seal, it was (78.79) %. None were (10,133) households and it was (15.43) %. Moreover, the households who use pit latrine were 1,895, (2.91) %. It can be seen that the sanitation condition was low in Sagaing Township. Therefore, these improvements were due to the health education given by township authority concerned.

Table (3.9) Households by Main Source of Lighting in Sagaing Township

Source of Lighting	Households	Percentage (%)	
Electricity	36,646	56.25	
Kerosene	108	0.17	
Candle	6,162	9.46	
Battery	12,142	18.64	
Generator (private)	5,707	8.76	
Water Mill (private)	60	0.09	
Solar System/Energy	2,138	3.28	
Other	2,180	3.35	
Total	65,143	100	

Source: Census Report Volume 3-E (Sagaing), 2014

According to this table, 36,646 households had available electricity, percentage was 56.25%. Households by battery were 18.64% and the households used candles for lighting were 9.46%. It can be assumed that the most households have available electricity lighting and the second most households use battery. The least households use water mill for source of lighting.

#### 3.3.5 Households by Source of Water

Table (3.10) shows the households by source of water for drinking.

Source of Drinking Water	Households	Percentage (%)	
Tap Water/Piped	11,098	17.04	
Tube Well/Borehole	24,931	38.27	
Protected Well/Spring	6,827	10.48	
Unprotected Well/Spring	414	0.63	
Pool/Pond/Lake	9,146	14.04	
River/Stream/Canal	6,523	10.01	
Waterfall/Rainwater	916	1.41	
Bottled Water/Water Purifier	3,237	4.97	
Tanker/Truck	1,511	2.32	
Other	540	0.83	
Total	65,143	100	

#### Table (3.10) Households by Source of Water for Drinking in Sagaing Township

Source: Census Report Volume 3-E (Sagaing), 2014

Most of the households got water for drinking from Tube-well/borehold, it was 38.27%. 17.04% of households got from Tap water/piped. 14.04% of households got from Pool/Pond/lake. 10.48% of households got from protected well/spring. Therefore, it assumes that the drinking water of this town is clean.

Table (3.11) Households by Source of Water for Non-Drinking Use in Sagaing
Township

Source of Non-Drinking Water	Households	Percentage (%)	
Tap Water Piped	13,908	21.35	
Tube Well/Borehole	34,473	52.92	
Protected Well/Spring	5,517	8.47	
Unprotected Well/Spring	537	0.82	
Pool/Pond/Lake	4,706	7.22	
River/Stream/Canal	4,689	7.2	
Waterfall/Rainwater	72	0.11	
Bottled Water/Water Purifier	49	0.08	
Tanker/Truck	608	0.93	
Other	584	0.9	
Total	65,143	100	

Source: Census Report Volume 3-E (Sagaing), 2014

Most of the households got water for non-drinking use from tube-well/bore hold, it was 52.92%. 21.35% of households got from tab water/piped. 8.47% of households got from protected well/spring. Therefore, it assumes that the source of water for non-drinking use of this town is clean.

#### 3.3.6 Fuel for Cooking

Table (3.12) shows the households by main type of cooking.

Type of Cooking Fuel	Households	Percentage (%)
Electricity	15,747	24.17
LPG	35	0.05
Kerosene	10	0.02
Bio Gas	37	0.06
Firewood	44,023	67.58
Charcoal	4,999	7.67
Coal	152	0.23
Other	140	0.21
Total	65,143	100.00

Table (3.12) Households by Main Type of Cooking Fuel in Sagaing Township

Source: Census Report Volume 3-E (Sagaing), 2014

According to this table, 67.58% of households used firewood, 24.17% used electricity and only 0.02% used kerosene. Therefore, it can be assumed that the most families of Sagaing Township still use firewood for cooking.

#### 3.3.7 Households by Availability and Related Amenities

Table (3.13) shows the households by availability and related amenities

#### Table (3.13) Households by Availability and Related Amenities in Sagaing

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Items	Households
Radio	24,857
Television	37,362
Landline Phone	2,362
Mobile Phone	26,224
Computer	1,542
Internet at Home	1,034

Source: Census Report Volume 3-E (Sagaing), 2014

According to this table, the properties of Radio, Television, Landline, Phone, mobile phone, computer and Internet at home of sample households were 24,857, 37,362, 2,362, 26,224, 1,542 and 1,034 households. The most available item for amenities is television.

#### 3.3.8 Households by Availability of Transportation Items in Sagaing Township

Table (3.14) shows the households by availability of transportation items in Sagaing Township.

Items	Households
Conventional households	65,143
Car/Truck/Van	1,931
Motorcycle/Moped	38,939
Bicycle	25,547
4-Wheel Tractor	801
Canoe/Boat	2,038
Motor Boat	727
Cart (bullock)	20,525

Table (3.14) Households by Availability of Transportation Items in Sagaing

Township

Source: Census Report Volume 3-E(Sagaing), 2014

According to this table, most of the households (38,939) used motorcycle/ moped. The second most of the households, (25,547) used bicycle. The third most of the households (20,525) used cart (bullock).

In this chapter, socio-economic background of Sagaing region, profile of Sagaing Township are described and also explains descriptive statistics for households in Sagaing Township by using census data 2014.Sagaing is located on the bank of Ayeyarwaddy River, 20 km southwest of Mandalay city. Agriculture is the mainstay of the local economy with rice and wheat as the main crops.The economy also benefits from the main rivers for transportation, communication andtrade.

#### **CHAPTER 4**

# SOCIO-ECONOMIC CONDITIONS OF YWARTHITGYI VILLAGE IN SAGAING TOWNSHIP

In this chapter, the data is collected from the sample households through field survey in the study area, i.e., Ywarthitgyi village is presented and analyzed.

#### 4.1 Background of Ywarthitgyi Village

Ywarthitgyi village is located in Sagaing Township, Sagaing Region. According to Cugyi (Big Cave) stone inscriptions, the village has originated since Bagan Dynasty in Myanmar by the name of Ywarthit. The region was extended by region of Min Kyi Swa Sawke of Innwa Dynasty.

Moreover, the region is a part along the waterway of traveling between the Royal Capital (Mandalay) and other towns during Kong Baung Dynasty. It is know that the region was cotton business centre set up by Steel Brothers Company. It is afferent that Ywathitgyi village has been a core centre of business since the ancient times.

The village is a good land and has water route traveling systems. As the region possesses sound location, gratifying trade, appropriate education and proper socialeconomic status, it was promoted and modified as Ywarthitgyi Model Village on 2<sup>nd</sup> February, 2007.

Ywarthitgyi village is situated in Sagaing Township,Sagaing Region. It lies in the south – western part of Sagaing Township. It lies between North Latitudes 21 degrees 51 minutes and 22 degree 13 minute, and between East Longitudes 95 degrees 36 minutes and 36 degrees 53 minutes. The region lies about 227 feet from the sea level.

The village has an area of (131) acres. It is bordered by Ngatayaw village to the east; Ywarma village to the west; Ayeyarwaddy River and Nat Kayaing village to the south and north respectively. The village is (3) miles awayfrom Monywa-Mandalay Highway and (2) miles from Monywa-Mandalay railway.

Under 18			Above 18		Total			
Male	Female	Total	Male	Female	Total	Male	Female	Total
758	765	1523	3096	3122	6218	3854	3887	7741

 Table (4.1) Demographic Characteristic of Ywarthitgyi Village

Source: Department of Administration (Ywarthitgyi: Village) 2018

According to the table, the population of Ywarthitgyi village is (7741) people in Ywarthitgyi. There are (1345) houses and (1812) households in the study area.

#### 4.1.1 Background of No. (3) Textile Industry

No. (3) Textile Industry started from signing a joint business contract with Toyo Minnkar Kai shirr Company Ltd (Japan) on 7<sup>th</sup> January, 1970, and on (21.1.1972), the machinery was ran on trial on 1<sup>st</sup> July, 1972, No.(1) Cotton and Textile industry (Sagaing started its operation ). Then, on 4<sup>th</sup> April, 2012, No. (1) Cotton and Textile industry changed its name to No. (3) Textile Industry (Sagaing). No. (3) Textile Industry (Sagaing) is located in Ywathigyi Village Tract, Sagaing Township. The Industry lies 2 minutes north of Ywathitgyi Village. Monywa-Mandalay motorway is only (1) mile away and it lies on the side of Monywa-Mandalay railroad. The site of the industry is readily accessible by road, rain and water-route. The area of the industry is 89.59 acres. The total area reaches to 489.59 acres including housing for factory staff and cultivation land area owned by the industry (400) acres.

# 4.1.2 Background of the University for the Development of the National Races of the Union (UDNR)

With a view to upgrading the living standard of the national race; who reside in the border areas, the University for the Development of the National Races of the union was formerly founded as Academy for Development of National Groups (ADNG) on 20<sup>th</sup> October 1964 in Sagaing under the direct control of ministry of Education. Then it was moved to Ywarthitgyi on 14<sup>th</sup> August 1968. The ADNG offered only primary Teacher ship courses. The former as a regular course while the latter was an occasional one according to the need of the nation. On 1<sup>st</sup> November 1998, the civil service selection and Training Board look over the duties and function of ADNG. On 10<sup>th</sup> May 1991, the ADNG was upgraded the University level by the state law and order Restoration Council law No. (9191) and opened as the University for the Development of the National Races of the Union. As a University, it offered under-graduated courses in addition to the primary courses. Furthermore, the Union Civil Services Board handed over the University Races of the Union to the Ministry of Border Affairs on 1<sup>st</sup> April, 2012.

The following courses are currently offered: -

- (a) Master Education Degree Course (two academic years),
- (b) Bachelor of Education Degree Course (five academic years),
- (c) Diploma in Teacher Education Course (one academic year)

The version of University is to turn out the efficient teachers-cum-community leaders capable of building and safeguarding the peaceful modern developed nation. The mission is to conduct specially designed programs for offering training in teacher education plus leadership and management to the national youths, enabling them to fulfill the objectives of the University.

The main task of the UDNR is to nurture the trainees of national youths to become efficient educational personnel as well as good organizers who will discharge their duties with the sense of responsibility and accountability focusing on human resources development in Far-Flung areas to carry out the development of socioeconomic life of national brethren, and to strengthen the Union Spirit among the national populace.

#### 4.2 Descriptive Statistics for Sample Households in Ywarthitgyi Village

Socio-economic conditions of sample households in Ywarthitgyi village are shown with descriptive method according to the survey data of this village.

#### 4.2.1 Gender of Household Heads

The table (4.2) shows the gender of household heads. They are female household heads and male household heads.

Туре	Household Heads	Percentage (%)
Male	262	82.1
Female	57	17.9
Total	319	100
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 Table (4.2) Gender of Household Heads

Source; Survey Data 2018

According to above table, 262 households are led by men and it is 82.1%. Fifty-seven households are led by women, it was 17.9%.

#### 4.2.2 Age of Household Heads

The table (4.3) shows the age of household head. The age of household head is divided into four classes and each class is limited by 20-years interval with the minimum of 20 years old and maximum of 99 years old.

Age	Households Heads	Percentage (%)
20-39	78	24.5
40 -59	145	45.5
60-79	87	27.3
80-99	9	2.8
Total	319	100

#### Table (4.3) Age of Household Heads

Source; Survey Data 2018

According to above table, between 20-39 years has 78 household heads and its percentage is 24.5%. Between 40-59 years has 145 household heads, it is 45.5%. Between 60-79 years has 87 household heads, it is 27.3%. Between 80-99 years has 9 household heads, it is 2.8%. According to this data, the age of most of the household head has between 40 and 59 years and least number of household head has between 80 and 99 years. It shows that the community of village is formed by middle household heads.

#### 4.2.3 Education Level of Household Heads

Table (4.4) shows the education level of household heads. Education levels are classified as monastery education, primary education, middle level education, high school level and graduated.

Education	Household Heads	Percentage (%)
Monastery	65	20.4
Primary	88	27.6
Middle	83	26.0
High	61	19.1
Graduate	22	6.9
Total	319	100

Table (4.4) Education Level of Household Heads

Source; Survey Data 2018

According to above table, 65 household heads of sample households completed monastery education level and its percentage is 20.4%. Eighty-eight household heads completed primary education level, it is 27.6%. Eighty-three household heads completed middle education level, it is 26%. Sixty-one household heads completed high school education level, it is 19.1%. Twenty-two household
heads are graduate level in education, it was 6.9 %. According to this data, it can be assumed that most of the household head are primary education level. Least number of household head has graduate level.

#### 4.2.4 Occupation of Household Heads

Table (4.5) shows the occupation of household head which can be divided by eight categories according to their works in daily life. They are farmer, salary man, driver, trader, casual, workshop, livestock and dependent.

Occupation	Household Heads	Percentage (%)
Farmer	48	15.0
Salary Man	81	16.0
Driver	17	10.7
Trader	10	10.7
Casual	116	34.5
Workshop	5	1.6
Livestock	6	0.3
Dependent	36	11.3
Total	319	100

**Table (4.5) Occupation of Household Heads** 

Source; Survey Data 2018

According to this table, 48 household heads of sample households are farmers and its percentage is 15%. Eighty-one household heads are salary men, it is 16%. Seventeen household heads are drivers, it is 10.7 %. Ten household heads are traders, it is 10.7%. One hundred and sixteen household heads are casual employees, it is 34.5%. Five household heads do workshop, it is 1.6%. Only 6 household heads are doing livestock, it is 0.3%. Thirty-six household heads are dependents, it is 11.3%. According to this data, most of the household heads are casual and least occupation of household heads is livestock.

#### 4.2.5 Number of Family Members

Table (4.6) shows the number of family members that a household has. The sample households have one person to ten persons in a family.

Number of Family Members	Households	Percentage (%)
1	0	0
2	54	16.9
3	80	25.1
4	89	27.9
5	47	14.7
6	30	9.4
7	8	2.5
8	4	1.3
9	5	1.6
10	2	0.6
Total	319	100

 Table (4.6) Number of Family Members

According to above table, 54 households have two family members, it is 16.9%. Eighty households have three family members, it is 25.1%. Eighty-nine households have four family members, it is 27.9%. Forty-seven households have five family members, it is 14.7%. Thirty households have six family members, it is 9.4%. Eight households have seven family members, it is 2.5%. Four households has eight family members, it is 1.3%. Five households have nine family members, it is 1.6%. Two households have ten family members, it is 0.6%. According to this data, most of the households have four family members and two households have ten family members.

### 4.2.6 Number of Students

Table (4.7) shows the numbers of students that a household has. The sample households have one to four students in a family. There is household that has no student.

#### Table (4.7) Number of Students

Number of Students	Households	Percentage (%)
0	156	48.9
1	106	33.2
2	40	12.5
3	15	4.7
4	2	0.6
Total	319	100

Source; Survey Data 2018

According to above table, 156 households have no students and its percentage is 48.9%. One hundred and six households have only one students, it is 33.2%. Forty households have two students, it is 12.5%. Fifteen households have three students, it is 4.7%. Two households have four students, it is 0.6%. According to this data, most of the households have no students and two households have four students.

#### 4.2.7 Number of Land Owned by Sample Households

Table (4.8) shows number of land owned of by sample households. The sample households possess agricultural land from 1-15 acres.

Number of Land	Households	Percentage (%)
1 - 3	30	9.4
4 - 6	8	2.5
7 - 9	5	1.6
10 - 12	3	0.9
13 - 15	2	0.6
Total	48	15
Courses Courses Data 2019		

Table (4.8) Number of Land Owned by Sample Households

Source; Survey Data 2018

According to above table, 30 households have 1-3 acres of land and its percentage is 9.4%. Eight households have 4-6 acres of land, it is 2.5%. Five households have7-9 acres of land, it is 1.6%. Also, other 3 households have 10-12 acres of land, it is 0.9%. Only 2 households have 13-15 acres of land, it is 0.6%. According to this data, most of the households have no land and small acres of land, and least household owns 13-15 acres of land.

#### 4.2.8 Animal Possession of Sample Households

Table (4.9) shows animal possession of sample households. The sample households own pig, fowl, cow and sheep.

Type of Animals	Households	Percentage (%)	Sample size
Pig	29	9.1	319
Fowl	8	2.5	319
Cow	72	22.6	319
Buffalo	1	0.3	319

 Table (4.9) Animal Possession of Sample Households

Source; Survey Data 2018

According to above table, 29 households own pig and its percentage is 9.1%. Eight households owned fowl, it is 2.5%. Seventy-two households own cow, it is 22.6%. Only one household owns buffalo, it is 0.3%. According to this data, most of the household own pig and least type of animals are fowl and buffalo.

### 4.2.9 Household Income of Sample Households

Table (4.10) shows household income of sample households. There is income of sample households from 50,000 MMK to 1,799,999 MMK.

Household Income	Households	Percentage (%)
50,000 - 299999	196	61.4
300,000 - 549999	102	32
550,000 - 799,999	13	4.1
800,000 - 1,049,999	6	0.9
1,050,000 - 1,299,999	1	0.3
1,300,000 - 1,549,999	0	0.0
1,550,000 - 1,799,999	1	0.3
Total	319	100.0

Table (4.10) Household Income of Sample Households

Source; Survey Data 2018

According to above table, 196 households earn income between 50,000 and 299,999, and its percentage is 61.4%. One hundred and two households earned income between 300,000 and 549,999, it is 32%. Thirteen households earn income

between 550,000 and 799,999, it is 4.1%. Six households earn income between 800,000 and 1,049,999, it is 0.9%. One household earn income between 1,050,000 and 1,299,999, it is 0.3%. Only 1 household earn income between 1,550,000 and 1,799,999, it is 0.3%. According to this data, most of sample household earn income between 50,000 and 299,999. It can be assumed that the economic condition of sample household in this village is fairly good condition.

#### 4.2.10 Household Expenditure of Sample Households

Table (4.11) shows household expenditure of sample households. There are expenditures of sample households from 45,000 MMK to 824,999 MMK.

Household Expenditure	Households	Percentage (%)
45,000 - 174,999	103	32.3
175,000 - 304,999	158	49.5
305,000 - 434,999	46	14.4
435,000 - 564,999	8	2.5
565,000 - 694,999	3	0.9
695,000 - 824,999	1	0.3
Total	319	100.0

 Table (4.11) Household Expenditure of Sample Households

Source; Survey Data 2018

According to above table, 103 households have expenditures between 45,000 and 174,999, and its percentage is 32.3%. One hundred and fifty-eight households have expenditures between 175,000 and 304,999, it is 49.5%. Forty-six households have expenditures between 305,000 and 434,999, it is 14.4%. Eight household has expenditures between 435,000 and 564,999, it is 2.5%. Three household has expenditures between 565,000 and 694,999, it is 0.9%. Only one householdhas expenditures between 695,000 and 824,999, it is 0.3%. According to this data, most of sample households have expenditures between 695,000 and 824,999.

#### 4.2.11 Credit Associations Borrowed by Sample Households

Table shows the Credit Association borrowed by sample households. There are five types of credit associations; Myanmar Economic Bank, private bank, NGO, co-operative association and money lender.

Credit Associations	Yes	Percentage (%)	No	Percentage (%)
Myanmar Economic Bank	15	4.7	304	95.3
Private Bank	6	1.9	313	98.1
NGO	2	0.6	307	99.4
Cooperative Association	27	8.5	292	91.5
Money Lender	17	5.3	302	94.7

 Table (4.12) Credit Associations Borrowed by Sample Households

According to above table, 15 households borrow from Myanmar Economic Bank and its percentage is 4.7%. Another 6 households borrow from Private Bank, it is 1.9%. Two households borrow from NGO such as alliance, it is 0.6%. Twentyseven households borrow from Co-operative Association, it is 8.5%. Seventeen households borrow from money lender, it is 5.3%. According to this data, most of the households borrow from Co-operative Association and least household borrows from NGO.

#### 4.2.12 Type of Saving of Sample Households

Table (4.13) shows type of saving of sample households in this area. The sample households save money in terms of cash, gold and bank.

Households	Percentage (%)
73	22.9
10	3.1
66	20.7
170	53.3
319	100
	Households           73           10           66           170           319

Table (4.13) Type of Saving of Sample Households

Source; Survey data, 2018

According to above table, 73 households save money in term of cash and its percentage is 22.9%. Ten households save money in bank, it is 3.1%. Sixty-six households save money in term of gold, it is 20.7%. One hundred and seventy households do not have saving, it is 53.3%. According to this data, most of the household save money in term of gold and least number of household save money in bank.

#### 4.2.13 Social Performance of Sample Households

Table (4.14) shows types of social performance contributed by sample households. The sample households contributed to social movements of building bridge, repairing house, repairing road and monastery affairs.

Social Performance	Yes	Percentage (%)	No	Percentage (%)
Building Bridge	2	0.6	317	99.4
Repairing House	23	7.2	296	92.8
Repairing Road	202	63.3	117	36.7
Monetary Affairs	280	87.8	39	12.2

 Table (4.14) Social Performance of Sample Households

Source; Survey Data 2018

According to above table, 2 households contribute in building bridge and its percentage is 0.6%. Twenty-three households contribute in repairing house, it is 7.2%. Two hundred and two households contribute in repairing road, it is 63.3%. Two hundred and eighty households contribute in monastery affairs, it is 87.8%. According to this data, most of the households contribute in social movement of monastery affairs and least types of social movement are building bridge.

### 4.2.14 Social Commitment of Sample Households

Table (4.15) shows social commitment of sample households. The sample households are membership in the following social organizations.

Social Commitment	Households	Percentage (%)	Sample size
Voluntary Organization	20	6.3	319
Co-operative	4	1.3	319
State Association	3	0.9	319
School Committee	9	2.8	319

 Table (4.15) Social Commitment of Sample Households

Source; Survey data 2018

According to above table, 20 households involve in voluntary organization and its percentage is 6.3%. Four households involvein co-operative organization, it is 1.3%. Three households involved in state association, it is 0.9%. Nine households involve in school committee, it is 2.8%. According to this data, most of the households involve in voluntary organization and least type of social organizations is state association.

#### 4.2.15 Property House of Sample Households

Table (4.16) shows the property house of sample households.

Housing Ownership	Households	Percentage(%)
Own	287	90.9
Rent	5	1.6
Other	27	8.5
Total	319	100

#### Table (4.16) Property House of Sample Households

Source; Survey Data 2018

. According to this table, 287 households are owners and its percentage is 90.9%. Five households are renters, it is 1.6 %. Other 27 households are staying in relatives' house, it is 8.5%. According to this data, most of the households are owners and the least households are staying in relatives' house.

#### 4.2.16 Housing Type of Sample Households

Table (4.17) shows the housing type of sample households.

Table (4.17) Housing Type of Sample Households

Type of House	Households	Percentage(%)
RC	10	3.1
Brick	58	18.2
Wood	35	11.0
Bamboo	216	67.7
Total	319	100

Source; Survey Data 2018

According to above table, 10 households own RC houses and its percentage is 3.1%. Fifty-eight households are brick houses, it is 18.2%. Thirty-five households own wooden houses, it is 11%. Two hundred and sixteen households own bamboo houses, it is 67.7%. According to this data, most of the households own bamboo houses and least type of housing own RC houses.

#### **4.2.17** Properties of Sample Households

Table (4.18) shows the properties of sample households.

Property	Households	Percentage (%)	Sample Size
Car	9	2.8	319
Cycle	240	75.2	319
TV	246	77.1	319
VCD	200	62.7	319
Satellite Dish	28	8.8	319
Radio	29	9.1	319
Sewing Machine	19	6	319
Electricity Generator	11	3.4	319
Bicycle	157	49.2	319
Automatic Rice Cooker	248	77.7	319
Iron	200	62.7	319
Telephone	284	89	319
Tractor	6	1.9	319
Other	32	10	319

 Table (4.18) Properties Owned by Sample Households

Source; Survey Data 2018

According to above table, 9 households own car and its percentage is 2.8%. Two hundred and forty households own cycle, it is 75.2%. Two hundred and forty-six households own TV, it is 77.1%. Two hundred households own VCD, it is 62.7%. Twenty-eight households own Satellite dish and its percentage is 8.8%. Twenty-nine households own radio, it is 9.1%. Nineteen households own sewing machine, it is 6%. Eleven households own electricity generator, it is 3.4%. One hundred and fifty-seven households own bicycle and its percentage is 49.2%. Two hundred and forty-eight households own automatic rice cooker, it is 77.7%. Two hundred households own telephone, it is 89%. Six households own tractor, it is 1.9%. Thirty-two households own other property such as refrigerator, fun and air con, it is 10%. According to this table, most of the households own telephone and least type of property is tractor.

#### 4.2.18 Sanitation Condition of Sample Households

Table (4.19) shows the sanitation condition of sample households. The households use covered pit toilet and open pit toilet.

Туре	Households	Percentage (%)
Covered Pit Toilet water seal (improved pit latrine)	37	11.6
Open Pit Toilet (tradition pit latrine)	282	88.4
Total	319	100

Table (4.19) Sanitation Condition of Sample Households

Source; Survey Data 2018

According to above table, 37 households use covered pit toilet and its percentage is 11.6%. Two hundred and eighty-two households used open pit toilet, it is 88.4%. It can be seen that most of the households use open pit toilet.

### 4.2.19 Drinking Water of Sample Households

Table (4.20) shows drinking water of sample households.

Drinking Water	Households	Percentage (%)
Well	1	0.3
Tube Well	3	0.9
River	305	95.6
Pool	1	0.3
Other	9	2.8
Total	319	100

Table (4.20) Drinking Water of Sample Households

Source; Survey Data 2018

According to above table, only 1 household get drinking water from well and its percentage is 0.3%. Three households get drinking water from tube well, it is 0.9%. Three hundred and five households get drinking water from river, it is 95.6%. Only 1 household gets drinking water from pool, it is 0.3%. Other 9 households get drinking water from purified drinking water. According to this data, most of the household get drinking water from river and least households get from well.

#### 4.2.20 Type of Light of Sample Households

Table (4.21) shows type of light of sample households. The sample households use electricity, battery, solar and other such as dry battery and candle.

Types of Light	Households	Percentage (%)
Electricity	295	92.5
Battery	4	1.3
Solar	3	0.9
Other	17	5.3
Total	319	100

Table (4.21) Type of Light of Sample Households

Source; Survey Data 2018

According to this table, 295 households use electricity for lighting and its percentage is 92.5%. Four households use battery for lighting, it is 1.3%. Three households use solar for lighting, it is 0.9%. Other 17 households use dry battery and candle for lighting, it is 5.3%. According to this data, most of the households use electricity for lighting and least households use dry battery.

#### 4.2.21 Fuel for Cooking of Sample Households

Table (4.22) shows type of cooking fuel of sample households. .

Type of Cooking Fuel	Households	Percentage (%)
Electricity	243	76.2
Fire Wood	68	21.3
Charcoal	8	2.5
Total	319	100

Table (4.22) Type of Cooking Fuel of Sample Households

Source; Survey Data 2018

According to above table, 243 households use electricity and its percentage is 76.2%. Sixty-eight households use fire wood, it is 21.3%. Eight households use charcoal, it is 2.5%. According to this data, most of the household use electricity for cooking fuel and least households use charcoal for their cooking fuel.

#### 4.2.22 Garbage System of Sample Households

Table (4.23) shows garbage system of sample households. The sample households dispose their waste to river, garbage can/car, by ignite and in no specific place, garbage pit.

Garbage System	Households	Percentage (%)
Garbage Can/Car	157	49.2
Ignite	27	8.5
To River	16	5.0
No Specific Place	13	4.1
Garbage Pit	106	33.2
Total	319	100

Table (4.23) Garbage System of Sample Households

According to this table, 157 households use garbage can/car for wasting and its percentage is 49.2%. Twenty-seven households use ignite for wasting and it is 8.5%. Sixteen households threw away their waste to river, it was 5%. Thirteen households threw away their waste in no specific place, it is 4.1%. One hundred and six households threw away their waste in garbage pit, it is 33.2%. According to this data, most of the household used garbage can/car for their waste and least households threw away waste in no specific place.

#### 4.2.23 Environment Assessment

Table (4.24) shows nature disaster experienced by sample households during last three years.

Туре	Households	Percentage (%)	Sample Size
Drought	9	2.8	319
Flood	102	32	319
Storm	290	90.9	319
Earthquake	124	38.9	319

Table (4.24) Natural Disaster Experienced by Sample Households

Source; Survey Data 2018

According to table (4.24), only 9 households have an experienced of drought, it was 2.8 %. One hundred and two households have an experienced of flood, it is 32 %. Two hundred and ninety of sample households have an experienced of storm, it is 90.9 %. One hundred and twenty-four households have an experienced of earthquake and it is 38.9 %.

Туре	Households	Percentage (%)	Sample Size
Destroyed Crop	6	1.9	319
Destroyed Livestock	17	5.3	319
Destroyed Assets	94	29.5	319

Table (4.25) Status of Damage of Sample Households

According to table (4.25), 6 households of the sample households are viewed that their agriculture crops got damaged by natural disaster and it is 1.9 %. Seventeen households have answered that their livestock got adverse effect due to natural disaster and it was 5.3 %. Ninety-four households of the sample households have experienced damage of their assets during last three years and it is 29.5 %.

### 4.3 Cross Tabulation Analysis

In cross tabulation analysis, it shows analysis of comparing with household income and condition of basic needs, comparing with household expenditure and saving, comparing with taking loan and supporting income.

### 4.3.1 Household Income and Condition of Basic Needs

Table (4.26) shows a cross tabulation analysis comparing two variables, household income with condition of basic needs.

Household Income	Condition of Basic Needs			Total
(Kyats)	Perfect	Moderate	Not enough	
50,000, 200,000	7	179	10	196
30,000 - 299,999	2.2%	56.1%	3.1%	61.4%
200.000.540.000	26	74	2	102
500,000 - 549,999	8.2%	23.2%	0.6%	32.0%
550,000, 700,000	5	8	0	13
550,000 - 799,999	1.6%	2.5%	0.0%	4.1%

 Table (4.26) Household Income and Condition of Basic Needs

Household Income	Condition of Basic Needs			Total
(Kyats)	Perfect	Moderate	Not Enough	
800.000 - 1.049.999	3	3	0	6
	0.9%	0.9%	0.0%	1.9%
1 050 000 - 1 299 999	1	0	0	1
1,000,000 1,277,777	0.3%	0.0%	0.0%	0.3%
1 550 000 - 1 799 999	1	0	0	1
1,000,000 1,777,777	0.3%	0.0%	0.0%	0.3%
Tatal	43	264	12	319
I otal	13.5%	82.8%	3.8%	100.0%

According to table (4.26), a total of 61.4% households (2.2% perfect, 56.1% moderate and 3.1% not enough for their basic needs) have income between 50,000 and 299,999. A total of 32% households (8.2% perfect, 23.2% moderate and 0.6% not enough for their basic needs) have income between 300,000 and 549,999. A total of 4.1% households (1.6% perfect, 2.5% moderate for their basic needs) have income between 550,000and 799,999. A total of 1.9% households (0.9% perfect, 0.9% moderate for their basic needs) have income between 800,000 and 1,049,999. A total of 0.3% households who have income between 1,050,000 and 129,999 say perfect for their basic needs. A total of 0.3% households who have income between 1,550,000 and 1,799,999 say perfect for their basic needs.

#### 4.3.2 Household Expenditure and Saving

Table (4.27) shows cross tabulation analysis comparing two variables, household expenditure with saving.

Household Expenditure	Sa	Total	
(Kyats)	No	Yes	1 otur
45.000 - 174.999	88	15	103
	27.6%	4.7%	32.3%

Table (4.27) Household Expenditure and Saving

Household Expenditure	Sav	Saving		
(Kyats)	No	Yes	Total	
175 000 204 000	113	45	158	
173,000 - 304,999	35.4%	14.1%	49.5%	
205 000 424 000	34	12	46	
303,000 - 434,999	10.7%	3.8%	14.4%	
125,000 561,000	2	6	8	
455,000 - 564,999	0.6%	1.9%	2.5 %	
565,000, 604,000	1	2	3	
565,000 - 694,999	0.3%	0.6%	0.9%	
605 000 824 000	1	0	1	
093,000 - 824,999	0.3%	0.0%	0.3%	
Total	239	80	319	
10(a)	74.9%	25.1%	100.0%	

According to table (4.27), a total 32.3% of households (4.7% saved, 27.6% no saving) have expenditures between 45,000 and 174,999. A total 49.5% of households (14.1% saved, 35.4% no saving) have expenditures between 175,000 and 304,999. A total 14.4% of households (3.8% saved, 10.7% no saving) have expenditures between 305,000 and 434,999. A total 2.5% of households (1.9% saved, 0.6% no saving) have expenditures between 435,000 and 564,999. A total 0.9% of households (0.6% saved, 0.3% no saving) have expenditures between 565,000 and 694,999. Only one households (0.3%) that has expenditures between 695,000 and 824,999 has saving.

### 4.3.3 Taking Loan and Supporting Income

Table (4.28) shows cross tabulation analysis comparing two variables, taking loan with supporting income.

Toking Loon	Supporti	Total	
Taking Loan	No	Yes	Total
No	253	0	253
NO	79.3%	0.0%	79.3%
Vac	2	64	66
Tes	0.6%	20.1%	20.7%
Total	255	64	319
10(a)	79.9%	20.1%	100.0%

Table (4.28) Taking Loan and Supporting Income

Source; Survey Data 2018

According to table (4.28), 253 households did not have taking loan and supporting income, its percentage is 79.3%. A total of 66 households had taking loan in which 64 household has supporting income and only 2 households has no supporting income.

### 4.4 Multiple Regression Model for Sample Households

Multiple regression analysis is applied to investigate the factors affecting household expenditure. To develop the multiple regression model, household expenditure is used as dependent variable and household income, number of family and taking loan are used as independent variables.

The estimated multiple regression model

$$\dot{Y} = b_0 + b_1 X_{1i} + b_2 X_{2i} + b_3 X_{3i} + - - -$$
$$\hat{Y} = 47423.272 + 0.328X_1 + 21945.9X_2 + 21235.03X_3$$

In constructing the model, the variables are noted as;

 $Y_i$  = Household expenditure

 $X_i = Vector of independent variables$ 

 $X_1$  = Household income

 $X_2 =$  Number of family

 $X_3 = Taking loan$ 

 Table (4.29) Results of Multiple Regression Model

Independent Variable	В	Standard Error	t test	Sig	Tolerance	VIF
Household Income	0.328	0.02	16.518	0.000	0.779	1.283
Number of Family	21945.9	2352.663	9.328	0.000	0.77	1.298
Taking Loan	21235.03	8140.853	2.62	0.009	0.987	1.013
Constant	47423.272	8989.865	5.275	0.000	-	-
Adjusted R Square	0.676	-	-	-	-	-
F- Value	221.982	-	-	0.000	-	-
Durbin – Watson	1.865	-	-	-	-	-

Source; SPSS Output

According to table, regression analysis is concluded with household expenditure and the three dimensions of socio-economic conditions as the independent variables. Adjusted R square value of 0.676. This means the predictors (independent variables) represents 67.6% changes in households. As a general rule, this model is a good fit as the adjusted R square is more than 50%. Result show that F value is 221.982 that is significant at p = 0.000(<0.01), suggesting that three dimensions of socio-economic conditions variables have significantly explained the 67.6% of the variance in household expenditure. The value of calculated (Durbin – Watson) was 1.865, the model is acceptable as its value is lower than 2 and each Variance Inflation Factor (VIF) was less than 5. These results show that serial correlation and multicollinearity problems were not included in this case.

The regression coefficient between mean household income and household expenditure is 0.328 (t = 16.518, p = 0.000<0.05). This shows that there is direct relationship between mean household income and household expenditure. The regression coefficient between number of family and household expenditure is 21945.9 (t = 9.328, p = 0.000<0.05). This shows that there is direct relationship between number of family and household expenditure. The regression coefficient between taking loan and household expenditure is 21235.03 (t = 2.62, p = 0.009<0.05).). This shows that there is direct relationship between taking loan and household expenditure is direct relationship between taking loan and household expenditure. The regression coefficient between taking loan and household expenditure. This shows that there is direct relationship between taking loan and household expenditure. This shows that there is direct relationship between household expenditure. The information in the table above also allows us to check for multicollinearity in our multiple linear regression model. Tolerance should be >0.1 (or VIF<10) for all variables, which they are. All tolerance are above 0.1 and all VIF value is obtained between 1 and 10 and it can be concluded that there is no collinearitysymptons.

This chapter describesbackground of Ywarthitgyi village, descriptive statisticsfor sample households in Ywarthitgyi village from survey data of sample households in this village, cross tabulation analysis of household income with conditions of basic need, household expenditure with saving, takingloan with supporting income. The multiple regression analysis is used to analyze factors affecting household expenditure. It is found that household income, number of family and taking loan are influential factors of household expenditure of each household.

#### **CHAPTER 5**

#### **CONCLUSION**

This study is described analysis of socio-economic conditions in Sagaing Township: In this study, the socio-economic conditions of Ywarthitgyi village is analyzed.

### 5.1 Findings

In the study of socio-economic conditions in Sagaing Township according to the objective one, it can be found that here are more females than males with 88 males per 100 females. The number of persons in working age group was larger than that of dependents in this township. One can also say that the volume of labour force was high in this township. Married population is the highest in this township. The most usual activity status is own account worker and the least status is sought work.

In the educational attainment of Sagaing Township, the most population in Sagaing Township are primary school level and the least population has completed vocational training. The most households in Sagaing Township owns wooden house andlive by their own houses.Most of the households used the water seal and it can be seen that the sanitation condition was low in Sagaing Township. Therefore, these improvements were due to the health education given by township authority concerned.

The most households had available electricity for main source of lighting in and the least households use water mill for source of lighting in Sagaing Township. Most of the households got water for drinking from Tube-well/bore hold. Most of the households used firewood. Therefore, it can be assumed that the most families of Sagaing Township still use firewood for cooking fuel. In the study of the households by availability and related amenities, it is found that the most available item for amenities is television. Most of the households used motorcycle/moped. Thus, the socio-economic conditions of Sagaing Township have fairly good condition.

In the study of socio-economic conditions in Ywarthitgyi village according to the objective two, it isfound that the sex distribution of sample respondents that most of the households are led by male in the study area. The age distribution of the sample household heads grouped into some class intervals has examined and it is found that most of the household head are between 40-59 years. About educational attainment of the household heads in the study area, it is found that the majority of the sample household heads are studied up to primary level. Thus, it is found that the majority of the sample household heads in Ywathiygyi village are less educated. The size of the family is examined and it is found that most of the sample households have family size 0 - 4 members. Therefore, it is observed that majority of the sample households in the study area have nuclear family.

The occupation distribution of household heads is examined in the study area. Occupations of the household heads are classified as farming, civil servant, driver, trading, casual, workshop and livestock. Some household headsare civil servants because of having university and industry in this area. Some of the household heads are engaged in agriculture for their livelihood. Because there is diary production, trading is important for some households' livelihood. From the study of occupation of the household heads, it is found that the majority of the sample household heads are engaged in casual employment. About 34.5% of the total sample households earn their income from casual employment. Again, it is found that most of the sample respondents are less literate. Most of the farmers and casual employees are not only uneducated but also untrained which affects their productivity.

The study has also examined the alternative sources of income such as trading, livestock production, driving job and government employment. It is found that there is very limited role to play by livestock production because the study area is affected by flood frequently. Some households produce fish for their self-consumption and sale purposes. Though some of the sample households produce fish and also sell fish but lack of commercialization of fish production in the study area affect the level of income for sale of fish directly.

This paper studies the ownership of land and the production of livestock (domestic animals) such as cow, pig and poultry (domestic fowls) such as hen. All the sample households in the study area less produce livestock and poultry and there is lack of commercialization of livestock and poultry production in the study area due to lack of training facilities for livestock and poultry farming, lack of marketing facility, lack of finance, flood affected area, etc. Thus, there is a limited role to play by the livestock and poultry production as an economic activity in this area.

The study has also examines the damages of agricultural crops, livestock, household assets caused by natural disaster. Especially, household assets are affected by flood. The household income level in the study area, it is found that most of the sample households have monthly income of Kyat. (50,000-299,999). Thus, the economic condition of the sample households in the study area is fairly good. In the study an attempt to examine the level savings deposited by the sample households in the study area. In this study it is found that 46.7% of the sample households are saving money. The saving habit among the sample households in this village is poor. The majority of the sample households save money for the purpose of family security. The various sources of savings are examined and it is found that most of the sample households save money in hand other than commercial banks. Therefore, it is realized that there is lack of commercial banks and banking services in this area.

The study has observed that the percentage of borrower is low in the study area. Sample households have borrowed money various sources such as NGO, Myanmar Economic Bank, Cooperative Association and money lenders. Most of the borrowers among the sample households have borrowed money from Htaint Ten Cooperative Association as there is lack of banking services in this area. The standard of the basic amenities like footing, clothing, housing, etc., available to the sample households in the study has been examined and it is found that most of the sample households felt that the level of basic amenities to them is barely sufficient.

The study of the involvement of sample respondents in some social organizations such as voluntary organization, cooperative association, school committee, state association has found that most of the sample households are less involved in various social organizations. Though most of the sample households have made some collective effort in monetary affairs and village welfare affairs. The study has also examined social variables such as households facing conflicts with neighbors and source of solving disputes or conflicts. Thus it is found that a small number of sample households have got into conflicts with their neighbours or relatives which results in less social disturbances and less affecting the peaceful environment in the society. Most of the sample households involved in conflicts with their neighbors or relatives have solved the disputes through their own initiatives.

The living standard of people living in a region is dependent on and also affected by various factors. With respect to objective of examining the living standard in this village, some variables or factors affecting living standard are examined. The distribution of status of housing ownership of the sample households in the study area, it is found that 90.9% of sample households have possessed their own house. Most of the sample households, 67.7% have bamboo houses. Thus, the majority of the sample households in the study area have possessed bamboo houses of minimum standard. The present study has also examined the household assets owned by the sample households in the study area and it is found that most of the households have possessed mobile phones, cycles, TV, VCD, and automatic rice cooker in the study area. About the sources of drinking water, it is found that most of the sample households collect drinking water from river water. Thus river water is the main source of drinking in the study area. The study has also examined the sources of cooking-fuel used by the sample households in this village and it is found that the majority of the households use electricity. The present study has found that the quality of sanitation facility is good in the study area. Most of the households have open pit toilet.

The study has made an environment assessment in the study area. It is found that some of the households nearby river have experienced flooding. Thus, these households had experienced the damages of agricultural crops, livestock, household assets caused by flooding.

In the study of household income and conditions of basic needs with cross tabulation analysis, it is found that the sample households earned income between 50,000 and 299,999 have not enough of basic needs the most. It is the fact that households have low amount of income and higher expenditures than their income and due to lack of alternative sources of livelihood opportunity to sustain their life. Household expenditure and saving are examined with cross tabulation analysis and it is found that the less expenditures a household has, the less saving they have. Although some households have low expenditures, they do not have saving because their expenditure and income are equal as low income. Also, taking loan and supporting income are examined and it is found that supporting income is good. Households use loans in capital, in health, in education, to buy agricultural things, fodder for livestock, assets.

The study is used Multiple Regression Model to analyze factor affecting household expenditure. According to Multiple Regression Model result, it was found that household income, number of family and taking loan were influential factors of household expenditure of each household.

### 5.2 Suggestions and Recommendations

From the results of present study, recommendations may be drawn for socioeconomic conditions of the sample households in Ywarthitgyi village. The majority of the household heads are engaged in casual employment due to low level of education. Thus, there is also need of awareness programmes among the people about the role and importance of educationin human life and they should encourage their family member to improve education level better than themselves and to continue attending school.

The economic condition of most of the sample households in this area is fairly poor. Most of the sample households have a low level of monthly income. Problem of poverty and low income is due to their casual employment. There is lack of alternative sources of livelihood in Ywarthitgyi village. Though some of the households involved in agriculture, livestock and poultry farming, there is lack of commercialization of these alternative sources of income.Moreover, No. (3) Textile Industry can't employ many people who reside in Ywarthitgyi village.

To generate alternative sources of livelihood, the government should encourage the casual employees for the self-employment by setting up of dairy farming, poultry farming, livestock production, etc. and in this regard the government should also provide training facility and also subsidized loan to those who will set up such farm house. Financial institutions, i.e., commercial banks should expand their services in Ywarthitgyi village.

The involvement of people in social organizations play an important role in improvement of social environment and also social welfare. Though the involvement of social organizations in this village is less. Thus, the villagers must be encouraged to involve in social organizations and to emerge more social organizations in Ywarthitgyi village.

To achieve all round good socio-economic conditions of Ywarthitgyi village, there should has special developmental schemes and implement them efficiently for the overall benefits of Ywarthitgyi village.

#### 5.3 Need for Further Study

There is need to study with respect to socio-economic conditions of Ywarthitgyi village. To formulate strategies to uplift the livelihood security and standard of living of the inhabitants of Ywarthitgyi village, the existing policies would review and two focused discussion should organized. From the study and analysis, this study will come to set the following policy measures for the development of Ywarthitgyi village and the livelihood security and also the standard of living of the inhabitants of this area; (i) education, (ii) Healthcare, (iii) infrastructure, (iv) transport and communication, (v) alternative sources of livelihood and vi) special schemes. Moreover, there is need to study the impact of No. (3) Textile Industry and University for the Development of the National Races of the Union on socio-economic conditions of residents in Ywarthitgyi village.

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## **APPENDICES**

## Appendix (1)

2.

# "Questionnaire for the Study of Socio-Economic Conditions in Ywarthitgyi Village, Sagaing Township"

# 1. Respondent's:

- a. Name......
  b. Age......
  c. Gender.....
  d. Education level......
  e. Occupation ......
  f. Relation to the household head......
  f. Relation to the household head.....
  household Head's:

  a. Name.....
  b. Age.....
  c. Gender.....
  d. Education level.....
  e. Occupation ....
- 3. Number of family.....

No.	Name	Gender	Religion	Relation with Household Head	Age	Education	Marital Status	Occupation

4. Number of students.....

Level of	No. of S	Total	
Education	Male	10141	
Primary			
Middle			
High			
Graduate			
Total			

# 5. (a) Land

- 1. Land owner
- 2. Renter
- 3. Tenant
- 4. Other
- (b) Land Ownership

Land(acres)	Land(acres)	Other	Total

## 6. Crops

(a) What kinds of crops do you produce?

No	Crons	Duration	Aaraa	Yield	Total	Total	Total	Net Income
INO.	Crops	Duration	Acres	(per acre)	Yield	Income	Expenditure	(monthly)

(b) Why do you produce these agricultural products?

1. Family use only

2. Sale only

	3. Bot	th family use & sale		
	4. Oth	ner		
(c)	Is the	re marketing available	for agricultural	products?
		1. Yes 2	2. No	
(d)	Do yo	ou use fertilizer for the	production of a	agricultural crops?
		1. Yes 2	2. No	
Lives	stock			
(a)	Which	h animals do you prod	uce?	
1	No.	Name	(Â)	Number of Anima
	1	Pig		
	2	Hen		
	3	Goat		
	4	Quail		
	5	Cow		
	6	Buffalo		
	7	Sheep		
	8	Other		
(b)	Why o 1. To 2. To 3. To 4. Oth	do you produce anima earn income use for agriculture consume for family her	ls?	
(c)	Whicl	h challenges do you fa	ce in livestock?	
	1.No	space for pasture		
	2.Inac	lequate for animal foo	d	
	3.Cha	nging of season		
	4. La	ck of market informati	ion	
	5 La	ck of knowledge and i	nformation with	respect

to livestock

7.

# 8. Household Income

# (a) Agriculture

No.	Crop	Number of Yield Per Acre	Total Yield	Total Income	Total Expenditure	Net Income

# (b) Livestock

No	Name of	Duration	Total	Total	Net Income
INO.	Animal	Duration	Income	Expenditure	(monthly)

# (c) Industry or Handicraft

No.	Type of Firm	Number of Employee	Productivity (monthly)	Net Profit (monthly)

# (d) Trader or Seller

Type of Shop	Number of Employee	Net Profit (monthly)

# (e) Daily Worker

Employment	Number	Wages	Wages	Total Income
Employment Number		(per day)	(per month)	(monthly)

# 9. Household Expenditure

No.	Expenditures	Average (monthly)
1	Education	
2	Health	
3	Food	
4	Clothes	
5	Small uses	
6	Fees for water/electricity	
7	Expense for repairing	
8	Social expenditure	
9	Telephone bill	
10	Vacation	
11	Snack and drink	
12	Other expense	
	Total	

# 10. Have you borrowed money?

Yes

No 🗌

# (a) State the sources of borrowing.

Name of Organization	Amount of Credit	Interest	Reason for Borrowing	Duration
Myanmar Economic			To buy land	
Bank				
Private Bank			To use for agriculture	
NGO			To buy livestock things	
Cooperative			To buy family assets	
Association				
Money Lender			To repay debts	
			To use for education	
			To use for health	
			For capital	

(b) Does credit support to family income?

Yes

(c) Mark  $(\hat{A})$  if it does not support income;

Low amount	
Higher interest	
Short duration	
Not right used	

11. Savings

(a) Do you save money?

Yes No

Types of saving

Saving	
Money	
Bank	
Gold	
Other	

12. State the condition of basic need.

(a) Perfect(b) Moderate

(c) Not enough

13. Did you any collective effort in last three years?

Mark (Â) if you have involved;

Building bridge	
House repair	
Making road	
Monastery affairs	

## 14. Are you a member of any organization?

(a) Mark  $(\hat{A})$  if you have involved in;

Types	
NGO	
Voluntary Organization	
Cooperative Association	
State Association	
School Committee	

(b) Does it support something for you?

Yes	No	
-----	----	--

15. (a) Did you face any conflict with your neighbor/relatives over last three years?

Yes	No	
-----	----	--

(b) How did you solve this conflict?

Own initiative	
Internal intervention	
External intervention	
Through dispute in court	

16. What household asset do you own/have?

	a. Car	b.	Cycle	c.7	<b>V</b>		
	d. VCD, DVD, EVD	e. S	Satellite	f.	Radio		
	g. Sewing machine		h. Genera	itor	i. Bicy	cle	
	j. Automatic rice cooker		k. Iron		l. Telep	ohone	
	m. Tractor		n. Other				
17.	Housing Condition						
	a. Own b.	Rent 📃	c. Other [				

Types of House	Types of Toilet
RC	Close pit toilet
Brick	Open pit toilet
Wood	Non
Bamboo	

# 18. Source of Drinking Water

Source	Well	Tube well	River	Pool	Other
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# 19. Cooking Condition

Source	Electricity	Wood	Coal	Gas	Other

# 20. Lighting Condition

Source	Electricity	Battery	Solar	Generator	Other
bouree					

# 21. Garbage System

Source Garbage Ignite	River	No Defined	Garbage	Other
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Can/Car		Place	Pit	

# 22. What type of natural disaster have you experienced during last three year?

Types	
Drought	
Flood	
Storm	
Earthquake	

## 23. Mention the status of damage due to natural disaster.

Destroying crops	
Destroying livestock	
Destroying pool	
Destroying assets	
Others	

24. Other.....

# Appendix (2)

## **SPSS Outputs**

	ANOVA <sup>a</sup>									
Model		Sum of Squares	Df	Mean Square	F	Sig.				
	Regression	2259690023037.983	3	753230007679.328	221.982	.000 <sup>b</sup>				
1	Residual	1068859558654.802	315	3393204948.110						
	Total	3328549581692.786	318							

a. Dependent Variable: Household expenditure

b. Predictors: (Constant), Taking loan, Household income, Number of family

Coefficients <sup>a</sup>										
Model	Unstandardized		Standardized	t	Sig.	Collinearity				
	Coefficients		Coefficients			Statistics				
	В	Std. Error	Beta			Tolerance	VIF			
(Constant)	47423.272	8989.865		5.275	.000					
Household income	.328	.020	.597	16.518	.000	.779	1.283			
<sup>1</sup> Number of family	21945.900	2352.663	.339	9.328	.000	.770	1.298			
Taking loan	21235.030	8104.853	.084	2.620	.009	.987	1.013			

a. Dependent Variable: Household expenditure

### **Collinearity Diagnostics**<sup>a</sup>

Model	Dimension	Eigenvalue	Condition	Variance Proportions			
			Index	(Constant)	Household	Number	Taking
					Income	of Family	Loan
	1	3.044	1.000	.01	.02	.01	.03
	2	.722	2.054	.01	.02	.00	.95
1	3	.168	4.253	.23	.86	.04	.02
	4	.066	6.789	.75	.10	.94	.00

a. Dependent Variable: Household expenditure

### **Residuals Statistics**<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	Ν
Predicted Value	115903.10	798658.81	233682.45	84296.758	319

Residual	-283658.844	377452.938	.000	57975.802	319
Std. Predicted Value	-1.397	6.702	.000	1.000	319
Std. Residual	-4.870	6.480	.000	.995	319

a. Dependent Variable: Household expenditure

• To get sample size from the community population Taro Yamane (Yamane, 1973) formula was taken into consideration.

Its formula was used to get the sample from population of Ywarthitgyi village.

Formula;

$$n = \frac{N}{(1+Ne^2)}$$

Where, n = sample size

N = population household size = 1812

e = the level of precision (A 95% confidence level of precision, was assumed)