

**YANGON UNIVERSITY OF ECONOMICS
DEPARTMENT OF ECONOMICS
MASTER OF DEVELOPMENT STUDIES PROGRAMME**

**A STUDY ON QUALITY OF LIFE OF RURAL HOUSEHOLDS
IN MYANMAR
(Case Study in Taikkyi Township)**

**AYE CHAN MON
MDevS - 2 (15th BATCH)**

NOVEMBER, 2020

**YANGON UNIVERSITY OF ECONOMICS
DEPARTMENT OF ECONOMICS
MASTER OF DEVELOPMENT STUDIES PROGRAMME**

**A STUDY ON QUALITY OF LIFE OF RURAL HOUSEHOLDS
IN MYANMAR
(Case Study in Taikkyi Township)**

This thesis is submitted to the Board of Examiners on partial fulfillment of requirements for the Degree of Master of Development Studies (MDevS).

Supervised by

Dr. Thuzar Lin
Lecturer
Department of Economics

Submitted by

Ma Aye Chan Mon
Roll No. 2
MDevS 15th Batch

NOVEMBER, 2020

ABSTRACT

Quality of life is an important factor for human beings. This study examines the quality of life of rural households in Taikkyi Township, Yangon Region. Descriptive method is used in this study by collecting primary data through the two-stage sampling approach and structured questionnaires. This study finds that the majority of rural households receive income mainly from farming and it is between 200,000 and 500,000 MMK per month and most of the rural households own wooden houses as housing wealth according to economic perspective. From sociological perspective, majority of rural household heads are in good health conditions and also good relationship with others. Although all rural household heads are literate, only eleven persons in every 100 persons are graduates. From psychological perspective, the study finds that the overall life satisfaction of rural households in Taikkyi Township is high level of satisfaction. This study suggests that the government should support more technology and loans in farming and create more job opportunities for rural people to get more income and also encourage higher level education of rural people.

ACKNOWLEDGEMENTS

First of all, I would like to express my deepest thanks to Professor Dr. Tin Win, Rector of the Yangon University of Economics and also Professor Dr. Nilar Myint Htoo, Pro-Rector of the Yangon University of Economics.

I also would like to express heartfelt thanks to Professor Dr. Cho Cho Thein, Program Director and Head of Department, Department of Economics for her encouragement and guidance through my study.

My deepest gratitude goes to my supervisor, Dr. Thuzar Lin, Lecturer, Department of Economics, Yangon University of Economics for her precious time, valuable advice, guidance and support throughout this study. I also thank to all the Professors and lecturers who contribute their knowledge to me during this two-year program.

Moreover, I would like to thank to all the respondents during survey time, all staff from General Administrative Department, Taikkyi Township for necessary data. I also would like to thank Tr. Daw Phyu Phyu Kyaw Myint, Tutor, Department of Economics, Yangon University of Economics for her help to this study. Then, I would like to thank to my family for their continuous support and understanding through my study. Last not least, I thank to all my classmates for their kind help, sharing their knowledge throughout the academic year from 2018 to 2020.

TABLE OF CONTENTS

	Page
ABSTRACT	i
ACKNOWLEDGEMENTS	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	iv
LIST OF ABBREVIATIONS	v
CHAPTER I INTRODUCTION	
1.1 Rationale of the Study	1
1.2 Objectives of the Study	2
1.3 Method of Study	2
1.4 Scope and Limitations of the Study	3
1.5 Organization of the Study	3
CHAPTER II LITERATURE REVIEW	
2.1 Concepts of Quality of Life	4
2.2 Approaches to Measures Quality of Life	5
2.3 Rural Economy	7
2.4 Different Perspectives of Quality of Life (QOL) Studies	8
2.5 Indicators of Quality of Life	14
2.6 Review on Previous Studies	14
CHAPTER III OVERVIEW OF LIVING CONDITIONS IN RURAL MYANMAR	
3.1 Rural Development Projects in Myanmar	20
3.2 Economic Conditions in Rural Myanmar	22
3.3 Social Conditions in Rural Myanmar	31
3.4 Background Information of Taikkyi Township	35
CHAPTER IV ANALYSIS ON QUALITY OF LIFE IN TAIKKYI TOWNSHIP	
4.1 Survey Profile	38
4.2 Survey Design	38
4.3 Survey Results	39

CHAPTER V	CONCLUSIONS	
	5.1 Findings	51
	5.2 Suggestions	52
REFERENCES		
APPENDICES		

LIST OF TABLES

Table No.	Title	Page
3.1	Myanmar's Human Development Index (2013-2017)	19
3.2	Number of Completed Sub-projects of Community Block Grants Under NCDDP	22
3.3	Labor Force Indicators by Residential Area in Myanmar	23
3.4	Sector of Primary Job, by Residential Area in Myanmar	24
3.5	Households Engaged in Each Income Source in Myanmar	25
3.6	Average Consumption and Income by Residential Area in Myanmar	25
3.7	Types of Housing Unit in Myanmar	26
3.8	Population Access to Improved Sources of Drinking Water, by Residential Area in Myanmar	27
3.9	Population Living in Households with Different Types of Sanitation Facilities, by Residential Area in Myanmar	28
3.10	Households Living in Villages or Wards Connected to the Public Grid whose Household is Either Connected or not Connected by Consumption Quintile	28
3.11	Percentage of Households Owning Mobile Phones	29
3.12	Twenty-year Plan for all Villages to Access Roads and Bridges in Myanmar	30
3.13	Rural Healthcare Facilities and Professionals in Myanmar	32
3.14	Population Living in Close Proximity to Medical Facilities by Type of Facility in Myanmar	33
3.15	Ill or Injured Individuals Seeking Different Types of Treatment, by Residential Area in Myanmar	33
3.16	Educational Attainment among Adults Aged 15 and Over in Myanmar	34
3.17	Number of Schools, Teacher/ Student Ratio in Taikkyi Township (2019)	36
3.18	Healthcare Facilities and Professionals in Taikkyi Township (2019)	37
4.1	Selected Survey Areas	38
4.2	Frequency Distribution of Characteristic of Household Heads	39

4.3	Frequency Distribution of Occupational Status and Economic Conditions of Household Heads	41
4.4	Frequency Distribution of Respondent's Housing Wealth	43
4.5	Frequency Distribution of Health Condition of Household Heads	44
4.6	Frequency Distribution of Educational Status of Household Heads	46
4.7	Frequency Distribution of Social Relation of Household Heads	47
4.8	Descriptive Statistics of Perceived Satisfaction of Household Heads	49

LIST OF ABBREVIATIONS

ADB	-	Asia Development Bank
CDF	-	Constituency Development Fund
CESR	-	Comprehensive Education Sector Review
CMEPSP	-	Commission on the Measurement of Economic Performance and Social Progress
DRD	-	Department of Rural Development
GAD	-	General Administration Department
GDP	-	Gross Domestic Product
HDI	-	Human Development Index
INGO	-	International Non - Government Organization
JICA	-	Japan International Cooperation Agency
LDFs	-	Local Development Funds
LIFT	-	Livelihoods and Food Security Fund
MALI	-	Ministry of Agriculture, Livestock and Irrigation
MDP	-	Multiple Discrepancies Theory
MOE	-	Ministry of Education
MLCS	-	Myanmar Living Conditions Survey
NCDDP	-	National Community-Driven Development Project
NESP	-	National Education Strategic Plan
PQLI	-	Physical Quality of Life Index
PRDF	-	Poverty Reduction Fund
PSI	-	Population Service International
QOL	-	Quality of Life
RDF	-	Rural Development Fund
SPPRG	-	Myanmar Social Policy and Poverty Research Group
SWB	-	Subjective wellbeing
TVET	-	Technical and Vocational Education and Training
UN	-	The United Nations
UNESCAP	-	United Nations Economic Commission for Asia and the Pacific
UNDP	-	United Nations Development Programme
WHO	-	World Health Organization

CHAPTER I

INTRODUCTION

1.1 Rationale of the Study

For centuries, people have naturally sought a decent life and, in this regard, tried to make maximum use of their skills and abilities to be better their living standards. Quality of life is an issue increasingly taken into account as one of the key elements in the assessing and comparing between countries, regions and communes. It is a primary goal information of a concept of local or regional development since the pursuit of personal and social well-being. Satisfying people's needs is the basis for an enhanced quality of life of both present and future generations, and the essence of the concept of sustainable development (Faraji Sabokbar, Najarzadeh, Torabi, et al, 2017).

Quality of life is measured generally by different indicators. Some are examined by living conditions, some by human development index (HDI) , some by happiness or life satisfaction, etc. Because the indicators used are different, the results are different. Whatever indicators are used, countries such as Norway, Switzerland, Denmark are usually situated in the top list for best quality of life countries in the world. When countries are ranked by HDI (2019) , Norway is first and Switzerland is second in the world. In Asia, Hong Kong is first and Singapore is second. The three countries with lowest HDI ratings from ASEAN region are Laos (140), Myanmar (145) and Cambodia (146) according to HDI world ranking list (2019). Anyway, human beings are more and more concerned in quality of life today and thus quality of life studies become one of the most popular topics by researchers around the world.

Living conditions are important for quality of life. Living conditions are generally measured by housing wealth, income, job, health, education, social relation, etc. Housing wealth is obviously necessary for quality life. Low quality of housing would be associated with reduced well-being and increased levels of psychological stress and lower physical health. Next, income and job are essential components of the well-being of individuals and societies. Then as a means to transmit knowledge

through generations, education is the basic of human civilization and has an impact on the quality of life of individuals. Health is also an important thing for quality of life. Without good health, a person's life would be meaningless. Next, a person who usually faces social relation related problems would not get full quality of life and thus social relation has an impact on quality of life. In addition, life satisfaction or happiness is significant for quality of life because if a person has material well-being but one is not satisfied or happy with life, it cannot be said those who has good quality of life.

According to population and housing census (2014) in Myanmar, 70 percent of total population live in rural areas and 30 percent live in urban areas. According to the sub-national HDI by global data lab, Yangon has the highest HDI with 0.665 among all regions in Myanmar in 2018. Taikkyi township is a township which located in northern portion of Yangon Region. According to population and housing census (2014), the unemployment rate for those aged 15-64 in Taikkyi Township is 3.6 percent. In education status, the number of population who can attend higher level education is low. Some of the households in this township have no toilet facilities. Some of the households use water from unimproved sources. When considering overall living conditions of the people in Taikkyi township, there is weak in education and accessibility to basic needs are also weak. That is why, this study attempts to examine the quality of life of rural households in Taikkyi township.

1.2 Objectives of the Study

The objectives of the study are to expose the living conditions of rural households in Myanmar and to investigate the quality of life of rural households in Taikkyi Township.

1.3 Method of Study

Descriptive method was used in this study to determine the quality of life of rural people in Taikkyi Township. The two-stage sampling method was used to carry out a rural household sample survey to select a sample of household heads. Both primary and secondary data are used in this study. The required primary data were collected by using a face to face survey to household head with a structured questionnaire. Secondary data was collected from different sources such as library,

online research papers and data from related office. The sample of 300 household heads are selected based on the population of rural people in Taikkyi Township.

1.4 Scope and Limitations of the Study

This study is mainly emphasized on quality of life of rural households. The respondents are household heads or the ones who have similar authority as household heads. In this study, the quality of life of rural households in selected areas of Taikkyi Township is examined by three perspectives: economic perspective (occupation, income and housing wealth); sociological perspective (health, education, social relation); and psychological perspective (life satisfaction) .

1.5 Organization of the Study

This study is organized into five chapters. Chapter one comprises of introduction which are rationale of the study, objectives of the study, method of study, scope and limitations of the study and organization of the study. Chapter two exposes literature review and Chapter three consists of overview of living conditions in rural Myanmar. Chapter four presents analysis of the survey data and Chapter five describes findings and suggestions.

CHAPTER II

LITERATURE REVIEW

2.1 Concepts of Quality of Life

The United Nations defined quality of life as the notion of human welfare measured by social indicators rather than by quantitative measures of income and production (UN,1997). World Health Organization (WHO) defined quality of life as “an individual’s perception of their position in life in the context of the culture and value system in which they live and in relations to their goals, expectation, standards, and concerns” (WHO, 1997).

According to Fraquhar (1995), there were four groups of quality of life definitions: global definitions, component definitions, focused definitions and combination definitions. Havighurst (1963) considered quality of life to comprise of 'inner' factors relating to what the subject thinks about his life, and 'outer' factors which measure behavior such as social contact and activities. The key quality of life dimensions were described by Patterson (1975) as health, function, comfort, emotional response and economics. Gillingham & Reece (1979) believed that the quality of life for the individual is the level of satisfaction he achieves as a result of his consumption of market goods, recreation, public goods, and other physical and social features of the environment in which he is situated. Quality of life was defined by Homles & Dickerson (1987) as an abstract and complex term representing individual responses to the physical, mental and social factors which contribute to normal daily living.

According to Bogue & Phelan (2005), quality of life is the perception and feeling about one current's life experience (family, social, economic/work, personal development/success). Hlavacek, (2010) defined Quality of life as the degree of satisfaction or dissatisfaction with personal, social, economic, and environmental expectations beyond basic human needs.

Hagerty et.al (2001) defined that "quality of life is a term that implies the quality of a person's whole life, not just some component part. It follows that if QOL is to be segmented into its component domains, those domains in aggregate must represent the total construct." Cummins (1997) described that "quality of life is both objective and subjective, each axis being the aggregate of seven domains: material well-being, health, productivity, intimacy, safety, community and emotional well-being. Objective domains comprise culturally relevant measures of objective well-being. Subjective domains comprise domain satisfaction weighted by their importance to the individual." Ilić, Milić, & Arandelović (2010) referenced that Janse et.al (2004) defined quality of life as multidimensional in construct including physical, emotional, mental, social and behavioral components.

2.2 Approaches to Measure Quality of Life

There are two popular approaches to measure quality of life: the Scandinavian level of living approach (Uusitalo, Ringen, Hanson, et al., 1987) and the American quality of life approach (Campbell, Converse, & Rodgers, 1976). The Scandinavian approach have the reliance on objective living conditions because it is more emphasized on welfare, whereas the American approach focuses on the subjective well-being of individuals.

The Scandinavian level of living approach is a measurement which is focused on objective living conditions. In the first attempt of formulation this approach, Johansson (1970) claimed resources as the central element of welfares. It comes from the concept of level of living which means the individual's command over resources in terms of money, property, knowledge, psychic, physical energy, social relation, security, etc. This is congruent with the British sociopolitical tradition which is influenced by both economics and sociology and it is also similar to UN expect groups' research on welfare (Uusitalo, Ringen, Hanson, et al., 1987).

The American Quality of Life approach is an approach which bases welfare measurements on subjective indicators. In this approach, quality of life experience was explored by asking individuals directly how his life feels to him and it was measured on satisfaction with the specific domains of life (Campbell, Converse, & Rodgers, 1976). In the tradition of utilitarian philosophy, 'mental health research' was strongly influenced by social psychologists like W.I. Thomas. So, this approach ultimately defines welfare as subjective well-being (Noll, 2004).

Development and Quality of Life are interdependent each other. There are many economists examined development and quality of life. An economist Morris David Morris created the Physical Quality of Life Index (PQLI) in the mid -1970s. Based on three factors, the Physical Quality of Life Index evaluates the quality of life or well-being of a country; basic literacy rate, infant mortality and life expectancy at age one. The PQLI becomes a precursor to develop today's human development index (HDI). Pakistani economist Mahbub ul Haq developed the human development index (HDI) in 1990. It intends to focus that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone. The HDI is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living.

The Dag Hammarskjöld Report on Development and International Cooperation, under the title "What now: Another Development" argued a new definition of development goals beyond the categories of economic growth. The concept of development could not be reduced to raise economic growth: "Development is a whole; it is an integral, value-loaded, cultural process; it encompasses the natural environment, social relations, education, production, consumption and well-being. The plurality of roads to development answers to the specificity of cultural or natural situations; no universal formula exists" (Hammarskjöld,1975).

"The Commission on the Measurement of Economic Performance and Social Progress"(CMEPSP) was held in February, 2008 under the initiative of the President of the French Republic, Nicholas Sarkozy. The commission was chaired by Joseph Stiglitz (President of the Commission), Amartya Sen (Advisor) and Jean Paul Fitoussi (Coordinator). It was started because GDP has a limitation to measure economic and social progress and thus to explore alternative measures and also to settle what statistical information was required to produce relevant indicators of social progress. The commission organized into three working groups: classical GDP issues, quality of life and sustainable development and environment. The key messages of the Commission includes (1) toward better measures of economic performance in a complex economy, (2) shift emphasis from measuring economic production to measuring people's well-being, (3) objective and subjective dimensions of wellbeing are both important, (4) use a pragmatic approach towards measuring sustainability (5) physical indicators for environmental pressures. (Stiglitz, Sen & Fitoussi, 2009).

‘BuenVivir’ approach also becomes one of the alternative development models. The term ‘BuenVivir’ is Spanish word and loosely translated into ‘good life or good living’. This approach starts in South America and signifies critiques of and alternatives to conventional ideas about development. The direct forerunner of BuenVivir are to be found in diverse concepts among some Andean indigenous groups. The first references with meanings similar to the present appeared in the 1990s, particularly in Peru, and became much more significant in Bolivia and Ecuador in the years after. The category ‘suma qamaña’ in Bolivia tends to a notion of wellbeing, or a fulfilled life, which can only be achieved by deep relationship within a community. The idea of sumak kawsay, from Ecuador highlights a welfare system that is not only material but that is also expressed within extended communities, both social and ecological. There are three uses of the label ‘BuenVivir’. A generic use is employed in generic criticisms of different forms of conventional development. A restricted use corresponds to more complex criticisms of contemporary capitalism that call for another, post-capitalist type of development. Substantive use relates to a radical criticism of all forms of development at their conceptual foundations, and a consequent defense of alternatives that are both post-capitalist and post-socialist. (Gudynas, von Birte Pedersen & Lang, 2014).

2.3 Rural Economy

Rural area economics is more inclusive than rural development or community economics. Rural area economics necessitates that economic issues in the countryside would be viewed through different angles than the one commonly used to picture agricultural phenomena. Sparseness of population, diversity of conditions, and interdependence with urban and global systems, provides the criteria within which rural area economics operate (Castle, 2000).

A micro view of rural economic performance in the U.S. shows that employment has increased faster in a unexpected number of rural places than in the neighboring metropolitan center. A significant source of growth in rural areas is rural industry clusters and also urban spillover is a factor for this. Rural areas generally are thought to have two key highlights – remoteness and small scale – that can slow economic growth. The U.S rural economy could overcome those barriers successfully (Henry, 1996).

In the paper of rural economy in new century, Johnson described the state and nature of rural economy in America has changed by decades. In 1950s, the status and role of rural America within the larger economy became, in some extent, clearer than in the last quarter-century. Rural areas produced raw materials, foods and energy and in some regions, provided low-cost labor for production of goods in the mature stage of their product cycle. In the 1970s, the population turn around, meant growth for many rural areas for the first times in decades. The outflow of rural youth and most employable members of the labor force declined but more important, a significant number of people were choosing to migrate to rural areas – choosing a rural lifestyle. In the final decades of the twentieth century, population growth returned to many rural communities in America. The rural economy in new century is driven by three main forces which are technological change, globalization and localization (Johnson , 2001).

Rural areas are typically related with agriculture activities while non-agricultural activities seem to be crowded naturally in urban centres. Despite of being neglected in the development literature in the past, the non-agricultural economy in rural areas has been increasingly studied since the 1960s and now it is a main stream topic in the field. When analyzing the transformation and diversification of the rural economy in Asia, the results come out as follows. Given the constraints in growth of agriculture and rural-urban migration, the rural non-farm economy is seen as a source of rural employment growth and poverty reduction. The indirect contribution of agriculture to an economy tends to rise over time in the form of agro-industrial activities. Urban centres are also a key element of rural non-farm growth (Briones, 2017).

According to ILO, the rural economy holds significant potential for creating decent and productive jobs and contributing to sustainable development and economic growth. It accounts for a significant share of employment and output in many developing countries but is widely characterized by severe decent work deficits and poverty, hosting nearly 80 percent of the world's poor.

2.4 Different Perspectives of Quality of Life (QOL) Studies

Today, researchers use many indicators and different perspectives altogether to measure quality of life (QOL). There are three different perspectives of Quality of

Life Studies that would like to be described: economic perspective, sociological perspective and psychological perspective.

(i) Economic Perspective

From economic perspective, economic well-being for quality of life can be measured by income and wealth. British economist A.C. Pigou, one of the founding fathers of modern welfare economics, sees national income as the primary measure of economic well-being. The foundation work in the measurement of national income was done by Simon Kuznets, the third Nobel laureate in economics. William Nordhaus and James Tobin (1973) attempted to adjust GNP to obtain a more meaningful measure of economic welfare. It becomes a direct forerunner of contemporary measures such as the Index of Sustainable Economic Welfare (as cited in Sirgu, Michalos, Ferriss, et al., 2006).

Easterlin (1974) concerned the association of income and happiness which is the first attempt in economic to assess in trend of well-being in terms of personal reports on happiness or life satisfaction. The basic data includes statements by individuals on their subjective happiness, as reported in thirty surveys from 1946 through 1970, covering nineteen countries, including eleven in Asia, Africa and Latin America. Within countries there is a noticeable positive association between income and happiness - those in highest status were happier, on the average, than those in the lowest status group. However, positive relation exists only at a given time and over time show that an association between income and happiness is so much weaker. Higher income is not accompanied by greater happiness. The reason is that people tend to compare their actual situation with a reference standard or norm derived from their prior and ongoing social experience in judging their happiness.

The relationship between income and subjective well-being: relative or absolute was investigated by Diener, Sandvik, Seidlitz, & Diener (1993). Two studies which empirically examine these positions are presented: one based on 18032 college studies in 39 countries and another based on 10 year longitudinal data in a probability sample of 4942 American adults. Modest but significant correlations were resulted in the U.S between income and well-being, but the cross-country correlations were larger.

Becker, Rayo, & Krueger (2008) reviewed 'Economic growth and subjective well-being by reassessing the Easterlin Paradox'. The authors emphasized on the

relationship between utility and measures of well-being and their approach takes the standard position that individual choices do maximize utility. It was concluded that although reported happiness and life satisfaction may be related to utility, they are no more measure of utility than are other dimensions of well-being, such as health or consumption of material goods. Igorzata Mikucka, Sarracino, & Dubrow (2017) described that in the long run economic growth improves subjective well-being when social trust does not decline and, in richer countries, when income inequality reduces.

Piekalkiewicz (2017) examined "Why do economists study happiness?" It shows that happiness can be an economic concept providing a critical review of the literature on (a) economic applications of happiness data and (b) economic consequences of happiness. Happiness data have been used to analyze microeconomic phenomena and to value non-market goods. Happiness may act as a determinant of economic outcomes: it increases productivity, predicts one's future income and affects labor market performance. A growing number of happiness studies shows a role of personality traits in understanding the link between well-being and economic outcomes.

Coates, Anand, & Norris (2015) studied 'Housing, happiness and capabilities: A summary of the international evidence and models'. This paper analyzed whether housing contribute to assessments of own utility and discover the factors shaping housing satisfaction through to life satisfaction. The study concluded that housing is not consumed, perceived or enjoyed in isolation from the world around; a wide range of variables serve to assess an individual's housing satisfaction ranging from the house's characteristics to the services and attributes of the neighborhood to cultural expectations; a range of housing-centric considerations influence life satisfaction and that occurs via the mediating influence of housing satisfaction. Kemeny (2001) has claimed that housing is an important aspect of capital investment component of welfare outcomes given its role in everyday life, security and health. Ronald (2007) has argued that the emergence of mass homeownership societies can be related to emerging welfare regimes and that 'in a number of society's retrenchment in public welfare provision has increased the focus on homeownership and asset-based welfare self-reliance'.

Chuanyong & Fang (2019) investigated 'Effects of housing wealth on subjective well-being in urban China'. The authors examined how housing characteristics affect individuals' subjective well-being (SWB) in China by using

2011 China Household Finance Survey data. The findings shows that the channel through which housing characteristics significantly affect SWB mainly depends on housing assets. House value appreciation significantly enhances SWB; however, housing debt does not affect the role of house value in SWB. Moreover, housing wealth has a more significant impact on SWB for low-income homeowners and those living in the eastern region of China.

(ii) Sociological Perspective

The sociological perspective is a view on human life, social interaction between individuals and groups, how these are conditioned by social structures or a society as a whole and how social interaction in turn maintains or transforms these social conditions (Kauppinen, 2018). From sociological perspective, quality of life studies are focused on health, education and social relation conditions.

Measuring health related quality of life was assessed by Guyatt, Feeny & Patrick (1993). Health status, functional status and quality of life are three concepts often used interchangeably to refer to the same domain of health. Clinicians and policymakers perceive the importance of measuring health-related quality of life (HRQOL) to inform patient management and policy decisions. Two basic means to quality-of-life measurement are presented: generic instruments that provide a summary of HRQOL; and specific instruments that focus on problems associated with single disease states, patient groups or areas of function. In Social indicators research and health-related quality of life research by Michalos (2004), it explains happiness on the basis level of satisfaction that respondents got from a dozen specific domains of their lives. Two approaches to explaining people's satisfaction with their own health: the same set of health related potential predictors of overall happiness and the Multiple Discrepancies Theory (MDT) are considered. The results concluded that if one's aim is to explain people's satisfaction with their own health, the potential predictors assembled in MDT can provide quite a bit and sometimes even more explanatory power than a reasonable broad set of measures of self-reported health.

Health status, quality of life and individual was assessed by Guyatt & Cook (1994). Quality of life indicators and health: current status and emerging conceptions was reviewed by Raphael, Renwick, Brown & Rootman (1996). In this study, quality of life and health are reviewed in six approaches. These are (1) health related quality of life; (2) quality of life as social diagnosis in health promotion; (3) quality of life among persons with developmental disabilities; (4) quality of life as social indicators; (5) the Centre for Health Promotion (University of Toronto) model and (6) Lindstrom's quality of life model. The links among the social indicators, quality of life and health promotions areas are analyzed. In conclusion, the authors point out the Centre for health Promotion's quality of life model for which it directs attention to a broad range of issues including personal development opportunities, immediate environments and community resources and Lindstrom's model for which it

highlights the importance of considering societal and structural determinants of health. In the book of Quality of life, health and happiness (Nordefelt, 1993), the author attempts to give a theory of quality of life in general and then apply that theory to a medical context. The concept of quality of life here means subjective one, happiness. In the results, the authors described that health can affect a person's quality of life in at least the following three ways: (1) the concept of health is analytically related to the concept of happiness, (ii) subjective illness involves pain, fatigue or other immediately unpleasant sensations, (iii) partly because of (i) and (ii), health has a very high priority on people's preference-scales. Thus believing or knowing that one is healthy can, by itself, contribute to one's level of happiness.

In the handbook of social indicators and quality of life research written by Land, Michalos, & Sirgy (Eds) (2011), it reviewed a wide array of research on the impact of educational attainment on quality of life. The reviewed research reveals the effects of educational attainment on QOL to be multidimensional and often reciprocal in nature. The mechanism underlying the education-QOL relationship are discussed in terms of three basic pathways by which education imparts benefits: (a) improving the stock of knowledge and the analytical skills individuals use to guide their behavior; (b) altering individuals preferences; and altering the constraints/ opportunities presented to individuals. The authors found that although there are still numerous questions and gaps remaining, the case for the positive effects of educational attainment on quality of life is in the balance very convincing. The relationship between education and a variety of indicators of subjective quality of life was examined by Ross, & Van Willigen (1997). The results found that well educated have lower levels of emotional distress and physical distress but they do not have lower levels of dissatisfaction. Education reduces distress largely by way of paid work, non-alienated work and economic resources, which are associated with high personal control but the extent to which it reduces distress by way of marriage and social support is much more modest.

Haller & Hadler (2006) studied 'How social relations and structure can produce happiness and unhappiness: An international comparative analysis'. It distinguished four relevant areas: (1) basic social relations and personal networks; (2) sociocultural integration; (3) occupational achievements and social status; (4) societal and political structures and institutions. The findings included that married people and people with children are happier than singles. Participation in religious or community

related activities has significant effects on happiness. Then non-employed (the retired, housewives, students) are more happy and more satisfied with their life when compared to employed people but in contrary, the unemployed are both less happy and less satisfied than employed people. It referenced that Durkheim (1973) has shown that social relationships protect individuals and are essential for them to fulfil their basic needs in his classical study on Suicide. Then Fromm (1956) said that "true love" exists only if we are ready to give love to others. The highest level of happiness may be obtained when we work or live for other people, for a community or for god. It was also mentioned that numerous studies have corroborated the finding that good and close relationships with other people - partners and spouses, parents and children, kinsmen, friends, neighbors and workmates - are a major source of satisfaction with life and happiness.

(iii) Psychological Perspective

Measures of Subjective Well-being (SWB) tend to describe subjective measures or indicators of the quality of life (QOL). SWB measures can contribute an important compliment to objective QOL indicators, such as economic trends and other social indicators. At first, psychology was conformed towards the goal of alleviating suffering and emotional anguish rather than the understanding of wellbeing. In the 1960s, a few researchers began to focus on happiness as a central topic. Warner Wilson (1967) published a review paper focused on "Correlates of Avowed Happiness," in which he specified the characteristics of a happy person. Bradburn (1969) proposed the "Affect Balance Scale," which is an instrument intended to assess both negative affect (or emotion) and positive affect (or emotion) (Sirgy, Michalos, Ferriss, et al., 2006). Subjective well-being consists of three interrelated components: life satisfaction, pleasant affect, and unpleasant affect. Affect refers to pleasant and unpleasant moods and emotions, whereas life satisfaction refers to a cognitive sense of satisfaction with life. Both affects and reported satisfaction judgments represent people's evaluations of their lives and circumstances (Diener, & Suh, 1997). In 1984, Diener distinguished between top-down and bottom-up approaches that influences SWB. The bottom-up approach follow the assumptions that there are basic human needs and if one's circumstances allow a person to fulfill these needs, happiness would be achieved. The top-down approach focuses on personality traits to measure SWB (Diener et.al 1999).

2.5 Indicators of Quality of Life

Social indicators that refer to personal feelings, attitudes, preferences, opinions, judgments or beliefs of some sort are called subjective indicators. Social indicators that refer to things that are relatively easily observable and measurable are called objective indicators (Sirgy, Michalos, Ferriss, et al., 2006, p.344).

Objective indicators include income and job, housing wealth, health, education and social relations. Subjective indicator includes life satisfaction. From economic perspective, income and job, housing wealth are important indicators for human beings to fulfill economic well-being. Economic well-being is one of the main indicators for quality of life. From sociological perspective, education, health, social are indicators to get social well-being. Social well-being also affect directly to the quality of life. From psychological perspective, life satisfaction (subjective indicator) which is self-rated by respondent is also significant to measure quality of life.

2.6 Review on Previous Studies

Askhatova, & Bulnina (2014) studied ‘Quality-of-life (QOL) improvement as a strategic resource of sustainable social and economic development of a region.’ In the study, a constant quality-of-life improvement of its population is one of the main objectives of the development of a region. There is a deep connection between the indices of QOL of a population and economic growth rates. On the one hand, a necessary condition for the quality-of-life improvement of a population is economic growth . On the other hand, higher indices of QOL of a population, including a lifespan, quality of education, income and social care accelerated the economic growth.

Bukenya, Gebremedhin, & Schaeffer (2003) examined ‘The relationship between quality of life, rural development and several socioeconomic variables’. In the study, Quality of life was measured by a three-point categorical measure of overall satisfaction and development is measured by a goods and services availability index. The empirical results are in harmony with the theoretical predictions and indicate a simultaneous relationship between quality of life satisfaction and rural development.

Grgić, Žimbek, Tratnik, Markovina, & Juračak (2010) studied ‘Quality of life in rural areas of Croatia: To stay or to leave?’The study was conducted using survey method on the sample of 914 respondents, who fall into age group between 25 and 45 years old, from Croatian rural areas (all 20 counties were included in the sample

proportionally). The survey consisted of four parts: the assessment of living conditions by rating satisfaction, the advantages and disadvantages of living in a rural area by rating the level of agree/disagree and their overall satisfaction with life in a rural community and indicate major problem by individuals and community life. The study results indicate that the major hardships of rural are economic nature, lack of employment opportunities, inadequate choice of profession and lower income compared to a city. The perception of quality of life in rural area is considerably affected by dissatisfaction of the respondents with social and health services and poorly developed infrastructure. But rural livelihood has advantages in natural settings, less pollution, better social ties and less crime. Nearly 20% of the respondents are dissatisfied with conditions of rural life and expect to leave.

Idris, Mohamed Shaffril, Md. Yassin, et al. (2016) examined 'Quality of Life in Rural Communities: Residents Living Near to Tembeling, Pahang and Muar Rivers, Malaysia'. The quantitative study used a constructed questionnaire as main tool to collect data on the QOL of river communities. Malaysian QOL dimensions (housing, physical environment, safety, involvement and social relationships, education, financial and job security, infrastructure facilities) mainly used in this research. This study was more on the subjective measurement of river community's QOL and so five-point Likert scale was used to choose by respondents. A total of 240 villagers aged between 15 to 84 years old were selected as respondents. The results show that the dimensions of settlement, safety, involvement and social relationships, as well as education have highest score, while dimensions of physical environment, financial and job security have moderate scores. Dimensions of infrastructure facilities come out a low mean score.

Ko Ko Hlaing (2011) examined 'A Study on Quality of Life in Dagon Myothit (South).' Descriptive method was used in this study. The assessment is made by using UNESCAP's QOL components and indicators (1995) and UNDP Human development index (2007). These components and indicators are family size (household size, housing level satisfaction of life, social participation), material possession (house and car ownership), education (basic school enrollment rate, literacy rate), health (doctor-population ratio, infant mortality rate), leisure and recreation (TV watching), human development condition (HDI index) , occupation (income level and GDP condition), transportation and communication (road, public transport bus and telephone), public safety (crime rate). Those indicators are classed into three level: high, medium and

low. Sample household 200 was selected in this study. This study result come out that in Dagon Myothit (South), with 5 member on average, household size is of medium level, housing condition falls in to the medium level, with the highest percentage of timber/ wooden houses. The availability of electricity is inadequate to satisfy the need. Material possession falls in low level. Education is in high level and with respect to health, public health care service is still limited. GDP index is low. With respect to transportation, number of roads has increased and the quality also improved. Communication has improved with the increased use of auto telephone, GSM, CDMA, E-mail, Fax and Internet. Crime rate has been reduced which reflects the improving public safety condition for the residents of the township. In conclusion, the level of quality of life of the residents of Dagon Myothit (South) is medium level as measured by the 18 indicators.

Michalska-Żyła, & Marks-Krzyszowska (2018) researched ‘Quality of Life and Quality of Living in Rural Communes in Poland.’ This research yielded the relationship between objective resources of the local community as well as the level of their social-economic condition and level of satisfaction of the inhabitants. That study adopted a multi-stage selection process and choose six sample communes out of all seventeen provinces in Poland. A survey of the inhabitants (a total of 700 inhabitants) was conducted and the sample size of each commune was selected in proportion to its size and reflected the structure of the adult population aged 18-70. The results showed that rural residents have life satisfaction in respect of family sphere and the main source of dissatisfaction is their financial situation. The examined residents overall positively assessed the conditions of living in their country. The lowest level of satisfaction with living in the commune was associated with such aspects as technical infrastructure, transport links, activities of NGOs and political parties and the lack of possibilities to exert influence on what is happening in the relationship between quality of life and quality of living in rural communities.

Pospěch, Delín, & Spěšná, (2009)studied ‘Quality of life in Czech rural areas.’ This study used seven indicators: relationship with family and friends, emotional well-being, material well-being, health, work and productive activity, feeling part of one’s local community and personal safety. The study used a sample of 3026 respondents that were divided into 855 rural and 2171 urban dwellers. The study found that there is a favor for city inhabitants in the category of material well-being and health. In term of work and productivity, rural population is worse off than urban

ones. In term of feeling part of one's local community, the result comes out to favor to urban according their indicator and the nature of community life. In the category of personal safety, the result is slightly in favor of their hypothesis.

Thet Paing Soe (2016) studied 'A Study on Quality of Life at Selected Housing Complex in Ahlone Township, Yangon.' Descriptive method was used in this study. Physical Indicators (housing, transportation and communication, immediate environment), Economic Indicators (job, income) and Social indicators (health care, education, family life, community life, leisure life) are used to study quality of life of residents of Manawhayi Yeikmon, ThiriMingalar Complex, Aungzayya Complex in Ahlone Township. A sample of 210 households is selected through systematic sampling method with 70 households from each housing complex in Ahlone Township, Yangon. The result come out that with respect to economic indicators, the degree of quality of life level stands as fair. With respect to social indicators, the degree of quality of life level stands good and With respect to physical indicators, the degree of quality of life level stands good.

Thu Rein Htun (2011) studied 'A Study on Quality of Life at Yuzana Garden City in Yangon.' This study used physical indicators (housing, transportation and communication, immediate environment), economic indicators (employment and working life, income) and social indicators (healthcare, education, family life, community life, leisure life) to measure quality of life (QOL) of residents in Yuzana Garden City in Yangon. Residents' opinion on satisfactory level of QOL with respect to each indicator was also measured in this study. Respondents were residents who lived in Chindwin Yeikmon, Sittaung Yeikmon, Ayeyarwady Yeikmon (Block A, B, C) in Yuzana Garden City. The questionnaires were distributed to 260 households. The research findings reveal that the quality of life does not solely depend on the material possessions. The residents in Chindwin Yeikmon possess better houses and facilities than those living in other sections in the study area. Negative responses to three indicators of quality of life included in questionnaires by residents in Chindwin Yeikmon are higher than the residents of Block B of AyeyarwaddyYeikmon, the low-cost apartment flat housing and thus it ranks second in the quality of life. In SittaungYeikmon, the unfavourable situations are transportation, income, community life and leisure life are fair and electricity supply and health care are poor at these high-cost housing type. So, it ranks fourth in the quality of life. In block A of Ayeyarwady Yeikmin, water supply, transportation, waste disposal system, income

and healthcare are fair and poor electricity and leisure life and so it falls in third place. In block B of AyeyarwaddyYeikmon, communication, sewage system, education and family life are very good and living space per person, water supply, transportation, waste disposal, employment and working life, and community life are good. In Block C, resident's responses comprise high negative percentages on satisfaction thus quality of life is lowest, ranking fifth within the study area.

CHAPTER III

OVERVIEW OF LIVING CONDITIONS IN RURAL MYANMAR

According to Population and Housing Census (2014), total population in Myanmar is 51,486,253 which are 14,877,943 in urban and 35,401,957 in rural. Population growth (annual%) in Myanmar was reported at 0.60848 % in 2018, according to the World Bank collection of development indicators, compiled from officially recognized sources. The total gross domestic product (GDP) of Myanmar is approximately USD 71.21billion and GDP per capita is of 1325.95 USD according to World Bank data (2018). In 2020, Myanmar population is estimated to be 54,409,800 people at midyear according to UN data.

Table (3.1) Myanmar’s Human Development Index (2013-2017)

	HDI value	Life expectancy at birth (years)	Mean years of schooling (years)	Expected years of schooling (years)	GNI per capita (2011 PPP\$)	Ranking
2013	0.524	65.2	4.0	8.6	3998	Low human development
2014	0.536	65.9	4.1	8.6	4608	low human development
2015	0.556	66.1	4.7	9.1	4943	medium human development
2016	0.571	66.2	4.9	10.0	5155	medium human development
2017	0.578	66.7	4.9	10.0	5567	medium human development

Source: UNDP Human Development Report, (2017).

In Table (3.1), Myanmar human development index from 2013 to 2017 was shown. According to the data, Myanmar HDI value was 0.524 (low human development) in 2013 and 0.536 (low human development) in 2014. Then HDI value gradually increases year after year and reach into medium human development category. In 2017, Myanmar HDI value is 0.578. Life expectancy at birth is 66.7 years, mean year of schooling is 4.9 years, expected years of schooling is 10 years and GNI per capita is 5567\$.

According to the 2014 Myanmar Population and Housing Census, Myanmar had 15 regions/states including 73 districts, 330 townships and 13620 village tracts (63938 villages). In Yangon Region, there are 4 districts which consist of 46 township. There are 619 village tracts (2129 villages) in Yangon Region. Total population of Yangon Region represents 14.3 percent of total population of Myanmar. In Yangon Region, 70 percent of population live in urban areas whereas 30 percent live in rural areas. Taikkyi township is a township which is located in the northern portion in Yangon Region. In Taikkyi township, there are 17078 households lived in urban and 45309 households live in rural with 20 wards and 75 village tracts (476 total villages).

3.1 Rural Development Projects in Myanmar

Myanmar government had been establishing many plans for rural development and decentralization, starting from 2011. For this aspect, a national strategic to alleviate poverty with eight priority areas to promote the socio-economic life of the people has been implemented. In accordance with the government's national strategic plan, policymakers have focused on the agricultural sector in rural development because approximately 70 percent of the population live in rural areas and their main livelihood is agriculture which is the backbone of the economy of the country. The eight priority areas in national strategic plan are as follows.

- (1) The development of agricultural productivity
- (2) The development of livestock breeding and fisheries
- (3) The development of rural small-scale productivity
- (4) The development of micro savings and credit associations
- (5) The development of cooperative tasks
- (6) The development of rural socio-economy
- (7) The development of rural energy

(8) Environmental conservation (Khine Su Ye Zaw, 2016).

The General Administration Department (GAD), under the guidance of the government, has managed to support community development projects with Local Development Funds (LDFs). LDFs comprise the Poverty Reduction Fund (PRF), the Constituency Development Fund (CDF) and the Rural Development Fund (RDF). In order to achieve the development of rural areas, the Department of Rural Development (DRD) is organized under the Ministry of Agriculture, Livestock and Irrigation (MALI). The DRD has implemented the construction of rural roads, bridges, housing and electricity that are necessary to develop the agricultural sector.

Moreover, by the State Fund, Department of Rural Development has been implementing Mya Sein Yaung project to convey with the people centered approach in line with the Rural Development Strategic Framework, to fulfill the needs of rural poor people being difficult to do the incoming jobs and needing the soft loan or without interest according to the survey conducted by the cooperation of LIFT Fund and SPPRG. The project has been carrying out in beneficial villages (7790), (6497) units within (288) townships, (70) districts from Nay Pyi Taw Council, (14) States and Regions and (6) self-administrative areas. From 2014-15 fiscal year to 2016-17 fiscal year, the total amount of budget is Kyat (196.71) billion, Kyats (3) million for one village.

In addition, the DRD has implemented the National Community-Driven Development Project (NCDD project) from 2012 to 2021. The project objective is to enable poor rural communities to benefit from improved access to and use of basic infrastructure and services through a people-centered approach, and to enhance the Government's capacity to act in response promptly and effectively to an eligible crisis or emergency. The NCDD project was first received a US\$ 80 million grant from the World Bank International Development Association (IDA). According to NCDD for integrated local development report 2019, total amount of funding is approximately US \$ 574 million. The NCDD project includes five components which are community block grants, facilitation and capacity development, knowledge and learning, implementation support and emergency contingency support.

Table (3.2) Number of Completed Sub-projects of Community Block Grants Under NCDDP

Descriptions	2013-14	2014-15	2015-16	2016-17
Transport (roads, bridges, footpaths, jetties)	126	743	2306	4265
Water Supply and sanitation	69	415	978	1156
Education	118	434	959	1057
Electrification	26	142	207	485
Community Facilities	15	49	140	399
Health	1	-	33	33
Other	2	29	108	249
Total sub-project costs: NCDDP costs (MMK billion)	1.5	9.55	32.25	55.25
Total block grants disbursed (MMK billion)	1.57	10.46	35.7	67.38

Source: NCDDP project report, (2017).

In Table (3.2), among the sub-projects completed under NCDDP, transport (roads, jetties bridges, etc) is the highest priority sector and there are total 4265 projects in 2016-17. Education and water supply/sanitation is on the second and third places respectively. Then electrification, community facilities, health and other are in such order by number of projects. Each year had been seen a progressive increase in the transport sector, showing the economic importance of roads and bridges to rural communities. Total sub-project costs in 2016-17 is 55.25 billion kyats.

3.2 Economic Conditions in Rural Myanmar

Since 2011, Myanmar government is taking initiative of political and economic reforms and become more intergrated into the regional and global economy. In Myanmar, 70 percent of population live in rural areas and thus rural economy development is a significant matter for the country. In rural economy, there are mainly two parts :

- (1) agricultural economy and
- (2) rural off-farm and non-farm economy.

According to the surveys in Myanmar main agricultural zones which are the Ayeyarwaddy Delta and the Dry Zone, levels of landlessness are high and agriculture landownership is skewed, with the smallest third of farms in both zones occupying less than 5% of all agricultural land. Despite the use of modern input in agriculture production, the profitability is still low. The risks of climate change and limited technology may be reasons to think about.

The explosive growth of agricultural mechanization is linked closely to migration and rising real wages. The rate of establishment of rural non-farm business has increased rapidly since 2010. Agricultural machinery rental and transport businesses has been rapid growth and business providing personal services and food away from home are also increased. Non-farm business now accounts for a significant share of rural incomes and employment. Low average size and uneven distribution of landholdings makes off-farm employment (defined as work away from own farm) is also a significant component of rural livelihoods (Boughton, et.al., 2018)

(i) Occupation and Income

In rural areas of Myanmar, most of the employment types of men and women engaged are smallholders, landless and small and median businesses. Smallholders who own less than 2 ha are mainly subsistence farmers who do not produce enough to feed their families. The landless have different strategies to earn money. They engage in several livelihoods such as farm labor, cottage industry and livestock rearing (especially chickens, pigs and goats). The minimum wage per day in Myanmar is 4800 kyats for eight hours of work.

Table (3.3) Labor Force Indicators by Residential Area in Myanmar

Descriptions	Myanmar (%)	Urban (%)	Rural (%)
Working age population (aged 15+)	100.0	100.0	100.0
Labor force	64.8	60.9	66.4
Employed	63.4	59.1	65.3
Unemployed	1.4	1.8	1.2
Out of labor force	35.2	39.1	33.6
Potential labor force	4.9	5.6	4.7

Other inactive	30.3	33.5	28.9
----------------	------	------	------

Source: MLCS, (2017).

Table (3.3) shows labor force participation by residential area (in percent). Within working age population (aged 15 and over), 66.4 percent of total rural working age population were in the labor force. Among out of labor force, other inactive group was 28.9 percent. It was quite large amount of population and it may affect kind of economic growth and productivity. In urban, the percent of labor force and out of labor force were not much different from rural ones.

Table (3.4) Sector of Primary Job, by Residential Area in Myanmar

	Myanmar (%)	Urban (%)	Rural (%)
Agriculture, forestry, fishing	51.3	9.6	67.1
Industry	16.6	25.3	13.4
Mining	0.8	0.6	0.8
Manufacturing	9.4	15.2	7.2
Utilities	0.1	0.3	0.1
Construction	6.3	9.2	5.3
Service	32.1	65.1	19.5
Wholesale and retail trade	14.4	28.4	9.1
Transportation, food services, information	7.0	14.4	4.2
Financial and professional services	1.0	2.9	0.3
Public administration	1.0	2.7	0.4
Education, health, social work	3.3	6.1	2.2
Other	5.4	10.6	3.4

Source: MLCS, (2017).

In Table (3.4), sector of primary job by residential area is shown. In rural areas, agriculture, forestry, fishing sector was top with 67.1 percent. Service sector was the second with 19.5 percent and industry sector was the third with 13.4 percent. Other professional jobs were quite a small amount and so rural people had a few opportunities to work professional jobs. In urban, service was the leading sector with 65.1% of primary job. Wholesale and retail sector was second with 28.4 % and industry sector is third with 25.3%.

Table (3.5) Households Engaged in Each Income Source in Myanmar

	Myanmar (%)	Urban (%)	Rural (%)
Farming and allied	57.9	16.8	54.7
Crop production	40.9	8.4	38.9
Livestock rearing	45.0	11.6	42.0
Fishing and aquaculture	8.9	1.5	7.8
Non-farm business	37.2	54.9	40.5
Agricultural labour	26.2	5.0	21.0
Non-agricultural labour	40.0	61.9	40.8
Remittances	19.5	18.5	20.2
Other	33.8	34.2	34.6
Rent	2.8	1.1	3.0
Public/social transfers	15.0	15.4	15.3
Miscellaneous	21.2	22.5	21.9

Source: MLCS, (2017).

In Table (3.5), most of the rural household mainly get income from farming and allied which includes crop production, livestock rearing, fishing and aquaculture with 54.7 percent. The second was non-agricultural labor and non-farm business with 41 percent. In urban, non-agricultural labor position was top with 62 percent following non-farm business with 54.9 on the second and ‘other’ category which includes rent, public/social transfers and miscellaneous with 34.2 percent on the third.

Table (3.6) Average Consumption and Income by Residential Area in Myanmar

	Myanmar	Urban	Rural
Household annual (millions)			
Income	3.47	5.36	2.71
Consumption	3.95	5.21	3.45
Per capita monthly			
Income	67,798	105,619	52,698
Consumption	77,157	102,707	66,957
Per capita daily			
Income	2,229	3,472	1,733
Consumption	2,537	3,377	2,201

Source: MLCS, (2017).

In Table (3.6), average income and consumption by residential area is shown. Average rural household income (annual) was 2.71 million kyats. But average consumption was 3.4 million kyats so it was slightly higher than their average income. They had to engage some financial sources such as borrowings, to manage that. In urban, average household income (annual) was 5.36 million kyats and average consumption was 5.21 million kyats. So urban household had enough income to cover consumption but also it had to think about health and education and other emergency cases.

(ii) Housing Conditions

Poor households have obviously lower access to basic infrastructures such as good shelter, water, sanitation, electricity. Good housing condition, neighborhood, access to infrastructure are really important as a part to have a good quality of life.

Table (3.7) Types of Housing Unit in Myanmar

	Myanmar (%)	Urban (%)	Rural (%)
Apartment/condominium/flat	4.5	12.4	1.4
Bungalow/brick house	6.8	13.3	4.2
Semi-pacca house	6.5	11.0	4.8
Wooden house	41.2	37.4	42.7
Bamboo	37.4	23.6	42.7
Hut 2-3 years/ Hut 1 year/ Other	1.9	0.8	2.3

Source: Housing and Household Amenities Report, (2014).

In Table (3.7), percentage of households by type of housing unit in urban and rural areas are shown. In rural areas, the types of house mostly found are wooden house (43%) and bamboo house (43%). The number of apartment/ condominium/flat, bungalow/brick house, semi-pacca house are more in urban than in rural areas.

Table (3.8) Population Access to Improved Sources of Drinking Water, by Residential Area in Myanmar

	Dry Season			Rainy Season		
	Myanmar (%)	Urban (%)	Rural (%)	Myanmar (%)	Urban (%)	Rural (%)
Improved, on premise	57.3	83.7	46.8	66.9	86.6	59.1
Improved, not on premise	22.1	9.7	27.0	19.9	8.8	24.4
Unimproved	4.7	0.9	6.2	4.3	0.8	5.6
Surface water	15.9	5.7	19.9	8.9	3.8	10.9

Source: MLCS, (2017).

Note: the following categories are used to characteristic water usage: (1) Improved, on premise – Drinking water from an improved water source which is located on premises. Improved water sources include: piped water, tube well/borehole, protected well, rainwater collection/tank, bottled water, and water delivered from a tanker/truck. (2) Improved, not on premise – Drinking water from an improved water source which is not located on premise. (3) Unimproved – Drinking water from an unprotected well or spring (4) Surface water – Drinking water directly from a river, stream, canal, pool, pond, lake, dam, or other stagnant water

In Table (3.8) percentage of the population with access to improved source of drinking water is shown. Clean and safety drinking water is important for everyone as health related factor. In Myanmar, drinking water is difficult for rural areas during dry season and it becomes worse year after year. Percent of rural population that can access improved sources of drinking water on premise was 47% in dry season and 59% in rainy season. In urban, 83.7% of population could access improved source of drinking water, on premise in dry season and 86.6% in rainy season.

Table (3.9) Population Living in Households with Different Types of Sanitation Facilities, by Residential Area in Myanmar

	Union (%)	Urban (%)	Rural (%)
Basic improved sanitation	64.2	73.6	60.4
Improved toilet	89.0	96.4	86.1
Toilet not shared	80.7	79.2	81.2
Hand-washing facilities	83.3	93.5	79.1

Source: MLCS, (2017)

Note : “Improved toilet” includes flushed to piped sewer system, septic tank, or pit latrine, ventilated improved pit latrine, pit latrine with slab, and composting toilet, but does not consider whether household has hand-washing facilities or if the facility is shared with other households

Sanitation is basic infrastructure that everyone has to access in daily lives. According to Table (3.9), 60.4 percent of total rural population could access basic improved sanitation. Percent of rural population that can access improved toilet was 86.1 and so it may be quite a good condition for rural area though improved sanitation system was basic infrastructure that everyone should access for health reason. In urban, percent of population who can access to basic improved sanitation was 73.6% and to improved toilet was 96.4%.

Table (3.10) Households Living in Villages or Wards Connected to the Public Grid whose Household is Either Connected or not Connected by Consumption Quintile

	Percentage of Household				
	Q1	Q2	Q3	Q4	Q5
Connected village/ward, household connected	18.8	33.2	39.9	50.1	69.1
Connected village/ward, household not connected	17.6	15.3	11.9	9.6	3.5
Unconnected village/ward	63.6	51.5	48.2	40.3	27.4

Source: MLCS, (2017).

Note: Q1 to Q5 represent per adult equivalent consumption with Q1=poorest quintile and Q5 = wealthiest quintile

In Table (3.10) percentage of households living in villages or wards connected to the public grid whose household is either connected or not connected, is shown. It was obvious that most of the household in Q1 could not connect to the public grid even if it is connected to the village/ward (17.6 percent). There are also many Q1 households which are located in public grid unconnected village/ward (63.6 percent). In Q5, there are 69% of households which can connected to public grid, located in connected village/ward.

In 2013, the government started taking steps to open up the telecommunications market, issuing licenses to new service providers. In 2014, Qatar-based Ooredoo and Norwegian Telenor Group entered the market, resulting in the reduction of consumer prices and a rapid growth in the number of subscribers, as well as the expansion of the country's infrastructure. In 2017, Mytel (Telecom International Myanmar Co., Ltd.) received License for the provision of telecommunication services, officially became the 4th operator in Myanmar.

Table (3.11) Percentage of Households Owning Mobile Phones

	2005	2010	2015	2016	2017
Union	0.4	4.8	52.1	73.0	81.5
Urban	1.4	13.6	84.2	92.7	93.4
Rural	0.1	1.7	40.0	65.9	76.6

Source: MLCS, (2017).

In Table (3.11), percentage of households owning mobile phones by rural, urban and union level from 2005 to 2017). It is obvious that urban households can access to mobile phones more than rural households. Compared to 2010, 2015 and 2017 data, it showed that percentage of rural households owning mobile phones is rapidly increased after the government open telecommunication markets.

In Myanmar, 40% of rural population live in villages without access to all season roads according to Asian Development Bank Studies. Then 4 million people live in the 8200 villages that are not connected by road. Another 20000 villages with an estimated 10 million people are connected by roads that are not passable during the rainy season.

Table (3.12) Twenty-year Plan for all Villages to Access Roads and Bridges in Myanmar

	20-year plan (2011-2031)	5-year plan (2011-2016)
Roads (km)		
Bituminous	6693	2022
Macadam	12129	4760
Gravel	265	265
Earth	9904	8499
Bridges (m)		
Concrete	4790	3495
Wooden	112101	28728
Culvert	77192	14522
Causeway and/or other	363	1766

Source: Myanmar Transport Policy Note, (2016).

In Table (3.12), twenty-year plan for all villages to access roads and bridges in Myanmar from ADP report which is created based on data of the department of rural development is described. The 20-year plan includes output targets for nearly 10,000 kilometers (km) of village road construction and about 19,000 km of village road improvements to macadam or bituminous standard. Although graveling was included in the first five year of the plan, it was not included in subsequent years due to the high maintenance costs for this surface type. The 20-year plan foresees over 110,000 meters (m) of bridge construction consisting mainly of wooden bridges, and about 77,000 m of culverts and causeways. Most of the concrete bridges and causeways are planned to be constructed in the first 5 years, with the length of planned causeways for the 5-year period already significantly increased compared to the original 20-year plan. Implementation by DRD is also exceeding planned volumes, with significant increases in the length of causeways as an inexpensive means of providing water crossings for roads with little traffic. This approach is considered very effective in terms of providing basic all-season access for village roads with very low traffic volumes.

Many rural transport services includes Dyna or Hilux type passenger trucks, tricycles, horse carriages or mules, bullock cart, trishaws operated by individual business men. Other types are motorcycles, tractor-trailers, bicycles, which are mostly used for personnel but they can be used for informal transport hire to get extra

income. Some rural people benefit from the buses and minibuses that operate on interurban routes. Motorcycles are the most common vehicle on rural roads and may be the main transporters of people and small freight. Where there are no roads, transport is very expensive in terms of walking time and freight charges. While overloading of passengers is common, there appears to be no evidence that rural transport is particularly dangerous or that safety and security are major issues for passengers or operators (Myanmar transport sector policy note, 2016).

3.3 Social Conditions in Rural Myanmar

In social condition in Rural Myanmar, health condition and education condition of rural people are described as follow.

(i) Health

Myanmar Health Vision 2030 (2000-2001 to 2030-2031) was made up during last decade and composed of (9) main areas: health policy and law; health promotion; health service provision; development of human resources for health; promotion of traditional medicine; development of health research; role of co-operative, joint ventures, private sectors and NGOs; partnership for health system development; and international collaboration.

As an integral component of the long-term visionary plan, the National Comprehensive Development Plan (NCDP) (Health Sector) (2010-2011 to 2030-2031) has been developed based on changing situation. The following strategies has been being implemented by aiming towards the health sector development,

- (a) Health System Strengthening
- (b) Disease Control Programme
- (c) Public Health Programme
- (d) Curative Services Programme
- (e) Development of Myanmar Traditional Medicine Programme
- (f) Human Resources for Health Development Programme
- (g) Promoting Health Research Programme

As Myanmar moves on the path of socioeconomic development and changing lifestyle, there is a shift in epidemiological transition towards non-communicable diseases. Myanmar is now facing double burden of diseases - Communicable Diseases & Non-Communicable Diseases. Communicable diseases of national concern are

HIV/AIDS, Malaria, and Tuberculosis. Chronic non-communicable diseases/conditions with shared modifiable risk factors tobacco use, unhealthy diet, physical inactivity, harmful use of alcohol is Cardiovascular disease, Diabetes Mellitus, Cancer, Chronic respiratory disorders. Non-communicable diseases/conditions of public health importance are Accidents and injuries, Disabling conditions (Blindness, Deafness, Community based rehabilitation), Mental Health, Substance abuse, Snake bite (Health in Myanmar, 2014).

In Myanmar, 70 percent of population live in rural areas and so healthcare condition of rural people is a important matter of concern. Here is rural healthcare services and rural people's conditions for healthcare shown in detail.

Table (3.13) Rural Healthcare Facilities and Professionals in Myanmar

	2013-14	2014-15	2015-16	2016-17
Rural Health Centers	1684	1696	1778	1778
Health Assistants	2062	2074	2156	2156
Health Supervisor I	498	1098	1098	1098
Lady Health Visitors	1768	1781	2300	-
Midwives	10045	11848	13391	-
Health Supervisor II	9165	11111	11607	11607

Source: Statistical Year Book, (2017).

In Table (3.13), rural healthcare facilities and professionals in Myanmar are shown. Number of rural health centers were increasing year by year. Number of health assistants, health supervisor I & II, lady health visitors, midwives is slightly increasing from 2013-14 to 2015-16 but no difference in 2016-17. The number of basic rural healthcare infrastructures and healthcare professional are still low to cover all rural population. Then there was no doctor in rural health centers. Thus, when rural people face emergency health problems, it may be really difficult and lose the lives.

Table (3.14) Population Living in Close Proximity to Medical Facilities by Type of Facility in Myanmar

	Myanmar (%)	Urban (%)	Rural (%)
Any public facility	88.7	91.1	87.8
Public hospital	50.4	85.6	36.3
Public health center	28.9	13.5	35.0
Public health post	41.7	15.1	52.3
Any private facility	55.6	96.1	39.5
Private hospital	20.0	55.1	6.0
Private doctor/clinic	55.0	95.8	38.6

Source: MLCS, (2017).

In Table (3.14), the percent of population living in close proximity to medical facilities by type of facility by residential area are shown. Nearly 88 percent of total rural population lived close proximity to any public facility and around 36 percent could live close to private facility. On the other hand, it is obvious that many urban population live close proximity to any public medical facility (90%) or any private medical facility (96%).

Table (3.15) Ill or Injured Individuals Seeking Different Types of Treatment, by Residential Area in Myanmar

	Myanmar (%)	Urban (%)	Rural (%)
Went to public medical facility/doctor	23.7	9.3	28.6
Went to private medical facility/doctor	37.5	56.7	31.0
Bought drugs at local store/pharmacy	20.4	18.3	21.1
Self-medicated	10.9	11.5	10.7
Other	4.8	1.8	5.9
Did nothing	2.6	2.3	2.8

Source: MLCS, (2017).

In Table (3.15), around 31 percent of ill or injured individuals in rural seek private medical facility/doctor and 28 percent to public health facilities. Another 21 percent used other type such as bought drugs at local store/ pharmacy. The rest used

other ways such as self-medicated or other or nothing. In urban, 56 percent seek to private medical facility or doctor.

(ii) Education

Education offers people the chance to have better lives, become successful members of their communities and actively contribute to national socio-economic development. In Myanmar education is seen as basic human need, an integral of the quality of life, a support for moral and social values, and an instrument for economic activity. Generally, Myanmar education sector consists of the following sections: Early childhood care and development, Basic education, Alternative education, TVET, Higher education.

The Ministry of Education (MOE) has undertaken a three-and-a half-year Comprehensive Education Sector Review (CESR) involving three phases: a rapid assessment (Phase 1); in-depth research and analysis of critical sub-sector challenges (Phase 2); and drafting and building ownership for an evidence-based and, costed National Education Strategic Plan (NESP) for the period 2016–21 (Phase 3). The MOE commits to achieving the following NESP goal statement by the end of the 2020-21 fiscal year: "Improved teaching and learning, vocational education and training, research and innovation leading to measurable improvements in student achievement in all schools and educational institutions."(National Education Strategic Plan, 2016)

According to the population and housing census (2014), the adult literacy rate (for those aged 15 and over) at union level was 89.5 percent. Urban residents are more literate (95.2 per cent) than rural residents (87.0 per cent).

Table (3.16) Educational Attainment among Adults Aged 15 and Over in Myanmar

	Myanmar (%)	Urban (%)	Rural (%)
No education	9.7	4.8	11.8
Monastic	7.0	2.9	8.7
Below Primary	19.7	11.8	23.1
Primary	33.6	27.7	36.1
Middle	17.6	26.4	13.9
High	5.6	10.2	3.6

Tertiary	6.9	16.2	2.8
----------	-----	------	-----

Source: MLCS, (2017).

In Table (3.16), educational attainment among adults aged 15 and over (in percent) is shown. In rural, 11% of total rural adults (15+) had no education level. The percent of rural people who could access tertiary level education were quite small (about 3 percent). Most of the rural population couldn't attend middle, high and tertiary level education because may be, the costs were higher as education level and also they had to help families to work in farming activities or other random jobs.

3.4 Background Information of Taikkyi Township

Taikkyi Township is situated in the northern portion of North District, Yangon Region. It has an area of 707.53 square miles. According to the data of March 2019 from General Administration Department of Taikkyi Township, total population is 270,990 including 130,202 males and 140,788 females. There are 17,078 households live in urban and 45,309 households live in rural with 20 wards and 75 village tracts (476 total villages) in Taikkyi Township. The majority of the population are Buddhists representing 246,183 of the population (90.89%) and 16,017 persons or 5.9 % of the population are Christians. There are 1,394 Hindus and 7,221 Muslims in Taikkyi Township.

The economic condition in Taikkyi Township is as follows. The main land use is for agriculture, 1,682,711 acres and land use for forestry is 1,600,641 acres in Taikkyi township. Residential land use (both urban and rural) is 11,719 acres. The main livelihood is agriculture production. There are eight main cultivating crops which are paddy, peanut, sesame, sunflower, Mat pe, green bean, sugarcane and corn. In livestock sector, buffalo, cow, pig, goat, chicken, duck, quail are being reared. There are also fish, prawn production in Taikkyi Township. There are also broker's sale centers for farming products which are six in total. The second is cottage industries in this township. There are (5) categories of cottage industries which include total number (31). They are (10) sweeper production, (10) tailoring shops, (6) goldsmiths, (3) blacksmiths and (2) motor vehicle workshops.

There are six state-owned industries in this township. They are Ahpyauk Petroleum Production, Ahpyauk Natural Gas Production, No. (100) Saw Mill, No. (101) Saw Mill, Taikkyi Electric Power Plant distributing electricity, Taw La Tee

Electric Power Plant distributing electricity. MyaungTagar industrial zone and industries in Hmawbi Township are just 30-40 minutes far from Taikkyi so some job opportunities for local people can be offered.

There are two purified drinking water plants, namely Quick and Penguin and two garment plant, called MGE and Dagon Seitkan Industrial Zone (2). There are (6) private owned petroleum/diesel stations in Taikkyi Township distributing total 24864 barrels of petroleum and 30060 barrels of diesel in 2019.

There are three major markets in Taikkyi Township including Taikkyi (Myoma) market, Okkan market and Ahpyauk market. In addition to markets, other stores and shops are open in Taikkyi Township which are selling different kinds of consumption products. There are two state owned banks and four private owned banks in Taikkyi Township. Yangon-Pyay high way road pass through Taikkyi Township. The main transportation route is buses and trains. There are five bus gates and one railway station. For water transportation, there are three small jetties which are built for Ahpyauk-Zalon route, Thayat Chaung- Kalout Thawt route, Ahpyauk-Danu Phyu route.

Social environment of Taikkyi Township (2019) can be expressed through the educational status, health status, recreation and sports and civil society organizations.

Table (3.17) Number of Schools, Teacher-Student Ratio in Taikkyi Township, (2019)

School Level	Number of Schools	Number of Teacher	Number of Students	Teacher/Student Ratio
High	24	725	21016	1:28
Middle	20	182	5184	1:28
Primary	263	1398	24457	1:17
Total	307	2305	50657	1:22

Source: General Administration Department in Taikkyi Township, (2019).

In Table (3.17), number of schools, teachers and students and also teacher/student ratio were shown. There are 24 high schools, 20 middle schools and 263 primary schools in Taikkyi Township. Total number of teachers are 2305 and students are 50657. Teacher/ student ratio is one teacher for 28 students in high school level, also one teacher for 28 students in middle school level and one teacher for 17 students in primary school level. Moreover, there are also 7 pre-primary schools with

21 teachers, 291 students and teacher/ student ratio is 1:13. According to population and housing census data (2014) , the literacy rate of those aged 15 and over in Taikkyi Township is 94.1 percent.

Table (3.18) Healthcare Facilities and Professionals in Taikkyi Township, (2019)

No	Healthcare Facilities and Professionals	Number
1	Township Hospital (50 beds)	1
2	Station Hospital (16beds)	4
3	Rural Healthcare centers	20
4	Private Clinics	47
5	Doctors	23
6	Nurses	39
7	Health Assistants	6

Source: General Administration Department, Taikkyi Township, (2019).

In Table (3.18), healthcare facilities and professionals in Taikkyi Township was shown in detail. There are one township hospital and four station hospitals, namely Taw Lati station hospital, Eai Galaung station hospital, Ahpyauk station hospital, Okkan station hospital which has 16 beds each. There are also four main rural healthcare centers in four village tracts including total 20 villages (each has its own rural healthcare centers). The total number of 47 private clinics exist in this township which are categorized into five: general, X-Ray, Dental, Optical and maternity. The total number of doctors is 23 and doctor/population ratio is 1:20754. The total number of nurse is 39 and nurse/ population ratio is 1:6918. Total number of health assistant is 6 and health assistant/ population ratio is 1:44697. The major diseases occurring in this township are dysentery, TB, hepatitis and Diarrhea.

There are two INGOs, PSI and JICA operating in this township focusing on TB and malaria disease. There are five Local NGOs operating in this township which are Myanmar Women's Affair Federation, Myanmar Maternal and Children Association, War Veterans Association, Red Cross Societies and Auxiliary Fire Fighters. There is one football ground, one volleyball ground, one library and on recreational park in Taikkyi Township.

CHAPTER IV

ANALYSIS ON QUALITY OF LIFE IN TAIKKYI TOWNSHIP

4.1 Survey Profile

Taikkyi Township is situated in the northern portion of North District, Yangon Region. The altitude of Taikkyi Township is located between 17° x 10' N Latitude and 17° 48' and between 95° 40' and 96° x 8' E Longitude. It has an area of 707.53 square miles. It is bounded to the East by Hlegu Township, to the south by Hmawbi Township, Yangon Region, to the west by Nyung Done Township, Danuphyu Township, Zalon Township, Ayeyawaddy Region, to the north by Tharyarwaddy Township, Bago Region. According to the data of March 2019 from General Administration Department of Taikkyi Township, total population is 270,990 including 130,202 males and 140,788 females. There are 17,078 households lived in urban with 20 wards and 45,309 households lived in rural with 75 village tracts (476 total villages) in Taikkyi Township. The survey was conducted in Okkan Kankone, Theinkone, PhalonKankone, Kwun Chan Kone, U To, Kyi Pin Lahar (north) in Taikkyi Township.

Table (4.1) Selected Survey Areas

No.	Name of Villages	Total Households	Selected Households
1	Okkan Kankone	130	50
2	Thein Kone	137	50
3	Phalone Kankone	279	50
4	Kwun Chan Kone	73	50
5	U To	263	50

6	Kyi Pin Lahar (north)	60	50
---	-----------------------	----	----

Source: Survey data ,(July, 2020).

4.2 Survey Design

A sample of 300 rural households was selected by using two-stage sampling method. At first stage, six villages were randomly selected from total 475 villages in Taikkyi Township by using simple random sampling approach. At second stage, total 300 households were selected randomly with each 50 households from six villages in Taikkyi Township.

The data collection was through structured questionnaires. The questionnaire consists of four parts in the survey. The first part includes respondent's demographic characteristics. The second part consists of economic perspective (income, job, housing wealth). The third part includes sociological perspective (health, education, social relation). The fourth part includes psychological perspective (life satisfaction).

4.3 Survey Results

The results of the survey were presented in the following with explanation on quality of life three perspectives: economic perspective (income, job, housing wealth), sociological perspective (health, education, social relation) and psychological perspective (life satisfaction).

4.3.1 Respondent's Demographic Characteristics

The demographic information of the total 300 respondents in six selected area was shown in Table (4.2). The targeted respondents of the survey were household heads or the one who had authority similarly as household heads.

Table (4.2) Frequency Distribution of Characteristic of Household Heads

	Number of Respondents	Percentage
Gender		
Male	98	32.67
Female	202	67.33
Age		
18- 35	75	25.00
36 – 55	143	47.67
56 and above	82	27.33

Marital Status		
Single	32	10.67
Married	226	75.33
Divorced	5	1.67
Widowed	37	12.33

Source: Survey data, (July, 2020).

In Table (4.2), among 300 respondents, 32.67% (98) of the total was males and 67.33% (202) of the total was females. In this study, the household heads are divided into three age groups ; 18-35 years, 36-55 years, 56 years and above. The age range of 36-55 is about 47% of among household heads and, 18-35 range is 25% and 27% are age range of 56 years and above.

In this study, the marital status of households' head is grouped into four categories: single, married, divorced, widowed. According to Table (4.2), about 226 out of 300 are currently married. This group contributes 75% to total sample household heads. There are about 37, 32, 5 household heads who are widowed, single and divorced respectively. These groups contribute nearly 12%, 11% and 2% to total sample respondents.

4.3.2 Economic Perspective

(1) Occupation and Income

Occupation and Income are important to live a life and it has a lot of effects on quality of life. Higher wealth may also improve access to quality education, healthcare and housing. Household income is the foundation to provide household's living conditions and occupation is generally the main source for household income. Although money may not buy happiness/ life satisfaction, it is an important means to achieving higher living standards and thus greater well-being.

Table (4.3) Frequency Distribution of Occupational Status and Economic Conditions of Household Heads

	Number of Respondents	Percentage
Occupation		
Farmer	104	34.67
Non-farm business owner	57	19
Informal worker	42	14
Formal private worker	22	7.33
Public servant	29	9.67
Others	46	15.33
Main source of household income		
Farming	109	36.33
Non-farm business	53	17.67
Informal work	46	15.33
Salary earner (public/private)	70	23.33
Others	22	7.33
Average monthly income of households (MMK)		
Under 200000	133	44.33
200,001 -500,000	141	47
Above 500,000	26	8.67
Household expenditure for food		
10-30% of income	65	21.67
31-50% of income	147	49
Above 50% of income	88	29.33

Source: Survey data, (July, 2020).

Table (4.3) shows frequency distribution respondent's occupational status and household's economic conditions (income and expenditure).

The majority household heads, 34.67%, are farmers; followed by 19% of total are non-farm business owner. Informal workers are 14%, formal private worker are 7.3% and public servant are about 10% in study area. Under "others" category, tailors, masons, carpenters, drivers and pensioners are included and it is 15.33% of

total respondents. It is found that job opportunities were still limited for rural people except farming in study area.

Major source of household income is categorized into five groups; farming, non-farm business, informal work, salary earners and others. 36.33% of total respondents described farming as the main source of household income and the second source of income was salary earners (private/public) mentioned by 23.33% of total respondents. The third was non-farm business which was 17.67% of total.

The average monthly income level is importance for the uplift of the socio-economic condition of household. Household income is the sum of the income of all members in the household. Regarding average monthly income of households, the majority of households (47%) have earned between 200,000 and 500,000 Kyats, followed by under 200,000 Kyats (44%), and above 500,000 Kyats (8.7%).

Regarding household expenditure for food consumption per month in study area, 49% of respondents used 31-50 percent of household income for food consumption per month. 29.33% of total respondents used above 50 percent of household income for food consumption per month and 21.67 % of total respondents used 10-30 percent of household income for food consumption per month.

In addition, half of total respondents said that it was usually balance between income and expenditure monthly in their household. The rest households stated that their income and expenditure were not balanced and they usually borrowed money or mortgage things informally from money lenders/ family/ friends. Among all respondents, one third of respondents reported that they had no assets or money to cover it if a family member would face an emergency case and need at least 200,000 MMK. Among the rest respondents, some households had assets or money easily and some had them barely for that.

(2) Housing Wealth

Housing wealth is very important for human living. It is essential to meet basic needs, such as for shelter from weather conditions, and to offer a sense of personal security, privacy and personal space. Housing wealth consists of household size, house ownership and housing conditions. Housing conditions are also affected on people's health conditions. In general, having decent accommodation is one of the most valuable aspects of people's lives and it is a major element of people's material living standards.

Table (4.4) Frequency Distribution of Respondent's Housing Wealth

	Number of Respondents	Percentage
Household size		
Under 3	47	15.67
3-6	233	77.67
Over 6	20	6.67
House ownership		
You own it	244	81.33
Your parents /relative own it	54	18.00
A private landlord who is not related to me own it	2	0.67
Housing conditions		
Made of brick	120	40.00
Made of wood	156	52.00
Made of bamboo	23	7.60
Enough space for all family member	276	92.00
Good lighting	275	91.67
Good air condition	273	91.00
Access to clean water	291	97.00
Access to sanitation	300	100.00
Access to electricity	294	98.00
Access to main road	300	100.00
Access to telecommunication/internet	299	99.67

Source: Survey data, (July, 2020).

Table (4.4) shows frequency distribution of respondent's household wealth. Household wealth is measured by household size, house ownership, household amenities and assets. Regarding housing ownership, 81% of respondents said that they lived in their own houses. 18% of respondents said that they lived with parents/ relatives' own houses. The results showed that most of the rural households had own house and it was one kind of material wellbeing.

Concerning household amenities and assets, 52% of respondents reported their house was made of wood. 40% said that their house was made of brick and 7.67% was made of bamboo. 92% of respondents said that their house had enough space for all family members. 75% of respondents described that their house had good lighting. 91% of respondents described that their house had good air condition. 97 %

of respondents said they could access to clean water because they can use water from tube well. But water had light yellow color and so it was useable for cooking and washing, not suitable for drinking. Thus some people bought purified drinking water and some people boiled the water and drink it. All respondents mentioned that their household could assess to sanitary but most of them were basic improved sanitary. 98% of respondents said that their household could assess to electricity. All respondents could assess to main road and also assess to telecommunication/ internet.

4.3.3 Sociological Perspective

(1) Health

Better health is central to human happiness and well-being. It also makes an important contribution to economic progress as healthy populations live longer, are more productive, and save more. Table (4.4) shows frequency distribution of health condition of household heads.

Table (4.5) Frequency Distribution of Health Condition of Household Heads

	Number of Respondents	Percentage
Current health conditions		
1. Health in general during 30 days (Physical)		
Poor	38	12.67
Fair	53	17.67
Good	192	64
Very good	12	4
Excellent	5	1.67
1. Emotional stress during 30 days (Mental)		
Not at all	135	45
A little	96	12
Moderate	51	17
A lot	18	6

Table (4.5) Continued

	Number of Respondents	Percentage
Health behaviors		
1. Eating habits & Doing Exercise		
Eat variety of food	286	95.33
Do exercise regularly	91	30.33
Use unsaturated fat	114	38
Reduce salt and sugar intake	110	36.67
Eat regularly and control portion size	241	80.33
Maintain healthy body weight	68	22.67
2. Usage of Alcohol, Smoking, Beetle Nuts		
No, never	182	60.67
Yes, sometimes	50	16.67
Yes, often	11	3.67
Yes, always	57	19

Source: Survey data, (July, 2020).

According to Table (4.5), health condition of respondents consist of two parts: current health condition (physical and mental) and health behaviors (eating habits and doing exercise, usage of alcohol, smoking and beetle nuts, take action for illness). According to the survey, 64 % of total respondents reported that health in general during 30 days was in good condition. 17.67 % of respondents said that health in general was in fair condition. 12.67 % of total respondents said that health in general was in poor condition. 45% of respondents said that they had no emotional stress in past 30 days. The rest had emotional stress a little amount, moderate amount and a lot respectively during 30 days.

Regarding eating habits and doing exercise of rural households in study area, 95.33% respondents said that their household ate variety of food (three groups of food). But they couldn't eat all three groups of food in daily meals. 30.33% of respondents said that they did exercise regularly. 38% of respondents said that their households used unsaturated fat. 36.67% of respondents said that their household reduced salt and sugar intake. 80.33% of respondents said that they ate regularly and

control portion size. 22.67% of respondents said that they maintained healthy body weight. This study indicated that health conditions in study area was in fair condition.

Concerning respondents' usage of alcohol, smoking, beetle nuts in study area, 60.67% of respondents said that they never used alcohol or smoking or beetle nuts. 19% of respondents stated that they always used alcohol or smoking or beetle nuts. 16.67% of respondents said "yes, sometimes."

(2) Education

Education is one of the most important parts of human life. Education is important to live with happiness and prosperity. Education makes the national development process fast. The quality life of its citizens is largely depend on the level of education the citizens are able to acquire.

Table (4.6) Frequency Distribution of Educational Status of Household Heads

	Number of respondents	Percentage
Literate	16	5.33
Primary	99	33
Middle	82	27.33
High	68	22.67
Graduated	35	11.67

Source: Survey data, (July, 2020).

According to Table (4.6), 33% of total respondents completed primary level education. 27.33% of total respondents completed middle level education. 22.67% of total completed high level education. 11% of total respondents stated that they were graduated. Only 5.33% of respondents were literate. All of the respondents described that all of family members in their households are literate. The results showed that number of higher educational level completed persons were low. Most of them are only primary and middle level education completed.

(3) Social Relation

Social relation is any relationship between two or more individual and so it is important in daily life. Social relation can also support to physical and mental health and then it affects on quality of life.

Table (4.7) Frequency Distribution of Social Relation of Household Heads

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Good relationship with family members	1 0.33%	2 0.67%	17 5.67%	35 11.67%	245 81.67%
Close relationship with neighbourhood	0 0%	0 0%	16 5.33%	45 15%	239 79.67%
Good relationship with colleagues	1 0.33%	0 0%	26 8.67%	57 19%	216 72%
Good relationship with relatives	1 0.33%	1 0.33%	6 2%	38 12.67%	254 84.67%

Source: Survey data, (July, 2020).

In Table (4.7), frequency distribution of social relation of household head is described. 81.67% responded that they have good relationship with family member. 79.67% said that they are close to neighborhood. 72% indicated that they have good relationship with colleagues. 84% show that they have good relationship with relatives. Moreover, most of the rural households in this study responded that they usually participate in community's activities.

4.3.4 Psychological Perspective

In this study, the psychological perspective of household heads includes seventeen statements and each statement is measured with five-point Likert scale (1: strongly disagree, 2: disagree, 3: neutral, 4: agree, and 5: strongly agree). Thus, the mean value of all variables can be categorized into three satisfaction level such as low, moderate and high level. Mean value of less than 3 is categorized as low level of

satisfaction, mean value between 3 and 4 is categorized as moderate level of satisfaction and mean value of above 4 is categorized as high level of satisfaction.

Frequency Distribution of Perceived Satisfaction of Household Heads is described in Appendix II. 46 % of household heads satisfied with current household income. But it doesn't mean that they got high income. Compared to urban areas, expenses on food and utilities are cheaper in rural. 67% of household heads notify that income is important of quality of life of rural population.

Nearly 50% of household heads satisfied with their job. In recently years, the economy open for foreign investment and many industries are increased. Many rural people can work at those industries and support money to their families. The rural people see that they can earn just enough income to live more comfortable with their limited resources (e.g. education status) now than in the past years.

42% of respondents satisfied with own health; 46% of respondents satisfied with family health; 59% of household heads indicated that health is important of quality of life. 47% of respondents satisfied with family education level. 48% of respondents said they satisfied with their family education level. 93 % said that education is important to quality of life and 62% of household heads reported that personal development is important of quality of life of rural population. Most of the rural people are weak in higher level education. They are still satisfied with current education status because some of them can't afford for higher education and some of them can comfort themselves by supporting for their children's education.

71.33% show that social relation is important to quality of life. Obviously, rural people have strong bond in social relation compared to urban. 57.33% said that they feel safe to walk alone after dark in their environment. 44.33% reported that they satisfied with health and education services in their residential area. 46% indicated that they satisfied with public infrastructure in their residential area. 68.67% show that households amenities and assets are important for quality of life.

Table (4.8) Descriptive Statistics of Perceived Satisfaction of Household Heads

No.	Description	Mean	Standard Deviation
1	Satisfaction with current household income	3.75	1.20
2	Satisfaction with job	3.93	1.01
3	Importance of income to quality of life	4.11	0.62
4	Satisfaction with housing wealth	4.05	1.20
5	Importance of housing wealth	3.87	0.69
6	Satisfaction with own health	4.06	1.11
7	Satisfaction with family health	4.15	1.07
8	Importance of health to quality of life	4.35	0.57
9	Satisfaction with family education level	3.84	1.13
10	Importance of education to quality of life	4.22	0.61
11	Importance of personal development to quality of life	4.07	0.71
12	Importance of social relation to quality of life	4.01	0.59
	Overall Mean	4.03	

Source: Survey Data, (2020).

The mean value of all variables can be categorized into three satisfaction level such as low, moderate and high level. Mean value of less than 3 is categorized as low Satisfaction level, mean value between 3 and 4 is categorized as moderate level of satisfaction and mean value of above 4 is categorized as high level of satisfaction of household heads in rural area.

Table (4.9) shows that the individual mean scores of the 12 statements of perceived satisfaction of household heads. It is found that the mean scores of statements 1, 2, 5, and 9 are 3.75, 3.93, 3.87, 3.84. Therefore, these statements are between 3 and 4, and it shows that satisfaction with household income, job, family education level and importance of housing wealth are moderate level. It is found that the mean score of statements 3, 4, 6, 7, 8, 10, 11, 12 are above 4. It indicates that satisfaction with housing wealth, own health, family health and importance of income, health, education, personal development, education are high level. The overall mean of the 12 statements (perceived satisfaction of rural households) is 4.03 and it is greater than 4. It means that the overall life satisfaction of rural households is high

level of satisfaction in selected study areas. Satisfaction with current health status and housing wealth are key factors that support overall life satisfaction to high level. Despite of high life satisfaction, it doesn't mean that rural people have a great life. Most of the rural people are weak in higher level education. So they can't access many job opportunities. In recent years, some rural people can work in basic jobs of many industries because the country open for foreign investments. So, rural people sees that they have more job opportunitites besides farming and can earn more than previous years. In rural areas, costs are cheaper than urban and most of rural people are contented. Moreover, social connections are stronger with others in rural areas. Spacious layout , more relaxed pace and less pollution would also be supporting factor for high life satisfaction for rural people.

CHAPTER V

CONCLUSION

5.1 Findings

This study explores the living conditions of rural households in Myanmar and investigate the quality of life of rural household in Taikkyi Township by using descriptive method with three perspectives; economic, sociological and psychological perspectives. Economic perspective is measured by income, job and housing wealth. Sociological perspective is examined by health, education and social relation. Psychological perspective is measured by life satisfaction.

In Myanmar, the overall living conditions of rural households in general are found as follow. In economic conditions, although 65 percent of working age population is employed, most of them work in agriculture sector and average household income per month is about 230,000MMK. Most of the rural houses are made of wood. There are only a few brick house and semi-pucca house in rural area. Over 50% of rural households can access to clean drinking water, improved toilet and electricity. About 70 percent of rural households own mobile phones. In addition, the government is implementing twenty-year plan for all villages to access roads and bridges. In social conditions, the number rural healthcare facilities and services are still low for rural people. Most of the rural people are seeking to see public or private health care facilities or drug store. About educational attainment among adults aged 15 over, most are literate but only 2.8 percent attend tertiary level education.

According to survey results, 32.67% of the total was males and 67.33% of the total was females. The targeted respondents of the survey were household heads or the one who had authority similarly as household heads. The majority of respondents nearly 48% are aged between 36 and 55. The 75% of total respondents were married persons.

Regarding economic perspective, majority of respondents are farmers owning acres of farm land. Nearly half of rural households earn average monthly income 200,000-500,000 MMK. The average expenditure on food is 31-50% of total income.

In term of housing wealth, 81 % of respondents said that they owned their houses. 52% of respondents indicated that their house is made of wood. Around 90% of respondents show that their house has enough space for all family member, good lighting, good air condition, access to clean water, access to sanitation, access to electricity, access to main road, access to telecommunication and internet.

Regarding sociological perspective, in term of health, 64% of respondents said that they have good health conditions in general and 45% said that they don't have emotional stress during 30 days. Most of the respondents have good eating habits. Only one third are doing exercise regularly. 60% of respondents said that they don't use alcohol or smoking or beetle nuts at all. In terms of education, 27% of respondents said that they have middle level education. A few people in study area are graduates like 11 persons in every 100 persons. In terms of social relation, 82% responded that they have good relationship with family member. 80% said that they are close to neighborhood. 72% indicated that they have good relationship with colleagues. 84% show that they have good relationship with relatives.

Concerning psychological perspective, it is found that satisfaction with household income, job, family education level and importance of housing wealth are moderate level. It is found that satisfaction with housing wealth, own health, family health and importance of income, health, education, personal development, education are high level. The overall mean of the perceived satisfaction of rural households is 4.03. It indicates that the overall life satisfaction of rural households is high level of satisfaction in selected study areas.

5.2 Suggestions

To improve the quality of life of rural households in Myanmar, the followings are suggested. The government should encourage higher level education for rural population; more support agriculture technology, agriculture loans and create markets for agriculture products; create more job opportunities in non-farm sector; provide more facilities and professionals for rural healthcare service; provide more basic public infrastructures for rural population.

In addition, as further studies, research more specifically on subjective well-being would like to be recommended. Subjective wellbeing is also important for quality of life and people self-reported factors would be a consideration for policy making.

REFERENCES

- Askhatova, L. I., & Bulnina, I. S. (2014). Quality-of-life (QOL) improvement as a strategic resource of sustainable social and economic development of a region. *Life Science Journal, 11(6s)*, 354-357.
- Bauer, R. A. (1966). Social indicators and sample surveys. *Public Opinion Quarterly, 30(3)*, 339-352.
- Becker, G. S., Rayo, L., & Krueger, A. B. (2008). Economic growth and subjective well-being: Reassessing the Easterlin paradox. Comments and discussion. *Brookings Papers on Economic Activity, 2008*, 88-102.
- Bogue, P., & Phelan, J. (2005). Exploring the quality of life of farm families in Ireland: implications for extension. *Journal of International Agricultural and Extension Education, 12(3)*, 79-90.
- Boughton, D., Aung, N., Belton, B., Filipski, M., Mather, D., & Payongayong, E. (2018, July). Myanmar's Rural Economy: A Case Study in Delayed Transformation. In *International Association of Agricultural Economists pre-conference, Vancouver, Canada*.
- Bradburn, N. M. (1969). The structure of psychological well-being.
- Briones, R. M. (2017). Transformation and diversification of the rural economy in Asia. *The IFAD Research Series; Philippine Institute for Development Studies: Rome, Italy*.
- Bukenya, J. O., Gebremedhin, T. G., & Schaeffer, P. V. (2003). Analysis of quality of life and rural development: Evidence from West Virginia data. *Growth and Change, 34(2)*, 202-218.
- Campbell, A., Converse, P. E., & Rodgers, W. L. (1976). *The quality of American life: Perceptions, evaluations, and satisfactions*.
- Castle, E. N. (2000). *The economics of rural places and agricultural economics* (No. 1841-2016-152292).
- Coates, D., Anand, P., & Norris, M. (2015). *Housing, happiness and capabilities: A summary of the international evidence and models* (No. 81). Open Discussion Papers in Economics.

- Cummins, R. A. (1997). Assessing quality of life. *Quality of life for people with disabilities: Models, research and practice*, 2, 116-150.
- Diener, E., Sandvik, E., Seidlitz, L., & Diener, M. (1993). The relationship between income and subjective well-being: Relative or absolute?. *Social indicators research*, 28(3), 195-223.
- Diener, E., & Suh, E. (1997). Measuring quality of life: Economic, social, and subjective indicators. *Social indicators research*, 40(1-2), 189-216.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological bulletin*, 125(2), 276.
- Durkheim, E. (1973). *Emile Durkheim on morality and society*. University of Chicago Press.
- Easterlin, R. A. (1974). Does economic growth improve the human lot? Some empirical evidence. *In Nations and households in economic growth Academic Press*, 89-125.
- Faraji Sabokbar, H. A., Najarzadeh, M., Torabi, Z., & Malakan, A. (1999). Studying Factors Affecting Quality of Life Using Multilevel Models: A Case Study in Rural Areas of Kangavar County. *Journal of Sustainable Rural Development*, 1(1), 3-11.
- Farquhar, M. (1995). Definitions of quality of life: a taxonomy. *Journal of advanced nursing*, 22(3), 502-508.
- Fromm, E. (1995). *The art of loving*. 1956. London: Thorsons.
- Gillingham, R., & Reece, W. S. (1979). A new approach to quality of life measurement. *Urban Studies*, 16(3), 329-332.
- Grgić, I., Žimbek, T., Tratnik, M., Markovina, J., & Juračak, J. (2010). Quality of life in rural areas of Croatia: To stay or to leave? *African Journal of Agricultural Research*, 5(8), 653-650.
- Gudynas, E., von Birte Pedersen, D., & Lang, M. (2014). Buen Vivir. In *Degrowth: A vocabulary for a new era* (pp. 201-204).
- Guyatt, Feeny & Patrick . (1993). Measuring health-related quality of life. *Annals of internal medicine*, 118 (8), 622-629.
- Guyatt, G. H., & Cook, D. J. (1994). Health status, quality of life, and the individual. *Jama*, 272(8), 630-631.

- Hagerty, M. R., Cummins, R., Ferriss, A. L., Land, K., Michalos, A. C., Peterson, M., ... & Vogel, J. (2001). Quality of life indexes for national policy: Review and agenda for research. *Bulletin of Sociological Methodology/Bulletin de Méthodologie Sociologique*, 71(1), 58-78.
- Haller, M., & Hadler, M. (2006). How social relations and structures can produce happiness and unhappiness: An international comparative analysis. *Social indicators research*, 75(2), 169-216.
- Hammarskjold, D. (1975). What now: Another Development Dag Hammarskjold Report. *Development Dialogue*.
- Havighurst, R. J. (1963). Successful aging. *Processes of aging: Social and Psychological Perspectives*, 1, 299-320.
- Henry, M., & Drabenstott, M. (1996). A new micro view of the US rural economy. *Economic Review-Federal Reserve Bank of Kansas City*, 81, 53-70.
- Hlavacek, M. L. (2010). *Qualitative Study to Determine Quality of Life Factors Based on Reported EFNEP Success Stories*. [Masters monograph, University of Nebraska]
- Holmes, S., & Dickerson, J. (1987). The quality of life: design and evaluation of a self-assessment instrument for use with cancer patients. *International Journal of Nursing Studies*, 24(1), 15-24.
- Idris, K., Mohamed Shaffril, H. A., Md. Yassin, S., Abu Samah, A., Hamzah, A., & Abu Samah, B. (2016). Quality of life in rural communities: Residents living near to Tembeling, Pahang and Muar Rivers, Malaysia. *PloS one*, 11(3), e0150741.
- Igorzata Mikucka, M., Sarracino, F., & Dubrow, J. K. (2017). When Does Economic Growth Improve Life Satisfaction? Multilevel Analysis of the Roles of Social Trust and Income Inequality in 46 Countries, 1981-2012. *World Development*, 93, 447-459.
- Ilić, I., Milić, I., & Arandžević, M. (2010). Assessing Quality of Life: Current Approaches. *Acta Medica Medianae*, 49(4).
- Janse, A. J., Gemke, R. J. B. J., Uiterwaal, C. S. P. M., Van Der Tweel, I., Kimpen, J. L. L., & Sinnema, G. (2004). Quality of life: patients and doctors don't always agree: a meta-analysis. *Journal of clinical epidemiology*, 57(7), 653-661.

- Javed,S., Salma, J. & Khan, A. (2016). Effect of education on quality of lfie and well being. *The InternationalJournal of Indian Psychology*, 3(3) , 1-10.
- Johnson, T. G. (2001). The rural economy in a new century. *International Regional Science Review*, 24(1), 21-37.
- Kauppinen, I. (2018). Sociological Perspectives on Higher Education Research. In *Encyclopedia of International Higher Education Systems and Institutions* (pp. 1-7). Springer, Dordrecht.
- Kemeny, J. (2001). Comparative housing and welfare: Theorising the relationship. *Journal of Housing and the Built Environment*, 16(1), 53-70.
- Khine Su Ye Zaw (2016). Rural Development and Decentralization in Myanmar, Parliamentary Institute of Cambodia
- Ko Ko Hlaing (2011) *A Study on Quality of Life in Dagon Myothit (South)*. [Unpublished master's thesis]. Yangon University of Economics
- Land,K.C., Michalos,A.C., & Sirgy, M.J. (Eds). (2011). *Handbook of social indicators and quality of life research*. Springer Science & Business Media.
- Mangus, A. R., & Cottam, H. R. (1941). Level of living, social participation, and adjustment of Ohio farm people.
- Michalos, A.C. (2004). Social indicator research and health related quality of life research. *Social indicators research*, 65(1), 27-72.
- Michalska-Żyła, A., & Marks-Krzyszkowska, M. (2018). Quality of Life and Quality of Living in rural communes in Poland. *European Countryside*, 10(2) .
- Musschenga, A.W. (1997). The relation between concepts of quality of life, health and happiness. *The Journal of Medicine and Philosophy*, 22 (1) , 11-28.
- Noll, H.H (2004). Social indicators and quality of life research: Background, achievements and current trends. In *Advances in sociological knowledge* , 151-181.
- Nordefelt, L. (1993). *Quality of life, health and happiness*. Avebury.
- Patterson, W. B. (1975). The quality of survival in response to treatment. *JAMA*, 233(3), 280-281.
- Piekalkiewicz, M. (2017). Why do economists study happiness? *The Economic and Labour Relations Review*, 28(3), 361-377.
- Pospěch, P., Delín, M., & Spěšná, D. (2009). Quality of life in Czech rural areas. *Agricultural Economics/Zemědělská ekonomika*, 55(6), 284-295.

- Raphael, D., Renwick, R., Brown, I., & Rootman, I. (1996). Quality of life indicators and health: current status and emerging conceptions. *Social indicators research*, 39 (1), 65-88.
- Robertson, B., Joelene, C., & Dunn, L. (2015). *Local development funds in Myanmar: An initial review*. MDRI.
- Ross, C. E., & Van Willigen, M. (1997). Education and the subjective quality of life. *Journal of health and social behavior*, 275-297.
- Ronald, R. (2007). Comparing homeowner societies: Can we construct an east-west model?. *Housing Studies*, 22(4), 473-493.
- Schuessler, K. F., & Fisher, G. A. (1985). Quality of life research and sociology. *Annual review of sociology*, 124-149.
- Sewell, W. H. (1940). Construction and Standardization of a Scale for the Measurement of the Socio-Economic Status of Oklahoma Farm Families.
- Singer, P. (1994). *The Quality of Life* edited by Martha Nussbaum and Amartya Sen.
- Sirgy, M. J., Michalos, A. C., Ferriss, A. L., Easterlin, R. A., Patrick, D., & Pavot, W. (2006). The Quality of life (QOL) Research Movement: Past, Present, and Future. *Social Indicators Research*, 76 (3), 344-466.
- Stiglitz, J.E., Sen, A. & Fitoussi, J.P. (2009). Commission on the measurement of economic performance and social progress. *Report by the commission on the measurement of economic performance and social progress* .
- Thet Paing Soe (2016) *A Study on Quality of Life at Selected Housing Complex in Ahlone Township, Yangon* [Unpublished master's thesis]. Yangon University of Economics
- Thu Rein Htun (2011). *A Study on Quality of Life at Yuzana Garden City in Yangon* [Unpublished master's thesis]. Yangon University of Economics
- Uusitalo, H., Ringen, S., Hanson, E. J., & Erikson, R. (1987). *The Scandinavian model: welfare states and welfare research*.
- Wilson, W. (1967). Correlates of avowed happiness. *Psychological Bulletin*, 67(4), 294-306.
- Zhang, C., & Zhang, F. (2019). Effects of housing wealth on subjective well-being in urban China. *Journal of Housing and the Built Environment*, 34(4), 965-985.

Formulation and Operationalization of National Action Plan for Poverty Alleviation and Rural Development through Agriculture (NAPA), Working Paper- 8, Rural Employment

GAD Township Report -Taikkyi (2019)

Health in Myanmar (2014)

Myanmar Living Condition Survey by UNDP (2017)

Myanmar Statistical Year book, (2017)

Myanmar Transport Sector Policy Note - Rural Road and Access (2016)

Myanmar Transport Sector Policy Note - Rural Road and Access (2016)

National Education Strategic Plan 2016-21 Summary

NCDDP (National Community-Driven Development) Reports

The 2014 Myanmar Population and Census – The Union Report

The 2014 Myanmar Population and Census – Yangon Region Report

UNDP Human Development Reports (2014 to 2019)

https://unstats.un.org/unsd/publication/SeriesF/SeriesF_67E.pdf

<https://www.who.int/healthinfo/survey/whoqol-qualityoflife/en/>

<http://hdr.undp.org/en/content/human-development-index-hdi>

<https://www.encyclopedia.com/social-sciences/applied-and-social-sciences-magazines/physical-quality-life-index>

<https://www.ilo.org/global/topics/economic-and-social-development/rural-development/lang--en/index.htm>

APPENDIX - I

A Study on Quality of Life of Rural Households in Myanmar (Case Study in Taikkyi Township)

Survey Questionnaires

A. Respondent's Demographic Characteristic

1. Respondent's Gender

Male. Female

2. Respondent's Age -----

3. Respondent's Marital Status

Single/ never married. Married. Divorced. Widowed

B. Economic Perspective

Income & Job

4. In your family, how many people do work? -----

5. Your current job

Farming business. Non-farm business Informal work.

Formal private work. Public servant others

6. Main source of household income come from

Farming business. Non-farm business Informal work.

Salary earners others

7. Average Monthly income of household

0- 200,000 MMK

200,000 - 500,000 MMK

Above 500,000 MMK

8. Household expenditure for food consumption per month.

10-30 % of income

31-50% of income

Above 50% of income

9. In the past 12 months, is it balance between income and expenditure monthly?

Yes No

10. If not, how do you solve?

11. If you or a family member had faced an emergency case (e.g. health problem) and need at least 200,000 MMK, does your household have enough assets (e.g. kyat, gold) set aside to cover it?

- Yes, easily Yes, barely No

(ii) Housing wealth

12. How many family members do you have? -----

13. Your current house is that

- You own it
 Your parents/ other family members/ relative own it
 A private landlord who is not related to me owns it

14. Your house condition is (can tick more than one)

- Made of brick
 Made of wood
 Made of bamboo
 Enough space for all family members
 Good lightning
 Good air condition
 Access to clean drinking water
 Access to sanitary
 Access to electricity
 Access to main road
 Access to telecommunication/ internet

C. Sociological Perspective

(i) Health

15. During the past 30 days, how is your health condition in general?

- Poor. Fair. Good. Very good. Excellent.

16. During the past 30 days, how much do you have emotional distress feelings such as depression, anxiety?

- Not at all. A little. Moderate amount. A lot.

17. Which of the following health behaviors do you/your family do?

(can tick more than one)

- Eat variety of food (including vegetables & fruit)
- Do physical exercise regularly
- Replace saturated with unsaturated fat
- Reduce salt & sugar intake
- Eat regularly & control the portion size
- Maintain healthy body weight

18. Do you/ a family member drink alcohol, smoking or chewing beetle nut?

- No, never
- Yes, sometimes
- Yes, often
- Yes, daily

(ii) Education

19. Are all of your family member literate?

- Yes, all.
- Yes, a few
- Not, at all

20. Your highest education level

- Illiterate
- Literate
- Primary
- Middle
- High
- Graduated
- Post Graduate.

(iii) Social Relations

21. I have good relationship with my family members.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

22. I feel close with people in my neighborhood

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

23. I have good relationship with colleagues at work

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

24. I have good relationship with my relatives.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

25. Do you volunteer or participate in any community's activities/ charities/ or civil society organization/ government initiatives?

- No, never
- Yes, on special occasions.
- Yes, every few months
- Yes, monthly
- Yes, weekly

D. Psychological Perspective

26. For the following questions, please indicate the most appropriate response with the scale given below.

(1= strongly disagree, 2=disagree, 3 =neutral, 4=agree, 5=strongly agree.)

No.	Description	1	2	3	4	5
1	Are you satisfied with current household income?					
2	Are you satisfied with your job?					
3	In your opinion, is household income important for your quality of life?					
4	Are you satisfied with your housing wealth?					
5	In your opinion, is housing wealth important to quality of life?					
6	Are you satisfied with your health condition?					
7	Are you satisfied with your family health condition?					
8	In your opinion, is health important for quality of life?					
9	Are you satisfied with your family's education level?					
10	In your opinion, is education important for quality of life?					
11	In your opinion, is personal development/success important for quality of life?					
12	In your opinion, is social relations important for quality of life?					

APPENDIX - II

Frequency Distribution of Perceived Satisfaction of Household Heads

No	Description	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Satisfaction with current household income	25 8.33%	30 10%	23 7.67%	138 46%	84 28%
2	Satisfaction with job	9 3%	28 9.33%	26 8.67%	148 49.33%	89 29.67%
3	Importance of income to quality of life	1 0.33%	4 1.33%	25 8.33%	200 66.67%	70 23.33%
4	Satisfaction with housing wealth	19 6.33%	30 10%	7 2.33%	106 35.33%	138 46%
5	Importance of housing wealth to quality of life	2 0.67%	13 4.33%	43 14.33%	206 68.67%	36 12%
6	Satisfaction with own health	14 4.67%	27 9%	10 3.33%	124 41.33%	125 41.67%
7	Satisfaction with family health	12 4%	23 7.67%	11 3.67%	116 38.67%	138 46%
8	Importance of health to quality of life	1 0.33%	1 0.33%	6 2%	176 58.67%	116 38.67%
9	Satisfaction with family education level	17 5.67%	32 10.67%	20 6.67%	142 47.33%	89 29.67%
10	Importance of education to quality of life	0 0%	6 2%	13 4.33%	188 62.67%	93 31%
11	Importance of personal development to quality of life	0 0%	14 4.67%	25 8.33%	186 62%	75 25%
12	Importance of social relation to quality of life	1 0.33%	3 1.00%	40 13.33%	214 71.33%	42 14.00%

Source: Survey data, (July, 2020)

