

**DEVELOPMENT PROGRAM AND RURAL  
LIVELIHOOD: A CASE STUDY OF  
TWO VILLAGE TRACTS, SHWEBO TOWNSHIP,  
SAGAING REGION**

**PhD DISSERTATION**

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MYANMAR**

**MAY, 2015**

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**This dissertation is submitted to the Department of  
Anthropology, University of Yangon in partial fulfillment of  
the requirements for the Degree of Doctor of Philosophy**

**2015**



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ACKNOWLEDGEMENTS

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## ACKNOWLEDGEMENTS

This study could not have been completed without unwavering support of a number of people. I am very grateful to steering committee members for confirming this study title and for their supports in terms of guidelines, suggestions, encouragement and feedbacks toward conducting the research and thesis writing.

I must mention specially my research supervisor, Dr. Mya Mya Khin (Professor & Head, Department of Anthropology, University of Yangon) who always encourages, guidelines and criticizes me positively to achieve this study.

I am also immensely grateful my Co-Supervisor, Dr. Than Tun Sein, Professor (Part-time), Department of Anthropology, University of Yangon. He was a great source of inspiration, strength, valuable suggestions at different stages of my study.

I am deeply indebted to Dr. Saw Saw, (Deputy Director & Head), Medical Statistics Division, Department of Medical Research for providing helpful comments and valuable advice given to the study as Referee.

My sincere thank also goes to Dr. Yee Yee Cho, (Associate Professor, Department of Anthropology, Nationalities Youth Resource Development Degree College, Yangon) for her suggestions and feedbacks this study as External Examiner.

I am thankful to Dr. Lwin Lwin Mon (Associate Professor) and Dr. Hla Hla Kyi (Lecturer), Department of Anthropology, University of Yangon for their assisted me to improve this study as Member.

I am thankful to all my teachers, who have supported me greatly in this study. Thanks, too, to the people of Obo, Kinbya, Chiba (North) and Chiba (South), without whose assistance this thesis could not have been possible.

I am grateful to Dr. Myat Thet Mon (Assistant Lecturer, Department of Physics, University of Shwebo) for her kind help and assistance.

Finally, thankfulness also goes to my parents, sister and brothers have contributed immensely for both physically and mentally support.

## ABSTRACT

Livelihood is the capabilities, assets and activities required for a means of living. The development program in turn shapes the livelihood assets directly or through shaping the vulnerability. The development processes are influenced by laws, policies, institutions and culture of a society. The specific objectives of this study are to describe the livelihood of rural cultivators, to analyze contextual factors associated with livelihood of rural cultivators, to analyze the effect of development program for poverty alleviation on rural people and to identify possible remedies for addressing livelihood vulnerability in Obo, Kinbya, Chiba (North) and Chiba (South) villages in Shwebo Township. A community based cross-sectional, case study was done using multiple method approach: qualitative study, Informal Group Interview (IGI), Focus Group Discussion (FGD), Key Informant Interview (KII), In Depth Interview (IDI) and quantitative survey. Fifteen informants were interviewed for KII and twenty informants for IDI. Altogether 96 lower class households involved in the quantitative survey. In this study, all social classes have both on-farm and off-farm livelihood activities. Members of the upper and middle classes in study area have financial resources which are formal and informal services but there are only informal services in members of the lower class. All social classes need monetary loans in one form or another to have their livelihoods running smooth. Gender role in regard of livelihood goes different according to each social class. In the upper and middle classes most of a community's vulnerability is due to crop shock, insufficient capital, seasonality of price, insufficient inputs and weak knowledge of livelihood. Individual-wise, most vulnerability is caused by human health shock. In the lower class, community vulnerability is complete lack of support from organizations; and individual-wise vulnerability comprises insufficient capital, lack of opportunities, human health shock, food security and education. Development program does not secure poverty alleviation because no supports are offered to lower class members. Livelihood opportunities based on natural, physical, human, financial and social capitals of all social classes should be created.

**Key words:** livelihood, assets, development program, vulnerability context, coping strategies

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# CHAPTER I

## INTRODUCTION

### 1.1 Background of Development and Livelihood

Human beings have to always struggle for survival. Widespread areas of the world, they have different existential forms dependent on where they live, but their basic needs are the same. Those basic needs, connected with human's survival, cover food, shelter and physical defenses. According to Malinowski's (1944), studied division of labor, distribution of food, defense, regulation of reproduction and social control are needed to fulfill the basic needs. Social adaptation problems to help solve them are called derived needs. Therefore, integrative needs contributing to psychological security (satisfied by system of knowledge, law, religion, magic, myth and art), social harmony and purpose in life are consequences of basic needs. As people struggle to fulfill family's basic needs their ways of life as well as livelihoods diversify.

Human beings have to conduct livelihoods based on natural environment and social environment livelihood forms in urban and rural communities remain different. Rural community is one of the strengths in country building. In some countries, the development is mainly based on the people from rural area. Most of developed countries economies based on agriculture. Agriculture is the deliberate growing and harvesting of plant, but the term is often extended to include the raising of animals. As a mode of livelihood over 10,000 years old, agriculture is practised in every part of the world where plants will grow, even within cities. Agriculture is commonly combined with other livelihoods such as foraging, fishing, trade, or craft production, particularly as part of a seasonal cycle that includes periods of rest, migration, and role shifting. These complex relationships are often underestimated because farmers sometimes overstate their reliance on farming and understate exchanges with other peoples (Barnard, 2002).

Farming done on extensive farmland with much use of labor power, capital and machines rather than farming for self-consumption or subsistence is called Agriculture. Agriculturalists are called "farmers", "cultivators", or "agrarians" fairly

interchangeably, while those who are under the control of a state system that extracts rent are often labeled "peasants". A broad definition of the term peasant would invoke three important characteristics: Peasants are agriculturalists, for whom both production and consumption are oriented to the household and who are also under some economic and political obligations to outside power-holders. Peasants are small scale agricultural producers organized into households that rely on family labor in a subsistence oriented economy that is nevertheless a part of a larger state system that extracts various forms of rent from the communities it controls. Typologies of agriculture variously focus on crops grown and their uses, sources of water, degree of mechanization, regimes of fallow or rotation, ways of organizing labor, intensities of capital investment, and degrees of centralization of authority, among other things (Barfield, 1997).

In a nation-state administrative policy changes are followed by economic policy changes, then by changes in livelihood strategies. Even during the colonial period many rural dwellers in South-East Asia had seen their lives changed significantly, though the direction and pace of change varied much depending on communications, natural resources, local histories and demographics, pre-existing social economic and political structures, and the differences in colonial philosophies and policies. In the following decolonization period increasingly commercialized agriculture and other economic activities appeared, accompanied by expansion of markets in land, labor and agriculture. Village in South-East Asia has always been opened to the outside world and their contacts and links increased so much that the divide between 'rural' and 'urban' became less significant. Rural areas encompass more than just the people who live and work on farms. Generally, rural area provides the food for urban areas. To members of rural society mostly existing on agriculture livelihood strategies go different based on accessibility of assets.

A livelihood comprises the assets (natural, physical, human, financial and social capital), the activities, and the access to these (mediated by institutions and social relations) that together determine the living gained by the individual or household (Ellis, 2000).

Chambers defines the term Livelihood as "the capabilities, assets (store, resources, claim and access) and activities required for a means of living: a livelihood is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets and provides sustainable livelihood opportunities for the next generation and which contribute net benefits to other livelihoods at the local and global levels in the long and short term" (Chamber & Conway, 1991).

Capabilities are refers to a person's or household's ability to cope with stresses and shocks, and the ability to find and make use of livelihood opportunities. Assets refer to the basic material and social resources that people have in their possession. Livelihood assets are the basic building blocks from which livelihoods are generated. The existence of, and degree of access to, livelihood assets is therefore important in influencing the livelihood options that people may or may not have. The five broad asset areas are natural, physical, financial, human and social assets.

Natural capital refers essentially to the resources found in the natural environment. These include land, water, rivers, air quality, soils, marine life, grasses, animals, trees, biodiversity as well as the biophysical processes that are needed to sustain them. Physical capital refers to basic infrastructure, services and equipment, sanitation, communications that are needed to support livelihoods. Financial capital refers to the stocks and inflows of money people use to achieve their livelihood objectives. This might include savings and access to credit and income earned directly, through employment, or directly, through welfare grants or remittances. Human capital refers to ability of people to work in terms of their education, health and skills. When using the household as a unit of analysis, human capital refers also to the size and quality of the "household labor pool". Social capital refers to the social resources that people draw on in pursuit of livelihood objectives. These may include family and kinship networks, other forms of inter-household co-operation, membership of families groups and the quality of leadership and the degree of cooperation within communities.

Experts in various academic fields are working on rural society from many perspectives with forms of research to be followed by analyze. Scholars who accepted evolution first studied the condition of rural society, remarking that rural society is

difficult to change. It is sometimes called traditional society, folk society or peasant society. In early studies, Anthropologists usually approached the peasant community as a more or less isolated remnant of an earlier tradition. Wolf (1966) research was markedly different. He pointed out that peasants are rural cultivators integrated into larger economic, social and political systems; their production is, to varying extents, diverted to dominant outsiders, usually urban elites associated with a nation state. The peasantry always exists within a larger system. Wolf distinguished peasants from other nonurban groups on the basis of three criteria. They are rural agriculturalists, who retain control over land and whose goal is subsistence rather than business.

Agribusiness is a type of farming in which relatively few farmers, using sophisticated technology, produce a large proportion of the food consumed domestically and abroad. From a purely economic view, investing in farming is risky. Unlike most other business, farming is unique in that both economic factors (food prices, farm subsidies) and natural forces (rainfall, temperature) affect the success or failure of agriculture as a business. In addition, farming is heavily influenced by government regulation and deregulation, irrigation projects, credit policies and various price support programs.

To become a modern, developed nation mainly means brisk economic development, in which increased rural production plays an important part. Through that, rural people's income will increase to cause poverty's decline to lead to a better socio-economic life, then will follow a country's development in suitable proportion. Scholars in many disciplines have done research on histories of villages engaged in agriculture, agricultural techniques and implements, rural culture and traditions, rural games and diet. One of the most significant practical areas in which Anthropologists have made a contribution is that of agricultural and rural development.

"Developed", "Developing" and "Development" are used very well in the academic fields. In this study, the concept of development was discussed from Anthropological perspective. Development means both economic development and the social and cultural changes which accompany it. Economic development is the process of transition from one type of economic system to another, implying both economic growth and socio-cultural change. The next one is that development studies

emphasize on the changes of the native people's life style and life expectation by using the more efficient agricultural methods or modern technology. Then, development studies are to analyze the changes of the economic, political, social and cultural characteristics of a society. In other words, development refers to a process of change through which an increasing proportion of a nation's citizens are able to enjoy a higher material standard of living, healthier and longer lives, more education, and greater control and choice over how they live.

In this study it was considered the cause and effect of rural cultivator's development. At that time, invention, creation, innovation and contact with others (direct or indirect) are also necessary to mention the development scale. The interrelation of policy maker, development policy and the native people is fundamental fact to illustrate the concept of development.

A livelihood is considered sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, both now and in the future, while not undermining the natural resource base. Furthermore, sustainable livelihoods approaches acknowledge that access to natural, physical, financial, human and social capital are influenced by transforming structures and processes. Access to these different forms of capital, as well as the terms of exchange between different types of capital and the associated returns, are determined by a variety of transforming institutions, organizations, policies and laws. These transforming structures and processes influence how people combine and use their assets their livelihoods strategies in pursuit of beneficial livelihoods outcomes (more income, improved health and well-being, healthy environment and natural resources, and improved food security). Widely popularized by Chamber, sustainable livelihoods approaches encompass a set of core principles and an analytical framework that addresses multi-dimensional poverty by placing people and their livelihoods at the centre of any livelihoods strategy.

Sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are all in harmony and enhance both current and future potential to meet needs and aspirations.



## 1.2 Rationale for the Study

About (70) percent of Myanmar population are rural and farmers by the livelihood. Agriculture sector is the main prop to Myanmar's economic structure. Rice is the staple food of Myanmar people and paddy cultivation is the livelihood of majority of cultivators in the country. Thus their poverty or improvement reflects the same for the country. It is shown that the livelihood of cultivators needs to be taken into consideration.

The Union Government is working for betterment of agriculture sector as well as farmers' life. Since 1988, Myanmar has been in a tradition from a developing country to that of a modern, developed country centered on agriculture. Myanmar agriculture landscape has significantly changed based on the five reform principles, namely: increased development of agricultural land resources, new irrigation works are built and old ones repaired to have enough irrigation water, efficient agricultural mechanization, adopting new technologies and increased production and use of good quality seeds.

In hopes of alleviating poverty to some extent and helping the socio-economic life of rural people improve; "National Workshop on Rural Development and Poverty Alleviation" took place on May 20-21, 2011 at Myanmar International Convention Center in Yangon. Following discussion there, eight work programs to be sponsored by the State have been adopted.

They are for enhanced development of the following:

- (1) Agricultural production
- (2) Livestock breeding and meat and fish production
- (3) Development of small scale industries in rural areas
- (4) Development of private micro-finance
- (5) Development of co-operative works
- (6) Socio-economic development of rural community
- (7) Energy development in rural areas
- (8) Environmental conservation

For this transformation, tasks of all round development of the economy based on agriculture, national level workshops on rural development and poverty alleviation, making policies and accepting international aid are being undertaken. Rural development is very important in that rural people are providers of global food. Department for International Development (DFID) an organization fighting global poverty, will provide USD 300 million over four years for elimination of poverty in Myanmar. Such an aid reflects the improvement of rural people's livelihood and life condition is a national as well as global problem. This study intends to contribute to the understanding of the livelihood of cultivators and taking them into their consideration in all round development.

In implementing with increased momentum rural development program aimed at enhancement of rural people's socio-economic development, it is necessary to know of their present status, needs and desires. This study was tried found out from Anthropological perspective, whether those development program have had real positive effect on rural people and if they did not, which were the reasons and which approaches should be applied to make the development program have positive effect on rural people. Documentation would also be made as regard those factors that have had positive effect on rural people. However, a nation-wide study is infeasible so only two village tracts, Shwebo Township, Sagaing Region are selected for the study area. That township has wards and village tracts numbering 71, inhabited by 210499. Their major occupation is agriculture, carried out on a total farmland of 152360 acres. This study cannot hope to represent cause and effect experienced by peasants in the dry zone. Therefore Shwebo Township, Upper Granary of Myanmar as well as producer of Shwebo Baygya rice (species of rice) commanding the biggest market in paddies, has been made research study area.

The present day world is progressing with great momentum through information technology and globalization. In every discipline, professionals and researchers are speeding up their research with aims have the country become developed. This study also aims to have from research to development realized by way of a researched study under the topic "Development Program and Rural Livelihood: A Case Study of Two Village Tracts, Shwebo Township, Sagaing Region".

### **1.3 Research Questions**

The main problems of this study are:

- (1) How are livelihoods structured?
- (2) What, when, where and how are the key factors shaping the vulnerability context of the livelihood of people living in the study area?

### **1.4 Objectives**

#### **1.4.1 General Objective**

- to explore the effect of development program on poverty alleviation on rural people living in Shwebo rural community.

#### **1.4.2 Specific Objectives**

- to describe the livelihood of rural cultivators.
- to analyze contextual factors associated with livelihood of rural cultivators.
- to analyze the effect of development program for poverty alleviation on rural people.
- to identify possible remedies for addressing livelihood vulnerability.



1.5 Conceptual Framework for Livelihood and Development Program

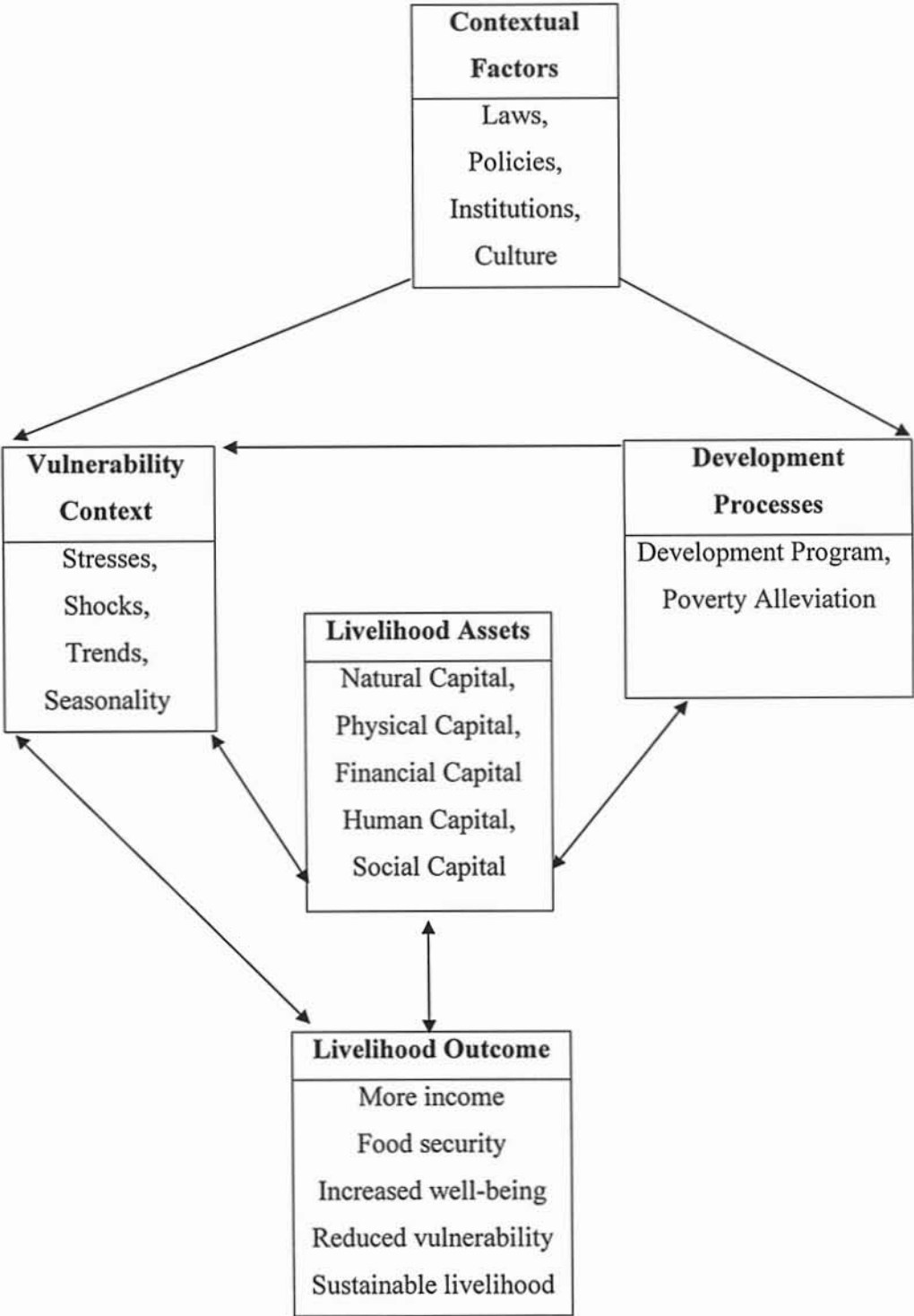


Figure 1. Influencing Factors on Livelihood and Development Program

The sustainable livelihood framework identifies five broad asset areas that offer holistic picture of all the capabilities, resources and entitlements that people have invested in and developed over time. Transforming structures and processes within the livelihood framework are the laws, policies, institutions and culture that shape livelihood. These influence vulnerability context and development. Vulnerability context provides an insight in the kinds of factors that have the potential to negatively impact on people's livelihood. Likewise, development processes are influenced by laws, policies, institutions and culture of a society. The development processes in turn shape the livelihood assets directly or through shaping the vulnerability context. Livelihood outcomes refer to the outcomes of people's livelihood strategies. Five potential outcomes are identified in the sustainable livelihood framework. As described under the specific objectives, this study was analyzed in depth the reciprocal effects between the vulnerability context and livelihood structures (assets) among rural people in study area. This analyzing was encompassed the relationship between development program underway and the livelihood vulnerability. This conceptual framework is shown in Figure 1.

## **1.6 Composition of Thesis**

This study is composed of nine chapters.

### **Chapter I: Introduction**

In this chapter, background to the study, rationale for the study, research questions, general and specific objectives of the study, conceptual framework for livelihood and development program and composition of the study are described.

### **Chapter II: Literature Review**

This chapter introduces literature review connecting with livelihood and development from secondary analysis such as official data, historical records and content analysis.

### **Chapter III: Research Method**

This chapter provides a general introduction to the study area and presents a detailed account of research design and method. Limitations of the methodology are also highlighted here.

### **Chapter IV: Socio-Economic Characteristics of Lower Class**

This chapter describes the socio-economic characteristics of the lower class.

### **Chapter V: Natural Resources and Livelihood**

In this chapter is to provide a detailed account and assessment of natural capital.

### **Chapter VI: Physical Assets and Contextual Factors**

This chapter depicts the description of the physical capital and contextual factors.

### **Chapter VII: Interrelationships among Components of the Livelihood**

This chapter set out to investigate among the different kinds of livelihood. Further, it also tries to understand the coping strategies adopted by the villagers to face risks, the linkages of livelihood structure and function of a family and community with their socio cultural practises.

### **Chapter VIII: Discussion**

This chapter covers the discussion of the influencing factors on livelihood and development program in this selected area.

### **Chapter IX: Conclusion and Recommendations**

The concluding chapter: the results of the various core chapters are revisited and discussed in terms of their implication for livelihoods and development in the study area.

## CHAPTER II

### LITERATURE REVIEW

Literature review has been organized into (6) parts.

#### 2.1 Poverty and Livelihood

Livelihood is the capabilities, assets and activities required for a means of living: a livelihood is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets and provides sustainable livelihood opportunities for the next generation and which contribute net benefits to other livelihoods at the local and global levels in the long and short term. Capabilities refer to a person's or household's ability to cope with stresses and shocks, and the ability to find and make the use of livelihood opportunities. Assets refer to the basic material and social resources that people have in their possession. Livelihood assets are the basic building blocks from which livelihoods are generated. The existence of, and degree of access to, livelihood assets is therefore in influencing the livelihood options that people may or may not have. The five broad asset areas are human, natural, financial, physical and social capital (Chamber & Conway, 1991).

According to the World Bank (2000), "poverty is pronounced deprivation in well-being". From this perspective, poverty is defined in terms of a lack of access (through ownership or other means) to various assets essential for generating a livelihood.

Livelihood is a part of culture and also reflects the poverty of culture livelihood also reflects how they are structurally interrelated with the cultural practises and more specifically, on how the people are closely associated with social system as well as livelihood culture. Livelihood is a central and essential focal point of the people which helps to document a socio-cultural reality of the community and also it gets manifested in their social institutions where a lay man can also observe the poverty and richness of culture (Eswarappa, 2007).

Poverty is a complex development challenge to understand and to address effectively. Elaborating on the vicious cycle of poverty, Chambers' (1983) illustration of "Deprivation Trap" provides some clarity regarding the interrelated causes and symptoms of poverty. Poor people are vulnerable; physically weak, isolated and powerless, making it difficult to get out of poverty.

Differentiation can also be made between different types of poverty, such as absolute poverty which refers to people living below the poverty line who are unable to meet even basic human needs such as food. Another variation is relative poverty, where people are said to be poor based on their inability to acquire things that their particular society deems necessary for reasonable life. Further distinction is also made between chronic poverty which refers to the persistent nature of poverty with people trapped in poverty for a long period of time and transient poverty, which refer to the fluid, temporary nature of poverty with people slipping in and out of poverty. Poverty does not simply imply a lack of money or financial capital. A lack of human capital and ownership of physical capital are prominent features amongst people who live in a persistent state of poverty for a long period of time, as well as amongst those who move in and out of poverty. Thus very often poor people's livelihoods are reliant on social capital (Rihis & Machado, 2007).

The dilemma the juxtaposition of nature conservation and poverty alleviation has serious implications for achieving the ultimate goals of sustainable livelihoods development, which is to alleviate poverty and improve quality of life of present and future generations. In order to promote awareness of the intrinsic value of natural assets and to ensure the preservation of these assets for utilization by future generations, it is imperative that sustainable livelihoods are created in a way that addresses the multi-dimensional nature of poverty. This means that sustainable livelihoods approaches should aim to improve poor people's quality of life in a holistic manner that does not jeopardize the city's natural resource stocks in either the short or long term (Jacobs, 2009).

Poverty levels were found to be high throughout the area, but they were particularly acute in the villages north of the Hobeni and Cwebe. Factors contributing to the vulnerability status of the communities were: population pressure and land scarcity,

exposure to climatic shocks, poor health status, job losses related to the under performance of the macro economy and corruption and inefficiencies among agents of local governance. Key determinants with respect to income, agricultural production, education and living conditions were identified. It was emphasized that livelihood patterns need to be viewed as holistic, integrated systems, and that development intervention based on sectoral approaches need to be avoided (Timmermans, 2004).

Discussion of above mentioned scholars says that livelihood is made up of capabilities, assets and activities, and that a lack of well-being leads to poverty, as seen in the context of livelihood and poverty. This study also deals with all social classes in the context of livelihood and poverty.

## **2.2 Vulnerability Context and Livelihood**

Understanding of the vulnerability context provides an insight into the kinds of factors of factors that have the potential to negatively impact on people's livelihoods (Ellis, 2000).

Vulnerability refers to exposure to contingencies and stress and difficulty in coping with them. Vulnerability thus has two sides: an external side of risks, shocks and stress to which an individual is subject and an internal side which is defenselessness, meaning a lack of means to cope without damaging loss (Chambers, 1989).

Vulnerability events may be characterized into trends, shocks and seasonal events. Trends are slow moving, often benign; changes in the macro-environment, the trajectory of which may be tracked with relative accuracy. These might include broader population trends, natural resource trends and/ or national and international economic trends. Shocks, on the other hand, are typically impacts that are sudden, unpredictable, and traumatic (Chambers & Conway, 1991).

For the majority of cultivator households in the study settlements the main source of vulnerability is conditioned by crop revenue risk. Production risk can occur due to uncertainly in rainfall measured in terms of its quantum, fluctuations and outliers. Risks faced by the households are broadly grouped into two categories, idiosyncratic



and covariant. The idiosyncratic risks include loss of an earning member, accident and falling sick. The covariant risks include drought and flood. Risk due to loss of earning member is very high among Sugali over the other social groups in Adadakulapalle settlement. Borrowing is the predominant response reported by the households cutting across all socio-economic groups, except Reddy/Kapu in Adadakulapalle settlement. Next to borrowing, selling and mortgaging of assets are the dominant responses (Eswarappa, 2007).

According to Khin Oo, Yi Yi Cho and Swe Mon Aung (2005), "Preliminary Analysis of Jute Farmer's Technical Knowledge and their Attitudes towards Jute Production"; Maubin, Myaungmya, Kyonpyaw, Hninthada, Toungoo, Thayawaddy and Yangon, 159 jute farmers were interviewed individually in October 2002. That study shows the agricultural pattern of paddy and kyne was observed in jute cultivation areas. Acreage of jute growing land was lessening, to be replaced by kenaf and paddy. Majority of farmers mainly depended on natural water source such as creek, canal and river for sowing jute. Pest infestation was noticed by 60% of jute farmers and few of them had serious pest problem. High proportion of farmers was willing to grow jute because that traditional work provides a regular income. Major constraints in jute production were low price, inadequate supply of seeds and advanced payment, less supply in inputs, low return compared with competitive crops and scarcity of labor. The selected jute farmers' main source of income and profitable crops were pluses, rice corn, chili and jute in order of sequence. However, it seemed to be no alternative to switch off the jute cultivation because most of the lands were flooded kyne field in rainy season which was not suitable for other crops. Therefore jute farmers demanded and expected the subsidies from Myanmar Jute Industries (MJI). The Jute farmers know how to enhance the yield and crop quality but they fall short of natural capital, financial capital and physical capital. Social capital is not discussed in this paper. It is concluded that jute cultivation cannot be sustainability livelihood yet because capacities lag behind in remedying the weaknesses found in jute cultivation.

From the above discussion it is to be understood that vulnerability is negative impact on people's livelihood making their coping hard to do. Discusses in context with vulnerability are trends, shocks and seasonal events, but stress is excluded. However,

this study discusses all social classes' vulnerability of trends, shocks seasonal events and stress.

### **2.3 The Influence of Resources on Livelihood**

Capital is resources when these resources are invested and mobilized in pursuit of a profit as a goal in action. Thus, capital is resources twice processed. In the first process, resources are being produced or altered as investment; in the second, the produced or altered resources are being offered in the marketplace for a profit. Resources are defined as valued goods in a society, however consensually determined, the possession of which maintains and promotes an individual's self-interest for survival and preservation. Resources can be either ascribed or acquired. Ascribed resources are those one is born with, such as gender and race. Other resources are prescribed by inheritance, such as caste and sometimes religion, and may include parental resources. Resources can also be acquired, such as education, or prestigious jobs. When resources are being invested for expected returns in the marketplace, they become social capital. Capital can be classified into two types are personal or human capital and social capital. Human capital consists of resources possessed by the individual, who can use and dispose of them with great freedom and without much concern for compensation. Social capital consists of resources embedded in one's network or associations (Lin, 2001).

The existence of and degree of access to livelihood assets is therefore important in influencing the livelihood options that people may or may not have. The five broad asset areas are human, natural, financial, physical and social assets. Human capital refers to ability of people to work in terms of their education, health and skills. When using the household as a unit of analysis, human capital refers also to the size and quality of the "household labor pool". Natural capital refers essentially to the resources found in the natural environment. These include land, water, rivers, air quality, soils, marine life, grasses, animals, trees, biodiversity, as well as the biophysical processes that are needed to sustain them. Financial capital refers to the stocks and inflows of money people use to achieve their livelihood objectives. This might include savings and access to credit, and/or income earned directly, through employment, or directly, through welfare grants or remittances. Physical capital refers



to basic infrastructure, services and equipment, sanitation, communications that are needed to support livelihoods. Social capital refers to the social resources that people draw on in pursuit of livelihood objectives. These may include family and kinship networks, other forms of inter-household co-operation, membership of families groups and the quality of leadership and the degree of cooperation within communities (Chamber & Conway, 1991).

Woolcock (2004) explores and describes the role of the social capital plays in creating sustainable livelihoods by examining a case study consisting of a network of three groups.

1. Bonding social capital refers to the “social glue” that binds relatively homogenous groups together or rephrased: “the trusting and cooperative relations between members of a network who are similar in terms of social identity”.
2. Bridging social capital refers to the “social oil that lubricates relations”; the more cross cutting “weak ties” between heterogeneous groups, or said differently “the connections between those unlike each other yet on relatively equal levels of status and power”.
3. Linking social capital refers to the vertical connections across power and authority ranks, or the norms of respect and networks of trusting relationships between people who are interacting across explicit, formal or institutional power or authority gradients in society.

Two important features of social capital deserve further clarification are resources can be accessed through direct and indirect ties, and such resources may be in alters’ possessions (their personal resources) or in their social positions (their positional resources). First, social capital includes the resources accessed through indirect ties. Resources of alters (direct ties) represent a relatively small portion of ego’s social capital. Often social capital activates chains of multiple actors. In order to gain access to a certain resource (say, information about a job), ego may go to someone who does not possess that information but who may know someone else who does. Thus social capital does not come merely through direct connections or simple dyadic relationships. Both direct and indirect connections can afford access to resources. Second, resources accessed throughout social ties include both these alters’ more or

less permanent resources and the resources they control through their positions in a hierarchical structure, say an organization their positional resources. In general, the positional resources of social ties are much more useful than personal resources to ego, because positional resources evoke not only the resources embedded in positions in an organization, but also the power, wealth, and reputation of the organization itself (Lin, 2001).

According to Jacobs (2009), Cape Town's growing economy has benefited greatly from its natural resources. These natural assets can be credited with making a significant contribution to Cape Town's Gross Domestic Product (GDP), especially when one considers revenue generated by the tourism industry. Even though the city's economy appears robust, many people living in townships on the Cape Flats continue to face a reality of being trapped in a state of deprivation; unable to access those natural resources as a means to make a living and unable to cope with shocks, trends and seasonality in a dynamic, vulnerable society plagued by inequitable distribution of wealth and environmental degradation. Yet, while access to financial, natural assets is limited, poor people can rely upon their social assets or social capital in order to make living. Limited natural assets are not the only assets required by the poor for creating sustainable livelihoods and a better quality of life. Indigenous people and their communities and other local communities have a vital role in environmental management and development because of their knowledge and traditional practises. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development.

"A Glimpse at the Socio-Economic Development of a Myanmar village", which is on a 30 years (1976-2006) socio economic development status of Kyaikmanhtaw village, Yintaik village tract, Taikkyi Township, Yangon division under central planning. It proposes that the increased number of households was due to Natural capital. The self-built lane leading to Yangon-Pyay main road shows the villagers' unity or social capital. But that study does not discuss socio-economic activities in the line of their livelihood. As to the resolution of major agricultural problems the village in 2002 obtained water through irrigation. So summer paddy was grown and the mung bean also on farmland which did not have irrigated water as a usual practise. Starting 2002-2003 compulsory sales of paddy and pulses to State Agricultural Trading has been

abolished so cultivation costs as well as income have increased. As for Financial capital the paper stated not enough dams and embankments existed for agricultural production. Agricultural loans covered about ten percent of the total cultivation cost only and outside loans had to be secured at high yield paddy the farmers preferred their traditional strains and were reluctant to accept the strains provided by Myanmar Agriculture Service; but the reasons are not given in the research paper. At the village the rich poor gap expanded on land ownership but the reasons for lessened ownership of farmland are not presented in the paper (Maung Thein, Mya Than & Maung Aung 2011).

Timmermans (2004) worked a research in South Africa. The communities living in the area are among the poorest in South Africa and are largely dependent on migrant remittances and state welfare grants for their survival. Livelihood systems in the area are complex, varied and dynamic, and that for development to be sustainable; it needs to be informed by a thorough understanding of the many factors that shape the context in which livelihoods are generated. The examination of natural capital was found that, despite the study area being relatively well-endowed with a rich and diverse natural resource base, the value of this natural capital to livelihoods was not being fully realized. Reasons for this included: a lack of access to the forests and shoreline within the nature reserve, restrictive conservation legislation reducing the scope for trade in natural resources, the underdevelopment of tourism and the existence of various environmental constraints. Physical capital was found that key infrastructure and services, such as roads, electricity, water, communications, public transport, health care facilities, agricultural extension and markets were either completely absent, or woefully inadequate. These factors contributed to the area's remoteness and its exclusion from the mainstream economy.

In Multi-Household Farming System in Northeastern Thai village writing by Shigetomi (2004), Farming system in which two or more households, usually those of close kin, maintain their stakes in the same piece of farmland by relying on their kinship bonds with each other. There are two types of multi household farming. One is a joint farming venture, in which the households work together on the same piece of land, known as *het nam kan* by the local people.<sup>3</sup> The other type is a sort of land transfer in which the landowner allows another household to cultivate the land

without taking any rent. The local people call it hai tham kin. As labor out-migration became more prevalent with economic development, farmers increasingly resorted to multi-household farming. The transforming of this farming system is understood as a response of farmers to their changing economic and social environment. Farming households with close kinship ties in northeast Thailand have long been practicing joint utilization of farmland. Sharecropping has expanded into the land tenure relation between close relatives. Hai tham kin, which used to be a co-operative option undertaken between close kin, is now applied as part of the sharecropping agreement. The market system is now taking over the communal system of land and labor transactions between farming households in this northeastern Thai village.

Livelihoods in a given culture, gets institutionalized which portrays the internal and external relationship between the social institutions such as family, kinship, marriage, community council and so on. Family is an important social institution among Sugali. It fashions the economic transactions and social relations. The head of a family is the decision maker with regard to the livelihood pursuits of family members. The kin members play an important role in the livelihood pursuits of individuals. They act as a social resource and kin network help in regulating and pursuing livelihoods of its members. In case of household activities, involvement of women is more and they feel that household works are part of their social responsibility. Sometimes, when women get tired in their work activities, they request their husbands to help them and cooperate in managing the activities in a family. The ownership of land usually vests in the name of the man. Women work in the land and help men to manage it. Women have control over livestock and its products. They now get credit facilities from self-help groups and government. Now women also feel more empowered (Eswarappa, 2007).

This study was tried to present the struggle waged by different social classes in agricultural livelihood. Out of human capital, social capital, natural capital, physical capital and financial capital are studied mainly, to show which factors were influential and which factors were detrimental for their livelihood. To analyze the effect of development program for poverty alleviation on rural people and to find out the strong and weak point out sustainable livelihood theory in this study.

## 2.4 Income Diversification

Kim (2011) examined the reasons and patterns of livelihoods diversification and raise concerns regarding unequal access to diversification opportunities among different groups in rural Uganda. Livelihood diversification is becoming a significant livelihood strategy in rural Uganda. Difficulties arising from lack of money income are compounded by an education and health. However, while school fee is free at public primary schools, education involves a lot of extra costs such as school uniforms, stationeries and transportation. Moreover, as the quality of education is much better at private schools many people try to send their children to private schools where tuition fee is very high. Diversification is increasing in rural Uganda as alternative or complementary livelihood strategies. Livelihood diversification into on-farm and non-farm activities have benefitted rural population in general as reflected in rising non-farm incomes and decreased rural poverty.

Social network can also contribute to better chance of success in diversification. Thus, social network improves credit access for the poor with which they can diversify into a new livelihood activity. In order to promote social network and thus income generation through diversification, the government should first realize potential of social network in widening livelihood strategies. The support for inclusive group-based activities should be included in a rural development policy. Also, government should understand the nature and objectives of existing social institutions in order to come up with appropriate intervention program for different social network. Support for social network should be provided together with other material provisions in order to create a benign circle between social capital and other physical asset capital in a way that promote a favorable diversification.

According to Ellis (2000), rural livelihood diversification is the process by which rural households construct on increasingly diverse portfolio of activities and assets in order to survive and to improve their standard of living. Diversification can be divided into two categories, on-farm and non-farm diversification. On farm diversification means maintenance of a diverse spread of crop and livestock production activities that interlock with each other in various ways. Non-farm diversification refers to seeking business or employment opportunities other than traditional crop production and



livestock rearing. Even non-farm diversification is related to agriculture as it includes processing and trading of agricultural produce. Diversification can be either survival strategy or choice depending on whether it is pursued out of involuntary reasons (disasters, conflicts) or opportunity (better employment and business outside farming).

According to above mentioned scholars' discussion, social assets leads to income diversification whereby vulnerability is reduced; but other livelihood assets are not taken into consideration. But this study deals with how all social classes' income diversification comes from what kinds of assets.

## **2.5 Contextual Factors Influencing Livelihood**

Contextual factors refer to systems of local administration and socio-economic organization as mediated throughout laws, institutions, policies and culture. They are important because they determine access to the various types of capital, to livelihood strategies and to decision making bodies and sources of influence.

In socio-economic life of Konbaung period (1752-1885), Toe Hla stated agriculture was the major livelihood activity in Konbaung period, when feudalism was still extant. It describes the four regions (Minbu, Kyaukse, Madaya and Shwebo) as veritable granaries of Upper Myanmar. Those regions produced a lot of paddy thanks to water coming from dams. Myanmar Kings appointed employees to take care of dams and canals. He also bore the maintenance expenditure of irrigation works. In the irrigated regions most of the workers of the fields were royal employees. In other places the farmers depended on rains or small scale self made lakes for their livelihood. Thus they depended on non farmland than paddy field. In the Konbaung era, population is sparse, agricultural land are abundant. It makes the agrarian to be free from landless problems that is who can make develop agricultural land for themselves out of the fallow land, also known as common land. The peasants, though possessed of enough farmland, cattle and seed paddy they were unable to achieve self sufficiency in food because of warfare, drought, floods and pestilence. In socio-economic life of Konbaung era, from the subsistence agriculture improved to the commercial agriculture, but the majority of peasants remained poor because of the

prescription of Royal Monopoly and the oppression of buyers in royal employ. Thus policies are found to have dominance over peasants' livelihood.

Anderson (1999) examined in Vietnam's Transforming Economy & WTO Accession, Implications for Agricultural and Rural Development discussed under the title "Effects of policy changes on agriculture and rural development". Vietnam has had sustainable economic growth and poverty alleviation as its key goals of economic policy reform since the introduction of renovation in 1986. Opening up the economy to foreign trade and investment is seen as having been a crucial contributor to those goals, along with freeing up domestic markets and allowing farmers use rights over agricultural land. Joining the WTO invariably involves some policy changes to conform to WTO rules, as well as some commitments to provide greater access for WTO members to Vietnam's market for goods, services and financial capital in return for the benefits of WTO membership and the greater access that members may provide for the acceding country's exporters.

Thaung Htay (2011) undertook a study the Household Livelihood Security Approach for Sustainable Rural Development in Myanmar. Data were collected with Household Security approaches based on Loikaw and Demawso Township in Kayah State and Mindat and Kanpetlet Townships in Chin State. Since the last decade, the world has environmentally, politically, socially, demographically and economically, been undergoing changes with a great momentum. Those changes have direct or indirect effects on people's livelihood security, and are the root cause of poverty as well. Natural disasters, manmade disasters, governance policy settings, infrastructure conditions, background historical situations and long-term cultural practices are connected with people's livelihood conditions. Based on that connection, people suffer stress and shock, leading to livelihood insecurity and poverty. Moreover policy setting, historical and infrastructural conditions could have both positive and negative effects on people's livelihoods. When disasters strike, vulnerable populations appear. Rural people's livelihood security is essential for sustainable rural development. Based on Natural capital, Economic or Financial capital, Physical capital, Human capital, Social capital and Political capital and with household livelihood security approach the strength of people is identified to know about its nature. People make use of various kinds of capital to have positive livelihood outcomes (nutritional

security, habitat security, social network security, personal empowerment and personal safety).

Policy changes have brought about food security, food price stability, job creation, poverty alleviation and income distribution, so most probably there has been an effect on rural development. This study was tried to present to what extent laws, policies, institutions and culture had influenced peasants' livelihood. If they are positive, documentation as such will be made. If they are negative, possible solutions from Anthropological perspective will be presented to best of efforts.

## **2.6 Effect of Development Program**

Yadav (2008), examined how public land agro forestry program has contributed to social and economic resources, particularly in raising income of pro-poor (landless) household under study. The study will be carried out in only four public land agro forestry groups in Dhanusha districts, Nepal. This research shows: due to this program social capital has increased in the form of group formation, group mobilization and the network information thanks to public land agro forestry user groups. In this way social empowerment happens, to the benefit of livelihood. The social capital has been increased by group formation, group empowerment, group operation and functioning, decision making process, dispute solving mechanism and human capital has been increased by participation of group members in workshop meeting, exposure visits, training. Further, the discussion with group members has shown that the group members are so impressive and enthusiastic that they are very supportive in program implementation. An conclusion, the program has been very effective not only for supporting livelihoods of poor and landless people in the district but also for the appropriate land use of public lands and involvement of excluded groups in the development process.

This scholar has been mainly referring to social and financial resources, but not other resources, in his observation and analysis. This study, however, describes: what impacts on residents' livelihood are made by development program in study area; and how natural, physical, financial, human and social assets are connected with livelihood.



Winters, Corral & Gordillo (2001) examined livelihood America in order to inform project design and project implementation in the region. This research is on household livelihood strategies and rural development projects, the existence of social capital at a meso or macro level plays an important role as well as household decisions that directly or indirectly lead to the creation of social capital. They discuss social capital in more detail than the other household assets. Social capital depends on both the quantity and quality of interpersonal relationships. The use of social capital in livelihood strategies may differ. Along with other forms of capital, social capital has an important role to play in fostering rural development. As part of any project, actions should be taken to foster a positive impact of social capital. Project while fostering social capital must not ignore the need for the accumulation of complementary assets such as natural, physical, human and public capital and improved technologies for using those assets.

Soliman & Mi Mi Maw (2005) had made a study under the title "Contribution of the Project on Poverty Alleviation and Social Mobilization based on Participatory Approach to Rural Development" Kungyankone village, Taikkyi Township, Yangon. The overall goal is to improve the quality of life of the women in the village. The components of the project are micro-credit program, capacity building program, social services and community development activities. Based on the poverty assessment data and the criteria of permanent resident, on accessibility to any other credit institutions, the poorest and character of the villagers, they reformed self-help groups in which they themselves selected the members and group leader for better understanding among the members having joint responsibility to repay the loan. Income generating activities were identified at their option in order to increase women's decision making ability. The poor women well organized and household income increased markedly. Capacity building is of great importance in poverty alleviation program. Skills and abilities of poor people will be upgraded by providing skill development trainings and professional trainings. The project is now going on very well due to the active participation of the beneficiaries. The project activities meet village needs because of bottom-up planning methodology. The revolving fund and saving deposit have increased to some extent. The villagers always request to the project coordinator to continue the project implementation. Their request for continuation of the project

implementation shows that the project is significantly effective and beneficial to the villagers to a large extent.

Khin Htay Htay (2014), in her studied of the livelihoods of Bamar National living in Salin Township, Magway Region. In this studied, the livelihood is viewed from a cultural anthropological perspective. Their main livelihood is agriculture. They mainly depend on wet rice cultivation. In this area most of the farmers are poor and indebted. The well to do is rare. The farmers who have farm can get loans farm government. A family who has one acre of farmland, this family has a chance to get loan, 100000 kyats for expense of farming. Besides the villagers who cultivate onion can get loan 20000 kyats for one quota plot. After producing crops, the loans must repay with interest of 0.7 kyat. Moreover the government uses Wein Gyi Choute loan system. In which ten farmers are grouped in one and if a farmer does not repay the loan nine farmers must repay for the whole group. If they cannot organize ten farmers, they can't get the loan. It was found there are two NGOs in the village tract. One is PECT Myanmar microfinance program and the second is Cesvi program which provide to develop economy and health for mother and children. To be a member of PECT the entrance fee is needed 500 kyats and they can save cash daily or monthly. If one has 2500 kyats as a total saving, one can borrow 40000 kyats with interest and must liquidate within six months. Civic program has been providing rice seeds, pea nuts vegetable seeds for house yards, pigs for agriculture and training course of tending animals especially cattle, pig and foals. Although Cesvi provides seeds, some rules are prescribed for supplicants. However, most farmers are face with a great debt of cash, and difficulties for subsistence as the expense of cultivating is high and the lands they owned are small. The government started the alleviation of poverty in 2011. It was noticed that most villages were satisfied with their daily life.

Many ecological changes can be found in Myanmar 1988 according to the political changes. So the cause and effect of ecological changes on the native people are interesting. Taungkhinyan creek was closed and the dam was built. Now, they can grow not only the rainy paddy but also the summer paddy. And then, they can grow sunflower, peanut, maize and so on. One of the benefits of Taungkhayan dam is the water for the daily use. The hill those were formerly red in color along the Taungkhinyan creek become green. This change is also a good result for the native

people and the nation. When the causes and effect of ecological changes on the native people are studied, it can be found the development policies are both for the policy maker in the native people (Mya Mya Khin, 2009).

In this study are: how development program in study area have impacted residents' livelihood; and how natural, physical, financial, human and social assets are connected.

## CHAPTER III

### RESEARCH METHOD

#### 3.1 Study Design

A community based cross-sectional, case study design was conducted in this study.

#### 3.2 Study Site

The study area was Sagaing Region is the largest of seven regions and the second largest of States and Regions of Myanmar. It is bordered by Kachin State, Shan State, Mandalay Region, Magway Region, Chin State and India in clock-wise direction. There are eight Districts (Sagaing, Shwebo, Monywa, Katha, Mawlaik, Hkamti and Tamu) or (8) Townships. Shwebo District is roughly rectangular in shape and with the exception of a strip a few miles in width along the Ayeyarwady and a small area in the south-west that drains into the Chindwin, lies wholly within the basin of the Mu River. Shwebo Township is situated on the Mu Valley railway line about three hours run from Sagaing Township. Shwebo Township, Upper Granary of Myanmar as well as producer of Shwebo Baygya rice commanding the biggest market in paddies, has been made research study site. The study site chosen in Shwebo Township comprises Chiba Village Tract and Minkone Village Tract, with most acreage of paddy fields in the township. Then Chiba (North), Chiba (South), Obo and Kinbya villages were chosen at random by ballot as study site.

#### 3.3 Study Population

Study population included: rural household heads for quantitative interviewing; village elders, bachelors' leader, chaperon and youths for Informal Group Interview; village elders, farm land owners and lower class for Key Informant Interview; all social classes age above 20 with residence of 10 years for In Depth Interview and lower class of both genders of above 18 and lower 55 for Focus Group Discussion in study villages.

### **Inclusion criteria**

- Agricultural land owners, farm hands
- Who are both male and female
- Who are willingness to share their knowledge and experience

### **Exclusion criteria**

- Those who feel like being unresponsive during this study
- The villagers who is away from village at the time of data collection

## **3.4 Study Period**

The study period lasted from June 2011 to May 2015. The detailed time frame for this study was presented in Annex (3).

## **3.5 Sample Size Determination**

For the quantitative survey, focusing on poor households, the sample size was estimated by using the following formula.

$$Z = 1.96, SD = 100, d = 20$$

$$\text{Thus } n_0 = Z_{\alpha/2}^2 \frac{(SD)^2}{d^2}$$

$$n_0 = \frac{(1.96)^2 (100)^2}{20^2} = 96$$

where  $n_0$  = sample size

Z = Standardised normal value, usually taken as 1.96 for a 95 % confidence interval

$\alpha$  = Level of significance

SD = Standard deviation

d = Precision range

Thus, a total population was obtained by above calculation. Therefore, for 4 villages, a total of 96 households needed to be interviewed by the survey questionnaire.

### **3.6 Methods of Data Collection**

A combination of both quantitative and qualitative data collection methods was applied to collect data.

#### **3.6.1 Quantitative Method**

As already indicated under sub section 3.5; quantitative data collection focused only on poor households. Data collection technique used in this study included face-to-face interview using structured questionnaires was performed in Obo, Kinbya, Chiba (North) and Chiba (South) villages. The survey questionnaire covered the following areas: ages, education, and occupation of household head, households of membership, housing type, and household access to electricity and possession of lower class information. Interview was conducted at the convenient time and places of the respondents to ensure their comfort and privacy. Interviews were made with heads of households.

#### **3.6.2 Qualitative Method**

Qualitative data collection methods applied: Informal Group Interview, Key Informant Interview, In Depth Interview, Focus Group Discussion, and visual technique like social mapping and seasonality analysis.

##### **Informal Group Interview (IGI).**

An IGI session each was held at Obo, Kinbya, Chiba (North) and Chiba (South) villages, making up four sessions altogether. At each IGI session an interview of 13 respondents such as village elders, bachelors' leader, chaperon, and youths was conducted. At each IGI session, major issues for discussion included: how many social classes of the villagers, livelihood patterns by social classes, and what social classes have most members. The researcher had the social mapping of residential areas drawn up, with the houses of lower class circled in red. IGI guidelines are shown in Annex (4).

### **Key Informant Interview (KII)**

Key Informant Interview was conducted with village elders, agricultural land owners, lower class. All the interviews are recorded using a tape, paper, photographs with the consent of the facilitators and interviewer. KII guide lines are shown in Annex (5).

### **In Depth Interview (IDI)**

For IDI; Obo, Kinbya, Chiba (North) and Chiba (South) was asked of villagers aged above 20 with all social classes. Moreover, interviews were made of study area dwelling native aged above 15 on livelihood and ways of life. IDIs guidelines are shown in Annex (6). Twenty informants were interviewed for IDI.

### **Conducting Social Mapping**

During the IGI, social mapping was performed and household of lower class identified. Then request was made to select 4 married males and 5 married female from the lower class household indicated in the social map. Social mapping was done only after the IGI as depicting of number of houses, roads, health facilities, schools, pagoda, library, monastery, would be embarrassing to the participants. Firstly, respondents' names, age, livelihoods, were asked of the village representative. Then drawing of village map took 45-60 minutes, with contribution by all respondents. According to social mapping of Obo, Kinbya, Chiba (North) and Chiba (South) are three social classes.

### **Focus Group Discussion (FGD)**

Four FGD sessions, each at Obo, Kinbya, Chiba (North) and Chiba (South) villages, were held of 4 married male and 5 married female, aged 18-55 years, from the lower class. FGDs were focused on issues relating to livelihood patterns, seasonal variation, household food security, financial services, social clubs, opinions for coping strategies their livelihood, effect of current poverty alleviation program on their livelihood. At the end of each FGD, the researcher summarized the facts obtained from discussion and allowed the participants to add or modify the facts. All the



discussion made during IGI, FGDs and visual techniques were recorded not only by note taking but also by audio recorder. FGD guidelines are shown in Annex (7).

### 3.7 Sampling Method

For selecting the four villages purposive sampling method was used in this study (see in Figure 2).

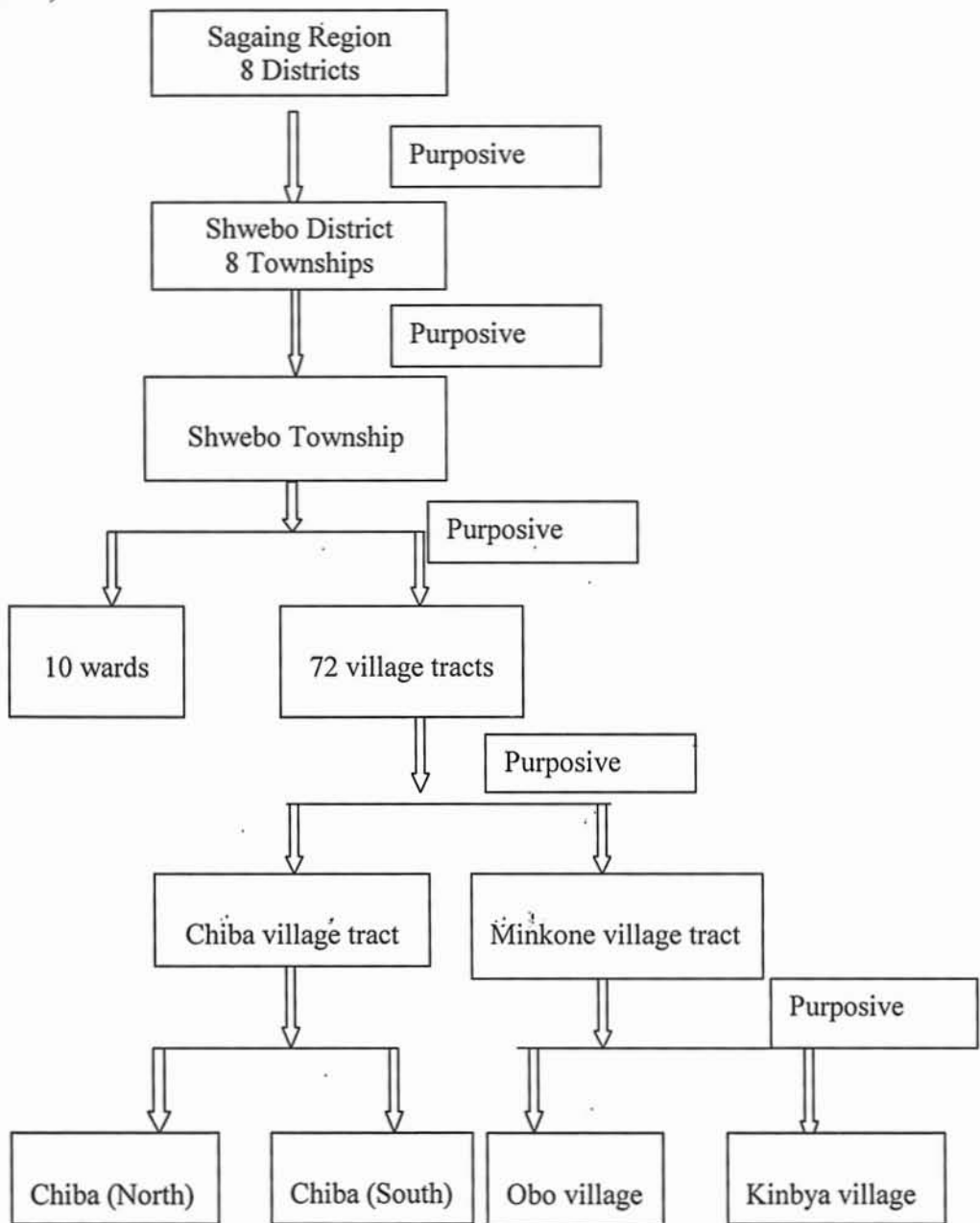


Figure 2. Sampling Procedure

### 3.8 Data Collection Tools

The structured questionnaire is shown in Annex (3). This was presented before using it in the field. For sampling of 96 poor households the following approach was applied.

During IGI sessions of each study village, perceived social group identification was performed. See Annex (9 & 10) for the social groups identified at each study village. During the IGI session at each village, participatory drawing of social map was facilitated. Offer completions of each social group, the participants were facilitated to encircle the poor households (as perceived by them) with red marker pens. See Annex (11) for social maps drawn. Then, household lists were prepared at each village for the poor household.

Poor households were next selected through a sample random sampling method at each village, where the total sample method of 96 was distributed proportionately, See Table (7) for the sample distribution at each village.

**Table (1) Variable Include in the Study**

Variable	Operational definition	Scale of measurement
Age	Aged of completed years	Ratio
Gender	Gender of household head 1. Male 2. Female	Norminal
Education	Educational levels categorized as 1. Illiterate 2. Monastic education 3. Primary education 4. Middle education 5. Graduate	Ordinal

Occupation	Job of household head 1. Dependent 2. Odd job taker 3. Loom waver 4. Carpenter 5. Stall keeper 6. Driver	Ordinal
Household size	Household size difference of the household in lower class	Ratio
Housing type	Housing type of household 1. Self owned house 2. Renter 3. Parents' house 4. Squatter	Ordinal
Possession	Possession of lower class 1. Radio 2. Television 3. Compact disc player 4. Bicycle 5. Motorcycle 6. Telephone 7. Livestock breeding	Ratio

Before conducting qualitative data collection, objectives of conducting IGI, KII, IDI, FGD and visual techniques were explained. Interview guide described in Annexes 4, 5, 6 and 7 were applied.

### 3.9 Data Analysis and Management

Quantitative survey data was analyzed using SPSS 16 for Windows. Background characteristics of respondents' age, gender, education, occupation, household size, housing type and possessions were described with frequency and percentage for categorical data and mean with standard deviation for continuous data.

All IGI, KII, IDI, and FGD results were recorded using cassette tapes. Once daily data were collected; the field notes were transferred to the data files according to the subjects. Re-reading of the transcripts and relistening of the audio file were done. And then, the obtained data were analyzed to get livelihood structure. The connection between livelihood structures and livelihood assets in all social classes of local people was described because livelihood patterns diversifying to assets. Moreover all social classes have diversifying ways of life based on livelihood. Results of social mapping method were presented with textual and diagrammatic display.

### **3.10 Ethical Consideration**

Chairmen of the local administrative officers were asked for permission to make study activities.

Before the interview the researcher discussed the study objectives, the type of interview to be performed, the participants have full right to choose to participate or not in the study.

The participants' rights and sensitivities were safeguarded and they would not be affected in any way.

### **3.11 Limitation of the Study**

In study area, the relationship between local people's livelihood and community network was studied but others social networks were left out from study.

Second, lower class member's daily income and expenditure were not available to study for quantitative because culturally sensitive and only relied on the participants' responses.

## CHAPTER IV

### SOCIO-ECONOMIC CHARACTERISTIC OF LOWER CLASS

The socio-economic characteristics of the lower class; household-head's age, gender distribution of household head, education, occupations, household size, housing types, electricity and possessions are taken into consideration in analysis of a sample size of 96 households. Breakdown of the sample for different villages is shown in Table 2.

**Table (2) Breakdown of the Sample for Different Villages**

Village	No. of households		Poor households of sample taken
	No. of total households	No. of poor households	
Obo	92	24	7
Kinbya	188	62	19
Chiba (North)	424	98	30
Chiba (South)	338	132	40
Total	1042	316	96

Ages of household-heads in the sampled households fall into six age groups; the youngest at age 20 and the oldest at age 80 (see Table 3).

**Table (3) Ages of Household Heads**

Age group	No	%
20-30	8	8.4
30-40	28	28.9
40-50	26	27.8
50-60	30	30.8
60-70	3	3.1
70-80	1	1.0
Total	96	100%

According to Table 3, the sample of 96 households has 30 household heads aged 50-60 (30%) as the highest. Most of household heads belong to 30-60 age groups.

**Table (4) Gender distribution of Household Head**

Sex	No	%
Male	90	93.8
Female	6	6.2
Total	96	100

Table 4, shows that among household-heads in the sample of 96 household's male constitutes 93.8% and female 6.2% only. So male are found to be enjoying priority in the lower class.

Education of the household head by analysis falls into the following 5 categories, enumerated in Table 5.

**Table (5) Educational Levels of the Household Head**

Education levels of the respondents	No	%
Illiterate	28	29.9
Monastic Education schooling	7	7.2
Primary education	48	49.5
Middle school education	12	12.4
Graduate	1	1.0
Total	96	100

By these circumstances, out of the five categories those with primary education number most at 48(49.5%); but there is a graduate only. Illiterate household-heads are 28 (29.9%), placing at the second most numerous categories. Thus it is evident most household heads of the lower class have had primary education only.

Analysis of the household head's occupation shows 6 categories, as shown in Table 6.

**Table (6) Household Head's Occupation**

Occupation	Number of household heads	%
Dependent	2	2.1
Odd-job taker	86	89.7
Loom worker	3	3.1
Carpenter	3	3.1
Stall-keeper	1	1.0
Driver	1	1.0
Total	96	100

Among jobs of household heads, odd-job takers number the most at 86 (89.7%). Stall-keeper and driver number the least, at one each. Household heads usually resort to odd job for their livelihood.

Table 7 shows an analysis of 8 categories households of membership which ranged from 2 to 8.

**Table (7) Households of Membership**

Household size	No. of household	Strength	%
2	5	10	5.2
3	29	87	30.9
4	28	112	28.9
5	20	100	20.6
6	8	48	8.2
7	5	35	5.2
8	1	8	1.0
Total	96	400	100

Out of the sampled households, household size is of 8 categories, counting 400 people. The 3 member household is the most numerous at 30.9%; and the 4 member household is second most numerous at 28.9%. Thus it can be deduced that of the



sampled households in study area, the total of 3 members, 4 members, and 5 member households account for about 80% of all the people. Then those households under study usually consist of mother, father, children, son-in-law and daughter-in-law.

Housing type of households is divided into four, as follows with Table 8.

**Table (8) Housing Type**

Category	No	%
Self-owned house	4	4.2
Renter	2	2.1
Parents' house	37	38.5
Squatter hut	53	55.2
Total	96	100

These circumstances show: Of the four housing types, 53 households (55.2%) and the most numerous live in squatter huts; 2 households (2%) and the least are renters; and households at parental homes number 37 (38.5%) and are second most numerous. Thus households of the lower class mostly live in squatter-huts or parental homes.

Sampled households with or without access to electricity are given in Table 9.

**Table (9) Household Access to Electricity**

Category	No	%
Access	29	30.2
Non-access	67	69.8
Total	96	100

For these circumstances the sampled households with non-access to electricity number 67 (69.8%), showing that more than half of the households have no access to electricity.

Sampled households and their possessions are as follows, in Table 10.

**Table (10) Possession of Lower Class**

Category	%
Radio	47%
Cassette tape recorder	18%
Television	40%
Compact Disc player	12%
Bicycle	74%
Motorcycle	36%
Telephone	3%
Livestock breeding	9%

A study of Table 10 shows possessions of 96 sampled households stand at: Radio 47%; Cassette tape recorder 18%; Television 40%; Compact Disc player 12%, Bicycle 74%; Motorcycle 36%; Telephone 3% and Livestock breeding 9% possession of bicycles and television account for a large number each.

A study of socio-economic characteristics in the lower class shows that most household-heads are males with primary education only. The majority of them are odd-job takers, with no regular occupation. Their households without access to electricity are in the form of squatter hut or parents' house. But most of the households possess bicycle, radio and television.

## CHAPTER V

### NATURAL RESOURCES AND LIVELIHOOD

The aim of this chapter is to provide a detailed account and assessment of Natural Capital. The local people of Obo, Kinbya, Chiba (North) and Chiba (South) make their living, mainly depending on agriculture and each community depends on natural surroundings for its particular livelihood. In this part based on both qualitative and quantitative findings factors like how the background history of the villages and natural resources have had an effect on locals' livelihood, to be accompanied by some vulnerability.



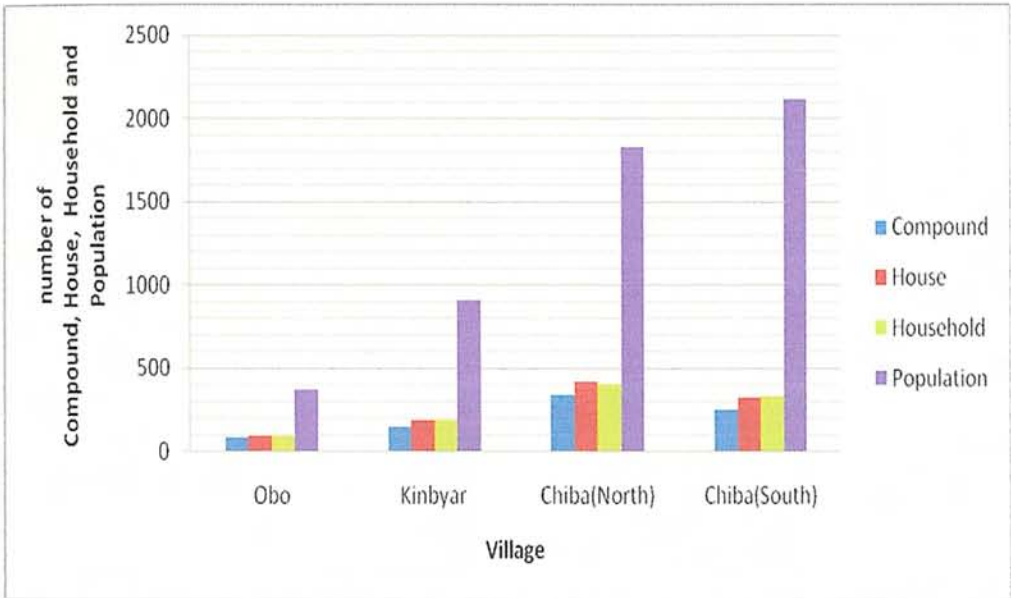
**Figure 3. Paddy Field**

#### **5.1 Background History of the Villages**

The Chiba village tract comprises Chiba (North), Chiba (South) and Ngasukone villages and Minkone village tract comprises Obo, Kinbya and Minkone villages. Then two villages each for research, out of Chiba and Minkone village tracts have been randomly chosen. They are Obo, Kinbya, Chiba (North) and Chiba (South) villages.

**Table (11) Demographic Characteristics of Study Area**

No	Village	House	Household	Above 18 Male	Above 18 Female	Under 18 Male	Under 18 Female	Total Population
1	Obo	92	92	125	169	34	46	374
2	Kinbya	188	193	250	293	165	200	908
3	Chiba (North)	424	406	703	784	147	193	1827
4	Chiba (South)	338	448	783	949	185	203	2120

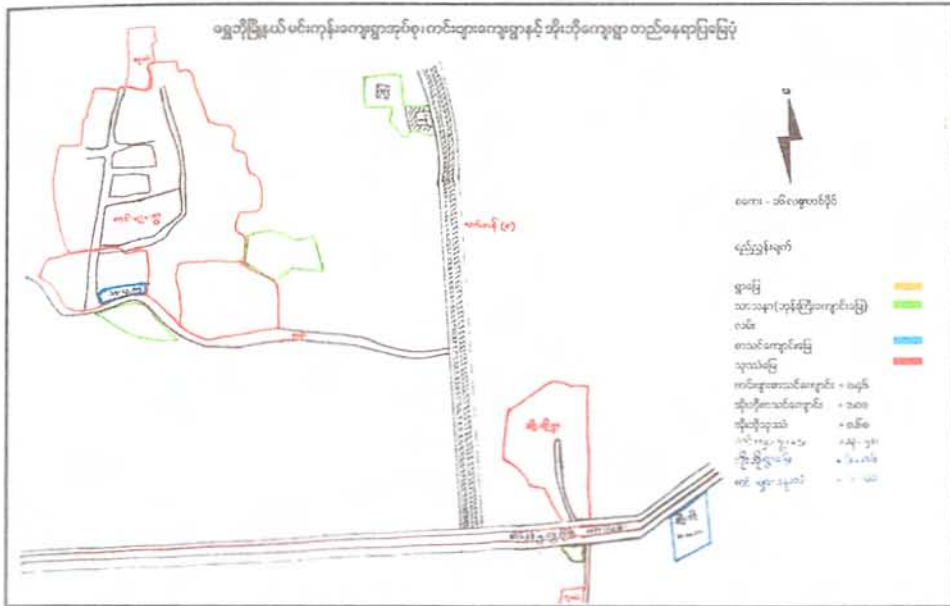


**Figure 4. Comparison of Compound, House, Household and Population of 4 Villages**

\*Source- Village Administration

Figure 4 shows that Obo village has compound (90), house (92), household (92), and population (374), while households usually have separate compound and house. Kinbya village has compound (151), house (188), Household (193), and population (908), while (37) houses have no sperate compound and (5) households have no separate house. Chiba (North) village has compound (340), house (424), Household

(406), and population (1827), while (84) houses have no sperate compound and (18) houses have no resident. Chiba (South) village has compound (252), house (338), Household (448), and population (2120), while (76) houses have no sperate compound and (10) houses have no sperate house.



**Figure 5. Location Map of Obo and Kinbya Villages**

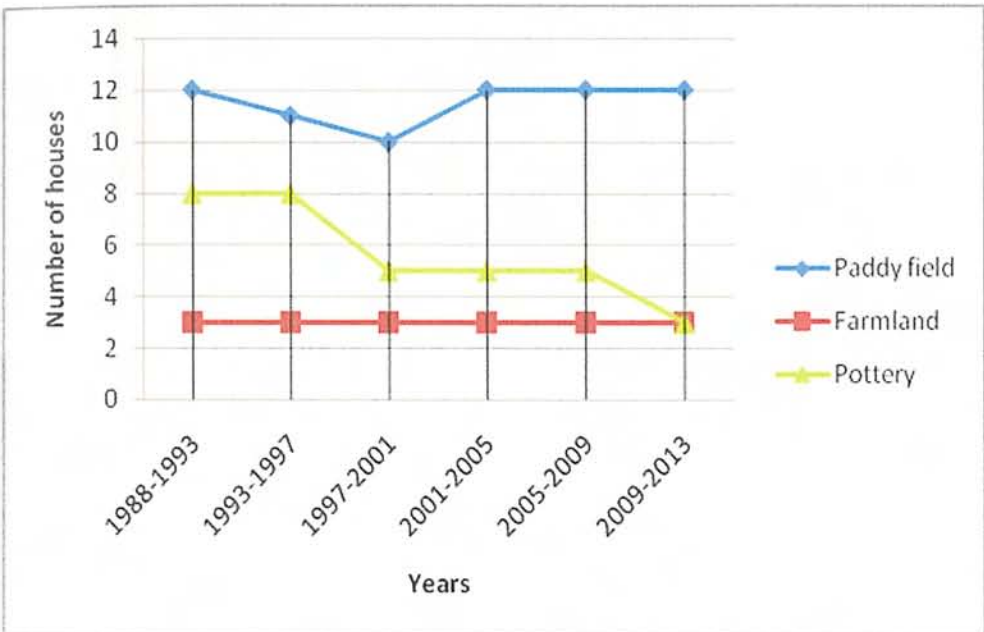
**5.1.1 Obo Village**

Obo village lies 1.5 miles to the west of Shwebo Township. During Alaungmintaya’s (U Aungzeya) reign Pottery Officer U Toke invite the villagers to test the soil which is the best earth for making pots near the Shwebo Capital. To know of the best earth for making clay, and an area to the south of the Shwebo Capital was chosen to set up a village of pottery workers. Over time the earth around there became useless, while pungent smells from pottery kilns often wafted into the city. So the village was ordered to relocate and present day Obo was established. Once at a pottery competition held in U Aungzeya's reign the village was declared champion in pot (အိုးဖိုလီ) which then derived into Obo (အိုးဖို).



According to social mapping of Obo village has three social classes. The upper class of owners of paddy land, motorbikes and houses. The middle class with daily income is house owners. The lower class of odd job takers lives in squatter shelters by the roadside. The middle class is the most numerous at that village. At Obo the housing plots are moderately wide and the houses are moderately spaced from another.

Obo village has different types of livelihood, like, paddy growing and other farming, pottery, and taking up any available job. Most residents in Obo village are prospective daily-wage earners for any job.



**Figure 6. Livelihoods of Household in Obo Village**

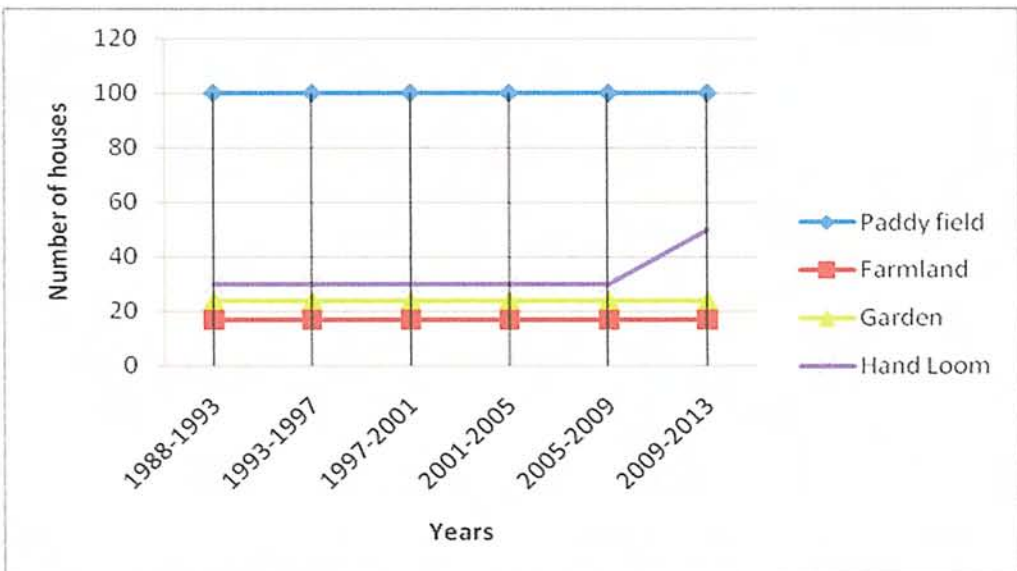
\*Source- Village Administration

Figure 6 gives livelihood patterns 1988-2013 of local people at Obo village. It shows: livelihoods on paddy field gradually lessen in 1988-1993, to reach the lowest in 1997-2001, then to gradually increase in 2001-2013. Livelihoods on farmland do not change. Livelihoods in pottery dive in 1993-1997, to reach a through from 1997-2001.

### 5.1.2 Kinbya Village

Kinbya village is situated about two miles west of Shwebo Township. During Alaungmintaya's reign a sentry post was set up at the western gate of the city area. The village founded there later on was known as village with sentry personnel (ကင်းဝင်း), which then derived into Kinbya village (ကင်းဖျား). Oral history says Kinbya village has evolved from Obo village. The Japanese Colonization (1941-1948) had an abundance of bad hats, and Obo village on Shwebo-Seikkhun main road often falls victim to robbery. So the rich people shifted to a new site which was difficult of access via the main road, and thus appeared Kinbya village. Kinbya village has various forms of livelihood exist, namely; paddy growing, agriculture other than paddy, gardening, working on traditional looms and work as a daily-wage earner.

There are three social classes at Kinbya village. The upper class consists of owners of paddy land, motorbikes, hand loom or paddy marketers and house owners. The lower class with daily income consists of garden owners and house owners. The lower class is odd job takers. The middle class has the most numerous members in that village. Kinbya with housing plots are moderately wide and the houses are moderately spaced from one another.



**Figure 7. Livelihoods of Household in Kinbya Village**

\*Source- Village Administration



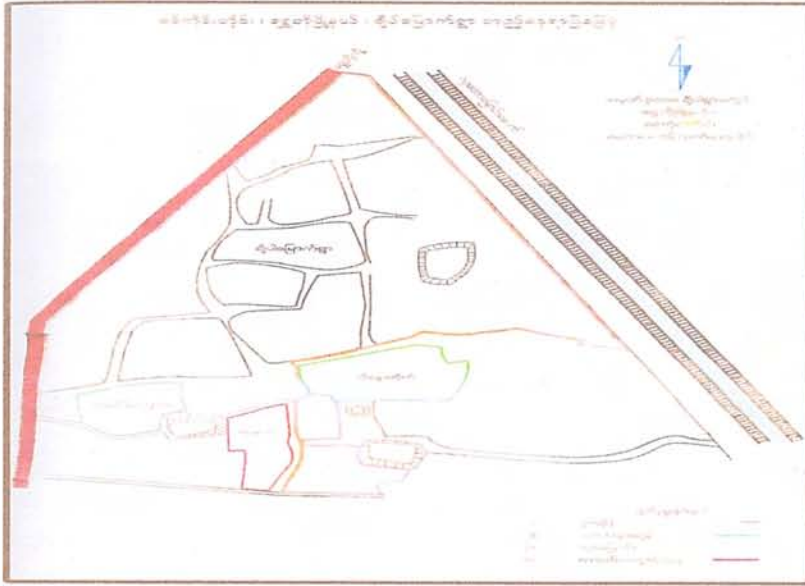
Figure 7 gives livelihood patterns 1988-2013 of local people at Kinbya village. Livelihoods on paddy field, farmland and garden do not change. But livelihoods of handloom operation rise sharply in 2005-2009, reaching topmost from 2009-2013.

### 5.1.3 Chiba Village

Chiba village lies about three miles to the west of Shwebo Township. It was founded by ruler Thadoe Minkhaung, even before Alaungmintaya. During Thadoe Minkhaung's reign Chiba village was one and only, and its background history has different versions according to oral history. A version goes: At that time there were three women well-known for their working skill of loom, namely, Mae Saw, Mae Hla and Mae Mya. Thadoe Minkhaung fell in love with Mae Mya. His Senior Right Sitke (second-in-command of the military) U Cakka had a son named Maung Thein Tan who was serving as Right Sitke. Informed that Maung Thein Tan and Mae Mya were in love, Thadoe Minkhaung sent Maung Thein Tan and fighters to Tagaung area to suppress the enemy. Meanwhile Thadoe Minkhaung's advances were rejected by Mae Mya. He, suspecting her real lover was Maung Thein Tan, sent him again to the Chin Hills on an expedition. On returning home in victory, Maung Thein Tan was assassinated on the way thanks to the scheming of Thadoe Minkhaung. Learning of his death, Mae Mya built a Myatheintan Pagoda with the permission of the ruler. However Thadoe Minkhaung ordered Mae Mya to weave a silk lungji giving her some silk yarn, and at the same time asked another to take away that yarn in stealth. So Mae Mya weaved a cotton lungji only as she was too poor to replace the stolen silk yarn. Feigning his fury on receiving a simple cotton lungji, Thadoe Minkhaung had her executed. Since that time the village has been known as Chiba (ချည်ဝါ), but the vernacular spelling in use today is Chiba (ချီဝါ).

Again, another version goes: In Thadoe Minkhaung's reign royal attendants used to carry royal children around. Sometimes they made the young ones walk on the ground by themselves, resulting in royal children's crying out 'Chiba Chiba' (ချီဝါ ချီဝါ). Hence the origin of Chiba name. Yet again, ancient Myanmar warriors used to carry supplies of non-staling cakes on their long march. Chiba village was the producer of

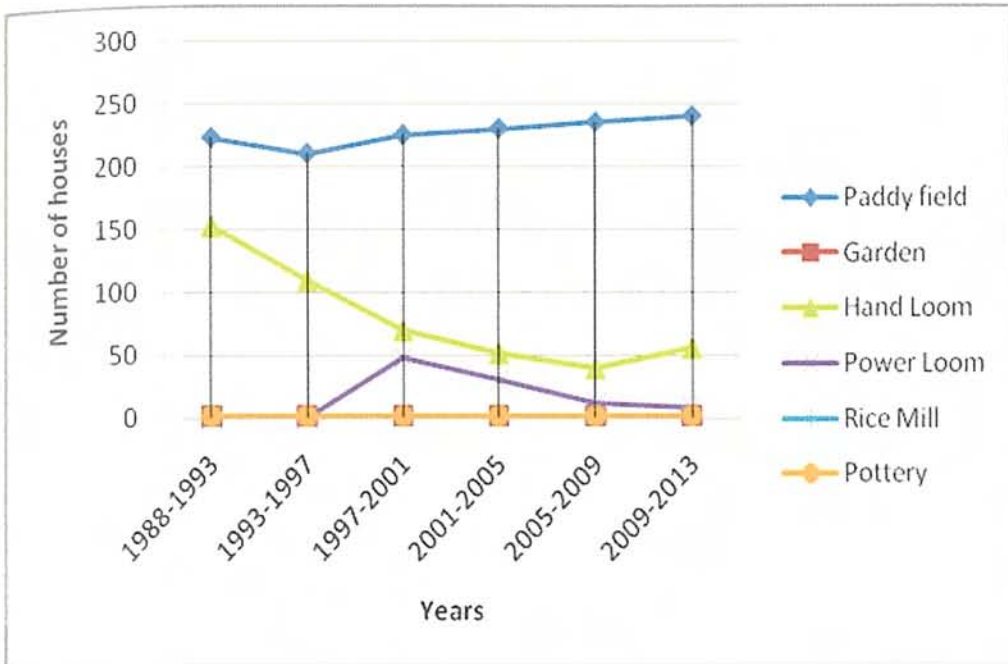
is divided into two villages are Chiba (North) and Chiba (South). Long ago, a newly built village usually had a pagoda, monastery and water tank at its top. Present day Chiba (South) has a pagoda, monastery and water tank at its top so it is assumed to be the original Chiba, while Chiba (North) is a derivative to it.



**Figure 8. Location Map of Chiba (North) Village**

According to social mapping of Chiba (North), there are three social classes. In the upper class are those with good economic activities working above 10 acres of paddy land. The middle class is those owning less than 10 acres of paddy land, and loom operators. The upper and middle classes consists of owners of motorcar, motorcycle and marketers of paddy or house owners with daily income. The lower class comprises odd-job takers. At Chiba (North) the middle class has the most numerous members. Inside the village, upper class household have houses in the main middle street or the eastern road. Most of middle class household live in Western Street and lanes and the lower class household live in houses at the fringes of the village. Chiba (North) with large housing plot have the houses thinly scattered.

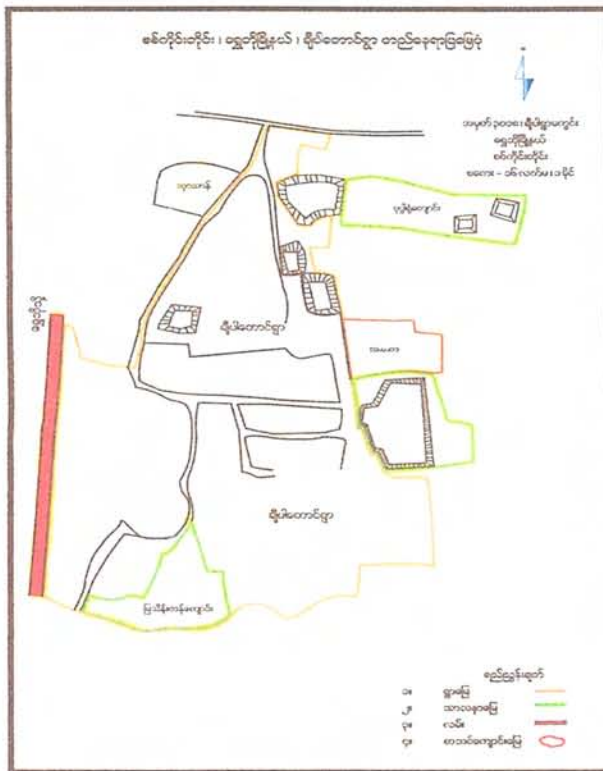
Chiba (North) village has various forms of livelihood exist, namely; paddy growing, agriculture other than paddy, gardening, looms, pottery and work as a daily-wage earner.



**Figure 9. Livelihoods of household in Chiba(North) Village**

\*Source- Village Administration

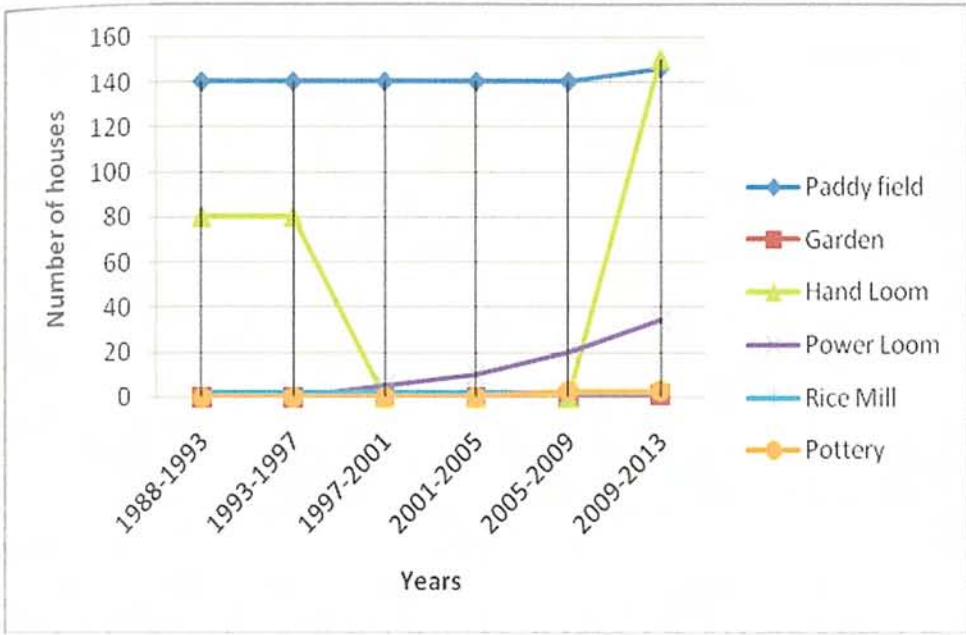
Figure 9 shows that livelihood patterns 1988-2013 of local people at Chiba (North) village. Livelihoods on paddy field gradually lessen in 1988-1993 to reach the lowest, then rebound and reach the highest in 2005-2013. Livelihoods in pottery do not change. Livelihoods in handloom operation dive in 1988-1993, gradually increase from 2005-2009. Livelihoods in mechanical loom operation increase in 1993-1997, then gradually lessen until 2009-2013.



**Figure 10. Location Map of Chiba (South) Village**

The Chiba (South) village has three social classes. The upper class consists of owners of paddy land, motorcar, motorcycle, and power loom, marketers of paddy or house owners. Middle class consists of owners of motorcar, motorcycle and marketers of paddy or house owners with daily income. The lower class comprises odd-job takers. The middle class has the most numerous members in that village. Chiba (South) with smaller housing plots have the houses standing more closely.

Chiba (South) village has various forms of livelihood exist, namely; paddy growing, gardening, looms, rice-milling and work as a daily-wage earner. Figure 11 shows that livelihood patterns 1988-2013 of local people at Chiba (South) village. Livelihoods on paddy field gradually lessen in 2005-2009. Livelihoods of handloom operation dive in 1993-1997, gradually increase from 2005-2009, and reach highest in 2009-2013. Livelihoods of mechanical loom operation rise in 2009-2013, then gradually rise until 2009-2013, their highest.



**Figure 11. Types of Livelihood in Chiba(South) Village**  
 \*Source- Village Administration

## 5.2 Natural Capital

Natural Capital is created when human beings use natural resources in adaptation to make their living possible. Natural Capital refers essentially to the resources found in the natural environment. These include land, water, river, air quality, soil, marine life, grasses, animals, trees, biodiversity, as well as the biophysical processes that are needed to sustain them. Out of the natural resources, only those compatible with the local livelihoods are use Obo, Kinbya, Chiba (North) and Chiba (South) villages, being dependent on agriculture for their livelihoods, mainly use land, climate, water, soil, flora and fauna out of the natural resources.

### 5.2.1 Land

Obo, Kinbya, Chiba (North) and Chiba (South) villages lie in Shwebo Township, which in turn falls in the wide plains of the Dry Zone in Central Myanmar. Its elevation is 350 feet above sea level. The rectangular Shwebo Township lies between the Ayeyarwady and Mu river-basin. Kinds of agricultural land of Shwebo Township



are paddy land, farm land for crops other than paddy, silty land, and garden land. Out of a total (152360) acres of agricultural land in Shwebo Township the paddy land accounts for (114875) acres, farm land for crops other than paddy (37208) acres, silty land (253) acres and garden land (24) acres. Paddy land is major among different kinds of farm land, and most of the paddy land and garden land lie to the west of Shwebo Township and to the east of Mu River. That paddy land is too sticky that it remains waterlogged during the monsoon. Most of the farmland for crops other than rice and silty land lies to the east of Shwebo Township. The paddy land at Chiba (North) and Chiba (South) villages is uneven so human power is mainly used to grow paddy. Ownership of land is hereditary. If it is transferred from parents to children no deeds are required; but they need to be made on transference of land ownership to others and are prepared with the help of buyer, seller, and village committee chairman and land survey personnel.

Chiba (North) village there is a few potters who make use of clay, a natural resource. They produce flower vases and traditional flower pots to welcome Myanmar New Year. Those female potters used to get their clay out of old tanks and ditches but now hire workers to get the clay for fear of leeches living in those tanks and ditches. The potters do not work during the monsoon as newly made pots are not easy to dry up then. Working on self-manageable basis, they produce about 100 vases a day. Newly made pots are left to dry up in sunshine; next day they are baked the whole night in a fire made of paddy husks, straw and dried cow dung, resulting in semi-manufactured pots. These semi-manufactures are sold in Shwebo Township at kyats 40 apiece. These goods, on becoming manufactured products after being decorated in enamel paint, are sold at kyats 500 apiece. The potters are skilled enough to produce finished products but the brokers are unwilling to buy them. But a few finished products of there are bought by local villagers at kyats 500 apiece, mostly in December.

Sand extraction and marketing is carried out at Chiba (North) and Chiba (South) villages. This is not a livelihood per se, but taken up by people with monetary means for extra income, through use of machines on Mu Canal bed when the water in it has dried up. Sometimes this sand is given for free to be used in village for free to be used in village development works.



**Figure 12. Gathering sand in Mu Canal**

Obo village has five pottery business people. This generational occupation cannot be a livelihood to be depended on by a family. Clay for pottery is obtained by themselves from the ponds nearby. To make pots, a mixture of silty earth (lying at the pond's center) and dark compact soil (found in the pond's sides) is used. Pottery includes production of toddy containers and Thingyan (Myanmar New Year) pots. The former sells more, out of 60 odd pieces of pottery produced per day only in summer and the cold season. Based on unstable income at home, pottery is usually carried out by housewives and female family members. The current new generation is unwilling to take up pottery because it is not year-round occupation and dirty work handling clay. Pottery is not done in the rainy season when gathering of clay and drying of pottery in sunshine is not convenient. Outside of the pottery season the locals follow agricultural work, shop keeping, or work as daily-wage earners.

In 2011 the government adopted the eight programs for rural development and alleviation of poverty, the number three of which calls for the development of small scale industries in rural areas. Yet those engaged in such an industry cannot subsist on it alone. To make both ends meet, they work for daily wages in the fields during planting and harvesting seasons. When daily-wage work is not available, they would turn to small scale industries. For the development of small-scale industries in rural



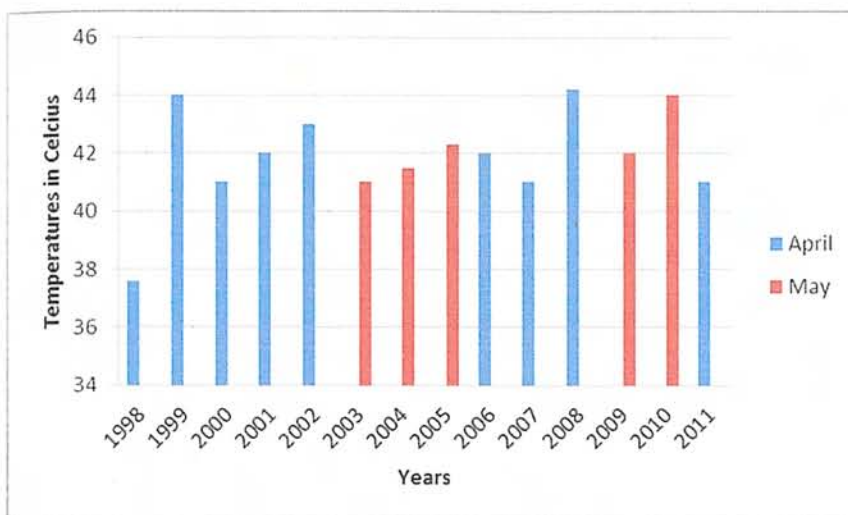
areas technologies; loans to serve as capital and development of markets for their products are needed.

### **5.2.2 Climate**

For human beings and environment the climate is the most relevant factor to human life for its being connected to them directly or indirectly. Human beings have different forms of subsistence based on climate. Their shelter, clothing, communications and lifestyle have direct relationship with their local climate, and their agricultural productivity is largely influenced by it. Obo, Kinbya, Chiba (North) and Chiba (South) villages, lying in the Dry Zone of Central Myanmar, usually have their climate divided into three parts, namely,

- (1) Summer (March to May)
- (2) Rainy Season (June to October)
- (3) Cold Season (November to February)

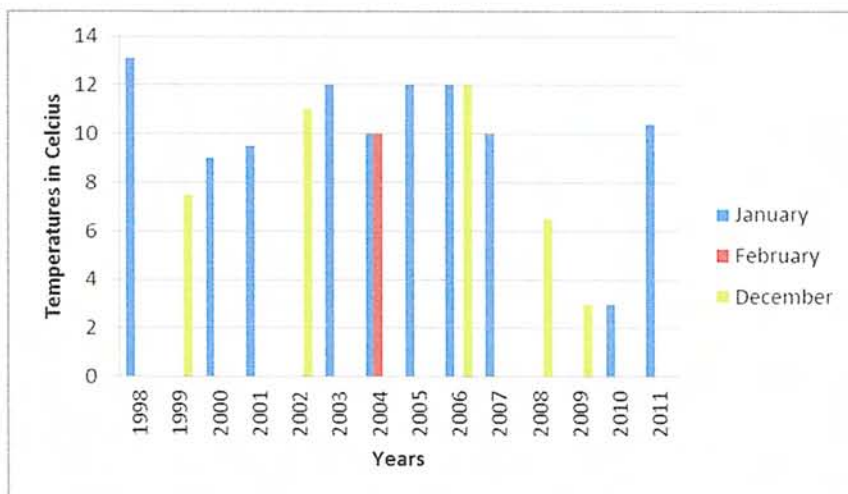
Shwebo Township lies in the path of south-west monsoon. It rains well on its passage over Rakhine Yoma range but little over the Dry Zone plains. Shwebo Township has a hot climate with scant rainfall. So its crops dictated by the climate are grains (paddy, wheat, maize), edible oil crops (groundnut, sesame, sunflower), beans and pulses (chick pea, lablab bean, pigeon pea, mung bean, green peas, and blue phaseolus lunatic beans), and industrial crops (sugarcane, virginia tobacco, long staple cotton). Paddy is the major cereal being grown in accordance with the local land, water and climate in Obo, Kinbya, and Chiba (North) and Chiba (South) villages.



**Figure 13. Description of Annual Highest Temperatures during 14 Years in Shwebo Township**

\* Source: Meteorology Department, Shwebo Township

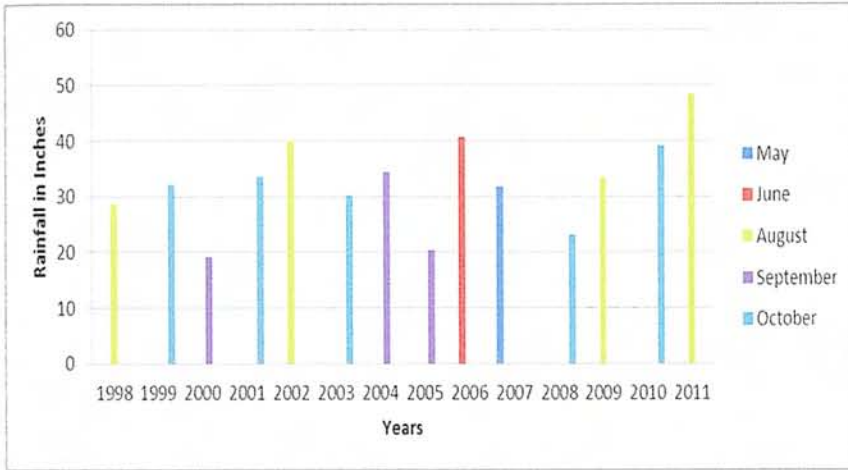
Figure 13 gives: annual highest temperature happens in April, in 9 out of 14 years; in May in 5 out of 14 years. Annual highest temperature over 14 years happens in 2008.



**Figure 14. Description of Annual Lowest Temperatures during 14 Years in Shwebo Township**

\* Source: Meteorology Department, Shwebo Township

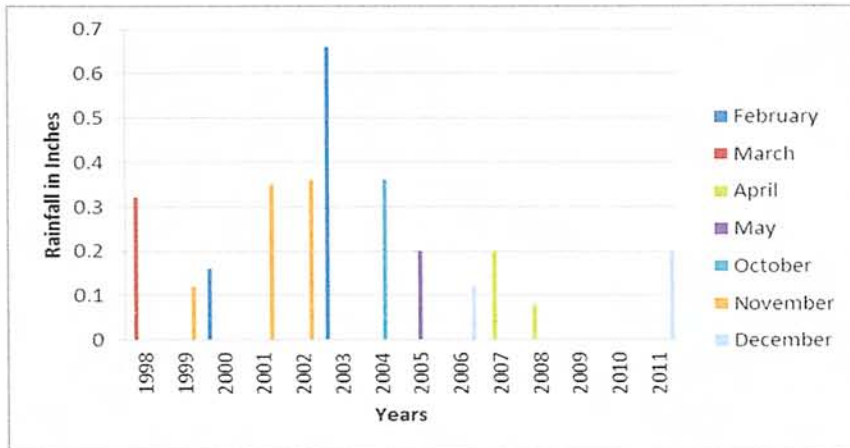
Figure 14 gives: annual lowest temperature happens in January in 10 out of 14 years and May in 5 out of 14 years. Annual lowest temperature happens jointly in January and February 2004, and also in December and January 2006.



**Figure 15. Graph of Annual Highest Rainfall during 14 Years in Shwebo Township**

\* Source: Meteorology Department, Shwebo Township

Figure 15 gives: annual highest rainfall happens for a record in August 2011 in 14 years. Annual highest rainfall happens in August and October.



**Figure 16. Graph of Annual Lowest Rainfall during 14 Years in Shwebo Township**

\* Source: Meteorology Department, Shwebo Township

Figure 16 gives: annual lowest rainfall happening in 2009 and 2010, in 14 years.

### 5.2.3 Water

Water use plays an important role in agriculture development Obo, Kinbya, Chiba (North) and Chiba (South) villages which lie in the belt of scant rainfall. Paddy thrives well in hot and humid climate. During the time of growth, paddy needs to have weather with average temperature of 70° F plus and a rainfall of 45-65 inches. Shwebo Township could be divided into irrigated area and rain-drenched (moekaung) area. The former paddy is fed with water from Mu Canal and Maha Nanda Lake. Rain-dependent agricultural area is prescribed to be moekaung area. Obo, Kinbya, Chiba (North) and Chiba (South) villages are included in the irrigated area. Shwebo Township in the dry zone has very few creeks with year-long water. Streams and creeks there have water flow during the rainy season but are dried up in summer. The Mu river-basin receives year-long water because its namesake river, like the Ayeyarwady, extends northward enough to receive water from a good rainfall therefrom. The remaining streams and creeks are mostly dry creek.

Obo, Kinbya, Chiba (North) and Chiba (South) villages are mainly dependent on the Mu River for their water. It forms a boundary between Shwebo Township and Depayin Township to the west of it. Significant to form an irrigation system, the Mu River could be called the lifeblood of Shwebo Township with its headwaters in Banmauk Township, Katha District, the Mu River flows north-south across Shwebo District to join the Ayeyarwady River near Myinmu Township. Before the Kabo Dam was built, the Mu River was even used to float down logs and bamboo and for plying of riverine craft. Such transportation and logging activities were no longer possible since 1901 when Kabo Dam construction started. The Mu River has an immense volume of water in the rainy season so that it often spills over the banks to erode soil. But in summer, there is less water and its water surface is expansive. The Mu River, with about 18 miles of its length inside Shwebo Township is forced to follow a meandering course because it has to mostly flow cross the plains and has a large volume of water in the rainy season.

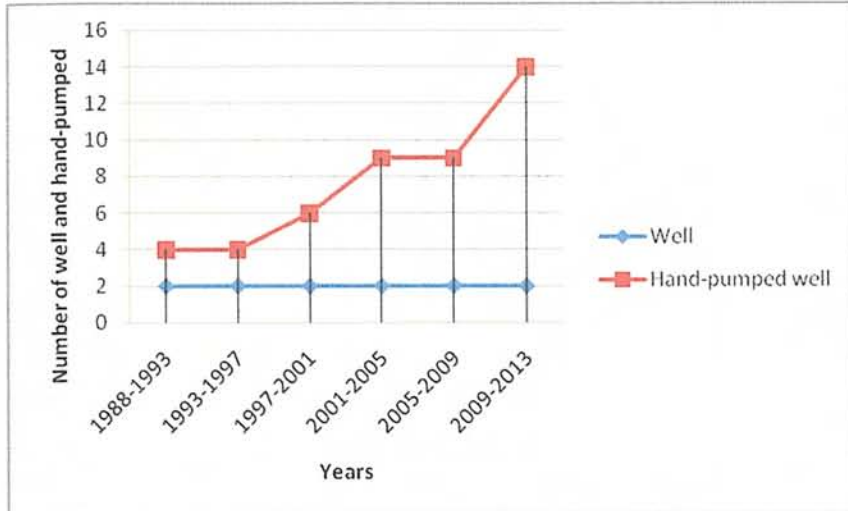
The rainfall at Obo, Kinbya, Chiba (North) and Chiba (South) villages is not enough for agriculture so they have to mainly depend on irrigated water for that purpose. Those villages lying to the west of Shwebo Township received irrigated water out of Kabo Dam via the Shwebo Myaungmataw (main canal). The Shwebo Myaungmataw near Kabo village is a diversion canal of Kabo Dam. Meant to give enough water to Shwebo Township agriculture, the main canal was first built in 1901 and completed in 1905 water from Shwebo-Myaungmataw flows by two diversion canals, 14 feeder canals, and 20 minors. The total length of canals is 149.46 miles. The irrigated area thanks to Shwebo Myaungmataw is 693 acres in Kanbalu Township, 30243 acres in Khin-Oo Township and 7949 acres in Shwebo Township. The Shwebo Myaungmataw itself is 143409 long. It has five Shwebo feeder canals, out of which Shwebo feeder canal No(6) is 52854 feet, Shwebo feeder canal No(2) is 25785 feet, Shwebo feeder canal No(6-Ka) 7861 feet, Shwebo feeder canal No(7) is 53400 feet, and Shwebo feeder canal No(7-Ka) is 16700 feet long. Obo, Kinbya, Chiba (North) and Chiba (South) villages rely on Shwebo feeder canal No (6, 6-Ka, 7, 7-Ka) for their irrigation and water of household use.



**Figure 17 (a & b). Well and Hand-Pumped Well**

Some people of Obo, Kinbya, and Chiba (North) and Chiba (South) villages store rainwater in large glazed pots for year-long use of boiling it for drinking.

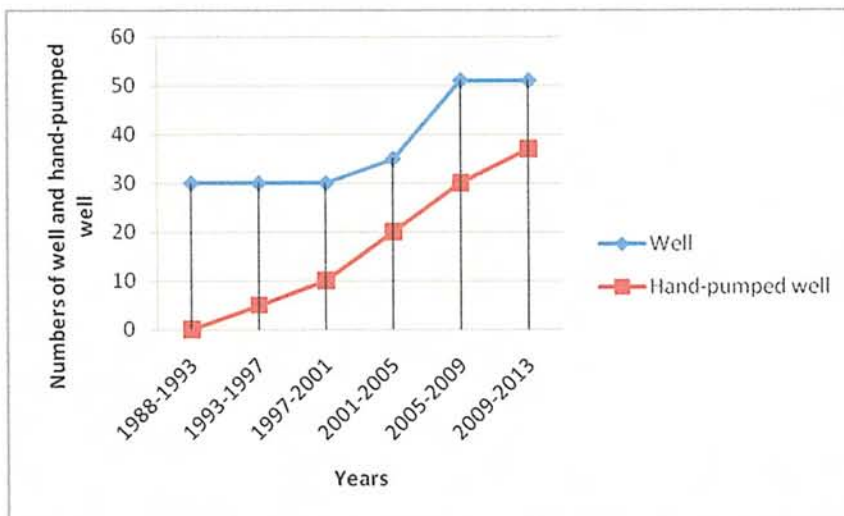




**Figure 18. Access of Wells and Hand-Pumped Wells in Obo village**

\*Source- Village Administration

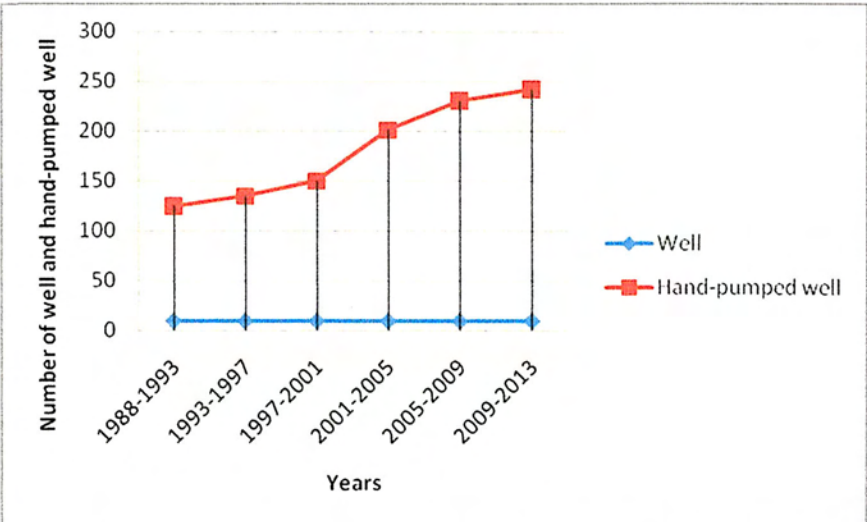
Figure 18 shows that use of a well does not change during 1998-2013, but that of hand-pumped multiples from 1993-1997, to reach the highest in 2009-2013.



**Figure 19. Access of Wells and Hand-Pumped Wells in Kinbya Village**

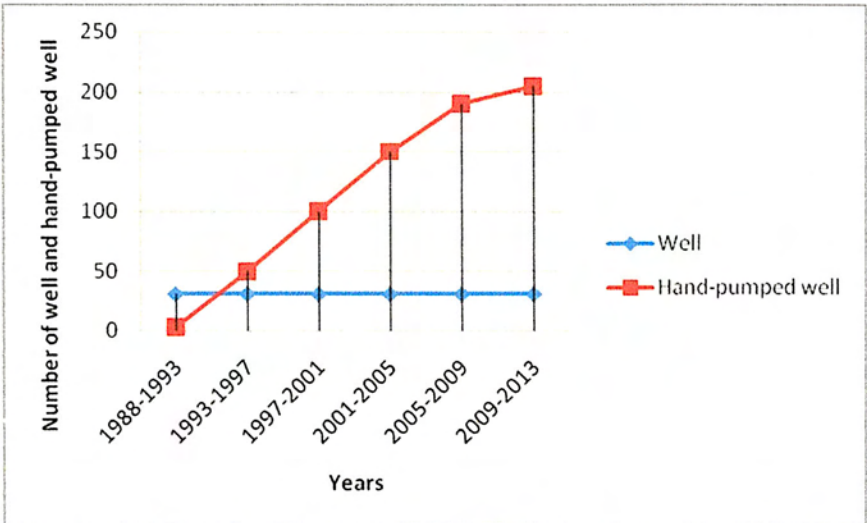
\*Source- Village Administration

Figure 19 shows that use of a well gradually increase from 1997-2001, and reach as the highest in 2009-2013. Use of hand-pumped increases from 1988-1993, to reach the highest in 2009-2013.



**Figure 20. Access of Wells and Hand-Pumped Wells in Chiba (North) Village**  
 \*Source- Village Administration

Figure 20 shows that use of a well stay the same from 1998-2013. But use of hand-pumped increases from 1988-1993, to reach the highest in 2009-2013.



**Figure 21. Access of Wells and Hand-Pumped Wells in Chiba (South) Village**  
 \*Source- Village Administration



Figure 21 shows that use of a well stay the same from 1998-2013. But use of hand-pumped increases from 1993-1997, to reaches the highest in 2009-2013.

#### 5.2.4 Soil

Soil is most important to farmers for their livelihood. The soil of Shwebo Township can be classified into five kinds, Meadow Alluvial Soil, Dark Compact Soil, Meadow Soil, Alkalio Soil, Red Brown Compact Soil, and Yellow Brown Forest Soil. Dark Compact Soil is mainly found in Obo, Kinbya, Chiba (North) and Chiba (South) villages. It usually occurs on old silt and volcano ash, composed of long-deposited silt added with clay and sand. This soil, about 40-50 feet in thickness, grows stickier with depth. And water cannot easily seep through. This soil is very sticky when damp, and develops fissures in dry weather.



**Figure 22. Chemical Fertilizers**

The soil at Obo, Kinbya, Chiba (North) and Chiba (South) villages, having been used continually for years, has become degraded, the farmers claim. With no time to be left aside, that soil needs to be remedied. Back in 2000 some spots needed to be scattered with one unit of fertilizer, but now five units of fertilizer are needed. Natural fertilizer is effective but enough of it is not available for purchase. Chemical fertilizers have to be used also, but the necessary amount of it varies from place to place. Moreover, as a

consequence of use of chemical fertilizers birds and fishes have become scarce, the farmers claim. They also say that Obo, Kinbya, Chiba (North) and Chiba (South) villages, with their less breeding of cattle and livestock, now have scarce humus for farming.

### 5.2.5 Flora and Fauna

The growth of flora in a certain area depends on water, land topography, climate and the type of soil. Obo, Kinbya, Chiba(North) and Chiba(South) villages, lying in the Dry Zone with scarce rainfall and hot climate, have no deep forests near them, but only pockets of tropical dry forest. This irrigated region of level plains has trees like *Acacia leucophloea* tamarind, rain tree, and mango but they are sparsely scattered. Again scattered among those big trees are xyrophytes such as, toddy palm, kantara, kyasharu, hsuphyu, cactus, and lead tree, often standing in the form of fencing. A few medicinal plants, like moonseed vine and yellow, white, and red plants (*zinywayseit*) also can be found. A few daily wage workers often gather red plants whole, to be sold at the traditional medicine shop in Shwebo Township. Owners of farmland can have firewood out of the trees they have grown on their land, but most people with no farmland have to buy firewood from sellers coming from Kyaukmyaung Township.



Figure 23 (a & b). Fishing

At the creeks and fields around Obo, Kinbya, Chiba (North) and Chiba (South) villages a variety of fishes, land crab, common moorhen, phaungtoat, the little egret, species of wild goose and snipe are found. There are also migratory birds. Poisonous snakes like viper and cobra exist, in addition to a great number of field mice.

### **5.2.6 Livestock Breeding**

Obo, Kinbya, Chiba (North) and Chiba (South) villages are engaged in growing paddies so their fields and ditches contain fishes, like, tilapia, eel. Farmhands used to fish in the ditches and streams, always successfully but this activity goes against the law, and they could be dealt with according to law. Yet they continue it in stealth, leading to a scarcity of fish, land crab and useful insects in the wet fields. Moreover, they often use Chinese-made electric devices to fish without regard for fishing season so that fish eggs, fry and useful insects also are killed. The problem is aggravated by the use of powerful insecticides, the local people say. Near the paddy fields duck breeders operate, some of them are local and some are outsiders. Migrant duck breeders have become because feed is cheap, but the ducks eat up insects, fish and land crabs living in the fields, and when they have entered and fed in the nurseries the former set up flagstuffs in the fields to show where nurseries lie. However duck herders can work in the fields after the harvest. At Obo, Kinbya, Chiba (North) and Chiba (South) villages, livestock breeding cattle, buffalo, pig, goat and poultry is followed on self-manageable basis, partly to support the villagers' farming work.

The locals' farming used to include breeding of cattle and milk cows as there were pastures on the sides of feeder canals but it has discontinued since 2000 when the pastures were changed into farmland. Moreover the paddy land over years have used up the soil and oxen are unable to struggle in the changed fields, so cheaper buffaloes are bred as they can negotiate the changed fields. Poultry rising has also lessened for fear that they might intrude into others' compounds and it will cost a lot to fence in the chickens. Pig breeding has also lessened since the era of Burma Socialist Program Party (1962-1988) when broken rice and bran became scarce thanks to the duty of paddy farmers to pay taxes in the form of paddy. Today there is a fish-breeding pond at Chiba (North) and Obo villages.

## CHAPTER VI

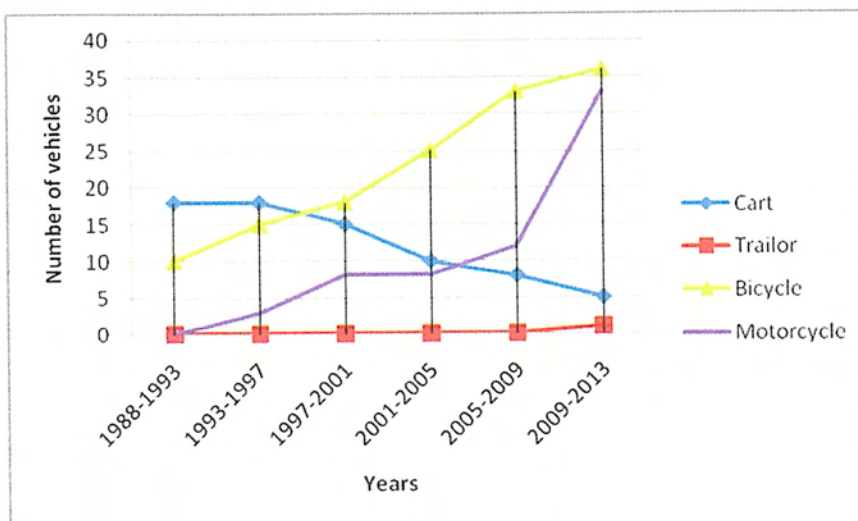
### PHYSICAL ASSETS AND CONTEXTUAL FACTORS

Physical Capital refers to basic infrastructure, services and equipment, sanitation, communications that are to support livelihoods. It is supportive of improvement in the conduct of livelihoods.

#### 6.1 Transportation and Communication Facilities

Obo village is about 1.5 miles and Kinbya village is about two miles from Shwebo Township. Chiba(North) and Chiba(South) villages are about three miles from Shwebo Township, so those villages can have communication with other towns and rural areas via Shwebo Township. Shwebo Township, lying on Shweboe-Myitkyina railroad and motor road, is accessible to cities in Upper Myanmar. Especially Shwebo Township has good communication by road. The Shwebo-Mandalay motor road to the south, 74 miles long, is serviceable year round. Shwebo Mandalay buses ply between the two terminals starting from either side once every hour of the day from 5 a.m. to 4 p.m. Private owned light trucks also ply on the same road, at kyats 2000 per head. The Shwebo-Wetlet motor road, veering off Shwebo-Mandalay road, is 22 miles long and has daily bus services. Other roads with daily bus services are: 100 miles Shwebo-Monywa road to the south, 23 miles 4 fur-long Shwebo- Kinn Oo road to the north, 27-miles Shwebo-Ye Oo road to the west, 17-mile Shwebo-Kyaukmyaung road to the east, 130-miles Shwebo-Kawlin road, and 7-mile Shwebo-Seikkhun road to the southwest by the side of which lie Obo, Kinbya, Chiba (North) and Chiba (South) villages. Shwebo-Seikkhun bus fare is kyats 2500 per head. These villages are accessible from Shwebo Township year round by foot, bicycle, motorcycle, or motor car. Thanks to Mandalay-Myitkyina railroad passing through Shwebo Township, Kinn Oo, Zeegon, Htangan, Kanbalu, Kawlin, Monhyin, Hoping, Moekaung and Myitkyina to the north, and Wetlet, Sagaing and Mandalay to the south are accessible to local people.

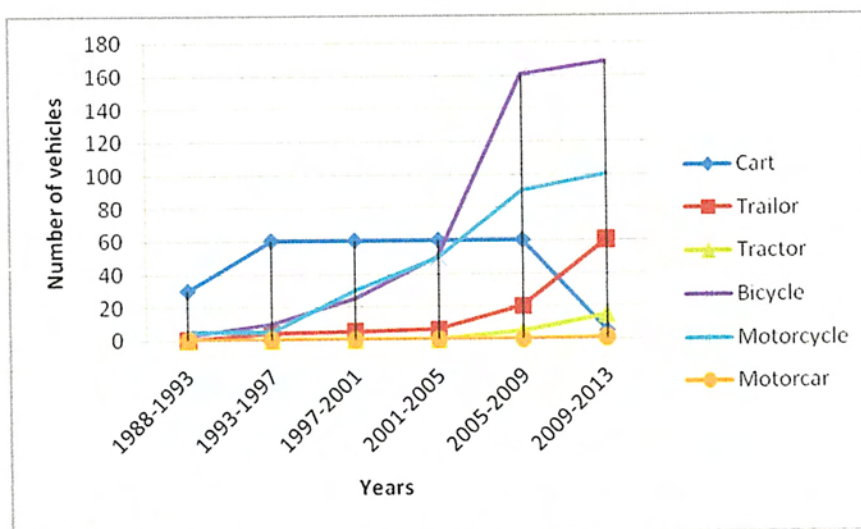




**Figure 24. Access of Vehicles in Obo Village**

\*Source- Village Administration

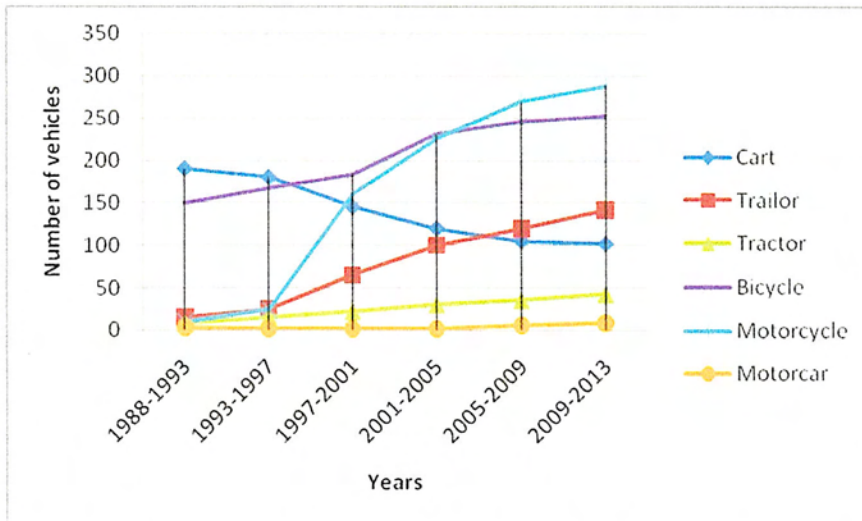
Figure 24 shows: At Obo village, use of trailers do not change. Use of carts decrease from 1993-1997, to reach the lowest in 2009-2013. Use of motorcycles and bicycle increase from 1988-1993, and reaches the highest in 2009-2013.



**Figure 25. Access of Vehicles in Kinbya Village**

\*Source- Village Administration

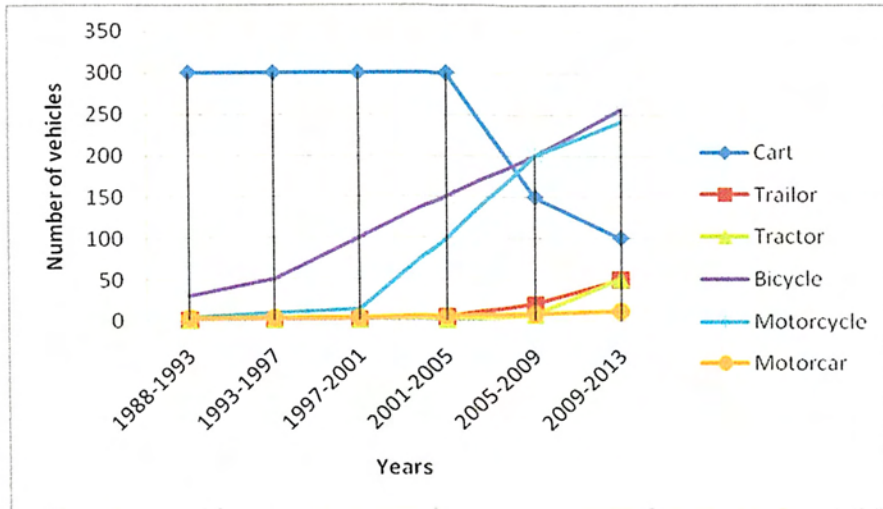
Figure 25 shows: At Kinbya village, use of mortorcar does not change; but use of carts decreases from 2005-2009, to reach the lowest in 2009-2013. Use of mortorcycles and bicycles increase from 1988-1993, and reaches the highest in 2009-2013. Use of trailer gradually increase from 1993-1997 and reaches the highest in 2009-2013. Use of tractor gradually increase from 1993-1997 and reaches the highest in 2009-2013. Use of tractor gradually increases from 2001-2005, and reaches the highest in 2009-2013.



**Figure 26. Access of Vehicles in Chiba (North) Village**

\*Source- Village Administration

Figure 26 shows: At Chiba (North) village, use of mortorcar increases a little only. Use of carts decreases from 1988-1993 and reaches the lowest in 2009-2013. Use of mortorcycles and bicycles increase from 1988-1993, and reaches the highest in 2009-2013. Use of trailer and tractor increase from 1988-1993 and reaches the highest in 2009-2013.



**Figure 27. Access of Vehicles in Chiba (South) Village**

\*Source- Village Administration

Figure 27 shows: At Chiba (South) village, use of mortorcar increases a little only. Use of cart dives decreases from 2001-2005 and reaches the lowest in 2009-2013. Use of mortorcycles and bicycles increase from 1988-1993, and reaches the highest in 2009-2013. Use of trailer and tractor gradually increase from 2001-2005 and reaches the highest in 2009-2013.



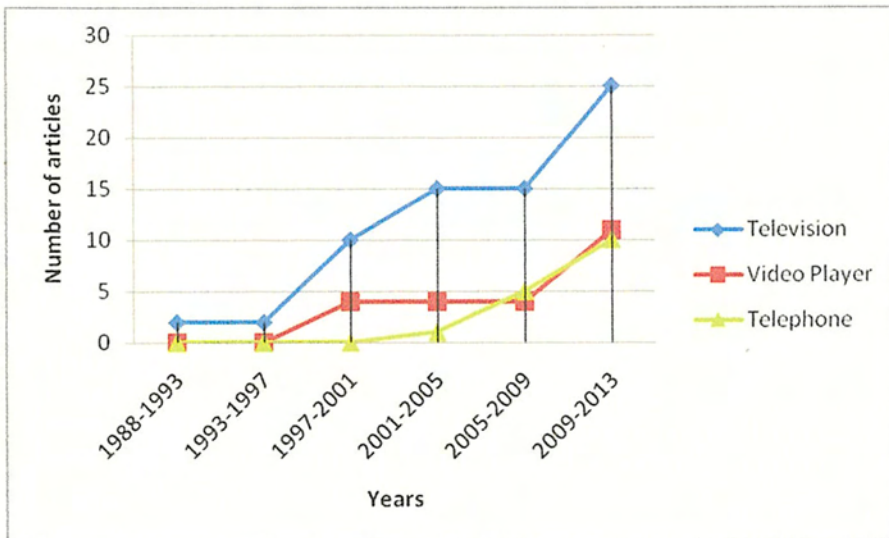
**Figure 28 (a &b). Shaves of the Paddy Field**





**Figure 29. Winnowing Paddy**

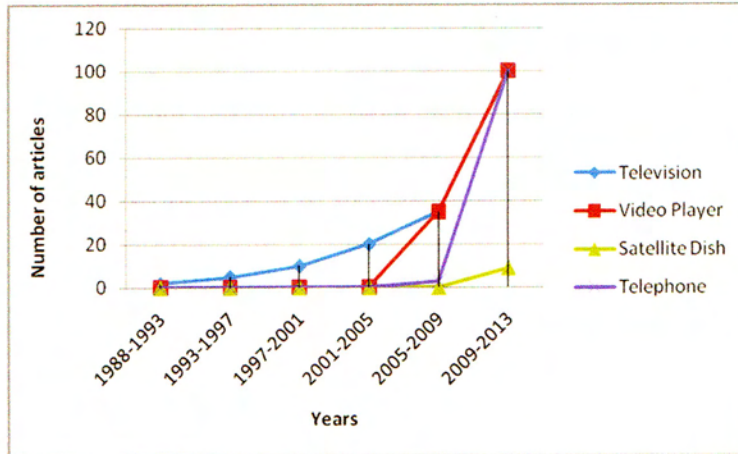
Use of telephones dates back to about 2003 at Obo, Kinbya, Chiba (North) and Chiba (South) villages. For information media the locals of Obo, Kinbya, Chiba (North) and Chiba (South) villages have access to channels like MRTV, Myawaddy, MRTV (4) and Channel (7). Radio Channels are in use but newspapers and journals are not available yet.



**Figure 30. Access of Communication Articles in Obo Village**

\*Source- Village Administration

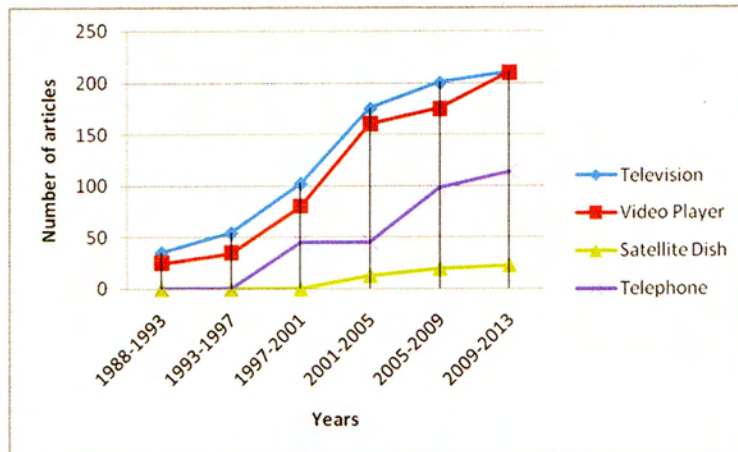
Figure 30 shows: At Obo village, use of television, video player and telephone increases year on year; use of television is the most numerous and that of telephone is the least.



**Figure 31. Access of Communication Articles in Kinbya Village**

\*Source- Village Administration

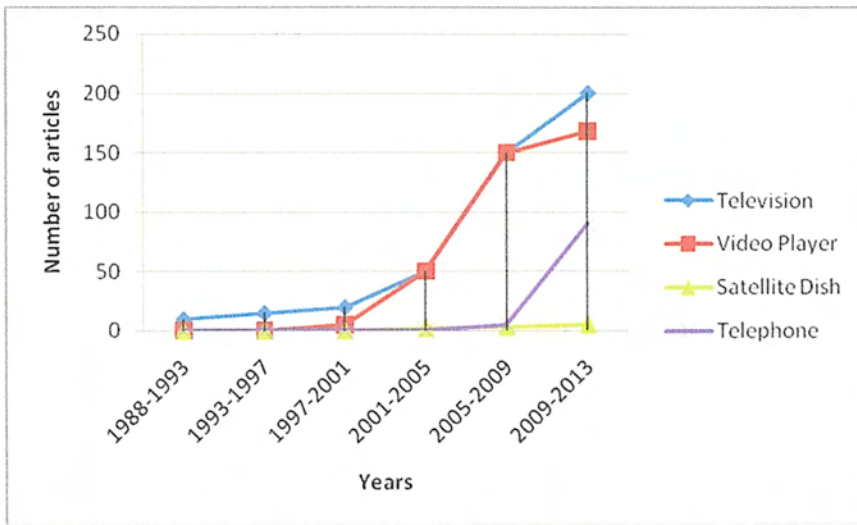
Figure 31 shows: At Kinbya village, use of television, video player and telephone increases year on year; use of satellite dish is the least numerous.



**Figure 32. Access of Communication Articles in Chiba (North) Village**

\*Source- Village Administration

Figure 32 shows: At Chiba (North) village, use of television, video player and telephone increases year on year; use of satellite dish is the least numerous.



**Figure 33. Access of Communication Articles in Chiba (South) village**  
 \*Source- Village Administration

Figure 33 shows: At Chiba (South) village, use of television, video player and telephone increases year on year; use of satellite dish is the least numerous.

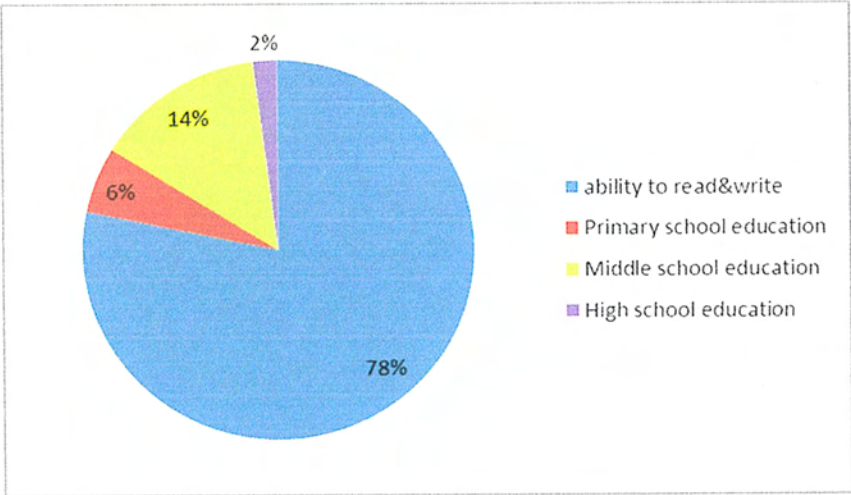
Most of the local farmers sell their paddy to brokers. Though they wish to deal with the rice mills they have no motorized transport to carry the paddy. A few farmers go to the rice mills to sell their paddy for a little more income. Moreover, when paddy farmers do not have enough labor power they have to hire tractors, which are not easily available. Even when they get to hire them the rental fees are usually more than normal.

## 6.2 Education Facilities

Obo village has a Basic Education Primary School, situated 1.5 miles north of Shwebo-Seikkhun motor road. The school compound is 363 feet and 120 feet, which was donated by a well-wisher. The school building was built as donation by the Obo Monastery standing close by. The school, opened on 3-10-1991, has no electricity.

For drinking water and sanitation Mu river water has to be bought at kyats 500 a barrel. The Union Solidarity and Development Association had tried to dig an artesian well to donate but its efforts were in vain because of the soil condition of this high ground area. At Obo village, children’s education would depend on the economy of the family. Lower class of Obo village are forced to take up any job that comes by; as a result their schoolchildren cannot go to school as they have to baby-sit their under five years siblings. Sometimes those schoolchildren would bring their brother or sister to the school, where on the teacher has to baby-sit it as well, according to a female Primary Assistant Teacher of Basic Education Primary School, Obo Village.

Literacy levels of Obo villagers goes: those with bare reading and writing skill (278); those with Primary School level education (20); those with Middle School level education (50); those with High School with level education (7); those with University education (7); and (2) graduates, it was studied. See Figure 24 for the literacy levels in Obo village. Only the Obo villagers with economic means can send their children, upon completing Primary School education, to Shwebo Township to take up Middle School education. Moreover, that requires vehicle transportation, better clothes and accessories, and time. Thus villagers of humble means only expect some help from their children in their livelihood upon completion of Primary School education.



**Figure 34. Literacy Levels in Obo Village**

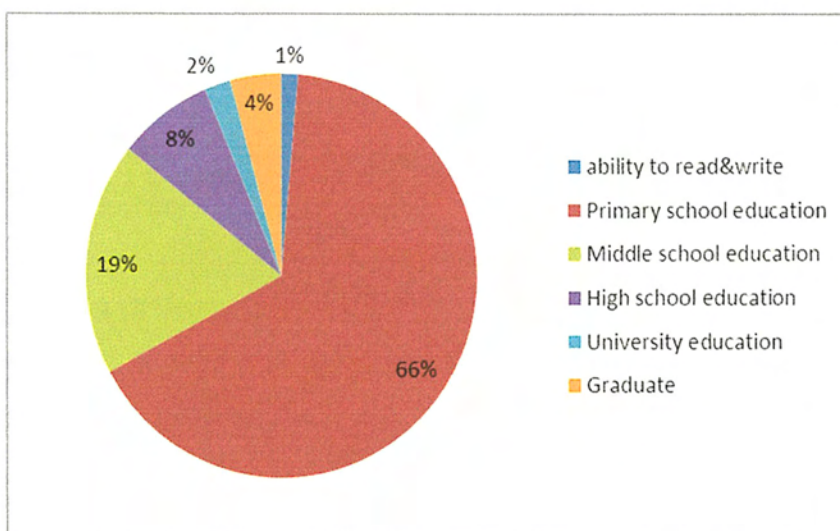
\*Source- Village Administration



Figure 34 shows: At Obo village, those who have fundamental education, at 78%, are the most numerous. Those who have middle school education, at 14% are the second most numerous and those who have high school education at 2% are the lowest. Therefore, by literacy level of most residents those who have fundamental education are the most numerous.

Kinbya Village has a Basic Education Primary School, opened on (2.5.1954) on self-reliance basis. The school compound is 405 feet in length, 120 feet and 112.5 feet in width. The schools with its possessions were turned over to the Department of Basic Education on 31-5-1982. It has a total of 45 students in, 2011-2012 school years, all from Kinbya village. This school without electricity has a useless dilapidated well. It uses water from the monastery standing close by.

Literacy status of Kinbya locals goes: those with mere reading and writing skill (11); those with Primary School level education (517); those with Middle School level education (147); those with High School with level education (762); those with University education (17); and (33) graduates, it was studied. See figure (25) for the literacy levels in Kinbya village. Most parents, however, allow their children who tire of schooling to help them in their livelihoods.



**Figure 35. Literacy Levels in Kinbya Village**

\*Source- Village Administration

Figure 35 shows: At Kinbya village, those who have primary education, at 66%, are the most numerous. Those who have middle school education, at 19% are the second most numerous and those who have fundamental education at 1% are the lowest. Therefore, by literacy level of most residents those who have primary education are the most numerous.

Chiba (North) village has a Basic Education Middle School, whose land of five acres was donated by a well-wisher. Basic Education Primary School, Chiba (North) Village, opened on (1.6.1955), became Affiliated Middle School in 1983. On (31.8.2009) it was opened it was opened as Middle School (Branch). In April 2013 it has become a full-fledged Basic Education Middle School.

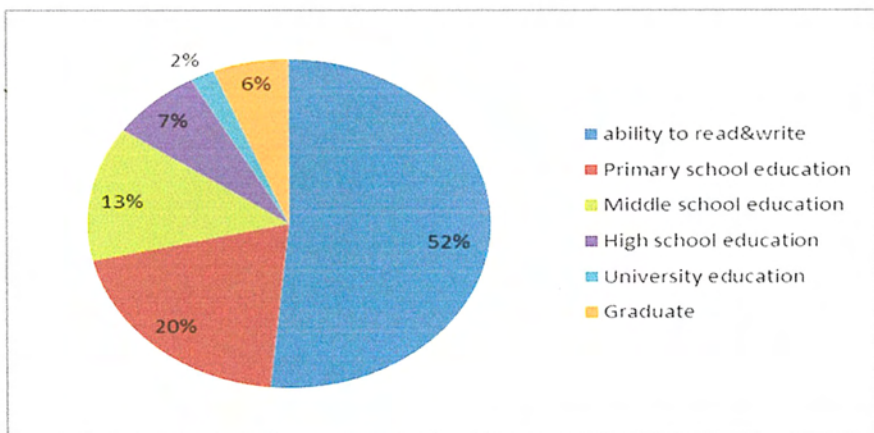
This school has three artesian wells and electricity. The schoolrooms are still without ceiling, so in very hot weather the classes are under the big shady trees. The school library has about 100 books. Two artesian wells are used for drinking water and the other is for sanitation. There are a seven-unit brick latrine and a latrine which is walled with bamboo matting. The school owns a total farmland of 19.69 acres whose proceeds become school fund. Some part of that land was private donation while other parts were government-repossessed land turned over to the school. Some local farmers of honesty have been allowed to grow paddies in those fields and are required to give to the school 10 baskets of paddy per acre of whatever strain of rice they have grown. Some schoolchildren come to school from the family field huts. Chiba (North) village has a Pre-Primary School opened by United Nations Children's Fund (UNICEF) in 1981. A Pre-Primary School, catering for about 30 children, but is attended by Chiba (South) children as well. The enrolment numbers up to about 50 children in summer as some Basic Education Primary School students are allowed in, from a minimum age of two years to a maximum age of seven years.





**Figure 36 (a&b). Pre-Primary School**

Chiba (North) village is usually bent on encouraging education of children. Literacy status of Chiba(North) locals; those with mere reading and writing skill (752); those with Primary School level education (290); those with Middle School level education (193); those with High School with level education (107); those with University education (29); (88) graduates and post graduates (5) it was studied. See Figure 32 for the literacy levels in Chiba (North) village. Local with economic means usually send their children who have completed Middle School education to boarding schools in Ye-Oo, Shwebo or Mandalay Township for fur the education or have the children who tire of schooling learn trades in a practical manners.



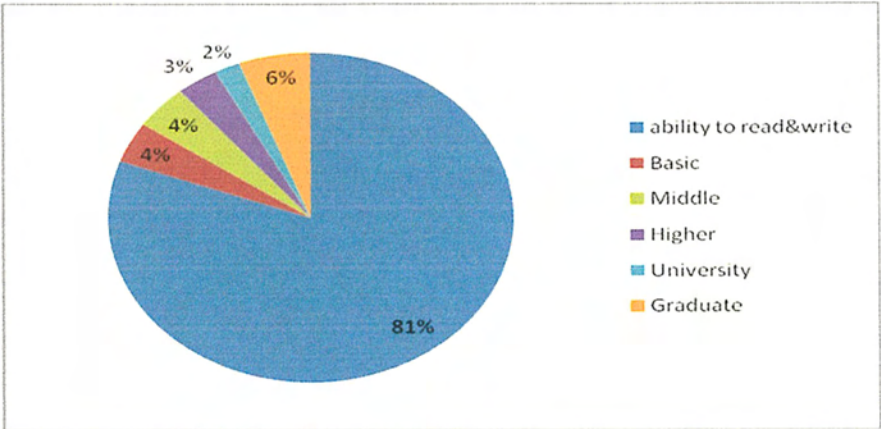
**Figure 37. Literacy Levels in Chiba (North) Village**

\*Source- Village Administration

Figure 37 shows: At Chib (North) village, those who have fundamental education, at 52%, are the most numerous. Those who have primary school education, at 6% are the second most numerous. Those who have university education at 2% are the lowest. Therefore, by literacy level of most residents those who have primary education are the most numerous.

Chiba (South) village has a Basic Education Middle School with compound area of 2.5 acres, opened on (1.6.1986). Originally a wooden building, the Basic Education Middle School now has a brick extension with four classrooms and an office. The brick building was first built in 1988 with funds coming from parents’ donations and brought to completion in1999.

Chiba (South) village is usually bent on encouraging education of children. Literacy status of Chiba(South) locals; those with mere reading and writing skill (1063); those with Primary School level education (53); those with Middle School level education (57); those with High School with level education (44); those with University education (27); (75) graduates and post graduates (2) it was studied. See Figure 33 for the literacy levels in Chiba (South) village. Local with economic means usually send their children who have completed Middle School education to boarding schools in Ye-Oo, Shwebo or Mandalay Township for fur the education or have the children who tire of schooling learn trades in a practical manners.



**Figure 38. Literacy Levels in Chiba (South) Village**

\*Source- Village Administration

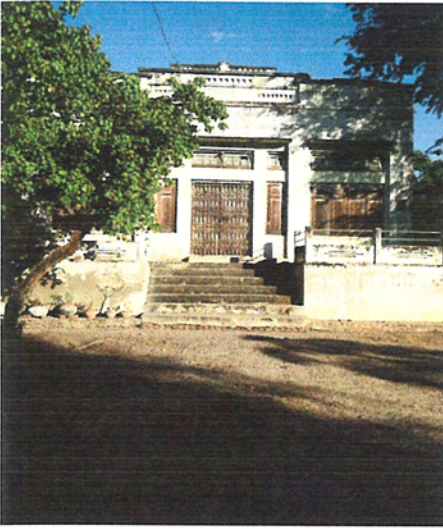
Figure 38 shows: At Chiba (South) village, those who have fundamental education, at 82%, are the most numerous. Those who have graduate education, at 6% are the second most numerous. Those who have university education at 2% are the lowest. Therefore, by literacy level of most residents those who have primary education are the most numerous.

All the schools have enough classrooms and benches. The main condition to enroll at the school is the student to be must be of prescribed age. The schools were provided with text books for free by the government in 2011-2012 academic years.

### **6.3 Housing Type**

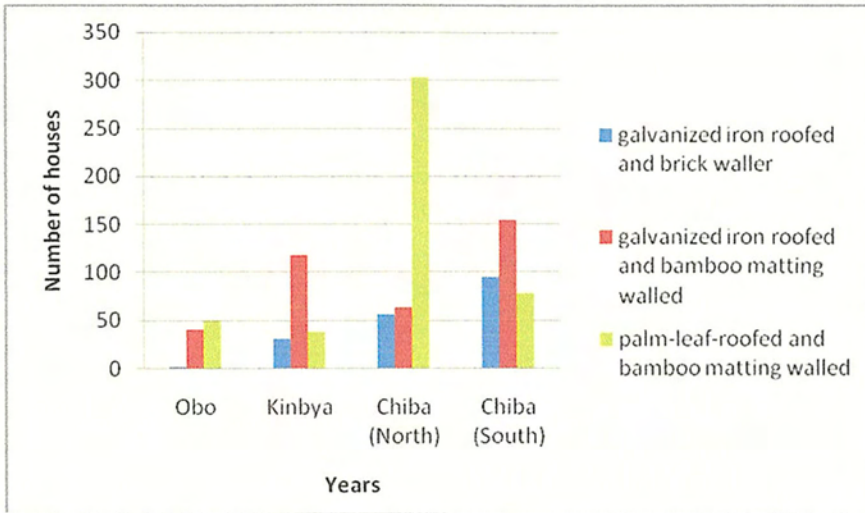
Obo, Kinbya, Chiba(North) and Chiba(South) villages situated in the Tropical Zone have houses built in adaptation with the weather; that is to reduce the temperature inside the house as far as possible. In fact, a house has to be built based on climatic conditions and social and economic circumstances. Construction materials for housing are mostly bamboo matting, thatch of a grass species, locally produced toddy-palm leaf and its stem, which would suit the weather and potential house-builder. People enjoying good business build themselves big houses or semi-brick houses with galvanized iron sheet roofing. Between the rich and poor their houses differ in walls only, but all have earthen ground floor, with bead stand standing thereon. The house usually has one room only; it is a store room for jewelry, money, rice, edible, oil and so on. After 2000, galvanized iron sheet is commonly used for roofing instead of thatch of grass which must be renewed every year at some cost.





**Figure 39 (a & b). Upper and Lower Class House**

Houses at Obo village are built based on the owner's livelihood, or on supposed protection against the elements. People of means, a minority, build for themselves houses with brick walls and flooring, roofed with galvanized iron sheets. People of modest means build for themselves houses roofed with galvanized iron sheets, walled with bamboo matting which have a dirt floor on which bed sheets and long benches stand. Poor people build for themselves dwelling roofed with palm-leaves and walled with palm leaves or bamboo matting. On the dirt floor are placed bedsteads and long benches. The types of houses at Obo village are: galvanized iron roofed and brick walled 2 houses, galvanized iron sheet-roofed and bamboo-matting-walled 41 houses; and palm-leaf-roofed and bamboo-matting-walled 49 houses. Houses at Kinbya village are built based on the livelihood, galvanized iron roofed and brick walled 31 houses, galvanized iron sheet-roofed and bamboo-matting-walled 118 houses; and palm-leaf-roofed and bamboo-matting walled 39 houses. Chiba (North) village are built based on the livelihood, galvanized iron roofed and brick walled 57 houses, galvanized iron sheet-roofed and bamboo-matting-walled 64 houses; and palm-leaf-roofed and bamboo-matting-walled 303 houses. Chiba (South) village are built based on the livelihood, galvanized iron roofed and brick walled 95 houses, galvanized iron sheet-roofed and bamboo-matting-walled 155 houses; and palm-leaf-roofed and bamboo-matting-walled 78 houses (see Figure 40).

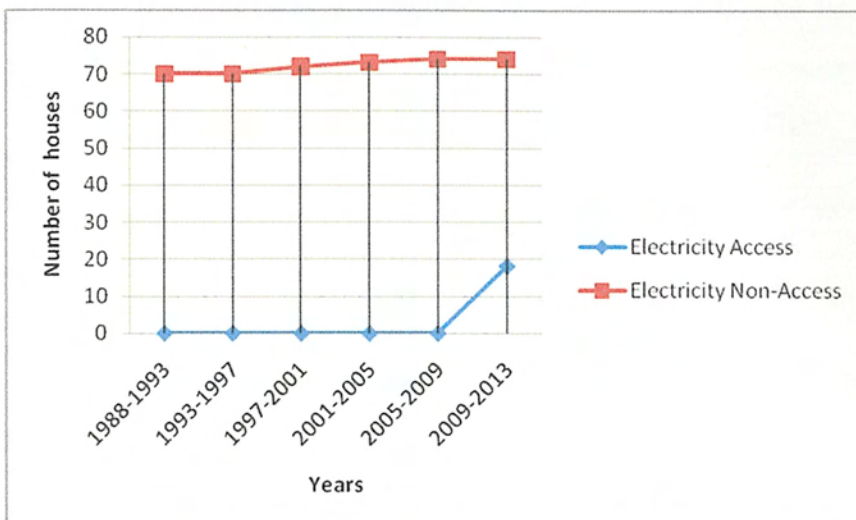


**Figure 40. Comparison of Types of Houses in 4 Villages**

\*Source- Village Administration

#### 6.4 Electricity

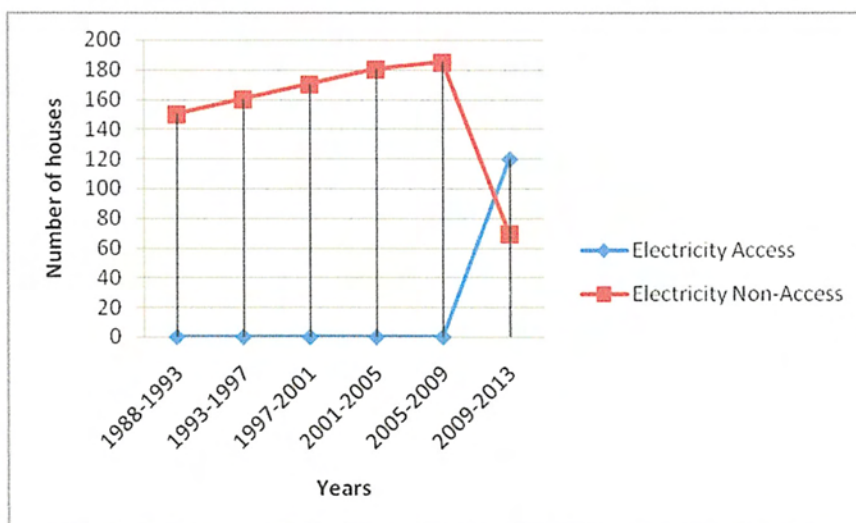
Obo, Kinbya, Ciba (North) and Chiba (South) villages have electricity distributed by the government. Starting March, 2013, Obo village has been electrified, at a cost of kyats 170 lakhs comprising contributions of kyats 70 lakhs and donations of kyats 100 lakhs by Yangon resident well-wishers. For setting up of power lines each houses was required to contribute kyats 150000. It is used for lighting and entertainment (Television, Radio) but not for cooking purposes. Firewood and charcoal are usually used in the kitchen.



**Figure 41. Access of Electricity Assess in Obo Village**

\*Source- Village Administration

Figure 41 shows: Obo village’s access to electricity shoots up from 2005-2009 and its use is highest in 2009-2013.

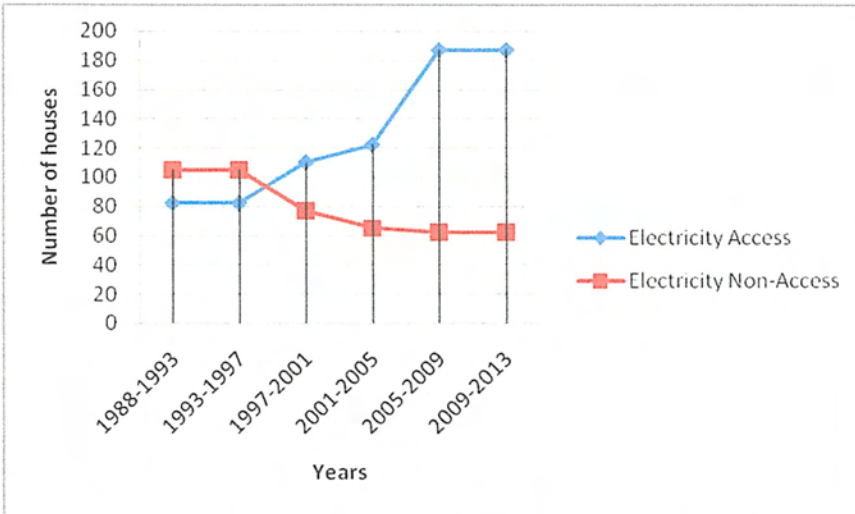


**Figure 42. Access of Electricity Assess in Kinbya Village**

\*Source- Village Administration

Figure 42 shows: Kinbya village’s access to electricity shoots up from 2005-2009 and its use is highest in 2009-2013.

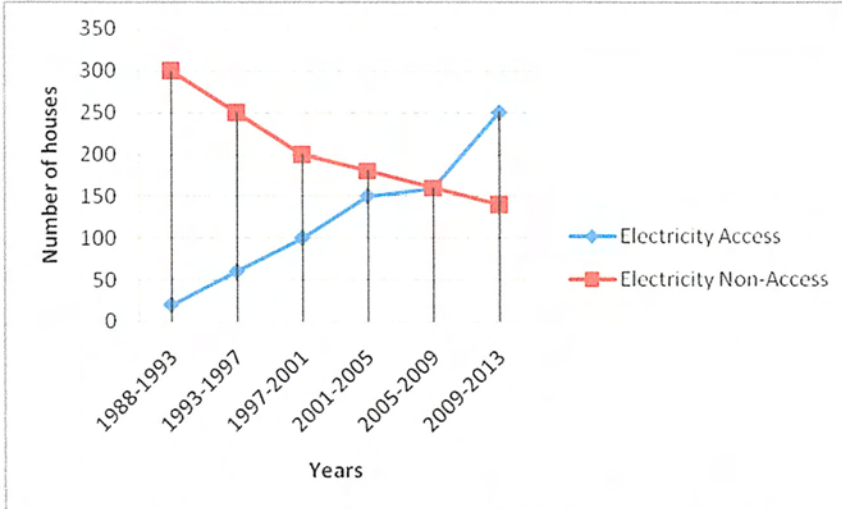




**Figure 43. Access of Electricity Assess in Chiba (North) Village**

\*Source- Village Administration

Figure 43 shows: Chiba (North) village’s access to electricity shoots up from 2005-2009 and its use is highest in 2009-2013.



**Figure 44. Access of Electricity Assess in Chiba (South) Village**

\*Source- Village Administration

Figure 44 shows: Chiba (South) village’s access to electricity shoots up from 2005-2009 and its use is highest in 2009-2013.

## 6.5 Health Services

Obo village has a volunteer health worker and a midwife who has been trained under Ministry of Health. This health worker, currently Administrator of Obo village, is servicing about nine villages around that village. Kinbya villagers become ill, they have to go to the health care centre in Chiba (North), Chiba (South) and Shwebo Township. If they have no vehicles to go to these health care centres, they have to hire a carry operator. Most of the villagers consider medical expenses and carry services. It makes them to be difficult to accept medical care.

Chiba (North) village has a private General Practitioner clinic which daily opens at 4.00 p.m. to will be it closed at late night of the patients come to consult with doctor. In health care centre, Chiba (South) village is serviced by a midwife and a delivery room. The original dispensary was first built in 1967. On (1.7.2011) a delivery room was built with funds given by a private donor but the roof and flooring only have been completed and is not usable yet. When some pregnant in labor arrived they were sometimes forced to give birth on the bullock cart they were riding on, said the midwife. Moreover some pregnant choose service of quacks because of their economic and poor knowledge.



**Figure 45. Private General Practitioner Clinic**

The midwife claims that most of the villagers lack essential medical knowledge. Moreover female paddy planters sometimes get bitten by poisonous snakes at work. Some female workers, when snake-bitten, think their misfortune is the cause of the forest spirits' displeasure and proceed to propitiate them after consultation with astrologers. When they finally arrive at a clinic it is too late and they succumb to snakebite. On such an occasion the farmer, the employer, does not give any aid to them. Snakebite insurance is kyats 500 per head but most farmhands are not insured. Always struggling for livelihood, most villagers cannot attend the health education program arranged by the authorities. And though some are knowledgeable about health care they do not have enough money to get proper treatment.

## CHAPTER VII

### INTERRELATIONSHIPS AMONG COMPONENTS OF THE LIVELIHOOD

Man in human society cannot live alone that is required to have interrelationships with others. So man is a social creature. As human society is based on culture its members are bound to have interrelationships while abiding by its rules and customs through such living, members become united and able to survive for long. Human society has social structure properly made up of various interrelationships and social functions go different based on its members' survival. Though on agrarian society, the villages of Chiba (North), Chiba (South), Kinbya and Obo villages have their locals being engaged in different livelihoods based on household assets.

This chapter sets out to investigate among the different kinds of livelihood. Further, it also tries to understand the coping strategies adopted by the villagers to address the risks, the linkages of livelihood structure and function of a family and community with their socio-cultural practises.

#### **7.1 Agriculture as a Component of the Livelihood**

Most households at Chiba (North), Chiba (South), Kinbya and Obo villages have farming as their livelihoods which are mainly based on agriculture. Farmland indicates their social and economic status and it enhance their position in the society. Most farmland owners are hereditary. On an average cultivator owns 30 acres of paddy field at the most, each of which produce 70-80 baskets (tin) of paddy if natural disasters are prevalent. Major commercial crop is paddy, with the strains of Shwebo-Baygyar (ရွှေဘိုဘေးကြား), IR 747 (အိုင်အာ-၇၄၇), Shwe Thwe Yin (ရွှေဘွယ်ရင်) and Pale Thwe (ပုလဲဘွယ်). Every year two crops of paddy (summer and monsoon) grown, and most paddy produced as sold to brokers. Some villagers go to town to sell it and keep it in storage to await better prices. Landless villagers are highly dependent on agricultural works by doing as a physical labor (transplanting, harvesting, ploughing, and weeding) is paid kyats 2000-3500 per day.

Family members at Chiba (North), Chiba (South), Kinbya and Obo villages are mostly engaged in a struggle for living with division of labor among themselves. The whole system of livelihoods are dynamically associated with their socio-cultural practises and social institutions such as family, kinship, social behavior, beliefs and other life cycle. Livelihood is such a phenomenon which depends upon the social manifestation of the family and community. Livelihood is a dynamic part of the social structure and reflects an entire spectrum of a social system. A brief account of their family, kinship, cooperation, leadership structure, gender, financial services, vulnerability and strategies are presented here. An examination of these institutions is necessary in order to understand their livelihood and the impact of development program on their socio-economic life.

### **7.1.1 Handicrafts and Industry**

In Myanmar Socialist Program Party (1962- 1988) time weaving on the loom at village experienced a boom. At that time the sets of silk fabric, brand name Shwesetkyar (ရွှေစကြာ), meant for use by Hluttaw representatives were very popular. Daw Oo of Chiba (North) produced them through the use of power looms. This manufacturing by about 2000 had significantly declined. Many workshops suspended for higher cost of electricity rather than labor costs. Some workshop owners did not operate on their own but received piecework assigned by the weaving works at Seikkhun village. In 2013 the Apwintgawk (အပွင့်တောက်) design business on the part of handlooms. Therefore almost all would be migrant weavers at Myitkyina stayed at home as they were able to maintain the some livelihood in the village. To set up a handloom costs kyats 250000, one operating cycle, with Hnittayar (နှစ်တစ်ရာ) yarn to produces 40 nether garments, costs about five lakhs of kyats. It is more profitable with family members as weavers. A weaver's wage, dependent on textile design is kyats 3000 only at the most.



A man, aged 53 years, owner of seven power looms and four acres of farm land talked about his livelihood thus:

*“Weaving has been handed down from generation to generation. My family has stood independently for three years. A power loom needs an investment of 17 lakhs of kyats. The power loom makes for passable business only during the months of Tawthalin, Thidingyut, and Tazaungmon. I now have seven power looms in operation, with four workers. Some look after two machines at the same time”.*

A 25 years old female from lower class talked about the livelihood thus:

*“This handloom is not our own. Weaving businessman set it up for our sake. The loom alone costs kyats 200000 which we are unable to afford. With the cost for yarn on operating cycle will need an investment of five lakhs of kyats. Of course an operating cycle take upon one’s own should be more profitable. Now it’s only weaving fees to us. My sisters have dealing with the weaving businessman and for that reason he has set up the handloom for our sake”.*



**Figure 46. Hand Loom**



### 7.1.2 Family and Kinship Network

Most residents at Chiba (North), Chiba (South), Kinbya and Obo villagers are practises both nuclear and extended family can be found among them. Nuclear family is included of father, mother and children, but extended family in formed of husband and wife, children and their relatives. In a family, father usually is the head of the household, taking charge of their livelihood. Moreover he is a decision-maker in family's livelihood matters and other affairs. Mother in the main takes care of house chores and children. And she helps the family's livelihood directly or indirectly. When father, the head of household, passed away, she will take also her husband's duties. When both father and mother are passed away, the eldest son or eldest daughter usually takes the responsibilities for the household.

A 33 years old male farmer, single, from middle class said of the concept of family as follows.

*“A father guides in farm work. Sister goes out and buys groceries and mother cooks. Younger sister goes to school. I work in the paddy fields. Any emergency is dealt with by us all. We share happiness as well as misery. As the saying goes: Quarrels in the living room mean unhappiness at the back of home.”*

A 45 years old married female with the livelihood of rice planting and harvesting, from lower class, said of the concept of family as follows;

*“We live through weal or woe that we eat out of the same pot.”*

According to their culture, sons and daughters pay respect to parents and elders and inheritance is through the male and female line. Family members have to mainly deal with division of labor in their struggle for livelihoods, social activities and problems arising out of the family. As the children without an income help mother's chores and other's needs. In families, every member shares their views for betterment of the family activities.

A dependent 65 years old widow from lower class said of her family's struggling in unity for their survival as follows:

*"I wasn't much of a provider to my children. Now my son and daughter have been working abroad for three years, remitting their money home. With their money I've bought a mobile phone. We've no worry for living. Grandchildren are staying with us so that my children can try to make a fortune abroad."*

Most of the villagers at Chiba (North), Chiba (South), Kinbya and Obo are Bamar nationals practise by bilineal kinship system. In this kinship system can be divided into three kinship system; kinship by blood, kinship by marriage and kinship by adoption. Social networks between rural and urban kinship are also important to migrate and search for job in the cities. However, the family network of father, mother and children is found to be much stronger than the kinship network in these villages. Nevertheless the villages of Chiba (North), Chiba (South), Kinbya and Obo, the family and kinship network and leadership structure play an important role in their struggle for livelihood.

### **7.1.3 Cooperation Based on Community**

At Chiba (North), Chiba (South), Kinbya and Obo villages most locals live on agriculture so inter-household cooperation is called for. Creating and activating social capital requires at least two people. Cooperation in the form of discussion, voluntary labor and advice in regard of irrigation, ploughing, growing of seedlings, harvest, treatment of insect infection, labor, seed paddy and paddy marketing goes on between neighboring plots and neighboring households. Besides social affairs are discusses when free, female neighbors visit from house to house to talk about familial matters so they seemingly are more interested in social affairs of the locality than male. Social capital is not costless to produce as it requires an investment at least in terms of time and effort. Households in neighborhood spend time talking with neighbors for information sharing, sharing meals with friends, participating in religious gathering, mutual helps goes on in the form of babysitting, watching over the house, lending agricultural implements, instruments of loom operation, bicycles or motorbike. Social

capital is both an input into and an output of collective action, to the extent that social interaction is likely to increase.



**Figure 47 (a & b). Social Club Members**

A 45 years old married male who owns five acres of land, from middle class, said of intra-community cooperation related to livelihood as follows.

*“Farmers help one another in dealing with plant infection, irrigation, labor needs and marketing of paddy. Like, I help him when he is in trouble, and vice versa.”*

A 37 years old spinster, bank crew leader, from lower class, said of negotiation and coordination to be made between land-owning farmer and farmhands as follows.

*“Farmers and hired planters work together. If a farmer wants some farm work done on a certain day, the laborers will comply. If work schedule is too tight for them the farmer awaits labor for a few days. It is interdependence so understanding is needed to get the work done.”*

#### 7.1.4 Leadership Structure

A village administrator is required for both Chiba (North) and Chiba (South) villages. A Chiba (South) villager won that post in 2014 when the two villages chose a successful candidate through voting. The village Administrator's office stands in Chiba (North), and is home to official work and meetings. Kinbya and Obo villages' tract of Mingon has a Mingon villager as their administrator. At the village of Chiba (North), Chiba (South), Kinbya and Obo villages there are appointed 10 household heads and 100 household heads under the Village Administrator. Elected by local elders, those heads are interested in local affairs and endowed with leadership qualities. In an emergency villager would directly consult the 10 household head or 100 household head on how to proceed.

The most common problems at Chiba (North), Chiba (South), Kinbya and Obo villages are quarrels and farmland disputes. In such an event village committee chairman and village elders would visit the fields concerned to investigate and try to settle the matter through negotiation. Usually a local settlement is reached. Village elders, who were also sub-headmen, sometimes took up the leadership mantle at this level.

A 54 years old married man, farmer and operator of mechanical weaving from upper class, said of cooperative activities for the sake of village community as follows.

*"We local elders work together for rural development. Especially in matters of the school, electricity and loans we take what responsibility we could for smooth functioning of things. We cannot tackle it in a private way."*

#### 7.1.5 Social Clubs

At Obo, Kinbya, Chiba (North) and Chiba (South) villages social clubs are established and running on self-help basis so that needy matters can be collectively dealt with by villagers. They are village elders committee, school welfare committee, village electrification committee, village agricultural loans committee, leading bachelors group, chaperons group, Buddhist religious chanting group, and social welfare

society. Social clubs are voluntary, each comprising chairman, secretary, and members which number at least ten. Chairman and secretary are elected by members.

The village elders committee, comprising males aged 50 and above members from upper and middle classes, gives advice on and assists rural development and administrative matters. The school welfare committee, comprising males aged 40 and above members from the upper and middle classes, works for improvement and fulfillment of needs of the school as much as it can. The village electrification committees, comprising males aged 40 and above members from the upper and middle classes, see to it that their program of electrification of the village is processing well. The village agricultural loans committee, comprising males aged 40 and above members from the upper and middle classes, tries to have agricultural loans granted and repaid. The leading bachelors group, comprising males aged 15-50 years from the upper and middle classes, assists and participates in social ceremonies. The chaperons group, comprising females aged 15-50 years from the upper and middle classes, assists and participates in social ceremonies. The Buddhist Religious Chatting Group, comprising female aged 20-70 years from the upper and middle classes, chants religious verses in worship on Sabbath days and at religious ceremonies. The social welfare society, comprising nearly all households, assists in all funerals.

The Social Assistance (Funeral) Society, established in 2012, has more than 200 members. Every house is charged kyats 500 a month to create a fund which receives outside contributions also. The society has bought a motorcar to be used as a hearse. When a local people male dies, male members come over to his home to help out and for 7 days three members each stay overnight. The same is true in regard of females. Funeral proceedings including digging of a in the ground, falls in the responsibility of the society. Moreover the family of the dead person is given kyats 50,000. When the locals are taken ill the motorcar may be used to transport the patient to and from the hospital for free.

Therefore social clubs are found to be generally composed of males from the upper and middle classes. By local people's culture, it is believed that male are suitable to be active outdoors and able to lead, and female generally should emphasize on housekeeping. People from lower class, mainly bent on family's subsistence, do not



join the social clubs, but their household still contributes a membership fee of kyats 500 to participate in village Social Assistance Society.

A 53 years old woman from the lower class, married and odd job taker, related her feeling about the social assistance society thus:

*“We have no worry about a funeral any more. We used to say, Death is more important than livelihood. Society members are now worried free. In the past it took a long time for me to repay the debt necessitated by Mother’s death. It was a great hardship. Now that our household is a society member I can die in peace, knowing that because of the society’s aid, my children would not need much money for my funeral. The society is a favor to us.”*

**7.1.6 Division of Labor by Gender**

Chiba (North), Chiba (South), Kinbya and Obo villages farming as major livelihood is based on the labor of family members. In this division of labor different patterns of livelihood emerges for male and female. Table (12) gives different livelihood patterns of male and female and the livelihoods followed in order of favor.

**Table (12) Livelihood by Gender**

No	Male	Female
1	Lead farming	Housekeeping
2	Ploughing	Transplanting
3	Clearing of paddy dykes	Weeding
4	Uproot seedlings	Uproot of seedlings
5	Harvesting and sunning paddy	Harvesting and sunning paddy
6	Broadcasting of compost	Weeding
7	Gather sand	Gather sand
8	Catch small fish, frogs and paddy field rats	Sell small fish, frogs and paddy field rats
9	Weave on the loom	Weave on the loom, pottery
10	Axe logs for firewood, gather firewood	Gather firewood, gather wild plants

11	Migrant worker	Migrant worker
12	Odd job	Odd job, Vending

\*Source: Field survey in 2013

The above Table 12 shows, the study area, local people in all social classes cannot exist alone on a livelihood alone. Upper and middle classes can work for additional income based on their ability to make financial investment but members of the lower class get additional income based on their labor. At Chiba (North), Chiba (South), Kinbya and Obo villages the division of labor goes according to the following. Family members work for an income and if some can't, they help out in housekeeping and fulfilling of other needs such as cooking, washing, buying groceries, babysitting, cleaning.



Figure 48 (a & b) Pottery

### 7.1.7 Division of Labor by Age

The division of labor by age at Chiba (North), Chiba (South), Kinbya and Obo villages are found to follow different patterns. Most often local males with parents of monetary means go to school. If they drop out, they go for farm work to lead it. Males from families with no farmland of its own would help out in homemaking since childhood, and become farm workers from age 13 onwards. In good health, they would continue as such till age 40. Beyond, they are not strong enough to do farm

work, and become daily-wage workers or takers of any available job. In families with financial means their female children have formal education. When they discontinue schooling; they would help parents in housekeeping or join government service. But in families without financial means female children take up age-compatible work as follows in Table 13.

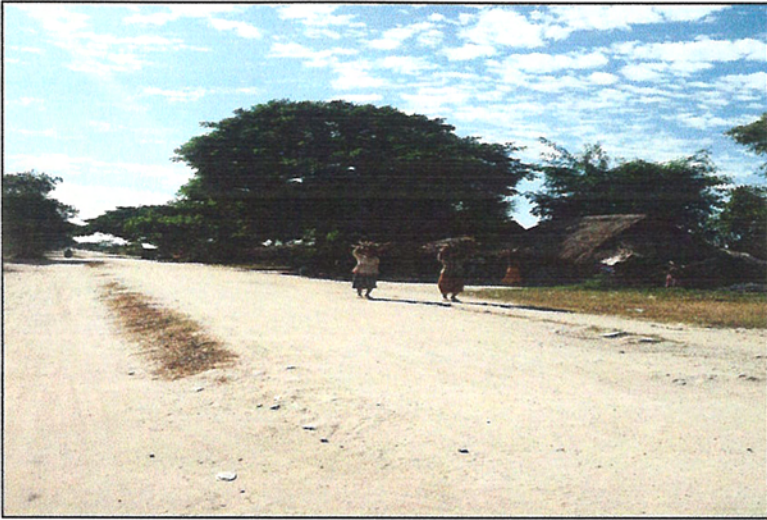
**Table (13) Division of Labor by Age among Female in Lower Class**

No	Age 5-12	Age 13-20	Age 21-28	Age 29-36	Above 37
1	Housekeeping	Transplanting	Transplanting	Transplanting	Weeding
2	Babysitting	Uproot seedlings	Uproot seedlings	Uproot seedlings	Weaving
3	Gathering wild plants, Gathering firewood	Weeding	Weeding	Weeding	Gathering firewood
4	Fetch-water, washing, cleaning, cooking	Odd Job	Carrying sand	Carrying sand	Carrying sand
5		Housekeeping	Weaving on the loom	Weaving on the loom	Odd Job
6			Odd Job	Odd Job	Vendoring
7			Vendoring	Vendoring	Housekeeping
8			Housekeeping	Housekeeping	Babysitting

\*Source: Focus Group Discussion in 2014

The above Table 13 shows division of labor by age among female has a changing pattern. Among land-owning families most females enjoy schooling according to age or help out in housekeeping, weaving and farm work. In families without ownership of land the females have many different types of activities: productive work (contributes towards an income) and reproductive work (fuel and water collection, caring for children and elderly, cooking, cleaning, food processing, gardening).





**Figure 49. Gathering of Firewood**

In such a struggle for survival among families without ownership of land their daughters aged 5-12 very rarely gets to receive school education. Female of such ages are required to do housekeeping, babysit, gather wild-growing water convolvulus, gather firewood, fetch water, wash clothing, clean the surroundings and cook food so that their parents may pursue their livelihoods in peace of mind.



**Figure 50 (a & b). Gathering of Wild Plants and Fish**

Females aged 13-20 are found to be most eligible to have jobs for their livelihood. The locality being dependent on farm work as its main livelihood, farm owners like to hire young woman aged 13-20 for their youth and stamina in transplanting, weeding and so on. Moreover "Baukthagyi" (ဘောက်ခွဲကြီး) system is in place. The Baukthagyi is a woman; usually aged 25-35, who organizes teams of paddy transplanters and finds work for them. Farm owners, often younger than Baukthagyi, find them inconvenient to deal with.

A 20 years old maiden commented on easy availability of cash loans if girls like her have access to jobs, as follows.

*"It's easy for us to find work. We're able bodied so Baukthagyis love to hire us. But our family has borrowed money and I'm compelled to work for the Baukthagyi the money lender likes. On payment of wages the lender takes control of my wages at once at the Baukthagyi. So I'm being hired but no actual wages. If I need money then, I could borrow again. Nearly all paddy transplanters are in debt. We can't afford to work for better paying wages lest we won't be given a loan again when we need it. When farm work suspends we can work for daily wage in weeding, housekeeping, or weaving on the loom. But income is less than paddy transplanting or harvesting."*

Under the Baukthagyi each team of paddy transplanters is at least 10-20 strong, who give her percentage of their wages. When their farm work recesses at the home, the paddy transplanters go to Monhyin and Kawlin as migrant workers in paddy transplanting or harvesting. Some females take up daily wage jobs or do housekeeping only. Young paddy transplanters have plenty of would be employers; but, being debtors, they are compelled to work for the Baukthagyi their creditor likes.

Female in age groups 21-28 and 29-36 have many jobs to choose from, but they are less favored than age group 13-20. The minority of paddy farms grow early maturing strains. Their owners usually hire better performing youths in paddy transplanting and harvesting. Jobs are plentiful only when the paddy farms need transplanting or



harvesting at the same time. Thus, outside of seasonal farm work the female in age groups 21-28 and 29-36 opt for weeding, weaving on the loom, and peddling, collecting sand out of the Mu canal, any available job, or housework. A livelihood especially of paddy transplanting and harvesting for a female aged above 37 is very hard to come by. They may choose weeding, weaving on the loom, gathering firewood, collecting sand, any available job, peddling, babysitting, or housework for livelihood. These jobs pay money but do not exist on a regular daily basis.

A 47 years old housewife from lower class said of the need for flexibility in job taking on the part of those advanced in age, as follows.

*“I was a transplanter or harvester in the past. Now aged above 40, I can’t work like in the past. But I have weaved on the loom for more than seven years. Out in the field, transplanting is the most tiring among jobs taken up by women. Limbs in water and the rest of body in sunshine, we have our back bent almost perpendicularly all day long. This hard work might be tolerable in youth, but it’s out of the question in advanced age.”*



**Figure 51. Wave on the Hand Loom**

Female in advanced age enjoy few job opportunities. At such age those without children and supportive relatives have to struggle hard for survival on their own.

A 60 years old housewife from lower class said of the scarcity of jobs to older persons thus.

*“Husband and wife, we two have no supporters at all. Each of us takes up any job that comes by so that we may have two meals a day. We have the morning meal, at 9:00-10:00 a.m. and the evening meal at about 5:00 p.m. For both meals we have to use about three condensed milk tins of rice, just satisfying our hunger. Jobs are hard to find on the part of the elderly. So I have to go out collecting firewood at the forest edge nearby, out of stumps and stubs left behind by others. I can barely collect a basketful of firewood, worth about kyats 500. Then I have to bargain with a prospective buyer for selling it, sometimes with much persuasion. Again I have to carry the firewood to the buyer’s home.”*

A 40 years old woman commented on advanced age and its attendant loss of vigor thus:

*“Jobs almost do not exist for us elderly people. Worse, most Baukthagyis are younger, and they dislike older workers. They’re more in favor of teenagers like 16 years old. But by Tawthalin (August-September) or Thidingyut (September-October) with plentiful farmwork to go around they barely oblige to enlist the elderly for jobs. We elderly people cannot lift heavy loads. Paddy farmers like to hire younger people for weeding, what with heavy loads of weeds to be disposed of properly. Some kind-hearted farmers hire me wherein I manage to have a young co-worker. I might depend on her for any help I would need.”*

**Table (14) Division of Labor by Age among Male in Lower Class**

No	Age 5-12	Age 13-20	Age 21-28	Age 29-36	Above 37
1	Housekeeping	Transplanting	Ploughing	Ploughing	Ploughing
2	Babysitting	Ploughing, Harvesting	Harvesting	Harvesting	Harvesting
3	Gatherfirewood	broadcasting of top fertile soil	broadcasting of top fertile soil	broadcasting of top fertile soil	broadcasting of top fertile soil
4	Fetch-water,	Cleaning of paddy dykes	Cleaning of paddy dykes	Cleaning of paddy dykes	Cleaning of paddy dykes
5		Fishing	Fishing	Fishing	Fishing
6		Carrying sand	Carrying sand	Carrying sand	Carrying sand
7		Odd jobs	Odd jobs	Odd jobs	Odd jobs

\*Source: Focus Group Discussion in 2014

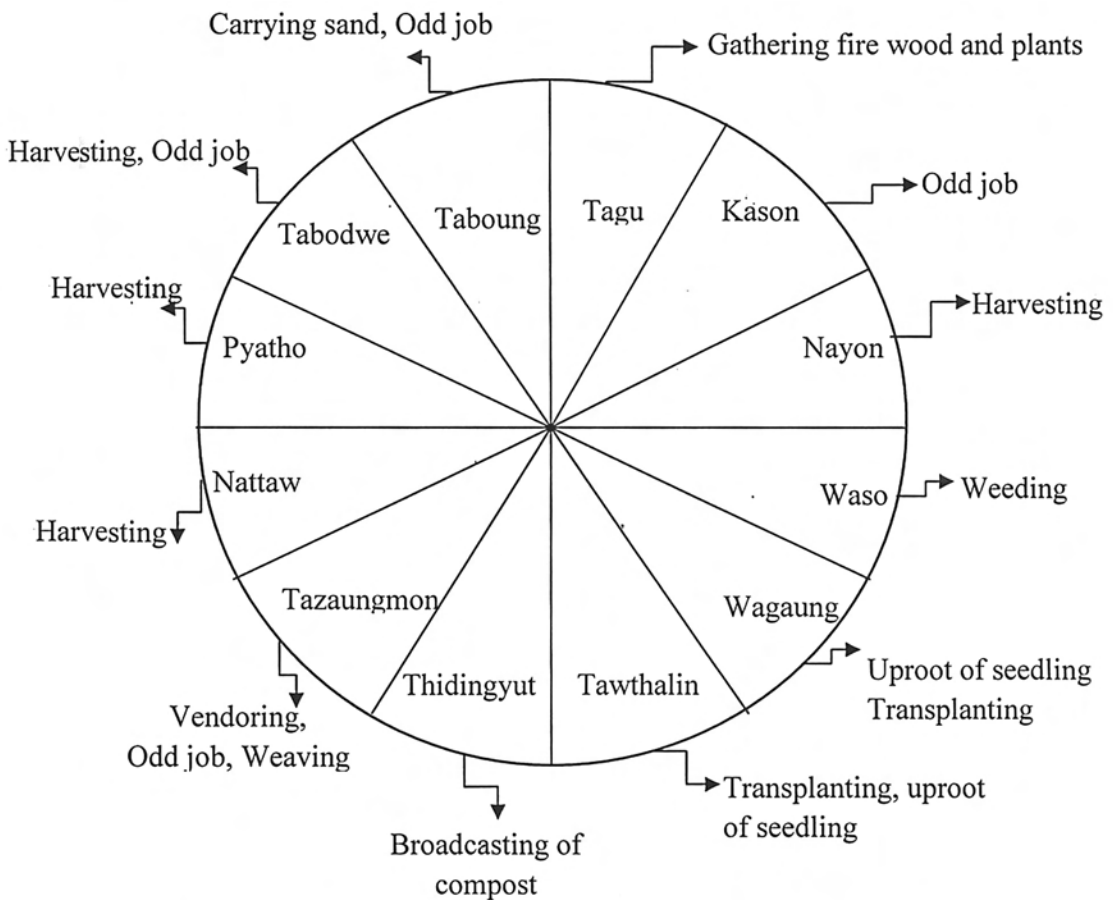
The above Table 14 gives division of labor according to age, of lower class males. Generally they dropped out after primary education for a lack of financial resources. Being an agricultural area as regards livelihood, it holds few job opportunities for male much less than female.

On this, 38 years old male from the lower class, married and odd job taker, commented thus:

*“Here rice cultivation is main livelihood; with plentiful jobs for girls in transplanting and harvesting. There is ploughing, preparing bunds, and broadcasting of top fertile soil only for male. Demand for male’s labor is low. When agriculture in this local recesses female may go off to other areas for transplanting or harvesting work; in addition there is weaving on the loom. Males here go for fishing, catching frogs, and odd jobs, but there is not a daily job.”*

### 7.1.8 Division of Labor in Seasonal Cycle

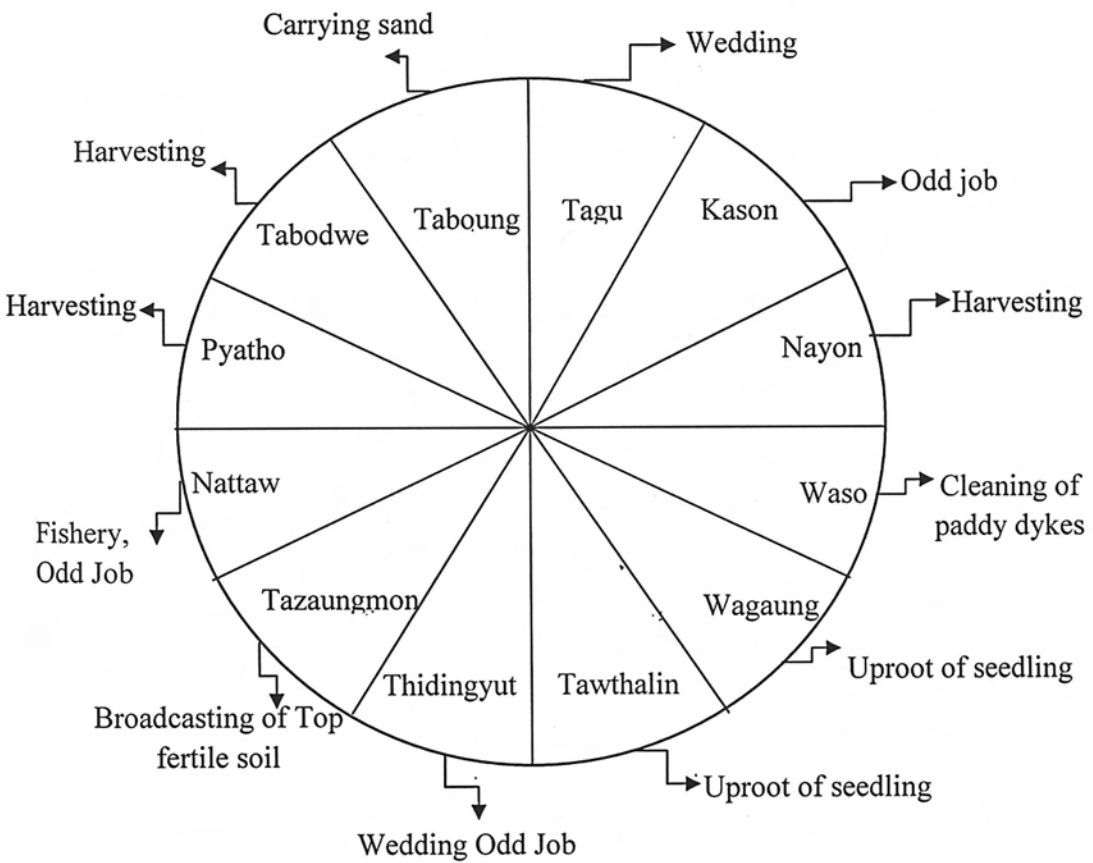
Locals of Chiba (North), Chiba (South), Kinbya and Obo villages with farming as livelihood do not enjoy year round job opportunity. Upper class and Middle class have opportunities to invest and conduct other occupations for income, but lower class members are compelled to take up any available job for daily income and living. In pursuit of livelihood its pattern goes different for lower class males and females, month wise, as follows.



Tagu = March-April, Kason = April-May, Nayon = May-June, Waso = June-July, Wagaung = July-August, Tawthalin = August-September, Thidingyut= September-October, Tazaungmon= October-November, Nattaw= November-December, Pyatho= December-January, Tabodwe= January -February, Taboung= February-March

**Figure 52. Seasonal Cycle of Female in Lower Class**  
 \* Source-Focus group discussion in 2014

The above mentioned seasonal cycle shows that jobs are scarce for female in Tagu, apart from weeding, gathering of firewood, or picking convolvulus. Then follow harvesting of summer paddy in Nayon, weeding in Waso and uprooting of seedlings and transplanting of monsoon paddy in Wagaung and Tawthalin. Weeding is available in Thadingyut. Tazaungmon and Nattaw have least job opportunities, excepting gathering of firewood or water convolvulus. Then harvesting of paddy and sunning of paddy jobs are available in Pyatho and Tabodwe respectively. Jobs are scarce in Tabodwe and Tabaung, but carrying sand out of Mu canal can be taken.



**Figure 52. Seasonal Cycle of Male in Lower Class**

\* Source-Focus group discussion in 2014

According to above mentioned seasonal cycle male have least job opportunity during Tagu, Kason of the year. Weeding job, from 6:00 a.m. to 11:00 a.m. brings one kyats 1000. This work needs little labor, and farmers usually hire strong males younger than



30 years. When weeding is not necessary farmers would ask hired workers to dig ground or do earthworks or other hard labor. But the job has no regular, daily basis. In Nayon harvesting job of summer paddy is available at labor rate of kyats 2500-3000 per day. That hard work takes almost all day long, to be carried out by the harvester with his body bent at the waist. So most men over 40 cannot take that job but go for other jobs (like firewood gathering, any available job). Available jobs in Waso, Wagaung are uprooting of seedlings and clearing of paddy dykes. It is weeding out in Tawthalin, followed in Thidingyut, Tazaungmon and Nattaw by broadcasting of compost, or catching fish and frogs in the ditches that brings an income of kyats 1000-10000 for the day. It is harvesting work in Pyatho. Jobs are scarce in Tabodwe and Tabaung, but carrying sand out of Mu canal can be taken.

For the above mentioned factors lower class members' livelihoods are subject to seasonal cycle to satisfy their families living. Family members seek what jobs they could for family's living, but job opportunities go different according to age. Their jobs do not bring regular daily income to make ends meet, so they have to borrow money often, to be repaid with labor. They need regular daily income because their debts incurred to deal with family's living and health matters carry high interest.

## **7.2 Off-farm Activities as a Component of the Livelihood**

Off-farm activities have become an important component of livelihood strategies among rural households. People without ownership of farmland take up farm work for wages and available job for a daily wage when farm work recesses. Such incomes cannot make for a family's subsistence for various reasons so off-farm income has to be tried now and then. A family cannot stand on a single livelihood alone so seasonal off-farm activities have to be taken up for a constant income. Farming becomes less profitable and more risky as a result of crop and market failures, farm debts, income fluctuations, climatic change, policy, shock and health, and they are pushed into off-farm activities leading distress-push diversification.

The upper class, being engaged in two kinds of livelihood, can well deal with family's living and matters of health, education, and social affairs; while the middle class has to engage in three kinds of livelihood to carry on likewise. But the lower class has to

take up three kinds of livelihood just for family's subsistence. Households are rather pulled into off-farm activities leading risk reduction, daily income in the following Table 15.

**Table (15) Types of Subsistence Patterns**

No	Village	Social class	First income	Second income	Third income
1	Chiba (North)	Upper class	Paddy farm, Power loom, Rice mill	Trade	
		Middle class	Paddy farm, Hand loom	Shop	Odd Job
		Lower class	Paddy farm, Odd Job	Peddling, Pottery, Fishery, Odd Job	Odd Job
2	Chiba (South)	Upper class	Paddy farm, Power loom, Rice mill	Trade	
		Middle class	Paddy farm, Hand loom,	Shop	Odd Job
		Lower class	Paddy farm, Odd Job	Fishery Odd Job	Odd Job
3	Kinbya	Upper class	Paddy farm, Hand loom, Shop	Trade	
		Middle class	Paddy farm, Gardening, Hand loom	Peddling Odd Job	Odd Job
		Lower class	Paddy farm, Odd Job	Odd Job	Odd Job
4	Obo	Upper class	Paddy farm, Shop	Trade	
		Middle class	Paddy farm, Gardening,	Peddling Odd Job	Odd Job
		Lower class	Paddy farm, Odd Job	Pottery Odd Job	Odd Job

According to the Table 15, households need to diversify their income sources in order to strengthen their resilience, particularly during adverse seasonal, economic or social conditions. To whatever extent possible, they engage in different livelihood systems at the same time. Chiba (North), Chiba (South), Kinbya and Obo villages by social mapping have three social classes in which middle class numbers most, upper class least, and lower class is in the middle range. Moreover, subsistence pattern varies in accord with the social class concerned.



**Figure 54. Power Loom**

Most households in Chiba (North), Chiba (South), Kinbya and Obo villages have livelihoods of farming based on agriculture. The majority of upper class households own farm land handed down by forefathers and mainly depend on paddy farming for livelihood. But to raise living standard and better social life of the family they take up, besides paddy farming, use of the power loom, rice milling, or marketing (paddy). Therefore their income makes for a surplus, more than enough to satisfy the family living needs.

Most families of middle class own farmland handed down by forefathers and their main livelihood is paddy farming. But for the sake of family's living and children's education they also take up weaving on the hand loom, peddling, or any available job (broker, daily wage earner). Most families of middle class have enough for their

living but are often in debt due to poor health, children's education, or social responsibilities. Thus middle class is found to have enough to satisfy family's living needs, but is still faced with difficulties in children's education and other familial matters.



**Figure 55. Shop**

Families of lower class mainly have paddy farming for livelihood by the season, and for the rest of time take up seasonal activities like fishing, catching eels, selling traps for paddy field rats, peddling, gathering firewood, gathering of wild-growing vegetables, odd jobs given by the farm owner and so on. Families in lower class own no houses but live in small huts built on a plot of land co-owned by all thanks to inheritance. Lower class is found to be struggling hard to barely satisfy the family's needs for daily living.

Upper class members for their farming and other private owned industries can fulfill their living needs as well as education, health and social needs to the full. Middle class members with income from farming and other businesses can fulfill the family's living needs to the full, but few instances of complete satisfaction of children's education, family's health and social activities. Lower class members for lack of regular daily income struggle through various livelihoods to satisfy family's normal living needs.

### 7.3 Types of Financial Services

People use to achieve their livelihood objectives and it comprises the important availability of cash that enables people to adopt different livelihood strategies. Households could access credit either through formal credit providers such as the agricultural credit or informal networks such as private creditors.

#### 7.3.1 Formal Credit

Starting in 1974, the state offered agricultural loans at 25 kyats per acre, and 35 kyats in 1992. By 2001 it was kyats 10,000 per acre at an interest of 0.75 percent. During 2011-2012 that loan stood at kyats 50,000 per acre at an interest of 0.71 percent. The latest statistics say Agricultural Bank issued in 2013 loans at kyats 100,000 per acre, up to a total of 10 acres, at an interest of 0.71 percent for a period of 6 months. In 2013 at Myanmar Awba company a farmer with up to three acres of farm land could have the loan of kyats 200,000 and the loan of kyats 500,000 with above 5 acres. The loans were for a period of five months at an interest of 2.50 percent.

When agricultural bank is ready to lend money the information is given to village Bank Committee members who in turn announce it through amplifiers in the village. When data has been collected of would be borrowers the documents are sent on to agricultural bank. When the time comes the loans are permitted through collective responsibility (*Wainggyichoke*) system whereby a group of 10 debtors have to pay back the loans in full at the same time. If a debtor defaulted the rest would have to pay back his loan.

The Myanmar Agricultural Bank made loans two times in 2013, to the convenience of farmers, commented a 52 years old male farmer in upper class as follows:

*“The agricultural bank usually makes loans in July. This year it made so one more time in December for the cultivation of summer paddy. So it has made our life easier.”*



But he complained about the short duration of loans thus:

*“The state is lending at small interest. But for the short 6 month duration of loans we are hit twice. Besides payment of interest we are soon faced with pay-back time, when the paddy has just been harvested and there is no prospect of getting a good price for it. The duration of loans should be extended to 8 months.”*

Government loans to rural people are limited to land owning farmers (upper and middle classes). Private companies also extend loans likewise. Lower class without ownership of loans are not entitled to get loans, so they have to borrow money at high interest from private creditors to meet their living needs.

A 65 years old householder male from lower class said of how he had hoped for loan, as follows.

*“We have heard about poverty alleviation in rural areas, by word of mouth. The village crier announced through the use of amplifiers, come ye one each from the households to village administrator’s office, carrying identity card, to get State loans. Upon arrival there we were told paddy farmers alone are eligible. We almost lost face. Later I remained almost oblivious to loans coming from authorities. We are always neglected, loans or otherwise. This time around laborers only are summoned, for the first ever time. We’re curious. Others remaining behind will ask us questions too when we return home. I come here to find out what is what. Even then, I should say, we know we have to work so that we might eat.”*

Then he continued:

*“Government loans extended to us would be paid back. I would like to raise a pig or two. Without money, it is out of the question still. The loans extended to us are to be guaranteed by village elders. We’ll never get loans without their guaranty.”*

State extends loans for rural development at little interest but the beneficiary is agriculture, not loom operation. Therefore those with weaving as their livelihood are hoping for cash loans lest they have to borrow money at high interest for a shortfall in investment, and are compelled to sell their products to brokers for a lack of time and storage facilities.

A 43 years old man, operator of a medium size power loom, is hopeful about obtaining loans from the State and said thus:

*“I run a power loom, and have labor, working area but don’t know how Small and Medium Enterprises (SME) like us can get loans from where. There’s a private banker but he charges exorbitant interest. Television news show the Cooperative Bank makes loans to businesses. That’s it and no more information comes our way. I’ve no idea how to proceed. Our business will hopefully improve with an opportunity like the agricultural loan.”*

The above facts show that among the rural people of same place only those who own farmland are able to enjoy opportunities. So, the life of rural people really improved use landless people in other livelihoods need to be given loans of reasonable amount and interest. Only then would the life of all rural people improve in a balanced way.

### **7.3.2 Informal Credit**

At Chiba (North), Chiba (South), Kinbya and Obo villages the major livelihood is based on agriculture and seasonal. Livelihoods with daily regular income are very few, so families are in need of money for their living. Moreover, land-owning farmers have access to government loans but the term is short and some money has to be used for familial matters. So they too depend upon external credit. On this a 60 years old paddy farmer remarked that most people involved in paddy production are in debt, adding thus:

*“Farming is no easy work. Over 40 years I’ve always been in a struggle to have enough paddies for consumption and children’s schooling. We have a supply of water year round and farming*

*continued without recess. Farmland needs a recess to be productive lest fertile soil is completely used up. It is costing more and more to buy and broadcast compost. Ownership of farmland is like that of a safe. We are not rich, but can't make ourselves relocate elsewhere because our village of about 500 houses lies near a town. There are only 10 paddy farmers who are independent. The rest exist on debt 10 baskets of paddy borrowed is to be repaid with 5 baskets of paddy as interest. I think more than 150 squatter shelters have appeared. There are land owner turned landless, house-owner turned one without a house, and farm laborers without a house from the beginning. It's quite a variety existing together."*

A 54 years old paddy farmer (female) explained about the compost problem and money needed thus:

*"Paddy farming needs money to invest. If I'm short of money at the time for broadcasting compost, it has to be bought on credit at the compost shop. The amount due is to be paid up within a month. If not it carries a 7 percent interest."*

The above findings show that the reason for most people's dependence on credit at high interest is lack of job opportunities with a regular daily income, it is to be concluded.

A 25 years old transplanter talked about the exorbitant interest charged by creditors as follows:

*"We can't answer any call for labor, because we always have to obey the creditor. We have to work under the Baukthagyi the creditor fancies. That Baukthagyi takes control of our wages as soon as they are due. Thus we always have work to do but the wages are less than full wages because our debt has to be serviced. Indebtedness is a vicious circle. May be a big lottery prize would make us debt free. I have just bought 12 pyi of rice on credit as we need food always. Jobless a debt in incurred."*

*With a job the debt is to be serviced. The interest is far above normal. We can ask for a loan at kyats 10,000 per acre but by paying back time a lot more has to be repaid. It is a waste of labor to us. May be we're still lucky enough not having to set down a capital. We've to soldier on with this physical body Mother has given us. Interest rates are 10 percent for a loan of above kyats 50,000 and 15%-20% for under kyats 50,000 loans. They are unavailable to us when out of work."*

The above study shows that landless rural people depend on physical labor for an income. Thus, in borrowing money to make ends meet there has to be human resource in the family. For the landless, credit is often limited.

A 23 years old paddy transplanter claimed youth has ready access to loans:

*"A money lender would check up a prospective borrower. Our mother readily gets loan because though she be old, her children including myself are able bodied workers. Old people without young children are unlikely to get a loan. To one with young children even a loan enough to buy a motorbike would be possible."*

In consideration of all above facts informal credit is found to be essential to all social classes. That credit is easily available on the part of those possessing farmland or properties. For the lower class depending on physical labor for a living, getting a loan is impossible without their physical labor. Moreover the creditor dictates their debt, leading to insufficient income on their part. So they have to borrow money again. In this way their debt grows larger and larger.

### **7.3.3 Savings**

Among those with farming as a livelihood the upper class members manage to save money for a surplus because they are engaged at the same time in operation of power loom, rice mill, or in trade. Moreover, their savings go back to investment in their livelihood. Middle class members are constantly struggling to meet family's living

needs, children's schooling, health and social responsibilities. A little surplus left has to be used for family's needs. They barely manage to keep off debt. Due to compounding interest, lower class members are in the vicious cycle of debt because they are not earning enough to remain in subsistence level.

A 48 years old married man without children, owner of three acres of farm land, explained why he is debt-free thus:

*"I've three acres of paddy land out of inheritance, and grow two crops monsoon paddy and summer paddy. Last year, monsoon paddy produced was worth 200 baskets or kyats 1200000 and summer paddy 210 baskets or kyats 800000. Total expenditure for the two crops was more than kyats 1000,000, leaving me kyats 1000000 worth for consumption. We've no children so are able to remain debt-free. To have a surplus means paddy prices must be high. Last year they were not. We couldn't wait, had not enough storage space, and investment for the next crop had to be made. So the paddy had to be sold at a less than desirable price. Here about you necessarily need not own a piece of paddy land to have surplus paddy; you only need to buy and store it long enough."*

Some people with surplus money are unable to save it because it has to be used in buying things which will be needed by the family. Among middle class families the livelihood income fulfills living needs but what surplus left is always used up for children's education.

A 45 years old woman explained how surplus money is usually used, thus:

*"Local villagers mostly store paddy bought with surplus money. Apart from that they would buy things, like a motorbike, depending on the surplus amount. Pure savings is not followed. Many paddy farmers, nearly all with schoolchildren, have to spend money on their education. If necessary, they would spend less on food. Here about a saying goes: The sparrow eats up the*



*paddy. It is a pun; sparrow in the vernacular also stands for school study."*

#### **7.4 Vulnerability Context and Livelihood**

Vulnerability context provides an insight into the kinds of factors that have the potential to negatively impact on local people's livelihood.

##### **7.4.1 Stress**

The upper and middle classes often suffer stress for being compelled to cultivate summer paddy. The paddy-field owner, after cultivating summer paddy, tries to hire female harvesters for timely harvest. But all paddy-field owners are in need of them at the same time so that those workers become scarce. So the farmer hires harvester machine. For the uneven fields and narrow plots of them the machine crushes many paddy plants and renders them useless but some paddy plants remain in place because the machine cannot access them. Such use of a harvester cost twice as much as a group of human harvesters. From crushed paddy plants grow paddy seedling at the cultivation time of monsoon paddy to serve as weeds. These weeds are to be eliminated with weed killers, let alone some labor needed for that activity. When the grass contaminated with weed killers is eaten by animals, they die.

Sometimes a back group has to be hired for not having enough labor. It is worrisome to have a green harvester or two in the back group. Sometimes probationary planters are found working at the center of the field, worrying the farmland owner all the more. In transplanting those workers often fold up the long paddy seedlings midway, with the result that roots remain about the soil and the seedlings die soon after. Moreover, the back groups often do the planting in wide rows in the central part of the field so that it has to be remedied again. Farmland owners are also troubled when the homeless people come to live nearby the fields, usually discarding their garbage and broken glass in the fields which could harm the lady farmlands. They pick others' crops and take the produce lying in the fields. Now and then the authorities evict them, but they always come back.

Most the upper and middle classes are being compelled to cultivate summer paddy. And their troubles in the process are: high rates of planting cost; increasing expenditures on inputs like chemical fertilizers and diesel oil; damage of paddies due to heavy rains at harvest time; difficult communication for some paddy fields; newly harvested paddies, while lying on the roadside, sometimes get wetted by rain and grow sprouts; reduced quality of the produce; waiting time at rice mills; failure to get a good price after milling of paddy because the rice turns out to be lower in quality; and damages caused by pests at the time of paddy plantation.

When enough irrigation is not available for all paddy fields in need Department of Irrigation issues a notice one month beforehand via Village Administrators saying supply of irrigation water will be suspended. Most farmers forgo any farming during the time when irrigation water is suspended. At that time a minority of farmers, suspended. At that time a minority of farmers, suppressing their wish to grow crops, forgo farming for fear of a loss due to field mice. When all agricultural land is being grown the destruction caused by rats is shared by all farmers and the extent of destruction for each becomes tolerable. When growing of crops is being suspended the farmers do Laepyin (mending their cropland whereby small plots are combined into a large field through repair of dykes, rat holes and plugged and plants which might shelter rats are cut down to be turned into firewood). For this suspension of crop land use the erosion of top soil is alleviated. The lower class, instead of serving as farm hands, is hired to dig up the ground or carry loose earth.

Female from lower class, enjoying a daily income in rice transplanting and harvesting season, weave on the loom also. For the rest of the year they go elsewhere as migrant workers in rice transplanting, harvesting, and weaving on the loom. Moreover, as farmers are willing to hire energetic under 30 years female those above 30 years have stress in trying to obtain a job. And male suffer stress in hoping for a regular daily job because as their main livelihood is agriculture, job opportunities are much less to them than female. When family member of lower class want to borrow money, those with job prospects only are able to do so.

#### 7.4.2 Shock

Most upper and middle classes have had shocks for various reasons. One of them: when their summer paddy falls victim to plant disease it is sprinkled with pesticides. If the bacteria do not die easily stronger chemicals are used at more cost. The stronger pesticides kill off all life good or bad in the fields. Sometimes most fields are to be sprinkled with pesticides and the foul smell there pervades the villages. The insecticide containers are usually accompanied by preventive gear for the user but, when the farmers buy them that gear is missing. Another trouble to farmers is the need to suppress the pest of field mouse.



**Figure 56 (a & b). Plant Bacteria in Paddy Field**

Small-scale paddy farmers who own 1-3 acres of land only are often faced with sudden damages caused by pests or family members who are taken ill. It is a hard problem to them. This locality falling in the rain-scarce zone is mainly dependent on irrigation. When this service comes late the farmers have to work the land faster requiring, more farmlands for planting. Then the latter become scarce because of more demand for them.

Whatever the shock, it can mainly be alleviated by money, which is borrowed at high interest. That goes for kyats 2000 per kyats 10000 borrowed. Small scale paddy farmers are in debt every year because once they have borrowed money they can hardly pay back. Most of them become daily-wage farmhands for form-owning employers. Some small scale farmers assert that they are even thinking to take up money-lending with a capital to be got after selling their farms. Almost always burdened with debt, they find it difficult to store rice for their own consumption. They often have to consume broken and damaged rice left behind after milling their paddy. Some small scale farmers have to sell off their farmland to pay back their debt, and then become daily-wage farmlands.

The lower class, when stricken with shock, has to draw advance money from the farmland-owner. In so doing, he receives at the wage rate of kyats 900-1000 per day instead of the regular kyats 2000-2500 per day. Thus some of their labor is sacrificed for nothing for themselves. They work year round but remain poor. Most daily-wage workers go off to Kawlin, Hoping, Monhyin, Myitkyina and the villages in Shwebo Township environs as migrant workers. On their return home their earnings are soon used up as they have to pay back their debts. Daily-wage workers try to solve health and social emergencies by drawing advance wages from the farmland owner. When faced with serious troubles they sell off their house and land. They have to live outside of the village as the homeless. Their busiest months are July, August, January and February while they find it most difficult to get employment in November.

#### **7.4.3 Vulnerability and Seasonality**

In 2012, though the purchase price for summer paddy was claimed by buyers to be kyats 300000 the farmer at harvest time actually got kyats 280000 only even after pleading with the broker. Moreover it was not a down payment, but realized only after several visits to the buyer. About three months after the harvest of summer paddy the purchase price might raise to kyats 420000, benefitting big-time farmers with some capital of their own. Most paddy farmers receive less for their paddy because they have to readily pay the daily wages and make arrangements for cultivation of monsoon paddy. The farmers who met with a disastrous harvest in one season usually

remains indebted for two years, it is learnt. Such a person is forced to sell off his farmland and becomes a daily-wage laborer.

#### 7.4.4 Vulnerability and Access to Knowledge

Knowledge regarding livelihoods is weak on the part of villagers of Chiba (North), Chiba (South), Kinbya and Obo villages. They gain some knowledge only when agriculture service staff and chemical fertilizer distributors' personnel come over to give instruction and educative talks. However, difficulties in real life are seldom helped by those educative talks.

A 45 years old man talked about paddy farmers' weakness as to knowledge, thus:

*“The paddy farmers are very weak in agricultural knowledge. Their access to knowledge takes the form of educative talks. But they are held like events and sometimes the farmers miss them. Practical field inspections are needed during paddy production. This year a good harvest is expected of most paddy fields but insects have struck unexpectedly. The farmers will suffer a lot. The paddy has whitened tops, thanks to the rice stem borer. The insecticide used is not much of a success with the insect inside the plant. A certain America made insecticide is said to be effective, but it is highly priced. We can't do anything but wait. Agriculture personnel do not come to help. Farming experts should have visited us from the beginning to show how to fix things. Some people in the next village posted comments on the internet so Agriculture personnel are to be judged negligent, unlike in the past. Their behavior has been lax especially since 2000.”*

In the educative talk's events and local activities only those from upper class and middle class participate in a leading role. The lower class members are usually absent because they have no spare time because of constant struggle for a living. For these reason members of lower class gradually become less vulnerable to knowledge concerning local affairs.



A 72 years old married male masseur from lower class spoke of his livelihood knowledge as follows.

*“We poor people are rarely talked to by others. Now at 72 years, this is the first ever time stranger has asked me for an interview. I began to cry for happiness.”*

On account of the above mentioned factors, villagers with the livelihood of farming related knowledge more from personal experience and dialogue with friends, rather than from educative talks. These talks, aimed at land-owning farmers, are most accessible to upper and middle classes. The farmers’ interest in educative talks lessens for their talking time, being difficult to easily understand and being useless as there a gap between the talks and facts on the ground.

#### **7.4.5 Vulnerability and Education**

At Chiba (North), Chiba (South), Kinbya and Obo villages’ members of upper and middle classes are at least middle school passed. In the lower class only a minority has had primary school education as the majorities are compelled to work according age for family’s living. Moreover basic education schools there suffer insufficient teaching staff, weak cooperation between teachers and parents, and weak efficiency of teaching staff. Therefore schooling inclined parents with monetary means begin to send up their children for schooling at cities.

On insufficient teaching staff, a 45 years old School Executive Committee member explained thus:

*“We have had to deal with school affairs on self-help basis; also, strength of teaching staff was not enough. At the beginning we had had to hire up to six outside teachers. Two has remained since 2012, each with a salary of kyats 70000. Yet the primary assistant teachers are a great help thanks to their services in middle school classes. They get no additional salary. Expenditures are incurred out of well-wishers’ donations plus education fund.”*

A 53 years old man of Chiba (South) who is active in local economic and social affairs commented on local education's shortcomings thus:

*“Our village is very weak in education affairs so prospects are seemingly not good. The teaching staff is mainly responsible. To be frank, a local child about to study for grade III transferred to a school in next village for fear of bad schooling at home. But the child was made to join the Kindergarten there. Last week also, a grade V student went to the monastery to stay for the holidays but he was given a caning by the abbot for not knowing even Myanmar alphabet. So some rich people make their children live in Shwebo for schooling even from the kindergarten onwards. To be frank, the school head is to be held responsible for the decadence in education. He's at odds with Executive Committee members. All Executive Committee members except one have resigned, myself included. For our social life to be successful there are two needs provision of good education and suppression of gambling. That's crucial.”*

The lower class members cannot send their children even to primary schools. There is no need to incur expenses for enrollment or stationery, but the children feel downhearted and began to lose interest in schooling for lack of pocket money and presentable clothing.

A 47 years old housewife from lower class, an odd job taker by livelihood, spoke of why her children are drop out of school, as follows.

*“Most children of ours and suchlike cannot go to school. School fees are nil but each child has to be paid kyats 100 to buy snacks for the morning and afternoon. Otherwise they would lose face before others. They are unwilling to go to school without any pocket money and I soon stop to exhort them. In this way they are made to do chores at home.”*

For these reasons it is found that household income leads to differentiation in social class and different education opportunities for the children. The main need to uplift

the teaching efficiency is enough strength of teaching staff. And cooperation among parents, teachers and local elders will play a leading role in the development of schools and education.

#### 7.4.6 Vulnerability and Health

At Chiba (North), Chiba (South), Kinbya and Obo villages have a government appointed only nurse. Chiba (North) has two private general practitioner clinic, opening everyday at 5:00 p.m. to give consultation to all patients. Upper class members usually go to town for medical care. Middle class members, when taken ill in a minor way, would buy medicines to take. It taking medicines is not effective; middle class members would consult local doctor or nurse. When a lower class member is taken ill he would rest at home and take care of himself by taking household medicines. If not improved, the illness will be treated through medicines bought at nearby shops. If illness persists, he would consult the nurse or doctor.

The lower class women aged 25, with little money due to poor livelihood conditions, recounted her difficulties in seeking medical care thus:

*“Currently out of a job, I have housework like cooking to do. Youngest brother, age 13 works hard, setting traps for fish at night. But presently he is taken ill and can’t go to the clinic for consultation for lack of money. The other day he fainted on the way to the latrine so I couldn’t go out for work. But a cousin from Shwebo, a grade ten passed, is visiting us at home due to our asking. He’s sort of a quack. He has won our villagers’ trust some time ago when he saved a patient, supposedly near death as claimed by his doctor through a medical injection. The local quacks charge 2000-3000 kyats injection, but my cousin charges 2000 kyats for two injections. At the moment my brother was just given Ngannigyaw (ငန့်နီတေ့၎်) traditional medicine, and he’s improving. Western medicine products didn’t seem to make him well.”*

Sometimes teams for free medical care would visit rural areas, but some people are forced to regard health as secondary for their struggle for food. Moreover the time of a team's visit does not suit their schedule. So they miss such medical care, related a 65 years old man as follows.

*“Health care is said to be free, but first-time visitor to dispensary has to pay kyats 200 for a registration book. We hardly have kyats 100, much less kyats 200. We mainly have to eat and medical consultation is secondary. It is free but medicines have to be paid for. So it almost costs the same as consultation at a private clinic. Some time ago the disabled in the environs received a special treatment for free. Their helpers receive soap, books and a sum of kyats 300 each. Apart from meals, the disabled were provided with crutches if necessary.”*

For their daily struggle for wages to buy food and weak knowledge regarding health many villagers fail to receive free services from the medical teams, leading to their poor cooperation.

A 47 years old woman, owner of a power loom, talked about poor health consciousness of laborers thus:

*“Laborers in this village have no health consciousness. Even today it was exhorted through the megaphone that women receive inoculation against cervix cancer for free. Yet they were hesitant for fear of losing the daily wage. I personally made a list of those women together with father's name and sent it to the authorities. Daily meals are all important, the rest is negligible.”*

#### **7.4.7 Vulnerability and Disasters**

At Obo village a settlement with houses close by the moat is called “Auk-Kyin” (အောက်ကျင်း). Starting from 2004, they suffer natural disaster in the form of floods in the rainy season. Before 2004, moat waters flowed straight on by the village; not diverting it into the village. In 2004 a businessman built a dam across the moat to

create a fishery, diverting aside the waterway. Moat waters, for now being forced to flow in a meanderings way, leads to over flooding during monsoon, so all houses at Auk-Kyin are under flood. To escape the disaster, the residents are forced to move to relatives' houses or the monastery for a temporary stay. During the three month period of disaster the houses begin to go to ruin for being half-submerged. Meanwhile livelihood activities also suffer.

An 80 years old dependent male from lower class spoke of the losses caused by floods, as follows.

*“Our area, Auk-Kyin is close to the moat. For ten years our houses have been flooded with water every Waso, Wagaung. It was not so before that time, as the moat waters flowed straight ahead. But a fishery pond had been dug straddling the moat and the floods have been regular since. Owner of that fishery is unknown. When the moat is in flood we have to move to the monastery or relatives' houses for a stay until the waters subsides. Our occupations also are to be dropped for about one and half months. The houses are seriously ruined after consecutive years of flooding. The houses at Auk-Kyin have their walls wasted beyond repair up to the waist level. At the heights of floods the authorities see to it that necessary documentary photos are taken but that's that and nothing follows.”*

## **7.5 Livelihood and Coping Strategies**

Coping strategies are composed of the various activities undertaken by the household to generate a living. People combine activities to meet their various needs at different time and on different assets. A changing asset may alter strategies depending on the policies and institutions at livelihood.

From 1962-2002, farmers were forced to sell their quota of paddy assigned by the government, and often faced with bad weather. Their living was hard and debt accumulated. At the same time when family members' health began to fail they had to



sell their farmland for costs of medical care. They were made to struggle hard for family's living and solving of other problems.

A 52 years old woman, farmland owner turned farm laborer, said thus:

*"I have turned landless for about 19 years. With six young children and an ill parent-in-law I had had to mortgage my farm land, to finally forfeit it to the creditor. At that time a plot of farmland cost kyats 15000 only and I didn't even receive a lump sum because my loan had been increasing incrementally, like, pyi by pyi of rice. The last plot of land was sold to initiate the sons into novice hood. Now monks, they are residing in Yangon. At present, with husband suffering from motor paralysis I am struggling for a living as a laborer."*

A 60 years old man whose livelihood often changes for various reasons said thus:

*"I owned four acres of farm land formerly. An elder of the village, I had a tenant farmer. He didn't make it and I got into debt and had to sell the land. Now I grow flowers in the house compound to sell. From 6.00 p.m. to 6.00 a.m. I am a night watchman at a fuel oil shop, with a salary of kyats 50000. Our family barely makes a living."*

Those with farming as livelihood are usually occupied during planting and harvesting periods, so they have to pick up what jobs they can do to meet their living needs.

A 38 years old eel catching man elaborated on the changing pattern of his occupations thus:

*"I take up farm work where it is available. Out of the season I set fish traps. Currently it is suspended due to lack of water in the Mu canal. But setting fish traps for the eel still works. Catching the eel is viable for about ten months, from Tabodwe to Tazaungmone. We eel catchers are self-disciplined we never take others' traps. 3-4 eels are often caught in a trap though none is caught sometimes. My normal catch per day is 3-4 viss. The fish*

*is worth kyats 6500 per viss if sold out of home. It could bring kyats 7500 on Shwebo market. In a pot of water the eel can survive for more than a month. Sometimes I put my fish on hold before selling it. Demand is strong but the fish has become scarce. I started catching eels in 2010, when even up to 7-8 viss of them were caught in a day. I agree that it is demeritorious work but I can't help catching fish for a living. An elder said the eel could go extinct in 3-4 years."*

A male odd-work taker, aged 25, said:

*"I'm making mouse traps for the paddy field rat. This occupation allows no recess in any month. At 3:00 p.m. I start setting 50-70 traps in the neighborhood of paddy fields. I recollect them at about 6:00 a.m. but the traps are only half successful. The meat is sold locally, normally bringing me some 2000 kyats per day. Sometimes the meat produced is just enough for our meals."*

An 86 years old man from lower class explained about his occupation for a living thus:

*"I am a sharpener of scissors and knives, earning altogether about kyats 1500 for the day. At the row of tailoring stalls in Shwebo market. I am always in favor. I get kyats 200 apiece for my services and a tailoring stall could be worth a business of 5-10 instruments. Some customers would come over to my house when I can't go out because of illness. Now that market is too far away for a weak person like me to go to. Currently I do massage for a fee at customer's home, or some customer would send me a motorbike. We are alone: I and wife who are blind. My three children reside far off, and they can't support us."*

Those with livelihood of farming are kept busy only in planting and harvesting time. During the spare time they usually go to other town to work. In the meantime they become migrant workers, with their children left in the care of parents or relatives at

native village. But whenever circumstances permit, they would come back home and take available jobs for livelihood.

Once a migrant weaver 2010-2013 at Myitkyina for lack of regular works at home a local woman (30 years) from lower class related her experiences thus:

*“The surroundings are based on farming and jobs are easy to have only in planting and harvest seasons. There’s virtually no job for the rest of the year so nearly all youth go up to Myitkyina for weaving work. They earn kyats 3000 or 4000 per day in addition to board and lodging. It was going well, but towards the end of 2013 nearly all returned home because local weaving industry has been restored. We had been migrants to earn a living, not for pleasure or comfort. Both I and husband returned. We earn here kyats 3000 per day as weavers but are happy about living together with children.”*

## CHAPTER VIII

### DISCUSSION

The aim of this study is to explore the effect of Development Program on poverty alleviation on rural people living in Shwebo rural community. In Chamber & Conway (1992) theory, they analyzed livelihood assets which are the basic building blocks from which livelihoods are generated. The existence of, and degree of access to, livelihood assets is therefore important in influencing the livelihood options that people may or may not have. Based on this theory, findings from the study area will be coordinated for discussion. Moreover similarities and differences were differentiated for further discussion in reference to other scholars' demonstrated views.

#### **Poverty and Livelihood**

Chamber & Conway (1991) defined the term livelihood as the capabilities, assets and activities required for a means of living: a livelihood is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets and provides sustainable livelihood opportunities for the next generation and which contribute net benefits to other livelihoods at the local and global levels in the long and short term.

Chamber (1983) said poor people are vulnerable physically weak, isolated, and powerless, making it difficult to get out of poverty. World Bank (2000) said poverty is pronounced deprivation in well-being.

Timmermans (2004) analyzed poverty, development and natural resources in South Africa, Dwesa/Cwebe. Factors contributing to the vulnerability status of the communities were population pressure and land scarcity, exposure to climatic shocks, poor health status, job losses related to the under performance of the macro economy and corruption and inefficiencies among agents of local governance.

Eswarappa (2007) said that livelihood is a part of culture and also reflects the poverty of culture. Livelihood is a central and essential focal point of the people which helps to documents a socio-cultural reality of the community and also it gets manifested in their socio-cultural reality of the community and also it gets manifested in their social institutions where a lay man can also observe the poverty and richness of culture.

Ribas & Machado (2007) said that a lack of human capital and ownership of physical capital are prominent features amongst people who live in a persistent state of poverty for a long period of time, as well as amongst these who move in and out of poverty.

Jacobs (2009) said that in analysis of allotment gardening in, Siyazama community Cape Town, to promote awareness of the intrinsic value of natural assets and to ensure the preservation of their assets for utilization by future generations, it is imperative that sustainable livelihoods are created in a way that addresses the multi-dimensional nature of poverty. This means that sustainable livelihoods approaches should aim to improve poor people's quality of life in a holistic manner that does not jeopardize the city's natural resource stocks in either the short or long term.

Similar in this study, local people based on accessibility of their assets, diversify into social classes, also livelihood patterns and livelihood strategies diversify. The upper and middle classes with ownership of paddy land grow paddy for livelihood. In this agriculture they face problems almost every year in the form of climatic shock, pests shock, insufficient labor, skill, education or training, poor tools and equipment for production or processing, poor access to credit and insurance markets, so difficulties arise to have sustainable livelihood. Financial needs, if any, are satisfied through selling of one's possessions or mortgaging them. Members of the lower class mainly depend on labor for their livelihood. Apart from lack of regular daily income they are faced almost every year with health shock, insufficient skills, education or training, inadequate household goods, and utensils, food, and lack of livelihood options. When income stops they draw advance wages or borrow money at interest to meet their living needs. Once they get jobs they have services to the loan, so this vicious circle goes on and on.



For the above mentioned reasons, though members of the upper and middle classes have insufficient human, physical, financial and social capital they can manage to satisfy the living needs of the family. Being without access to physical, financial capital and social capital, the lower class depends on human capital that is labor for livelihood and, in case of health shock; families living needs are difficult to satisfy. Therefore, assets are one of the most important factors to improve livelihood.

### **The Influence of Resources on Livelihood**

Chamber & Cornway (1991) demonstrated the five broad asset areas are human, natural, financial, physical and social assets. Natural capital refers essentially to the resources found in the natural environment. Physical capital refers to basic infrastructure, services and equipment, sanitation, communications that are needed to support livelihoods. Financial capital refers to the stocks and inflows people use to achieve their livelihood objectives. Human capital refers to ability of people to work in terms of their education, health and skills. Social capital refers to the social resources that people draw on in pursuit of livelihood objectives.

### **Natural Capital**

Timmermans (2004) demonstrated that in South Africa, because of the inaccessibility to considerable natural resources and environmental constraints they do not become natural capital enough for livelihood. Therefore most of the poorest are depending on migrant remittances and state welfare grants for their survival.

On the contrary, in the current study area, being dependent on agriculture for their livelihoods, mainly use land, climate, water, soil, flora and fauna out of the natural resources. Dependent on accessibility to natural resources livelihood patterns and livelihood strategies branch out differently. Year on year families of upper and middle classes take up for livelihood rice farming and gardening as they already have such cultivable plots of land. For gradual yearly degradation of fertile top soil more chemical fertilizers are needed, and rice farmers have to bear more costs. The families in the lower class access such natural resources as edible wild plants, fish, eels, paddy-field mouse and fuel wood for their own use and livelihood.

For water resource all social classes have access to Mu Canal. The rain fall is not enough for agriculture so they have to mainly depend on irrigated water for that purpose. Families in the upper and middle classes irrigate Mu Canal water for their paddy fields gardens. The upper and middle classes use water from the sources for drinking, cooking and domestic use from hand-pumped well. When Mu Canal is without water those families commercially collect sand out of it for extra income. Meanwhile the families of lower class labor for farmland owners for daily wage, and use the remaining Mu Canal water for domestic use. The soil having been used continually for years has become degraded that soil needs to be remedied. Some members of the lower class catch fish and set traps for eels and paddy-field mouse for their livelihood. Consequences of use of chemical fertilizer and electric dices to fish have become fish species are depleting year by year.

The above facts show that natural resources play a vital role for all social classes. The upper and middle classes have access to land for residential site and growing crops, while this opportunity does not exist for the lower class. Therefore in regard of natural resources, the social classes based on their socio-economic position are found different livelihood patterns and livelihood strategies.

### **Physical Capital**

Myat Thein, Mya Than & Maung Aung (2011) studied the socio-economic development of local people in Kyaikmanhtaw village, Yintaik village tract, Takkyi Township Yangon Region. Summer paddy and mung bean were grown in 2002 because of irrigation, which is physical capital.

Miller (2012), who as cultural anthropologist of economic systems says production, consumption and exchange remains an interrelated process and that there are five modes of livelihood: foraging, horticulture, pastoralism, agriculture and industrialism. The scholar says agriculture is mainly dependent on an artificial water resource, that is, irrigation channels.

Similarly in this study, for the use of Mu Canal water, physical capital, the farmland owners are able to grow double crop, summer paddy and monsoon paddy in a year.

Meanwhile the lower class members are enabled to enjoy job opportunities dependent on farmland owners. For these factors physical capital can claim to be contributing to improve the livelihood of local people.

Timmermans (2004) demonstrated livelihood of the poorest in South Africa. For a shortfall of physical capital, including key infrastructure and services such as roads, electricity, water, communications, public transport, health care facilities, agricultural extension and markets the region was much distanced from mainstream economy.

Similarly, in this study the residential site form shows: brick house or wood-floored and wood-walled house mostly for upper and middle classes and palm-leaf-roofed bamboo hut for the lower class. In study area the town with its year-round motor roads in use besides bus services makes for job opportunities in household income-earning activities. The upper and middle classes can go to town for direct trade and have easy access to livelihood related information. For good communications members of lower class can go off to sell fish in town, or become migrant workers in paddy plantation or loom weaving elsewhere. Moreover locals may sell paddy, eels or pottery to visiting outside people, some of whom also may take up seasonal rice plantation work in the locality. The upper and middle classes have access to electricity while the lower class has not. Most people of the upper and middle classes have, as transportation and livelihood assets, motorcycle, bicycle and tractor. A minority of lower class members own motorcycle and bicycle. The upper and middle classes get their potable water from their own wells and use own sanitation facilities. The lower class, however, get such water from public wells, monastic wells, or Mu Canal whichever is available at a given time. Sanitation, virtually non-existent, may take place in the bush, near the farmland.

For the locality's physical capital such as key infrastructure and services, that is roads, electricity, water, communications, public transport, and healthcare facilities the upper and middle classes in study area are being satisfied to a considerable extent. But no agricultural markets exist, so paddy price remains volatile due to the activities of brokers. Paddy farmers are always in need of capital for the following season. They cannot store up the commodity, but are forced to sell at whatever price is current. The

time is harvest time, making for less paddy prices. Thus, the locals' livelihood does not improve as well as it should.

The above factors say physical capital is basic to local people's livelihood and life style. Their physical assets may indicate their socio-economic status.

### **Financial Capital**

Myat Thein, Mya Than & Maung Aung (2011) studies the socio-economic development of local people in Kyaikmanhtaw village, Yintaik village tract, Takkyi Township Yangon Region. They demonstrated the local people depend on outside loans for a shortfall of financial capital that is agricultural loan.

Khin Htay Htay (2014) studied of the livelihoods of Bamar National living in Salin Township, Magway Region. In this area most of the farmers are poor and indebted. The farmers who have farm can get loans from government. However, most of the farmers are face with a great debt of cash and difficulties for subsistence as the expense of cultivating is high and the lands they own are small.

Similarly, in this study the local people have to depend on financial resources for their livelihood. Paddy farmers obtain agricultural loans for financial capital from Myanmar Agricultural Bank at very little interest. But the loan is not enough for conducting their livelihood and the loan's term is short. They face financial difficulties when confronted with stress, shocks, trends, and seasonality. Agriculture is not year-round livelihood to wage-earning farmlands who own no farmland. When suddenly faced with living and health-care needs they are forced to take outside loans at high interest. Almost all of them are borrowers. Moreover the traditional weaving on the loan, a small-scale industry, does not receive State loans. As capital required is unaffordable and the products have to be sold through brokers this livelihood do not grow as much as it should.

Financial capital may cause changes in livelihood strategies. Families of the upper class work to have extra income through speculation in rice paddies, self-owned loom-weaving, rice milling, keeping a shop, and collecting sand to sell. The families

for the middle class sometimes become victims of natural disasters; besides they are hard put to make ends meet when faced with the needs of children's education and family's health care. For extra income they weave on the loom of their own, keep a shop, and let their children become salaries workers on the outside. Family members of the lower class become debtors when faced with the needs of social affairs and health-care for their lack of regular income. All family members are required to earn an income as soon as they are adult; those not able to do so are required to help out in family activities of living. As the upper and middle classes own farmland there is enough economic activity to go by for them. Moreover members of the upper and middle classes are often in need of money for lack of capital farm inputs. Then members of the lower class are often in need of money usually for the needs of families living and health care.

In case of the upper and middle classes strategies to cope with sudden cash needs include borrowing money from friends and relatives, selling the stored paddy, or selling one's farmland or jewellery. But such strategies on the part of the lower class are advance drawing of labor charges or taking a loan of money at high interest. Financial service organizations for local people are both formal and informal services. Sustainable livelihood is yet to be because all social classes cannot depend on agriculture only for their living.

The above factors show that loans can contribute to the livelihood of all social classes. In this study, loans need to be available in enough amounts and for enough term for all social classes so that they would become inputs to the livelihood of rural people.

### **Human Capital**

Miller (2012) said there is a need for complex knowledge related to agriculture, such as environment, plants and animals, soil type, precipitation patterns, plant varieties and pest management. In paddy-growing livelihood of Southeast Asia and Southern India women and girls play a major role.

Similarly, in this study local people's abilities based on human resources such as individual skills, knowledge, labor and health are found to make for their livelihoods.



For the upper and middle classes of local people in study area the household head needs to have agricultural skills such as knowledge of seasonal seed paddy, chemical fertilizers, raising seedlings, picking them, irrigation, transplanting, weeding, harvesting, pest control, hiring farmhands, paddy marketing, and agricultural loans. In some matters they employ personal skills and management skills in others. Moreover they share knowledge among themselves in regard of the household livelihood and its education, economic, health and social matters. Children of school going age go to school, and if they drop out, they have to help out in parents' livelihood. In the lower class all prospective wage-earners have to work.

Dependent on the livelihood, inputs into children's education could go different. Children of the upper and middle classes mostly have the secondary education, and then they help out in parents' livelihood and household duties. Children of the lower class can hardly complete the primary education, and in accord with age, they cooperate for easier living of the family. Lower class families cannot afford children's education so they do not go to school are distance and the need to assist in work.

Dependent on livelihood, resolution of health-care needs go different according to different social classes. Family members from the upper class, when taken ill, buy and take prescription medicines or consult a doctor. Otherwise they visit a clinic in town for consultation while the rest of family takes care of the household livelihood. Family members from the middle class, when taken ill, take prescription medicines or seek advice from a trained nurse or consult a doctor. Otherwise they visit a clinic in town for consultation while the rest of family takes care of the household livelihood. In the lower class the bread-earner, when taken ill seriously, rest up at home, and would buy and take prescription medicines after several days of illness. Growing worse, they would consult a nurse or doctor because living is hard for them for low of income.

The above factors show human resources in the form of local people would go different in accord with the social classes. From a livelihood perspective there are both positive and negative features because of the larger number of family members in the lower class. On the positive side greater labor means diversifying livelihood activities. On the negative side there are more dependents due to a larger family, and

the income has to be shared among more people, who include jobless adults and children. Therefore the ability to labor is the biggest potential human asset in the lower class because livelihood is based on labor only. Moreover the quality of labor pool in the lower class comprises relatively poor health status and low levels of education skills and knowledge. As the lower class members education level (literacy, knowledge and technologies, skills) is much lower it is affecting of the livelihood options. Therefore, generally observed in the lower class are usually greater number of dependents than those who labor, lowest level of education and highest level of unemployment. Therefore the lower class's age, gender, ability to labor and good health are important to the ability to pursue different livelihood strategies.

### **Social Capital**

Lin (2001) said that resources are value good to society. Resource can be divided into ascribed and acquired resources. Ascribed resource is inborn, like gender and race. Example of acquired resource is education and job. Capital is divided into two types are personal or human capital and social capital. Human capital consists of resources possessed by the individual and social capital consists of resources embedded in one's network or association. Social capital can be accessed through both direct and indirect ties. Resource capital can be accessed as both personal resources and positional resources. The positional resources of social ties are much more useful than personal resources to ego, because positional resources evoke not only the resources embedded in positions in an organization, but also the power, wealth and reputation of the organization itself.

Woolcock (2004) described social capital has an important role as it can create sustainable livelihood. It has three division: internal group cohesion as Bonding social capital; inter group relations as Bridging social capital; and vertical relations as Linking social capital.

Eswarappa (2007) described social capital as an important factor among the Sugali in their pursuit of livelihood. Family is an important social institution among Sugali. The head of a family is the decision maker with regard to the livelihood pursuits of family members. They act as a social resource and kin network help in regulating and

pursuing livelihoods of its members. The ownership of land usually vests in the name of man.

Similarly in this study local people conduct livelihood based on social resources. A vital role is seen in family and kinship networks, interrelations between farmers and labor, and villagers' cooperation. However the participants' role goes different according to social classes.

In study area, local people's gender role activities go different depending on different social classes. In the upper class, father usually is head of household as well as decision maker in regard of livelihood and household matters in consultation with mother. The mother closely attends to household duties and health care of children. Generally the father takes care of livelihood matters and social affairs, while the mother often goes off to neighbors and relatives for advice-seeking talk. Children go to school for the school-going age. Sometimes males help the farm work, and females help the mother at home. In harmony and cooperation family members resolve domestic problems under the leadership of parents.

In the middle class father mostly are household head and conduct family livelihood in cooperation with the mother. The mother closely attends to children's affairs, visiting neighboring relatives in her free time for a conversation. Livelihood matters and social affairs mostly are attended to by the father. Children go to school for the school-going age. When the schooling is finished or they drop out, they have to help out in the parents' livelihood or take a job for an income. In harmony and cooperation the family member help resolve family problems as much as they can.

In the lower class the father only is household head. Both father and mother struggle for their living. Household duties mostly are taken up by the mother while other family members take what responsibility they can. In mutual help and cooperation family members work to solve the major problem of their living.

Base on the social class and different social networks due to gender role the ability to participate in social affairs diversity. Members of the upper and middle classes go for mutual help sharing of information in regard of family, kinship, neighbors and

community. But members of the lower class are in everyday struggle for the family's living, and so remain distant from the social affairs affecting kinship, neighbor and community.

For above reasons inherent in all social classes' social capital between and within households in the study area takes the form of rights and obligations that are embedded in kinship relations and social networks. For a family the bond between parents and children is found to be stronger than that between them and other relatives and friends. Extended kinship ties are extremely important in that they facilitate inter-household assistance in the form of labor or food sharing. Social capital in the local people is differentially situated with respect to types and class of social organization. Social resources play a vital role in helping people act to improve their livelihoods, mobilize assets and defend them.

The social networks of the upper and middle classes have better relations than the lower class do. The upper and middle classes, with ownership of farmland, obtain agricultural loans based on group responsibility. Thus individual benefits are both financial and psychological in that there are an increased sense of empowerment, achievement, self-confidence and social status.

Social networks among the lower class families are weak ties in that they have to struggle on focusing on living needs only, and there is lack of relations due to no support from any social organization.

The above factors show local people in study area are found to be struggling on for survival based on capital assets. The different assets also clearly interact as people use and transform them in their livelihood strategies. Family members in the upper and middle classes are engaged in agriculture as livelihood because of ownership of farmland. Moreover they work to have extra income through affordable inputs in paddy trading, running of a rice mill, weaving on mechanical or traditional looms, collecting sand, trade and shop. Members of the lower class go for livelihood strategies, combining their abilities with skills, in available jobs of labor such as raising paddy seedlings, harvesting, weaving on the loom, pottery, fishing, gathering of firewood and so on. Thus different social classes of access to resources lead to

different opportunities, enabling the abilities of people to transform those assets into income opportunities.

### **Contextual Factors Influencing Livelihood**

Toe Hla (2004) explored, Konbung period (1752-1885), agriculture is main livelihood; Minbu, Kyaukse, Madaya and Shwebo are like granaries to the country. Irrigation was vital for paddy cultivation. The peasants, though possessed of enough, farmland, cattle and seed paddy they were unable to achieve self sufficiency in food because of warfare, drought, flood and pestilence. In times of Konbung period subsistence agriculture had given way to commercial agriculture, but due to the prescription of Royal Monopoly and the oppression of buyers in royal employ the majority of peasants remained poor.

In Anderson's (1999) study, Vietnam has had sustainable economic growth and poverty alleviation as its key goals of economic policy reform since the introduction of renovation in 1986. Both agricultural and some non-agricultural policy changes needed before Vietnam can accede to World Trade Organization will have impacts on rural areas. Policy changes have brought about food security, food price stability, job creation, poverty alleviation and income distribution, so most probably thus has been an effect on rural development.

Thaung Htay (2011) explored, the household livelihood security approach for sustainable rural development in Myanmar especially at Loikaw and Demawso Township in Kayah State and Mindat and Kanpetlet. Natural disasters, manmade disasters, governance policy settings, infrastructure conditions, background historical situations and long term cultural practices are connected with people's livelihood conditions. Based on that connection, people suffer stress and shock, leading to livelihood insecurity and poverty. Moreover policy setting, historical and infrastructural conditions could have both positive and negative effects on people's livelihoods.

Similarly in study area, the government policies have caused great trouble for the peasants, with negative impacts for livelihood as well as social conditions.

In 1988-2000, livelihood strategy was forced to change by reason of the loss of top soil brought about by non-stop yearly agriculture; the cattle were not strong enough to tackle the soil and less food for cattle brought about by turning into farmland of canal-side postures.

During 1962-2002 the paddy yield went down due to the peasants being pressured to sell a set quota of paddy to the government; natural disasters and pestilence. To fulfill that quota the peasant had to buy some need paddy from outside market at a much higher price, which had to be funded through loans at high interest.

In 2007, a well-wisher demonstrated to peasants how to grow rice paddies through wide-spaced rows system with the deepest conviction with verbal guarantees. The change was a great success. But not enough capital for paddy storage and capital needs for next round of agriculture led to sales of paddy at whatever price was obtainable, so the livelihood did not improve as much as it should.

During 1988-2012 in paddy cultivation the farmers suffered loss because they were required to use seed paddy chosen by Agriculture Department only. It grew worse because the costs rose on the part of the upper and middle classes who were confronted with deteriorating top soil thanks to non-stop yearly paddy cultivation, and the need for more chemical fertilizers insecticides and labor.

In pestilence year by year invading bacteria and insects were found to be different, so the farmers cooperatively dealt with the problem through peer-to-peer consultation. Their efforts did not achieve enough for lack of insecticide spraying machines and a shortfall of needed chemicals. However, when the farmers were unable to hire infrastructure goods such as tractor, harvester, and paddy winnowing machine they acquired human labor. As a result scarcity of labor followed. In their livelihood tractor, spare parts, petrol, chemical fertilizer, and insecticide were most essential and had to be acquired before harvest time. But the money needed came usually from loans at interest or sales of jewellery.

The government gave loans to land-owners only at cheap interest, but the time term was short and the amount was less than necessary. When the loan could not be repaid



at due time for various reasons it was often serviced with outside lender's money acquired at high interest. Moreover small scale industries and the landless had no access to agricultural loans. Educative talks on agriculture were held sometimes, but misunderstanding ensued between talk-givers and farmers as the latter had no time to attend the event and theoretical knowledge often proved hard to understand to farmers.

The above factors show policies have both positive and negative effects on livelihood, while causing a change in social life of the peasants. In agriculture based Myanmar with peasants constituting 70 percent of the population, policies which prove beneficial in one region may have adverse effects in another region due to different environments and culture, so policies makers and peasants would be in harmonious relationship only when policies are made adaptable to the region concerned through practical survey when setting them.

To grow paddy for livelihood the peasants have to invest in money, labor and time. Agricultural loans are available to farmland owners only, thus development of the small scale industries and the welfare of the landless should be taken into consideration. Only then would all peasants have equal opportunity and proportionately benefit from the poverty elimination program.

Rural areas need peasant organizations or really pragmatic bodies to effectively deal with rural problems arising from time to time. Through that benefits will ensue to the livelihood as well as the social community.

### **Income Diversification**

Ellis (2000) said that rural livelihood diversification is the process by which rural households construct on increasingly diverse portfolio of activities and assets in order to survive and to improve their standard of living.

Kim (2011) describes unequal access to diversification opportunities among different group in rural Uganda. Livelihood diversification is becoming a significant livelihood strategy in rural Uganda. Difficulties arising from lack of money income are

compounded by education and health. School fee is free at public primary schools; education involves a lot of extra costs such as school uniforms, stationeries and transportation. Livelihood diversifications into on-farm and non-farm activities have benefited rural population in general as reflected in rising non-farm incomes and decreased rural poverty.

Similarly in the study area, all social classes do not depend on one sort of income only for livelihood. Their livelihood is basically agricultural so the upper and middle classes, owning paddy land, enjoy an income only in harvest time. The rest of the year their livelihood for more income constitutes running rice mills, shop, trade and weaving on the mechanical and hand looms. Generally, the upper class's livelihoods are for uplifting the family's living standard. The middle class seeks more income to deal with human health shock and children's school fees. The lower class which is landless has an income only in paddy-growing time and harvest time. The rest of the year their occupation includes fishing, setting mousetraps, vending, working the loom, and migrant work elsewhere the lower social class struggles on for extra income just to meet their living needs. Farming becomes less profitable and more risky as a result of crop and market failures, farm debts, income fluctuations, climatic change, policy, shock and health, and they are pushed into off-farm activities. Households are rather pulled into off-farm activities leading risk reduction, daily income.

For the above mentioned reasons livelihood diversification in the upper and middle classes helps the members meet living needs as well as health, children's education and social needs to some degree. Members of the lower class find it necessary to have a daily income to meet their living needs. If they do not have a daily income in their locality they become migrant workers so migration is part of active livelihood strategies. All the social classes have both on-farm and off-farm livelihood activities.

### **Vulnerability Context and Livelihood**

Chamber (1989, 1992) said that vulnerability refers to exposure to contingencies and stress and difficulty in coping with them. Vulnerability has two sides; they are external side of risks, shocks and stress to which an individual is subject and an

internal side which is defenselessness, meaning a lack of means to cope without damaging loss. Vulnerability may be characterized into trends, shocks and seasonal events.

Ellis (2000) said that vulnerability refers to factors of negative impact on people's livelihood.

Eswarappa (2007) said that a study of Sugali settlements' livelihood in Anantapur District shows the main cause for vulnerability is crop revenue risk. The two risks faced by households are idiosyncratic and covariant risks. The idiosyncratic risks include loss of an earning member, accident and falling sick. The covariant risks include drought and flood.

Khin Oo, Yi Yi Cho & Swe Mon Aung (2002) studied jute farmers at Myaungmya, Kyonpyaw, Hinthada, Taungoo, Thayawaddy and Yangon. That study shows the agricultural pattern of paddy and kyne was observed in jute cultivation areas. High proportion of farmers was willing to grow jute because that traditional work provides a regular income. Major constraints in jute production were low price, inadequate supply of seeds and advanced payment, less supply in inputs, low return compared with competitive crops and scarcity of labor. The jute farmers know how to enhance the yield and crop quality but they fall short of natural capital, financial capital and physical capital.

Similar study area shows vulnerability context varies according to social classes as well as community and individual. Five key factors being relevant in shaping the vulnerability context were identified as stress, shock, policies, health and education.

In the upper and middle classes most of a community's vulnerability is due to crop shock, insufficient capital, seasonality of price, insufficient inputs and weak knowledge of livelihood. Individual-wise, most vulnerability is caused by human health shock. In the lower class community vulnerability is complete lack of support from organizations; and individual-wise vulnerability comprises insufficient capital, lack of opportunities, human health shock, food security and education.

For the above factors the all social classes residing in study area are faced with both idiosyncratic and covariant risks. The vulnerability faced by all social classes is idiosyncratic risks comprising insufficient capital, human health shock and education.

### **Effect of Development Program**

Winter, Correl & Gordillo (2001) studied livelihood America in order to inform project design and project implementation in the region. This research is a household's livelihood strategies and rural development projects; the existence of social capital at a meso or macro level plays an important role as well as household decisions that directly or indirectly lead to the creation of social capital.

Mya Mya Khin (2009), Taungkhinyan village, Myaukkhinyan village, Shwebo village in Gangaw Township, Magwe Region described how ecological changes impacted native people. Taungkayan dam is affected the native people's expectation or life expectation when their income increase, their life expectation and their children future can be promoted. The main reasons for the ecological changes are to promote the native people's socio-economic and socio-cultural status.

A similar finding was seen in a study area with development program. Considering the arising of Thaphanseik Dam paddy land owners are able to do double-cropping and raise income; and job opportunities increase for the landless. Social network has expanded because agricultural loans given out by Myanmar Agriculture Bank are based on collective responsibility of individual ten member groups. Outside companies also make loans based on insurance.

Soliman & Mi Mi Maw (2005) studied of Kuangyankone village, Taikkyi Township, Yangon Region, and analyzed contribution of the project on poverty alleviation and social mobilization. Capacity building is of great important in poverty alleviation program. Skills and abilities of poor people will be upgraded by providing skill development trainings and professional trainings. The project activities meet village needs because of bottom-up planning methodology. The villagers always request for continuation of the project and it is significantly effective and beneficial to the villagers to a large extent.

Yadav (2008) studied socio-economic impacts of public land agro-forestry on livelihoods of pro-poor in central Terai, Nepal. Program caused social capital to increase because public land agro-forestry groups beget group formation, group mobilization and the network information. Therefore social empowerment arises on members' part, aiding livelihood. The program has been very effective not only for supporting livelihoods of poor and landless people in the district but also for the appropriate land use of public land and involvement of excluded groups in the development.

Unlike the current study, development program, favoring paddy land owners and being not bottom-up planning, cannot aid the landless. Poverty alleviation policies are most important to rural people.

The State in 1988 and 2011 adopted and implemented policies aimed at uplifting the life of rural people with agriculture based livelihoods. Since 1988, Myanmar has been in a transition from a developing country to that of a modern, developed country centered on agriculture. Myanmar landscape has significantly changed based on the five reform principles, namely: increased development of agricultural land resources, new irrigation works are built and old ones repaired to have enough irrigation water, efficient agricultural mechanization, adopting new technologies and increased production and use of good quality seeds. In the study area it was found that results are found to be as follows.

### **Increased development of agricultural land resources**

For exploitation of agricultural resources around Chiba (North), Chiba (South), Kinbya and Obo villages there is no more vacant or virgin land to be developed, it is learnt. Most farming plots are not regular shaped but fraction into small irregular shapes. So, during a recess in farming the farmers have the dykes flattened out so as to create wide and extensive farming fields to facilitate the functioning of harvesters.

### **New irrigation works are built and old ones repaired to have enough irrigation water**

Mainly engaged in paddy cultivation, the villages of Chiba (North), Chiba (South), Kinbya and Obo village lying in Dry Zone has to depend on irrigation. Kabo Dam built 2000 in Shwebo District is able to irrigate 530000 acres of paddy field. Via Thaphanseik reservoir water flows into Kabo Dam, then pass along branch canals to irrigate farmland around Chiba (North), Chiba (South), Kinbya and Obo villages. Before the Kabo only monsoon paddy was grown. With irrigation two crops; summer paddy and monsoon paddy are being grown in a year. Thus, while the farmer gains in productivity farm workers have more income thanks to growing job opportunities. In some years irrigation is late, or no irrigated water is available so that difficulties confront the farmer. Two crops of paddy every year means farmland has no recess, leading to degradation of fertile top-soil. Moreover the farmland begins to be compacted, making it hard for bullocks to pull the plough. Thus machines have to be hired to work the land.

### **Efficient agricultural mechanization**

Several needs remain for the farm to have efficient agricultural mechanization. Most popular implement is the hand-driyen tractor, but accessible only to half the farmers. The rest of machines (harvesting and winnowing machines) can be hired from the companies. Having to mainly struggle to satisfy family's living needs, most farmers have not enough money to buy farming implement as investment, it is learnt.

### **Adopting new technologies**

Before 2007 farmers used broadcast system of paddy seed in growing monsoon and summer paddy. In that year a well-wisher came and demonstrated new technology which has been used to date to great success. It dictates that seedlings are grown in small nurseries for monsoon paddy; and seed be directly broadcast onto wet, ploughed field for summer paddy. That way makes for economical use of seed, easy irrigation, and rich additional sprouts, all leading to good yield. Advantages to be had for summer paddy are economical use of seed, time, less expenses and labor all leading to



good yield. Advantages are more than disadvantages which include difficulty in acquiring burnt paddy husk for growing of monsoon seedlings and acquiring labor. For summer paddy the difficulties are wild growth of weeds and destruction of paddies by paddy field rats.

### **Increased production and use of good quality seeds**

It is most important for paddy growers to obtain good quality seeds. In the past the strain of summer paddy to be grown was dictated by department of agriculture but by 2012 paddy farmers can grow what strain they like. The seedlings of short stem strain of paddy they were required to grow in the past got submerged under water and soon died because some fields were like a basin with too much water. It is important for paddy farmers to seek seed paddy each on his own so that it soils his field conditions and be marketable.

In hopes of alleviation of poverty to some extent and helping the socio-economic life of rural people improve “National Workshop on Rural Development and Poverty Alleviation” took place on 2011. Following discussions there eight work programs to be sponsored by the State have been adopted. They are for enhanced development of the following: Agricultural production, Livestock breeding and meat and fish production, Development of small scale industries in rural areas, Development of private micro-finance, Development of co-operative works, Socio-economic development of rural community, Energy development in rural areas and Environmental conservation. In the study area it was found that results are found to be as follows.

### **Agricultural production**

Paddy farmers are to be helped in various aspects for increased rice production of the country, especially in essential inputs, namely, fertilizer, insecticides, good quality seed, controlled irrigation, and use of machines. The other factors needed are storage of paddy, distribution, sooth marketing agreement on reasonable price, natural disaster preparedness, agricultural loans, and improved education and health concerned with human resources. Only then would the farmers be awarded enough for

their efforts. However, for increased rice production paddy farmers' contribution alone is not enough; it is to be supplemented by the contributory efforts of ministry of agriculture and irrigation, survey and land records department, banks, cooperative microfinance, NGOs and the rest of rural people.

### **Livestock breeding and meat and fish production**

At Chiba (North), Chiba (South), Kinbya and Obo villages most people in agriculture breed cattle. But for lessening pastures, degradation of soil leading to bullocks' inability to work the land the water buffalo was introduced for use by 2008 to replace the bullock. So water buffaloes are being bred. Three families are breeding goats. Those without ownership of land raise pigs and poultry on self-manageable basis as they cannot invest much. Rich paddy farmers do not feel like livestock breeding for religious reasons, it is studied. In the past paddy fields were like a fishery but fish are scarce by now because of electric shock fishing. Those without ownership of land would like to adopt livestock breeding as livelihood but they cannot afford investments. So, to help farming and livestock breeding develop proportionately extension of appropriate loans through the cooperation of the government and private creditors is called for.

### **Development of small scale industries in rural areas**

To help fulfill family's living needs of paddy farmers without regular income, development of small scale industries in rural areas could play a significant role. There exist weaving on power loom or handloom and pottery at Chiba (North), Chiba (South) and Kinbya villages. But without formal loans, those industries cannot develop as well as they should, it is learnt. Power loom operators, without investment of one's own, receive yarns from traders to weave textiles they have ordered. It is like receiving wages for weaving. Handloom operators also carry on likewise, what with yarns for one session costing up to kyats 200,000. Most female weavers, unable to invest enough to set up a handloom, work for daily wage under loom owners or a loom owner would set up a handloom at the weaver's house if she be trustworthy; a handloom costs up to kyats 250000. Also, potteries in storage but have to sell them to traders at cheap rates. Pottery operators would like to sell manufactured ware (painted

pottery) at better price but the trader would buy raw material of pottery at cheap prices. Thus credit for investments and creation of a market are needed to help develop small scale industries in rural areas.

### **Development of private micro-finance**

At Chiba (North), Chiba (South), Kinbya and Obo, villages' farmers with ownership of land only have access to agricultural loans. Poor, landless families need to have regular income for their day to day living. Thus private microfinance is needed so that those families can invest to take up other productive occupations other than farm work. Only then would poor, landless people be able to enjoy regular daily income for their living and fulfillment of family members' health and children's education.

### **Development of co-operative works**

Price for paddy from farming and those for products from small scale industries are depressed because there brokers in their marketing. So group wise cooperation to mutual benefit is called for, and then educative talks on prospective benefits of co-operatives should be held

### **Socio-economic development of rural community**

Development in harmony on the part of Natural, Physical, Human, Financial and Social capital is found to be weak. This cooperation among the government, banks, cooperatives, NGOs, businessmen, donors and locals is especially needed for the socio-economic development of rural community, it is studied.

### **Energy development in rural areas**

At Chiba (North), Chiba (South), Kinbya and Obo villages' energy is mainly dependent on natural resources, while firewood is mainly used for cooking. All locals have no access to electricity yet. Moreover draught cattle are mostly used in paddy farming for livelihood. Only a minority of farmers can use agricultural machines.

More use of energy should mean economical use of time, labor and money, let alone the conservation of natural environment.

### **Environmental conservation**

Rural people have direct influence on the conservation of natural resources, which in turn support locals' living needs to a large extent. Thus natural environment is found to have been harmed in various ways, through deforestation brought about by gathering of firewood, adverse climate change, fish species going extinct due to electric shock fishing in ponds and fields and degradation of fertile top-soil as a result of multiple cropping.

However, locals' livelihood activities are found to have been forced to satisfy their basic living needs. Therefore more livelihood opportunities for the locals should be created. That development program, not being able to help all social classes in the study area, cannot make for poverty alleviation. Therefore development program is one of the most important factors for sustainable livelihood.

## CHAPTER IX

### CONCLUSION AND RECOMMENDATIONS

#### 9.1 Conclusion

The **livelihood** of local people of Obo, Kinbya, Chiba (North) and Chiba (South) villages is agriculture based. Growing paddy does not make for year-round income and all members of social classes have alternative livelihoods on-farm and off-farm activities. In so doing, the upper and middle classes choose, based on affordability of financial investment, rice milling, mechanical or hand weaving on the loom, horticulture, paddy marketing, collecting and selling of sand, shop keeping, or commerce. In rice-farming recess, the lower class goes for fishing, setting traps for eels, mouse trapping, and vendoring, weaving on the loom, gathering of water convolvulus in the wild, gathering of firewood, pottery, taking any available job, or working as migrant elsewhere.

Members of the upper and middle classes, making use of farmland as a **natural resource**, do double cropping of paddy-monsoon and summer through irrigation. Most farmers of the upper and middle classes use Mu Canal water for agriculture whereas members of the lower class serve as carriers of sand for a daily wage. Therefore people of all social classes are found to be earning their livelihood, being connected directly or indirectly with natural resources.

Regarding **physical assets**, the study area with good year-long communications makes for economic activities and livelihoods connected with other towns and villages. Most farmers of the upper and middle classes have a tractor each but no harvesting and winnowing machines. At harvest time those machines are difficult to rent or the rental fee is too high. Moreover, needs for pesticides and chemical fertilizer are on the increase year by year so farmers find it hard to acquire enough of them. This highlights accessibility of physical assets is a great help in a livelihood.

Members of the upper and middle classes in study area have **financial resources** which are formal and informal services but there are only informal services in

members of the lower class. All social classes need monetary loans in one form or another to have their livelihoods running smooth.

Regarding **human resources**, in study area productive and reproductive roles are shared according to gender. In the upper and middle classes the father, household head, mainly conducts family's livelihood, while the mother takes care of housekeeping and children affairs. In the lower class the father, usually household head, struggle together with mother for family livelihood. However, the mother mostly takes care of housekeeping and children's affairs. Therefore it can be found that human resources in the form of local people would go different in accord with the social classes and the locality, being agriculture-based, holds more job opportunities for female than male.

Concerning **social networks**, in the upper and middle classes male usually take charge of livelihood activities as well as participate in activities of village organizations. Struggling hard for a living, the lower class members don't often participate in community affairs. In farm work recess, crew of farmhand leader (*Baukthagyi*) would arrange so that the female may go work in local and other towns. Local administration also has to coordinate livelihood related matters of a community. From the above facts it can be found that the ability to participate in social affairs diversifies because of different social classes and social networks. Therefore social networks are one of the most important factors for all social classes to improve their livelihood.

In a nation-state administrative **policy** changes are followed by economic policy changes, then by changes in livelihood strategies. Members of the upper and middle classes have vulnerabilities. Regarding **institutions**, educative talks held by Agriculture Department or the companies are effective to a little degree only. It is so because talk shows are time consuming, they are mostly theoretical and difficult to understand and apply in a practical manner. And company held talks mostly cover the chemical fertilizers they want to sell. This highlights farmers can mainly get agricultural knowledge through their own experience and discussions among themselves.



The vulnerability faced by all social classes. Most of the upper and middle classes almost yearly experience community **shock** due to bacterial infection of paddy and loss of paddy market. Individual shock is concerned with health. In the lower class an individual shock such as the death or illness of the main income-earner makes for difficulties in family's living. Moreover most members of the upper and middle classes have **stress** due to a time-consuming wait to have their fields irrigated; difficulty in hiring of labor and machinery at paddy planting and harvest time; insufficient inputs; timely servicing of loans; shortfall in investment; weak skills and knowledge related to livelihood. Loom operators suffer stress for their inability to make investments even though there a market for textiles. Other forms of stress in the lower class are the family is large with few income-earners; lack of regular jobs; and debt and advance payments of labor drawn at high interest. By technological **trend** most farmers have begun to use tractors for reasons such as scarcity of feed, cattle's inability to tackle the changed condition of soil, and insufficient labor. But mechanical paddy harvester and thresher are too costly for the farmers to invest in; so company-owned machines have to be hired. There are vulnerability of **seasonality** price in the upper and middle classes. Paddy price tends to be strong before harvest time but is depressed afterwards, but most farmers have to sell their paddy at what price they can get because they need capital for the next season and to pay back the loans. In the lower class, by seasonality of employment opportunities in an agriculture-based economy only plantation and harvest time can make for abundant job opportunities.

Regarding **Development processes**, in the study area there is no vacant land for expansion of farmland despite the principle of increased development of agricultural land. After completion Kabo Dam in 2000, summer paddy as well as monsoon paddy as extra crop was grown, leading to more job opportunities for local people. Local farmers would like to have mechanical agriculture due to degrading in fertile top soil. But their financial means are limited and so they use tractors only. They use seed broadcast system as new technology for many advantages, despite a few disadvantages like a need for burnt paddy husk, weeding during the crop season, and vulnerability of seedlings to rats. The new technology's advantages: less seed paddy is used; easy water flow in and out of paddy field; better yield; less need for

farmhands; and low costs. By 2012 rice farmers could grow good quality seed so that they have come to grow field compatible and marketable strains of rice.

Regarding **poverty alleviation** factors needed for rice production are: insufficient inputs on the part of most rice farmers; shortfall in financial means to make investments; and lack of a proper market for the rice output. The farmers also breed cattle at home for agricultural use. But for decreasing pasture land and falling usefulness of the animals the number of breeders has decreased. To have a partial support for the family's living the members of the upper and middle classes have taken up mechanical and hand weaving, while the lower class chooses pottery to that purpose. Those industries have markets but have not developed as they should, for a lack of official loans and insufficient investments on the part of would be producers. Without cooperative works their paddy and other industrial goods are often depressed in price at the hands of private traders. All of the upper and middle classes have access to electricity, but it is true of the minority only in the lower class. This highlights development processes in turn shape the livelihood assets directly or through shaping the vulnerability context.

## 9.2 Recommendations

1. To have sustainable livelihood, all social classes should be made conscious of need to lessen the loss of natural resources, and community wise maintenance of those resources should be undertaken.
2. Agricultural inputs should be hired or sold to farmers of the upper and middle classes for their livelihood based on installment system. The agricultural loan should refer to the extent of acreage and cover a longer term. Industrial livelihoods should be improved through giving of suitable loans to them.
3. The current livelihood vulnerabilities of the lower class, the poorest rural people, should be lessened through: giving vocational training to lead to a regular daily income; giving those suitable loans to take up livestock breeding and handicraft industries; and creation of other job opportunities for a regular income.
4. For farmers to have sustainable livelihood, price for their paddy should not be artificially depressed but it should have access to a paddy market so as to get suitable prices.

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ကျော်ရှင်၊ မောင်၊ ၁၉၉၇၊ ကုန်းဘောင်ခေတ်ဦးစီးပွားရေး၊ မြို့နယ်ငြိမ်ဝပ်ပိပြားမှုတည်ဆောက်ရေးအဖွဲ့၊ ရွှေဘိုမြို့။

ကျော်ရှင်၊ မောင်၊ ၂၀၀၁၊ တတိယမြန်မာနိုင်ငံတော်ဟန်၊ ပုံနှိပ်ရေးနှင့် စာအုပ်ထုတ်ဝေရေးလုပ်ငန်း။

ကျော်၊ ထွန်းအောင်၊ ၂၀၀၃၊ မြန်မာနိုင်ငံမြေအသုံးချမှုနှင့် နှစ်ဆယ့်တစ်ရာစု၊ စာပေဗိမာန်။

ချစ်၊ ဒေါက်တာ၊ ၂၀၀၇၊ ကျေးလက်စီးပွားပြည်သူ့အား၊ Digest Media Bank ။

ထင်၊ မောင်၊ ၁၉၆၆၊ မြန်မာ့လယ်ယာမြေစနစ်၊ မောင်ကိုဦး။

တိုးလှ၊ ဒေါက်တာ၊ ၂၀၀၄၊ ကုန်းဘောင်ခေတ်၊ ကျေးလက်လူမှုစီးပွားဘဝ(၁၇၅၂-၁၈၈၅)၊

မြန်မာ့သမိုင်းအဖွဲ့။

မောင်သင်း၊ ဒေါက်တာ။ (၁၉၉၆)၊ ကမ္ဘာစိုက်ပျိုးမှုအစမြန်မာမှသည် ယနေ့ဆီသို့၊ စာပေဗိမာန်။

သိန်း၊ မောင်မြသန်း၊ မောင်အောင်၊ (၂၀၁၁)၊ မြန်မာကျေးရွာတစ်ရွာ၏ လူမှုစီးပွား ရေးတိုးတက်မှုကို တစေ့  
တစောင်းလေ့လာခြင်း၊ စကော်လာသုတေသနနှင့် ဖွံ့ဖြိုးရေးဂျာနယ်။







**ANNEX (3)**

**Questionnaires on Socio-economic characteristics of lower class**

1. Completed Age (in year) \_\_\_\_\_

2. Gender – Male/Female \_\_\_\_\_

3. Education

Respondent's education levels – illiterate/ monastic education school/  
primary education/ middle school education/ graduate/ others (specify)

\_\_\_\_\_

4. Occupation

Respondent's current occupation – dependent/ odd-job taker/ loom  
worker/ carpenter/ stall keeper/ driver/ others (specify)

\_\_\_\_\_

5. Household size \_\_\_\_\_

6. Housing type

Respondent's housing types – self-owned house/ renter/ parents'  
house/ squatter hut / others (specify) \_\_\_\_\_

7. Electricity – Access/ Non-access \_\_\_\_\_

8. Possession

Respondent's possession – radio/ cassette tape recorder/ television/  
compact disc player/ bicycle/ motorcycle/ telephone/ livestock  
breeding/ others (specify) \_\_\_\_\_

Name of the interviewer= \_\_\_\_\_

Date and time of interview= \_\_\_\_\_

ANNEX (3)

တတိယအလွှာများ၏ လူမှု-စီးပွားရေးလက္ခဏာရပ်များကို ဆန်းစစ်သောမေးခွန်းလွှာပုံစံ

၁။ ပြည့်ပြီးအသက် (နှစ်) .....

၂။ လိင် - ကျား/မ .....

၃။ ပညာရေး

အိမ်ထောင်ဦးစီး၏ ပညာရေးအဆင့်- စာမတတ်/ ဘုန်းတော်ကြီးပညာသင်/ မူလတန်း/  
အလယ်တန်း/ ဘွဲ့ရ/ အခြား(ဖော်ပြပါ).....

၄။ အလုပ်အကိုင်

အိမ်ထောင်ဦးစီး၏ လက်ရှိအလုပ်အကိုင် - မှီခို/ ကျပန်း/ ယက်ကန်း/ လက်သမား/ ဈေးဆိုင်/  
ယာဉ်မောင်း/ အခြား(ဖော်ပြပါ).....

၅။ အိမ်ထောင်စုဝင်ဦးရေ .....

၆။ အိမ်ပုံစံ

ဖြေဆိုသူ၏ အိမ်ပုံစံ - ကိုယ်ပိုင်အိမ်/ အိမ်ငှား/ မိဘအိမ်/ ကျူးကျော်/ အခြား(ဖော်ပြပါ).....

၇။ လျှပ်စစ်မီး - ရှိ/ မရှိ .....

၈။ ပိုင်ဆိုင်မှု

ဖြေဆိုသူ၏ ပိုင်ဆိုင်မှုများ - ရေဒီယို/ ကတ်ဆက်/ တယ်လီဖုန်း/ ဗီဒီယို/ စက်ဘီး/ ဆိုင်ကယ်/  
တယ်လီဖုန်း/ အိမ်မွေးတိရစ္ဆာန်/ အခြား(ဖော်ပြပါ).....

မေးမြန်းသူ၏ အမည်= -----

မေးမြန်းသည့် ရက်စွဲ= -----

မေးမြန်းသည့် အချိန်= -----

## ANNEX (4)

### **Informal Group Interview (IGI) guideline**

#### Background history of social classes

- Explain the purpose of the interview
- How many social classes of the villagers
- Livelihood patterns by social classes
- Access to resources (Natural, Physical, Financial, Human, Social)
- What social classes have most members
- Conducting social mapping
- Thanks for active participation and for their time

## ANNEX (5)

### Key Informant Interviews (KII) guideline

#### (a) Background history of village

- How village was first established
- Resources
- Assets (Natural, Physical, Financial, Human, Social)
- Activities

#### (b) Leadership

- How is the village administration organized?
- How is the Administrator elected?
- What are the Administrators duties and functions?
- In what had the Administrator to cooperate with the villagers?

#### (c) Social clubs

- How many social clubs are there in a village?
- What are a social club's leaders and how are they elected?
- What is the leadership of a social club and how it is formed by gender?
- By what social classes is a social club usually participated?
- How do livelihoods function in connection with social clubs?

#### (d) Livelihood activities and contextual factors

- Livelihood assets
- Agriculture
- Handicrafts and industry
- Off-farm activities
- Cooperation based on community
- Coping strategies

#### (e) Financial services

- Formal credit, Informal credit
- Savings

#### (f) Vulnerability context

- Stress, Shock
- Trends
- Seasonality



## ANNEX (6)

### **In Depth Interview (IDI) guideline**

#### (a) Socio economic characteristics of the lower class

- Household size
- Housing type
- Age of Household head
- Gender of Household head
- Educational levels of the household head
- Household head's education
- Assets
- Livelihood activities
- Division of labor by age and gender
- Seasonal cycle by gender
- Coping strategies

#### (b) Vulnerability Context

- Stress
- Shock
- Seasonality

#### (c) Development program

- What organizations do you resort to for support for your livelihood's improvement?
- Which factors are supportive to your livelihood's improvement?

## ANNEX (7)

### Focus Group Discussion (FGD) guideline

#### (a) Introduction

- Welcome
- Objective of the discussion
- We are going to discuss today about topics related to your livelihood and development program issues. The aim of this discussion is for all of you to share your ideas, feeling and practices with me. We'll discuss topics such as livelihood activities, assets, development program, coping strategies, vulnerability context.
- Anything you say here will be kept confidential and regarded as private. We'll never mention your name in the report and outside of this venue.
- Consent to tape and note taking
- Introducing of participant

#### (b) Conducting focus group discussion

##### Assets

- How does the livelihood go in regard of natural resource and what difficulties are encountered?
- How does physical resource play into livelihood?
- How many patterns are there in financial resource?
- What are the difficulties experienced and how do they affect livelihoods?
- In regard of human resource of family's division of labor, education and health, how are they connected with livelihood and how do they affect it?
- How does social resource affect livelihood and how does it cause the family, relatives and community to cooperate?

##### Livelihood activities

- Please discuss your livelihood patterns.
- How are livelihood patterns differentiated by gender?
- How are livelihood patterns taken up according the seasonality?
- What is the resolution in times when jobs are scarce?
- What is the resolution when there is a financial need?
- What is the major expenditure for the family?

##### Vulnerability context

-Stress, Shock, Seasonality

Thanks you for your time and sharing your ideas, thoughts, practices and experiences.

ANNEX (7)

ဦးတည်အုပ်စုဖွဲ့ဆွေးနွေးခြင်းလမ်းညွှန်

၁။ နိဒါန်း

- နှုတ်ခွန်းဆက်ခြင်း
- ဦးတည်အုပ်စုဖွဲ့ဆွေးနွေးခြင်း၏ ရည်ရွယ်ချက်

ယနေ့ဦးတည်အုပ်စုဖွဲ့ဆွေးနွေးခြင်းခေါင်းစဉ်မှာ “အသက်မွေးဝမ်းကြောင်းမှုနှင့်ဖွံ့ဖြိုးတိုးတက်မှု ပရိုဂရမ်ဖြစ်ပါသည်။ ယခုပါဝင်ဆွေးနွေးမည့်သူအားလုံးမှတစ်ဦးချင်းစီ၏ အယူအဆ၊ ခံစားမှုနှင့်ကျင့်သုံးမှုများကို ဆွေးနွေးတင်ပြစေလိုပါသည်။ ဦးတည်အုပ်စုဖွဲ့ဆွေးနွေးမည့် အကြောင်းအရာများမှာ အသက်မွေးဝမ်းကြောင်းမှုလှုပ်ရှားမှုများ၊ ပိုင်ဆိုင်မှုဖွံ့ဖြိုးတိုးတက်မှုအစီအစဉ်များ၊ ကိုယ်တွယ်ဖြေရှင်းနိုင်သည့်နည်းဗျူဟာများ၊ အားနည်းချက်နှင့် ဆက်စက်မှုများဖြစ်ပါသည်။

ပါဝင်ဆွေးနွေးပြောဆိုသည့်အကြောင်းအရာများကို လျှို့ဝှက်စွာထားရှိမည်ဖြစ်ပါပြီး ဆွေးနွေးတင်ပြချက်များကို အမည်နှင့်ဖော်ပြခြင်း၊ ထုတ်ဖော်ပြောဆိုခြင်းလုံးဝပြုလုပ်မည် မဟုတ်ပါ။

ဆွေးနွေးမှုများကို အသံဖမ်းစက်ဖြင့်ဖမ်းယူခြင်းနှင့် မှတ်သားခြင်းများကို ပြုလုပ်မည်ဖြစ်ပါသောကြောင့် ခွင့်ပြုပါရန် လေးစားစွာမေတ္တာရပ်ခံပါသည်။

ပါဝင်ဆွေးနွေးပြောဆိုမည့်သူများကို တစ်ဦးချင်းမိတ်ဆက်စေပါသည်။

၂။ ဦးတည်အုပ်စုဖွဲ့ဆွေးနွေးခြင်း

ပိုင်ဆိုင်မှုများ

- အသက်မွေးဝမ်းကြောင်းမှုတွင် သဘာဝအရင်းအမြစ်များနှင့် မည်ကဲ့သို့ ဆက်စပ်လျှက်ရှိပြီး မည်ကဲ့သို့ အခတ်အခဲများနှင့် တွေ့ကြုံနေရပါသလဲ။
- ရုပ်ပိုင်ဆိုင်ရာအရင်းအမြစ်များသည် အသက်မွေးဝမ်းကြောင်းမှုတွင် မည်သို့ လုပ်ဆောင်ပါသလဲ။
- ငွေကြေးအရင်းအမြစ်ပုံစံဘယ်နှစ်မျိုးရှိပါသလဲ။
- အသက်မွေးဝမ်းကြောင်းမှုတွင်မည်သည့်အခတ်အခဲများနှင့်တွေ့ကြုံရပြီးဘယ်လိုသက်ရောက်မှုများရှိပါသလဲ။
- လူစွမ်းအားအရင်းအမြစ်နှင့်ပတ်သက်၍ မိသားစု၏ လုပ်အားခွဲဝေမှု၊ ပညာရေးနှင့်ကျန်းမာရေးများသည် အသက်မွေးဝမ်းကြောင်းမှုနှင့်ဘယ်လိုဆက်စပ်ပြီးဘယ်လို သက်ရောက်မှုများရှိပါသလဲ။

- လူမှုရေးအရင်းအမြစ်များသည် အသက်မွေးဝမ်းကြောင်းမှုတွင်ဘယ်လိုသက်ရောက်မှုများ ရှိပြီးမိသားစု၊ဆွေမျိုးများနှင့်ရပ်ရွာအဖွဲ့အစည်းများမည်သို့ပူးပေါင်းဆောင်ရွက်ပါ သလဲ။

အသက်မွေးဝမ်းကြောင်းမှုလုပ်ရှားမှုများ

- အသက်မွေးဝမ်းကြောင်းမှုပုံစံများကို ပြောပြပါ။
- လိင်အရ အသက်မွေးဝမ်းကြောင်းမှုပုံစံများကွဲပြားသွားပုံကို ပြောပြပါ။
- ရာသီချိန်အလိုက် အသက်မွေးဝမ်းကြောင်းမှုပုံစံများ လုပ်ဆောင်သွားပုံကို ပြောပြပါ။
- အလုပ်အကိုင်ရှားပါးချိန်တွင် မည်ကဲ့သို့ဖြေရှင်းလုပ်ဆောင်လေ့ရှိပါသလဲ။
- ငွေကြေးလိုအပ်သောအခါတွင် မည်ကဲ့သို့ဖြေရှင်းလုပ်ဆောင်လေ့ရှိပါသလဲ။
- မိသားစုအတွက် အဓိကအသုံးစရိတ်သည် ဘာဖြစ်ပါသလဲ။

အားနည်းချက်နှင့် ဆက်စက်မှုများ

- ဖိစီးမှု၊ ထိတ်လန့်မှု၊ ရာသီချိန်

ယခုလိုအချိန်ပေးပြီး တစ်ဦးချင်းစီ၏အယူအဆ၊ခံစားမှုနှင့်ကျင့်သုံးမှုများကို မျှဝေဆွေးနွေးတင်ပြပေးသည့် အတွက် အထူးပင်ကျေးဇူးတင်ရှိပါသည်။

## ANNEX (8)

### **Informed Consent Form for lower class members in Focus Group Discussion**

This informed consent form is for ever lower class members in the study villages, Shwebo Township, Sagaing Region and who we are inviting to participate in study, titled “Development program and Rural Livelihood” issues among ever lower class members”.

Name of Principal Investigator - Daw Shin Thynn Tun

Name of Organization – Department of Anthropology, Yadanabon University

Name of Proposal – Development Program and Rural Livelihood

### **Information Sheet**

I am Daw Shin Thynn Tun and working for Yadanabon University. I am doing research on the development program and rural livelihood. I am going to give you information and invite you to be part of this research. This consent form may contain words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain.

It is possible that ever lower class members have their own ideas, practices and experiences. In this study, we would like to gather that information. This information might helpful to identify possible remedies for addressing livelihood vulnerability in this community.

This research will involve your participation in a one and half hour of group discussion. The findings of this research will be used for writing a thesis.

If you have any questions or clarifications, you may contact to Daw Shin Thynn Tun of Anthropology Department, Yadanabon University.

အုပ်စုဖွဲ့ဆွေးနွေးခြင်းသူတေသနလုပ်ငန်းတွင် ဆောင်ရွက်ရန်သဘောတူညီချက်တောင်းခံခြင်း

ဤသဘောတူညီချက်ပုံစံသည် ဖွံ့ဖြိုးတိုးတက်မှုပရိုဂရမ်နှင့် ကျေးလက်အသက်မွေးဝမ်းကြောင်းမှုဆိုင်ရာ များနှင့် ပတ်သက်သည်များကို လေ့လာမည့်သူတေသနတွင်ပါဝင်ရန် ဖိတ်ခေါ်ခြင်းဖြစ်ပါသည်။

အဓိကသူတေသီ - ဒေါ်သျှင်သင်းထွန်း

အဖွဲ့အစည်း - မနုဿဗေဒဌာန၊ ရတနာပုံတက္ကသိုလ်။

သူတေသနခေါင်းစဉ် - ဖွံ့ဖြိုးတိုးတက်မှုပရိုဂရမ်နှင့် ကျေးလက်အသက်မွေးဝမ်းကြောင်းမှုများကို လေ့လာသောသူတေသန

သူတေသနဆိုင်ရာအချက်အလက်များ

ကျွန်မသည် ရတနာပုံတက္ကသိုလ်တွင် တာဝန်ထမ်းဆောင်နေသော ဒေါ်သျှင်သင်းထွန်းဖြစ်ပါသည်။ ကျွန်မ သည် ဖွံ့ဖြိုးတိုးတက်မှုပရိုဂရမ်နှင့် ကျေးလက်အသက်မွေးဝမ်းကြောင်းမှုဆိုင်ရာများကို လေ့လာသူတေသန လုပ်ဆောင်နေပါသည်။ သင့်ကို ဤသူတေသနဆိုင်ရာအချက်အလက်များကို ရှင်းလင်းတင်ပြပြီး၊ ဤသူတေသနလုပ်ငန်းတွင်ပါဝင်ရန် ဖိတ်ခေါ်မည်ဖြစ်ပါသည်။ ယခုသဘောတူညီချက်ပုံစံတွင် သင်နားမ လည်သောစကားလုံးများပါဝင်နိုင်ပါသည်။ မေးမြန်းလိုပါက ကျွန်မပြောပြနေစဉ်အတွင်း ကြားဖြတ်၍ မေးမြန်းနိုင်ပြီး ကျွန်မလည်း အချိန်ယူ၍ပြန်လည်ရှင်းပြပေးပါမည်။

ဤသူတေသနလုပ်ငန်းတွင် တစ်ဦးချင်း၏ အတွေးအခေါ်များ၊ အလေ့အကျင့်များနှင့် အတွေ့အကြုံများ ရှိကြမည်ဖြစ်သည်။ ဤသူတေသနလုပ်ငန်းရလဒ်များမှတစ်ဆင့် အသက်မွေးဝမ်းကြောင်းမှုတွင် တွေ့ကြုံ နေရသည့် အားနည်းချက်များကို အတတ်နိုင်ဆုံး ကုစားပေးနိုင်မည့် နည်းလမ်းများကိုဖော်ထုတ်ပေးနိုင်မည် ဖြစ်သည်။

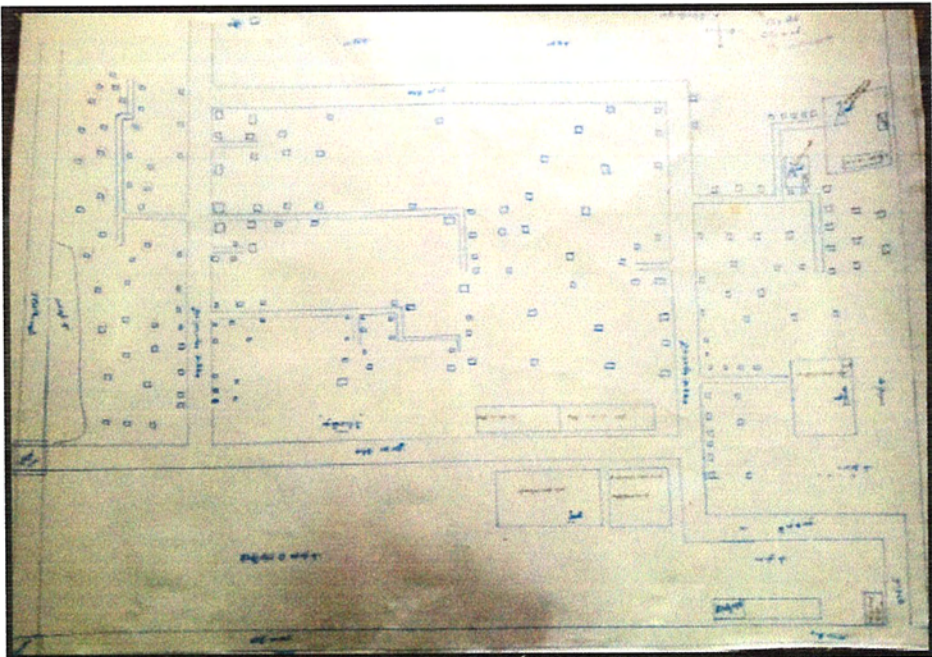
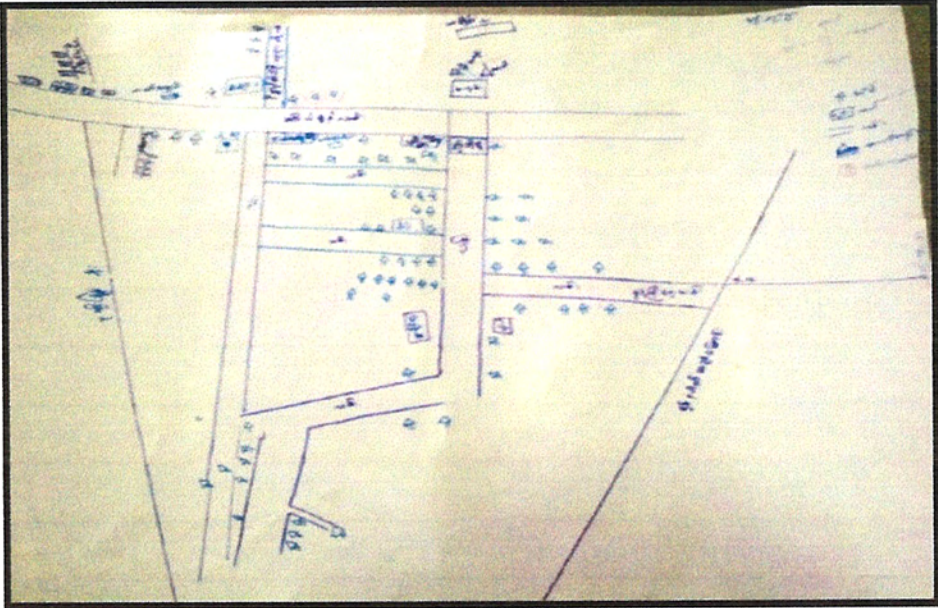
ဤသူတေသနလုပ်ငန်းတွင် ဖွံ့ဖြိုးတိုးတက်မှုပရိုဂရမ်နှင့် ကျေးလက်အသက်မွေးဝမ်းကြောင်းမှုဆိုင်ရာများ နှင့်ပတ်သက်သော အချက်အလက်များကို အသေးစိတ်အုပ်စုဖွဲ့ ဆွေးနွေးခြင်းပုံစံဖြင့် တစ်နာရီခွဲခန့် မေးမြန်းမည်ဖြစ်ပါသည်။ ဤသူတေသနလုပ်ငန်းရလဒ်များကို ပါရဂူဘွဲ့ကျမ်းစာအုပ်အဖြစ်တင်သွင်း မည်ဖြစ်သည်။

ဤသူတေသနလုပ်ငန်းရလဒ်များနှင့်ပတ်သက်၍ အသေးစိတ်မေးမြန်းရန်ရှိပါက မနုဿဗေဒဌာန၊ ရတနာပုံတက္ကသိုလ်ရှိ ကျွန်မထံသို့ အချိန်မရွေး မေးမြန်းနိုင်ပါသည်။



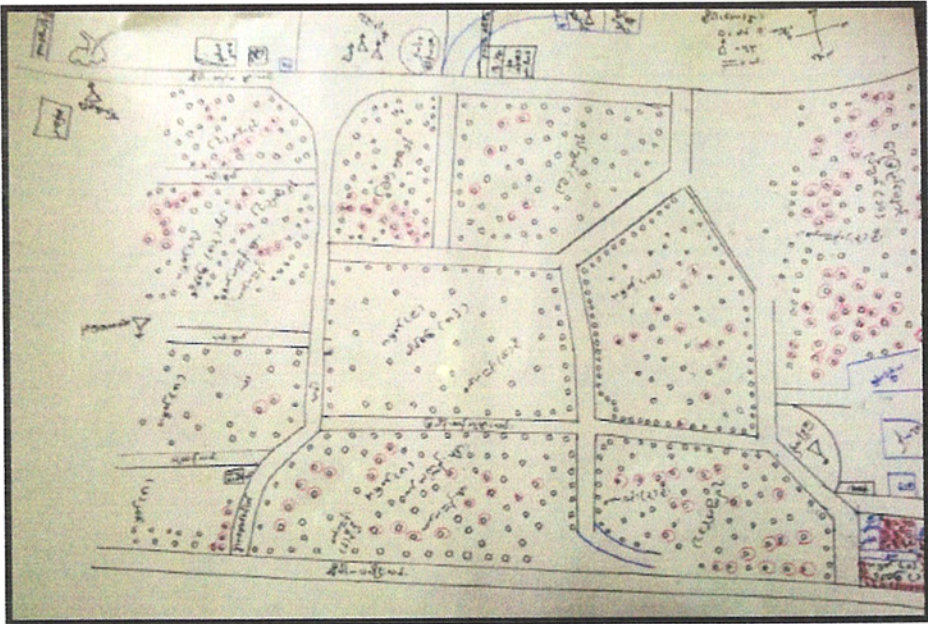
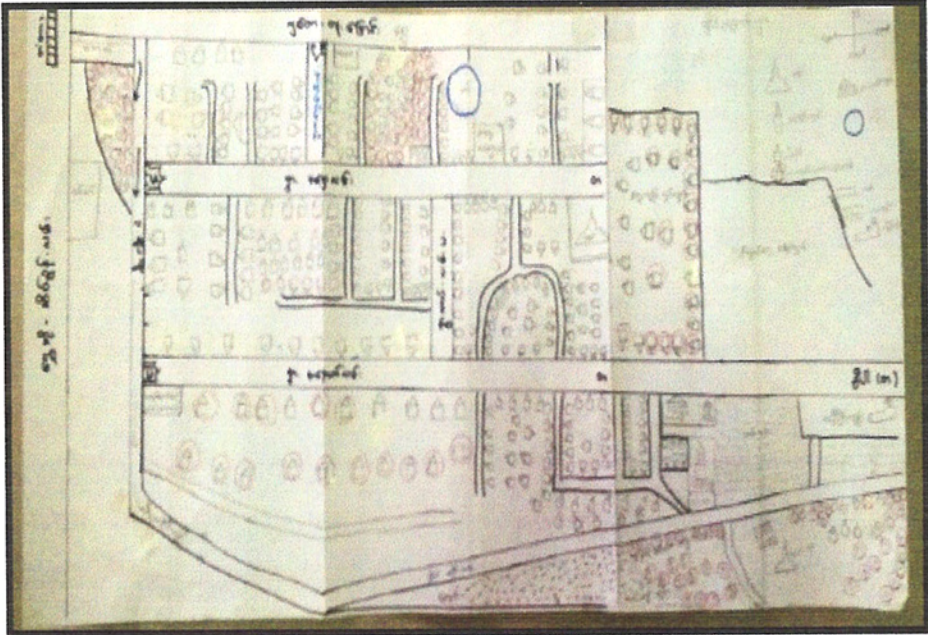
ANNEX (9)

Diagram Drawn by Obo & Kinbya Villages Map



ANNEX (10)

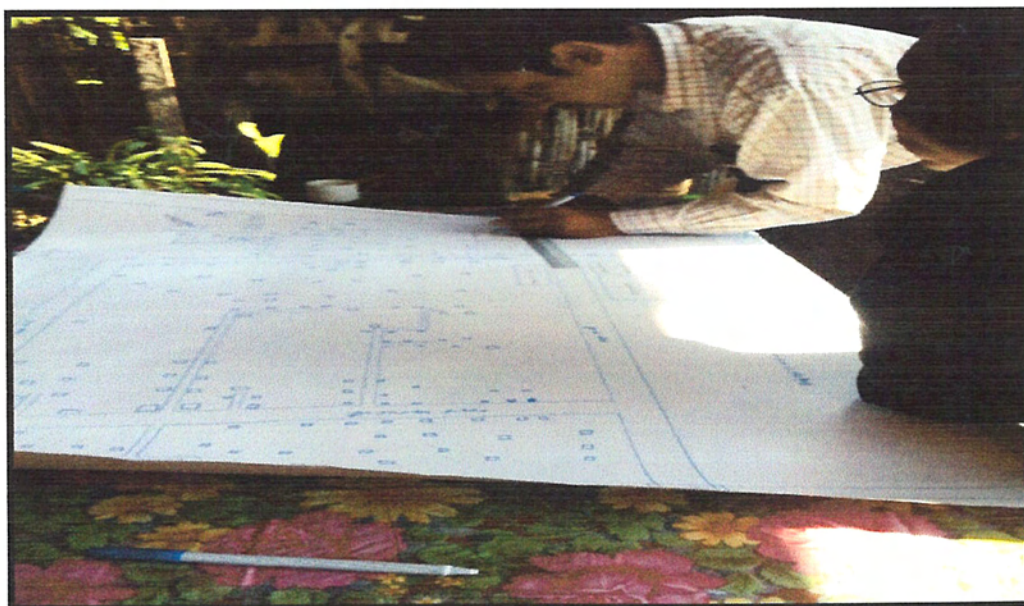
Diagram Drawn by Chiba (North) & Chiba (South) Villages Map





ANNEX (11)

Social mapping Drawn by Villagers



UNIVERSITY OF YANGON  
DEPARTMENT OF ANTHROPOLOGY  
External Examiner's recommendation on the PhD dissertation

Dated: Yangon, 31<sup>st</sup> May, 2015

TO WHOM IT MAY CONCERN  
Ref: Shin Thynn Tun's PhD thesis

**Thesis Title – Development Program and Rural Livelihood: A Case Study of Two Village Tracts, Shwebo Township, Sagaing Region**

This is to certify that I have examined the thesis “Development Program and Rural Livelihood: A Case Study of Two Village Tracts, Shwebo Township, Sagaing Region”, I am able to state that the research is very informative one. She has described the contextual factors associated with livelihood of rural cultivators and the effect of development program for poverty alleviation on rural people. She also gave a clear description on livelihood assets. The findings can contribute to the new projects of poverty alleviation in other rural area.

I am impressed with the work she has carried out. Therefore, I have no hesitation in recommending that the degree of Doctor of Philosophy be awarded.



Dr. Yee Yee Cho  
Associate Professor  
Anthropology Department  
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Degree College, Yangon  
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The Government of The Republic of The Union of Myanmar

Ministry of Health

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Tel : 95-1-375447, 95-1-375457, 95-1-375459 Fax : 95-1-251514



**Referee's Report for PhD thesis**

Title of Thesis: Development Program and Rural Livelihood: A case study of two village tracts in Shwebo Township, Sagaing Region  
Name of Candidate: **Shin Thynn Tun**  
Course and Year: PhD (Anthropology) (May, 2015)  
Roll No: 4 PhD-Anth-1  
Department: Department of Anthropology  
University: University of Yangon

The study explored effect of development program on poverty alleviation on rural people. The candidate demonstrates a broad awareness of theory on livelihood. Objectives of the study were spelled out clearly. The combination of quantitative and qualitative methods was appropriately applied to fulfil the objectives of the study. Results are suitably set out and accompanied by adequate interpretation.

The study found that development program is not able to help rural community for poverty alleviation. The main reasons related to crop shock, insufficient capital, low knowledge on livelihood and insufficient loans for short duration.. Discussion is well written based on findings and linked with objectives and theories. Conclusions are appropriately developed and clearly linked to the nature and content of the research framework and findings.

Overall, the thesis constitutes original contribution to knowledge in the respective field. That would be benefit in bringing this to a broader readership and thus it is encouraged the publications of this thesis.

Dr. Saw Saw  
M.B;B.S, PhD (University of Melbourne)  
Deputy Director  
Medical Statistics Division  
Department of Medical Research