# YANGON UNIVERSITY OF ECONOMICS MASTER OF PUBLIC ADMINISTRATION PROGRAMME

# A STUDY ON IMPACT OF THE CHANGES IN AGRICULTURAL LAND ADMINISTRATION IN YANGON REGION (CASE STUDY OF HMAWBI TOWNSHIP)

PYE PHYOE LYNN EMPA – 56 (15<sup>th</sup> Batch)

**AUGUST, 2019** 

#### **ABSTRACT**

This study aimed to assess the impact of the changes in agricultural land administration after 2013 and to study effects on land holders after changes in agricultural land administration in 2013. The survey was used as the primary data and the reports from Department of Agricultural Land Management and Statistics were used as the secondary data. The study area was Hmawbi Township, Yangon Region. The total of 254 respondents are selected as a survey. The total respondents were included and 59% were male and 41% were female. According to the income status, 168 (66.0%) of respondents were moderately increased income after 2013. Ownership of wooden building was increased 61.4% to 70.1% of respondents, ownership of no motor cycle was decreased 68.9% to 27.6%, no graduate from university in family members was decreased 96.1% to 88.6% and health care access to village clinic was increase 70.9% to 72.4% after 2013. This study found that the living condition, education, healthcare and social characteristics of respondents were more improved after changes in agricultural land administration in 2013.

#### **ACKNOWLEDGEMENTS**

First of all, I would like to express my gratitude to Professor Dr. Tin Win, Rector, Yangon University of Economics and Professor Dr. Ni Lar Myint Htoo, Pro-Rector, YUEco for their kind permission to undertake this study. Also, I wish to express my thanks indeed to Professor Dr. Kyaw Min Htun, Pro-Rector (Retired.), YUEco. Next, I would like to extend my most sincere thanks to Professor Daw Khin May Than, Professor (Retired.), YUEco for her kind teaching and available comments for our knowledge regarding research thoroughly.

I am also grateful to my supervisor, Professor Dr. Phyu Phyu Ei, Program Director of Master of Public Administration and Head of Department, Department of Applied Economics, YUEco for her invaluable supervision, constructive suggestion and unfailing interest for completion of this study.

And I would like to express my special thanks to all the professors, associate professors and lecturers for imparting of a great variety of knowledge and concepts of public administration during the study period of two years under EMPA Programme of YUEco.

Last but not the least; thanks are due to the respondents included in the study for their willing to participate and for their time and hard work to answer the survey questionnaire.

## **TABLE OF CONTENTS**

		Page
ABSTRACT		i
ACKNOLEDO	GEMENTS	ii
TABLE OF C	ONTENTS	iii
LIST OF TAB	BLES	v
LIST OF ABB	REBRATIONS	vi
CHAPTER I	INTRODUCTION	
	1.1 Rationale for the study	1
	1.2 Objective of the study	2
	1.3 Method of study	3
	1.4 Scope and limitations of the study	3
	1.5 Organization of the study	3
CHAPTER II	LITERATURE REVIEW	
	2.1 Land Policy	4
	2.2 Land Administration	9
	2.3 The benefits of a good land administration system	14
	2.4 Reviews on Previous Studies	17
CHAPTER III	I REVIEW OF THE AGRICULTURAL LAND	
	ADMINISTRATION IN MYANMAR	
	3.1 Pre-Independence Period (till 1947)	19
	3.2 Post-Independence Period (1948-1988)	22
	3.3 Military government	25
	3.4 Elected government	27
CHAPTER IV	SURVEY ANALYSIS	
	4.1 Survey Profile	38
	4.2 Survey Design	38
	4.3 Survey Results	39

### **CHAPTER V CONCLUSION**

**APPENDIX** 

5.1 Findings	50
5.2 Recommendations	52
REFERENCES	

## LIST OF TABLES

Table No.	Title	
Table (3.1)	Agricultural Land occupied by Non-agriculturalists in 1939	21
Table (3.2)	Myanmar Land Distribution under Land Nationalization Act,	24
	1953	
Table (4.1)	Demographic Characteristics of Respondents	40
Table (4.2)	Land acres owned by respondents	41
Table (4.3)	Income status of respondents after 2013	42
Table (4.4)	Income per Acre of respondents in rainy season	42
Table (4.5)	Income per Acre of respondents in summer season	43
Table (4.6)	Opinion of Farm Income by respondents	43
Table (4.7)	Ownership of Farm Equipment by respondents	44
Table (4.8)	Opinion on Agriculture Loans by respondents	44
Table (4.9)	Types of Home owned by respondents	45
Table (4.10)	Ownership of Motorcycle by respondents	45
Table (4.11)	Ownership of Motor Car by respondents	46
Table (4.12)	Ownership of Mobile Phone in respondents' family members	46
Table (4.13)	Number of Graduate in respondents' family Members	47
Table (4.14)	Access to Education of respondents' family members	47
Table (4.15)	Access to Healthcare of respondents' family members	48
Table (4.16)	Number of family trip per year of respondents	48

#### LIST OF ABBREBRATION

DALMS - Department of Agricultural Land Management and Statistics

MOALI - Ministry of Agriculture, Livestock and Irrigation

MOAI - Ministry of Agriculture and Irrigation

MAF - Ministry of Agriculture and Forestry

NAPA - National Action Plan for Agriculture

LUC - Land Use Certificate (Form 7)

FAB - Farmland Administrative Body

VFV - Vacant, Fallow and Virgin Land

GAD - General Administration Department

FPIC - Free, Prior and Inform consent

NULP - National Land Use Policy

CSO - Civil Society Organization

NGO - Non-Government Organization

#### **CHAPTER I**

#### INTRODUCTION

#### 1.1 Rationale of the study

Land is the solid surface of Earth that is not permanently covered by water. The majority of human activity throughout history has occurred in land areas that support agriculture, habitat, and various natural resources. Agricultural land is typically land devoted to agriculture, the systematic and controlled use of other forms of life particularly the rearing of livestock and production of crops to produce food for humans, and to produce biological products for human use. Human are doing the best to help the agricultural land through conservation, preservation and moderation of the use of resource.

Land administration is the way in which the rules of land tenure are applied and made operational. The processes of land administration include the transfer of rights in land from one party to another through sale, lease, loan, gift and inheritance; the regulating of land and property development; the use and conservation of the land; the gathering of revenues from the land through sales, leasing, and taxation; and the resolving of conflicts concerning the ownership and the use of land. Land tenure is the relationship, whether legally or customarily defined, among people, as individuals or groups, with respect to land.

Agricultural land administration can be an effective instrument in advancing rural development, and it highlights the need for country to develop their own strategies for land consolidation.

This situation occurs for many reasons, and efforts to enhance the quality of rural life must combine improvements to agricultural production, employment, infrastructure and the protection of natural resources. Such integrated rural development must take into account the land tenure structure which includes vast numbers of small and fragmented farms.

Agriculture is the main source of livelihood rural population in Myanmar. This sector provides employment for more than two-thirds of population and accounts for

more than one-third of Myanmar's GDP.Most of the people who live in rural areas in Myanmar are working in all the sectors of agriculture. In Myanmar, 70% of the country's population live in rural areas and their livelihood drives the agriculture sector as an important growth engine of rural development (FAO, 2016).

Myanmar's top agricultural exports include rice, maize, black gram, green gram, pigeon pea, chick pea, sesame, onion, tamarind, raw rubber, vegetables, and fruits.

Myanmar has been undergoing a rapid transformation – politically, economically and socially. As the country continues to open up to the world, there is much hope for poverty reduction, peace, sustainable development and economic growth. Agriculture is the main business of the economy of Myanmar, so that the agricultural land administration policy is the crucial role of the agriculture sector development. In Myanmar, there are several changes in agricultural land administration according to the farmland law, 2012. Agricultural land registration system is one of the main pillar of the existing farmland law. Secure land right is essential for improvement of land use and increasing productivity of land.

As Myanmar undergoes massive demographic, political and social transformation, its economic potential is threatened by widespread, persisting and systemic challenges related to the management of its land and natural resources. A well-functioning, transparent and accountable land administration and management system is crucial for Myanmar's overall development agenda. It is essential for promoting sustainable economic and social development, maintaining social cohesion, and establishing legal certainty on which economic growth is dependent and for promoting and protecting the socio-economic-cultural rights of the population.

The changes in agricultural land administration mainly to provide security of land tenure, ownership rights of farmers and addressing challenges. This study examines the impact of the changes in agricultural land administration by government in Hmawbi Township, Yangon region after 2013.

#### 1.2 Objectives of the study

The objective of the study is to examine the effects on farmers after changes in agricultural land administration with respect in Hmawbi Township.

#### 1.3 Method of study

This study is the descriptive study with primary and secondary data. The primary data collection used questionnaires with inperson survey. Question types include multiple choice with single response, multiple choice with multiple response, likert scale and dichotomous type for nominal data, categorical data and ordinal data. Sample population is 600 farmers who are working or living in two village tract in Hmawbi Township. Sample size is 254 persons which the minimal sample size required is 234 and additional 20 sample are added, in selected township. The study area was Hmawbi Township, the simple random sampling method was used in this study. Reports from Department of Agricultural Land management and Statistics, reports from UN-Habitat and source of internet were used as the secondary data.

#### 1.4 Scope and limitation of the study

The scope of the study is focused impact of the changes in agricultural land administration by the government in Hmawbi Township, Yangon region after 2013. The study will not cover the farmers who do not have land use certificates so that the study will not represent the whole population of farmers in the sample area.

#### 1.5 Organization of the study

This study consists of five chapters: Chapter I is introduction which include the rationale of the study, objectives, method, scope and limitations, and organization of the study. Land Policy, Land Administration, The benefits of a good land administration system and Reviews on Previous Studies were also described in Chapter II. Review of the transformation of agricultural land administration in Myanmar, Land governance, Management of state land, Land disputes and conflict resolution, Civil society engagement, Public awareness-raising on land issues and Land policy and legal environment were described in Chapter III. Analysis on survey results was composed of survey profile, survey design, and survey results: demographic, economic, living condition, education, healthcare and social characteristics of respondent's and analyzed in Chapter IV. Chapter V is conclusion which includes findings and recommendations.

#### **CHAPTER II**

#### LITERATURE REVIEW

#### 2.1 Land Policy

Without robust and concrete policy that are in well practices, the law implementation and departmental standard procedure will be resulted in chaos. Land policy can be defined as the relationships between people as regards land access and control. That makes it central to economic, political, social and environmental issues. Because they determine the means of managing and governing such relationships, land policies play an empirical role in the development and governance strategies of territories. The issue of land is important to public policy on regional planning, growth and reducing poverty and inequality, in both rural and urban areas. Land is at the heart of many key issues. For farmers and their families, land is the primary means of subsistence and the primary vehicle for investment, accumulation of wealth and transfer of wealth between generations. On a broader scale, land also plays a pivotal role in the economic development of agricultural production, management of natural resources, and support for local development, whether rural or urban. Consequently, the issue of land tenure concerns all the stakeholders involved, from local farmers to national or foreign investors, from local governments to public service providers. (French Diplomat, 2018)

Land is a key asset for the rural and urban poor. It provides for economic activity and the functioning of market (for example, credit) and non-market institutions (for instance, local governments and social networks) in many developing countries. Given this importance, institutions dealing with land have evolved over long periods, and land policies will invariably be affected by the presence of multiple market imperfections. Policy advice that is oblivious of either the complexity of these issues or the historical and political repercussions of policy interventions in this area can lead to unintended negative consequences. Research has long pointed to the need for a careful and differentiated approach as a precondition for making clear policy

recommendations in relation to land that can help improve both efficiency and equity. However, this message does not seem to have been clearly communicated to policy analysts and decision makers, with negative consequences. This report aims to summarize key insights from research and practical experience, not only to highlight the importance of careful and nuanced policy advice, but also to illustrate some general principles for formulating such policy advice in specific country settings. (Deininger, 2003)

The term "land-use policy" refers to the set of rules and regulations that directly influence the use of farmland, whether they are implemented by national or sub-national governments. It provides an alternative mechanism for influencing agricultural land-use. This, in part, reflects the prevailing assumption that the stock of farmland is largely fixed and that, while land-use policy might have some impact on the stock of farmland at the local or regional level, it has limited influence on the agricultural sector taken as a whole. By its nature, land-use policy is explicitly spatial in nature. While policies may be designed to deal with broad land-use issues, they have their impact on particular parcels of land. While there are a few forms of land-use policy that employ financial incentives to alter the relative returns to farmers from agriculture and other uses, in most countries the majority of land-use policy uses the regulatory power of government to compel land owners to follow particular actions. (Freshwater, 2009)

Land-use policy influences agricultural land-use in two distinct ways. The first, and most common, way is through either imposing restrictions on farmers' behavior, or encouraging specific actions. This type of land-use policies may alter the costs of production, or the revenues from carrying out agricultural production, and thereby influence the viability of the farm enterprise. However, altering the amount of land in agriculture is not the basic premise of such programs, and for the majority of farmers this type of land-use policy can be thought of as mainly influencing how farmland is to be used. The second type of policy is designed to influence land-use at a larger scale – that is, to affect decisions to either bring land into farming or remove land from farming. Clearly, these policies are most important at the urban and far fringe, where land conversion is a relevant issue. By contrast, farmland in the agricultural core zone is, by definition, hardly affected by these programs because there is little reason to modify the current land-use. These programs can be thought of as influencing how much land is available for farming. (Freshwater, 2009)

The effectiveness of land policy in support of development and poverty reduction by setting out the results of recent research in a way that is accessible to a wide audience of policymakers, nongovernmental organizations, academics, donor agency officials, and the broader development community. Its main message rests on three principles. First, providing secure tenure to land can improve the welfare of the poor, in particular, by enhancing the asset base of those, such as women, whose land rights are often neglected. At the same time it creates the incentives needed for investment, a key element underlying sustainable economic growth. Second, facilitating the exchange and distribution of land, whether as an asset or for current services, at low cost, through markets as well as through nonmarket channels, is central to expediting land access by productive but land-poor producers and, once the economic environment is right, the development of financial markets that rely on the use of land as collateral. The importance of rental market transactions and argues that removing impediments to these can help generate considerable equity advantages and at the same time establish the basis for a positive investment climate and the diversification of economic activity, especially in the rural nonfarm sector. It also recognizes that nonmarket mechanisms for transferring land, such as inheritance, award of public and state lands, and expropriation of land by the state for the broader public good, have historically played a major role in either facilitating or obstructing broadband access and effective land use and that policymakers should take careful account of these processes. Third, Governments have a clear role to play in promoting and contributing to socially desirable land allocation and utilization. This is clearly illustrated by farm restructuring in the context of de-collectivization and land reform and post conflict land policy in economies with a highly unequal distribution of land ownership where land issues are often a key element of social strife. Appropriate incentives for sustainable land use are also required to avoid negative externalities and irreversible degradation of nonrenewable natural and cultural resources. (Deininger, 2003)

Inappropriate land policies constitute a serious constraint on economic and social development in a number of respects that are of great significance for developing countries. Insecure land tenure, outdated land laws, and slow or dysfunctional institutions of land administration can restrict private investment, undermine good governance, and reduce the ability of local authorities to raise taxes. Highly skewed distributions of landownership and patterns of land access that

discriminate according to gender or ethnicity limit the ability of decentralized market mechanisms to put land to its best uses, shrink economic opportunities among disadvantaged groups, including the ability to use land as collateral, and foment social conflict and violence. While the importance of land tenure and access to land for agricultural production and for shelter and housing has long been clear, recent research goes beyond this recognition by emphasizing the significance of secure property rights over land as a precondition for sustainable pro-poor economic growth. (Deininger, 2004)

In the rural areas of most developing countries, land is not only the primary means for generating a livelihood but often the main vehicle for investing, accumulating wealth, and transferring it between generations. Thus the ways in which access to land is regulated, property rights are defined, and ownership conflicts are resolved has broad implications beyond the sphere of agricultural production. These regulations, rights, and procedures affect not only the ability of households to produce for their subsistence and for the market but also their social and economic status (and often their collective identity), their incentive to work, their willingness to use the land sustainably, and their ability to self-insure or to obtain access to financial markets. (UNECE, 2006)

The importance of land issues in fostering economic growth and reducing poverty was the impetus for the World Bank's 1975 "Land Reform Policy Paper." At the time, this dialogue was complicated both by an economic environment in which government interventions often caused the prices of rural land to deviate significantly from the net present value of agricultural profits and by a political context in which land was at the heart of a broader ideological struggle. In many developing countries today, far-reaching macroeconomic reforms have removed distortionary policies, the ideological divide has narrowed or disappeared, and the need to tackle structural issues has greatly increased the demand for policy advice. These considerations provide an opportune moment to review earlier policy recommendations and to use experience to assess the role of such policies in the broader process of development. The broad consensus underlying current thinking about land issues can be summarized in four key principles:

a. The desirability of owner-operated family farms on both efficiency and equity grounds

- b. The importance of secure property rights to land in eliciting effort and investment and in providing the basis for land transactions
- c. The need for a policy and regulatory environment that promotes transfers to more efficient land uses
- d. The positive impact of an egalitarian asset distribution and the scope for redistributive land reform where nonmarket forces have led to a highly dualistic ownership and operational distribution of land, that is, a distribution characterized by very large and very small holdings.

Although these principles remain valid, experience with land reforms challenges earlier assumptions in four areas. (Deininger, 2004)

First, the 1975 World Bank land reform policy recommended that communal tenure systems be abandoned in favor of freehold titles and the subdivision of the commons. Today it is recognized that some communal tenure arrangements can increase tenure security and provide a (limited) basis for land transactions in ways that are more cost-effective than freehold titles. Where that is the case, governments may find it useful to reduce the cost of cooperation, improve accountability, and facilitate a gradual evolution of communal systems to meet emerging needs, possibly for greater individualization of property rights over time. Second, although individual titling has great potential to increase investment and productivity, several preconditions must be satisfied for this to be a desirable intervention. The circumstances under which title is conferred are important; for example, titling should be area-based (that is, it should cover an entire area at once) and fit within a broader strategy of rural development. Otherwise, imperfections in other factor markets may undermine or even eliminate the advantages from possession of title, at least for the poor. Third, the earlier skeptical view of land rental markets has given way to a recognition of their critical role as a means for providing the poor with access to land. The removal of remaining restrictions on land rental is therefore a top policy priority. In contrast, however, removing the restrictions on markets for land sales may not be the most urgent requirement for increasing efficiency and may have a negative impact on equity. Measures thus should be sequenced properly, emphasizing rentals rather than sales, and should be integrated with the development of other rural factor markets. And fourth, a growing literature has made the case for redistributive land reform on efficiency and equity grounds. Most of the land reforms undertaken during

the last 20 to 30 years, however, were politically motivated and have not lived up to expectations. (Deininger, 2004)

Recently, a new approach has emerged: encouraging community managed agrarian reform based on voluntary negotiation. Provided that careful monitoring permits officials to make the necessary changes in program design and that political pressures to provide free handouts to influential lobbies can be resisted, this approach can help to overcome long-standing problems of asset distribution and social exclusion, which are key factors leading to rural violence. In addition to such changes in specific recommendations, land policy is increasingly viewed as an integral element of a broader development process rather than as a string of narrowly oriented technical interventions. This view is based on experience showing that a lack of consensus on the broader subject of land policy has often compromised the effect on development of specific interventions, such as land titling. In countries where land issues have in the past resulted in civil strife, revolution, and war, reaching a consensus requires time and involves all the relevant sectors of civil society. Initiating such a process, ensuring its integration into a broader framework of rural development initiatives, and strengthening the analytical capacity of key players have become important components of the World Bank's approach to land issues. At the same time, the political sensitivity of such issues and the need to adapt to site-specific conditions often dictates that specific approaches be explored on a small scale before they are implemented broadly. (Deininger & Binswanger, 1999)

#### 2.2 Land Administration

Land administration is not land reform. Land administration reform should if possible be nonpolitical and should be concerned with putting in place an efficient land administration infrastructure to manage the humankind to land relationship. Land reform and land tenure reform, have by their very nature political objectives, such as re-distributing land between different groups, and as such should be kept separate from the development of a land administration infrastructure. In general the introduction of a land administration system should not change the land tenure relationships between people and land. On the other hand land administration systems will enable land tenure reforms to be introduced. In one sense a land administration infrastructure provides an inventory of rights, restrictions and responsibilities in a country. (Williamson, 2000)

A land administration system should provide the infrastructure to manage land. Land policy decisions and land reform decisions should be kept separate from the management of the land administration system. An example is forestry and state lands which should all be included or recorded in the land administration system, yet management and policy decisions with regard to such lands are usually the responsibility of other agencies. On the other hand the land administration infrastructure in a country will be critical to the implementation of any sustainable development or environmental management policies. The land administration infrastructure is the foundation on which such policies are implemented. As such all national environmental and sustainable development policies should clearly articulate the role of land administration in implementing the policies. (Williamson, 2000)

A land administration infrastructure requires a legal framework which enforces the rule of law. Such a framework requires not only good laws but also legal institutions, professionals and government officials who are versed in the law, and a justice system which enforces the law. Such a legal framework is essential to ensure that land holders are secure in their occupation, they are not dispossessed without due process and compensation, and the land market can function with confidence and security. (Williamson, 2000)

The history of the changing relationship of people to land, with particular attention to the changing dynamics of public-private property rights and their significance for legal and institutional reforms. The concept of institutions is used somewhat differently in different disciplines and even within the same academic field the definitions might differ. The most general usage is that an 'institution' is a principle, custom or a system that forms part of a society or a civilization. Quite often it would refer to formal bodies, mechanisms or partial elements of the established 'order' or governance of society. Another usage is that 'institutions' refers exclusively to rules that constrain individual behavior. These rules could be formalized in law statutory as well as customary or they could have the form of cultural norms and standards for behavior, based on values and traditions for a particular society or a culture. In institutional economics as well as law and economics, this is the standard usage and so scholars like North, in his study of institutions and economic performance, have made a very clear distinction between institutions and organizations. (North, 1989).

There has been a significant change in the debate about cost recovery in land information systems over the last decade, especially in developed countries. In simple terms there is increasing recognition in developed countries that government is responsible for the majority of the initial costs in establishing the spatial data infrastructure in a state or nation, and particularly with regard to the cadastre. Transfer or exchange of data is at a nominal cost with increasingly partnerships being created to exchange different data within the state or national spatial data infrastructure (SDI) at no cost. Governments recognize that the benefits being returned to government from this policy, especially in the land administration context include:

- (a) development of a spatial information marketplace,
- (b) subsequent dealings within the land administration system,
- (c) economic development,
- (d) social stability,
- (e) reduced land disputes, and
- (f) improved environmental management.

In the cadastral and land administration area this policy is driven by a need of central government to establish a common spatial data infrastructure (SDI) for a jurisdiction. Land information and the underlying SDI are becoming essential to the good governance and the adoption of sustainable development objectives. Historically land titles offices have given little attention or shown little concern for the needs of establishing a cadastral map for a region or creating a land information base outside their own needs. These offices have argued that they are in the business of supporting land markets and are simply not interested in putting in too much effort into cadastral mapping. In a similar way, local government will not use and support a national or state spatial data infrastructure unless it is in local government interest and reduces their costs. They will certainly not expend their own resources for a function which they see is not their business. Therefore in order to establish a spatial data infrastructure for a state or country, central government has to fund the creation and use of their SDI through the establishment of partnerships (and funding mechanisms) to make it worthwhile for all users to use the same SDI. There are some important lessons for developing countries in these experiences. (Williamson, 2000)

Land administration and cadastral systems, and land titling are not just rural activities, but are national activities. They are just as relevant to urban areas as rural areas. Addressing urban poverty is a major issue, as is rural poverty. This is especially

an issue from the perspective of social stability, environmental management and sustainable development. At the same time issues of addressing indigenous rights within a land administration infrastructure are just as critical as rural and social issues, but require different strategies. More importantly it is virtually impossible to undertake substantial land administration reform without considering all land, and that includes urban as well as rural, state, forest and indigenous land. A national approach is essential for land administration reform. Decentralization is a key to land administration implementation in most countries. All land records are usually kept at the local land office level including cadastral maps, land registration documentation and land tax records. The local land office usually works closely with the elected local authority which is responsible for land use, development and environmental management. However a key aspect of decentralization or de-concentration is that there must be a central authority to establish policies, ensure quality of services, provide or coordinate training, to limit corruption and implement a personnel policy (particularly with regard to circulating senior staff). The central authority must have a funding base to ensure that the policies adopted at a local level will support state or national objectives. In those cases where total responsibility is given to a local level (including the financial responsibility), there is an inevitable tension with national objectives. Such an approach means that the establishment of a national focus for land administration, including the creation of a spatial data infrastructure, will be very difficult, if not impossible. The local authority inevitably works to its own agenda with little regard for national policies. Such an approach has particularly negative consequences for the achievement of national sustainable development objectives. (Williamson, 2000)

Land and its use may be examined from many different points of view. From an ecological perspective, land plays a vital role in the breeding and survival strategies of many living species. The history of human settlement has been dominated by national and international conflicts-men and women may kill or may be killed in fights over the boundaries of their nations or of their individual properties. These Guidelines focus on land as something over which individuals or communities have rights of ownership and use, that can be bought and sold and be subject to tax, and that is the basis of economic production. The role of land in the economy of each nation is not always obvious, but is of great significance. Without secure land rights there can be no sustainable development, for there will be little willingness to make

long-term investments. Countries in transition will, in particular, find it difficult to obtain some foreign investment. (UN, 1996)

The ownership, value and use of land. Each attribute of land needs to be carefully managed and to achieve this there must be good land records: of ownership to ensure security of tenure; of value to ensure fairness in land and property taxation and equity in the compulsory acquisition of land for State purposes; and of the use of land to ensure efficient resource management. Every land administration system should include some form of land registration, which is a process for recording, and in some countries guaranteeing, information about the ownership of land. A right is something to which some person or group of person's is entitled. The function of land registration is to provide a safe and certain foundation for the acquisition, enjoyment and disposal of rights in land. A land administration system should provide order and stability in society by creating security not only for landowners and their partners but also for national and international investors and moneylenders, for traders and dealers, and for Governments. Although systems of land registration are frequently directed at protecting the interests of individual landowners, they are also instruments of national land policy and mechanisms to support economic development. (UN, 1996)

A cadaster is similar to a land register in that it contains a set of records about land. Cadasters are based either on the proprietary land parcel, which is the area defined by ownership; or on the taxable area of land which may be different from the extent of what is owned; or on areas defined by land use rather than by land ownership, Cadasters may support either records of property rights, or the taxation of land, or the recording of land use. Cadasters may also be used in a multi-purpose role to provide a wide range of land related information. Where ownership has not yet been proved, as may be the case where the land is being restored to former owners, such multi-purpose records can be built around the land parcel as defined by rights of use. The cadaster is an information system consisting of two parts: a series of maps or plans showing the size and location of all land parcels together with text records that describe the attributes of the land. It is distinguished from a land registration system in that the latter is exclusively concerned with ownership. Both a cadaster and a land register must operate within a strict legal framework, but a land register may not in practice record all land over a whole country since not all citizens may choose to register their lands. The cadaster however should be based on complete coverage of a country, since it may be used for the purposes of land taxation. Surveys for the

cadaster can be used to support a land registration system and indeed in many countries the term "cadastral surveying" is used to describe the survey of land for the purposes of recording ownership. A cadaster is more specifically focused on the ownership, value or use of land parcels. Data that may appear in a cadaster include: geometric data (coordinates, maps); property addresses; land use; real property information; the nature and duration of the tenure; details about the construction of buildings and apartments; population; land taxation values. Data may relate to single plots of land or may cover many properties, as in land use zoning. The data may be used to support private land transactions, to support land markets, or to assist in the administration of diverse sections of the economy such as: agriculture; environment protection; fishery; forestry; housing; land-use management and zoning; public utilities; transport. (UN, 1996)

#### 2.3 Benefits of a Good Land Administration System

The modern cadaster is not primarily concerned with generalized data but rather with detailed information at the individual land parcel level. As such it should service the needs both of the individual and of the community at large. Benefits arise through its application to: asset management; conveyancing; credit security; demographic analysis; development control; environmental impact assessment; land and property ownership; land and property taxation; land reform; monitoring statistical data; property portfolio management; public communication; Although land records are expensive to compile and to keep up to date, a good land administration system should produce benefits, many of which cannot in practice be quantified in cash terms. These benefits are outlined below.

#### 2.3.1. Guarantee of Ownership and Security of Tenure

The compilation of land records and the judicial processes that must be gone through in order to bring land information onto the registers should provide formal identification and, in some systems, legal proof of ownership. The public registers should contain all essential juridical information allowing anyone viewing the system to identify third party rights as well as the name of the landowner. The English registration of title to land, the State then guarantees the details recorded in the register, so that if a mistake were to occur, compensation would be paid. Thus, although there is technically no guarantee of ownership, the integrity of the system is sufficiently high for landowners to have full confidence in their rights.

#### 2.3.2. Support for Land and Property Taxation

Good land records will improve efficiency and effectiveness in collecting land and property taxes by identifying landowners and providing better information on the performance of the land market, for example by identifying the current prices being paid for property and the volume of sales. Since the cadaster should provide full cover of the land, all properties can be included and none should be omitted. While not all countries seek to impose taxes on land or property, such fiscal measures are regarded by many as fair and just since they are perceived in effect as taxes upon wealth. They are relatively easy to collect in contrast for example to personal income taxes where earnings can be hidden.

#### 2.3.3. Provide Security for Credit

Certainty of ownership and knowledge of all the rights that exist in the land should provide confidence for banks and financial organizations to provide funds so that landowners can invest in their land. Mortgaging land is one way to acquire capital for investing in improvements. Landowners can then construct or improve buildings and infrastructure or improve their methods and management of the land, for example by introducing new farming techniques and technologies.

#### 2.3.4. Develop and Monitor Land Markets

The introduction of a cheap and secure way of transferring land rights means that those who wish to deal in land can do so with speed and certainty. Those who do not wish to sell their land can be protected-no persons need be dispossessed of land unless they so wish since their rights should be guaranteed.

The registers should be public so that at any time a landowners can confirm their rights. Those who wish to buy land can do so with confidence, knowing that the person who is trying to sell the land is the legally guaranteed owner. Those whose properties are subject to compulsory purchase-for instance where a new highway is to be built across their land-can be treated with fairness since the registers should provide information on current land prices, thus allowing better estimates of the market value of land to be made.

#### 2.3.5. Protect State Lands

In many countries the land that is held by the State for the benefit of the community is poorly documented. This is not a problem in countries where the State owns all land, but where there is private land ownership, that which remains in the possession of the State must be properly managed. In all societies the State is a major

landowner and its property must be protected for example from encroachment by farmers onto land beside roads or from attempts by squatters to settle on vacant land that is being held for future use. The State needs to manage its property assets and to ensure their efficient use and upkeep every bit as much as does the private citizen. A system of registration of title to land will facilitate this.

#### 2.3.6. Reduce Land Disputes

In many countries disputes over land and its boundaries give rise to expensive litigation and all too often lead to a breakdown in law and order. Much time is taken up by the courts in resolving these matters, leading to delays in other parts of the judicial system. Land often cannot be put onto the market or put to better use without resolution of the disputes, since no potential investor is likely to wish to be committed to developing land where a lawsuit may be pending. The process of registering rights should prevent such disputes arising in the future, since at the time of first registration formal procedures should be followed that will resolve uncertainties.

#### 2.3.7. Facilitate Rural Land Reform

The distribution of land to the landless, and the consolidation and redistribution of land for more efficient use all require detailed records of the present ownership and use of the land. Compensation may need to be paid to those who lose out in such a process, or money may be taken from those who make special gains. The design of new patterns of land ownership to provide greater productivity from the land can be effective only if the existing pattern is well documented.

#### 2.3.8. Improve Urban Planning and Infrastructure Development

As with rural land reform so urban centers need redevelopment and effective land-use planning and control. In many countries the control of development and the issuing of building permits are the responsibility of the local municipal authority. A good land administration system should permit the integration of records of landownership, land value and land use with sociological, economic and environmental detain support of physical planning. The availability of up-to-date large-scale cadastral plans of urban areas provides the basic framework within which development schemes can be planned and assessed and acceptable designs implemented.

#### 2.3.9. Support Environmental Management

Multi-purpose cadastral records can be used to record conservation areas and give details of archaeological sites and other areas of scientific or cultural interest that

may need to be protected. The cadaster can be used in the preparation of environmental impact assessments and in monitoring the consequences of development and construction projects. In the Netherlands, for example, there is a register of presently polluted sites and of formerly polluted sites that have been decontaminated.

#### 2.3.10. Produce Statistical Data

By monitoring the ownership, value and use of the land, data can be assembled for those concerned on the one hand with resource allocation and on the other with measuring the performance of development programs. Both long-term strategic planning and Short-term operational management require data in support of decision-making. (UN, 1996)

#### 2.4 Reviews on Previous Studies

Literature review on previous thesis regarding to Development of Land Policy, Land Administration, Land Fragmentation and Farm Size in Myanmar by Maung Yee Win (2008), states that the development of Myanmar agricultural economy effective land policies and efficient land administration which are essential for poverty reduction, good governance and environmental conservation. He found that agricultural policy emphasizes on good function of land market and providing opportunity to transfer the land as property of one owner to another can help raise productivity. Land consolidation program or land reform based on land distribution is not really a critical condition for Myanmar up till now. He also found that land policies and land laws are influencing the behavior of land holders in Myanmar. In order to improve the productivity and living standard of the country that is strongly dependent on agriculture, land plays the crucial role. Therefore, he analyzed that existing land laws should be re-examined and improvement to the more secure rights to land in order to reduce the household vulnerability and guarantee a basic level of self- provisioning and supplementary income should be created for the land holders.

Analysis of Land Use Policy Reform in Myanmar by Aimee Zaw (2016), states that Land reform base on land distribution is not really a critical condition for Myanmar up till now. Land policies and land laws are influencing the behavior of land holders in Myanmar. To improve the productivity and living standard of the nation that strongly dependent on agriculture, land policies play the crucial role. Myanmar needs a single land agency for administration (including registration) of

public forest and non-forest lands. This agency should be responsible for determining land holding rights and issuing land certificates. This would reduce duplication, make land administration more efficient, easier to monitor and enforce compliance. Myanmar must take steps to improving its system of land management in the country after careful consultation with relevant stakeholders, including civil society. Transparent land governance is needed for the new paradigm of pro-poor land access to succeed. The government can draw on available knowledge and global practices and good land governance experiences to gradually improve its regulatory and policy environment.

#### **CHAPTER III**

# REVIEW OF THE AGRICULTURAL LAND ADMINISTRATION IN MYANMAR

Myanmar is largely an agrarian economy. According to available statistics, total land under cultivation in Myanmar has increased by 0.67 percent annually from 21.48 million acres in 1960-1961 (net sown plus current fallow area) to 30.47 million acres (2013-2014). During the same period, population growth averaged 2 percent annually. Government estimates suggest that about half the rural population lives by subsistence. (MAF, 1986)

In Myanmar, almost entirely rural with 65% of the working population engaged on the agriculture and a large portion of the remainder dependent in one way or another on agricultural industry. Agriculture will continue to play crucial role in Myanmar economy, because of its size and potential contribution to the national income and linkages with the rest of the economy. In comparison to the rest of the economy, agriculture is the least import dependent, more labor intensive and more flexible. As an agro-based country, transformation of land policy, land administration and land reforms were different from one period to another and as their consequences; the structure of agricultural economy had also changed. (FAO, 2016)

#### 3.1 Pre-Independence Period (till 1947)

#### 3.1.1 The Kingdom Era

Most studies reveal that in the Myanmar Kingdom era, land policy was based on the domestic agriculture or subsistence agriculture and not for commercial. As the transportations and communications were not well developed commercial farming was not important. Agriculture was only for the consumption and food security in war times. Small scale farming was common and farms were individually owned.

At that time there was no landlordism and there were some tenure that operated on land owned by the king and his royal families, religious land and king's

servant's land. Especially in lower Myanmar agricultural waste and virgin lands were abundant and commercial cultivation was very rare for the whole region. Landlordism was not popular and agriculture was everywhere on a "subsistent" and not a "money" economy. (MAF, 1986)

#### 3.1.2 Colonial Era

British Colonial rule over Myanmar lasted for over 120 years. There were two outstanding historical experiences during the colonial period (1826-1947) which had left a deep impression and a bitter taste on the leaders and people of post-war Myanmar, as noted by many scholars. By 1826, after the first Anglo-Myanmar War, Rakhine and Taninthaye Division were occupied. In 1852, the whole southern region in Myanmar including Bago was annexed after the Anglo-Myanmar War. Having waged the third one in late 1885, the British kept the whole country under their rule. One of them was the loss of land by native cultivators and landowners to non-native and non-resident Indian landlords during the colonial period. Nearly half of the total cultivated area eventually came to be owned by non-native absentee landlords. Consequently, one of the very first measures taken by the government upon gaining independence was to enact the Land Nationalization Act of 1948 to nationalize all agricultural land and redistribute them to the landless cultivators, with the ceiling 10 acres each. (MAF, 1986)

#### **3.1.3** Under British Rule (in the 1800s-1941)

In the 1800s, the British reformed the agricultural structure by assuming control of all land administration and management. Farmers could gain permanent titles to land after cultivating/using/holding it continuously for 12 years and on payment of relevant land taxes. Thus, by adopting progressive land and revenue laws, the British created, for the first time, a legal arrangement recognizing private land holding and a systems of land tax collection. Later, when Lower and Upper Myanmar (erstwhile Burma) were annexed, separate laws were enacted. The Land and Revenue Act of 1879 was the first major land law enacted. It governed the acquisition of land rights for private persons and procedures for assessing and collecting land taxes.

In British Colonial Period, land reform was enacted by the British government. But the objective of the reform was to exploit the profit from the land resources. The government encouraged to expand the cultivated land by means of small scale farming and large scale farming. Having recognized the feudalism that could not be developed and increase productivity the government attempted to

increase the productivity on the line of capitalism. Therefore the main objective was (i) expanding of cultivated land (ii) collection of land tax.

In 1935, 59% of land in Lower Myanmar and 33% of land in Upper Myanmar or 49% of all land in the country were work by tenants. Tenancy rent was unduly high and there were no security of tenancy. The result of exorbitant tenancy rents is the in debt of almost the entire class of tenants. In pre-war period, the main problems of land tenure in Myanmar was the drift of agricultural lands into the hand of non-agricultural lists and in particular into the hands of foreign non-agricultural lists. By the year 1936, one fourth of the agricultural land in Myanmar had fallen into the hands of Chattier. By 1939 about one third of all agricultural land in Myanmar and about one half of the agricultural land in Lower had been transferred to the money lenders. During that period, the cultivators had to bear the full brunt of exploitation of the landlords. Even the colonial government attempts were in vain to the rescue to the poor cultivators. In the year 1939 saw the enactment of Tenancy Act and Land Alienation Act. But they could not fully operate due to the outbreak of Second World War. (MAF, 1986)

In 1941 nearly the half of the agricultural land in Lower Myanmar was in the hands of the non-agriculturalists and in the principle rice growing districts the proportion was much higher. In every district in Myanmar aliens especially Chattier community held a large portion of this land and in the principle rice growing districts this proportion amounted to about half of the land held by non-agriculturalists. In Upper Myanmar the drift had not proceeded so far but the tendency was the same and the very considerable areas, especially in irrigated districts were in the hands of non-agriculturalists.

Table (3.1) Agricultural Land occupied by Non-agriculturalists in 1939

Location	Total Area (acres)	Occupied by Non-agriculturalists	Percentage	
Lower Myanmar	11,293,092	5,585,150	49%	
Upper Myanmar	8,167,666	1,157,944	14%	
Total	19,460,758	6,743,094	35%	

Source: Report on Land Nationalization

Table (3.1) described that more than one-third of the agricultural or cultivated land were in the hand of non-agriculturalists or land lords in 1939.

#### **3.1.4** Under Japanese Rules (1942-1945)

In the period of the Second World War, both of the feudalism and capitalism had no opportunity to emerge. Even the small scaled farming operated by the cultivators for self-sufficiency was difficult in this period, because most farmers were forced to serve as porters or laborers for the military purposes. Agriculture was only target for domestic consumption.

#### **3.2.4** After World War II (1945-1947)

In World War II, Myanmar had seriously suffered the bitterness of war for three years and agriculture was only engaged for self-sufficiency. Most agricultural lands that were abandoned already turned into jungle. Before the Second World War the paddy growing areas had reached up to 12 million acres and the quantity of exported rice also reached up 3 million metric tons. Therefore when the British reoccupied the country the government re-encouraged the commercial agriculture and the small scaled farming again. Agricultural loan were subsidized to the farmers but landlordism also occurred again and tenure system became too popular again.

The change of tenure was the most important measure of land reform at that time. The foundation of the change of the tenure was first laid by the All Burma Peasants' Organization. The slogan "Landlordism must be abolished" and "Land to the Tillers" were employed before the independent was achieved. With a view to create a new economic order after bringing about a change in land tenancy system, it is provided in the article 30 the 1947 Constitution of the Union of Burma that "the state is the ultimate owner of all lands" and that "the state shall have right to regulate, alter or abolish land tenure or resume possession of any land distribute the same for collective or cooperate faming or to agricultural tenants".

In order to bring about to change in the land tenure system with the view to raising the standard of living of the agriculturists the following laws were passed by the government in pre-independent period. They were; The Tenancy Standard Rent Act, 1947 and Agriculturalists Debt Relief Act, 1947. Unfortunately, those Acts were not effective for the farmers in Myanmar. (MAF, 1986)

#### 3.2 Post-Independence Period (1948-1988)

#### 3.2.1 Parliament Era (1948-1962)

In 1948, Myanmar was established independence. In this period, the Government continued in order to abolish landlordism and to get the own land for the farmers important land laws were promulgated. They are;

- (a) The Disposal of Tenancies Act, 1948
- (b) The Agricultural Laborers Minimum Wages Act, 1948
- (c) Land Nationalization Act, 1953
- (d) Land Nationalization Manuals, 1954

As stated above, the main objectives of the Land Nationalization plan was to abolish the landlordism from its very foundation, to distribute the land to the cultivators and introduce the new rural economy and build a new order for the cultivators. Therefore the significant characteristics of the Land Nationalization Act are varied and many. The following are some of them.

There is the danger of revising the old system of landlordism if transfer of land is not prohibited. With the view to avoid this danger and also to facilitate effective administration of land Section 4 of the Act provide that no agricultural land shall be mortgaged, sold or otherwise transfer or divided except in accordance with the permission of the Act.

The Land Nationalization Act envisages introduction of planned agriculture. Section 38 provides that the President may take such measure as may be necessary for cultivation of May particular crop in any particular area, in the prescribed manner, and may also make rules. As, such the Act forms a statutory basic for formulation of planned agriculture.

Therefore, The Land Nationalization Act has many influences on the formation of size of holdings and fragmentation and also on tenure system. The Government confiscated the agricultural land within 1953-54 to 1957-58 and some lands were exempted and some were redistributed. From 1953 to 1958 the Government implemented the Land Nationalization Programme in 32 districts and totally 3.3 million acres of agricultural land were exempted and redistributed. But because of various political and administrative problems and constraints the Land Nationalization Programme was abandoned and ended in 1958. Actually only one sixths of the holdings were nationalized and more than 16 million acres were

remaining to nationalize at that time. However, it should be noted that it was the first turning point of the country to combat landlordism.

But at that time, there were still remained the areas where the Nationalization Act was not came to forced and those areas were mostly occupied by landlords and some of the landlords did not operate the land as usual. They let the tenants to operate the land and in 1961 the area of land operated by pure agriculturalist reached to 8.99 million acres while the areas operated by tenants were 6.99 million acres. (MAF, 1986)

Table (3.2) Myanmar Land Distribution under Land Nationalization Act, 1953

Year	No. of District	Township	Village	Area Exampled ,000 acres	Area Resumed ,000 acres	Total Area Effected ,000 acres
1953-	8	8	167	125.5	142.7	268.2
1954-	28	33	524	523.1	523.3	1046.4
Total	36	41	691	648.6	666	1314.6

Source: Report on Land Nationalization

#### 3.2.2 Revolutionary Council and Socialist Period (1962-1988)

In Revolutionary council period, remarkable laws were enacted to combat the remaining landlordism in Myanmar. After the Land Nationalization Programme, up to 1961 more than 16 million acres of agricultural lands were remained to nationalize. In those areas some land were operated by the landlords and some were operated by the tenants. Within 1000 tenants. 744 tenants were operating in those areas. The main objective of the Government was to nationalize all agricultural land and to form the government tenancy system.

Under the socialist government, farmers were considered the State's tenants and compelled to farm specific crops (such as rice) as per State policy. If farmers failed to meet production targets, their land was reclaimed by the State. As paddy production was not profitable, farmers decreased investment in land. As later events have shown, efforts to nationalize land and redistribute agricultural land were unsuccessful due to political constraints.

Land nationalization and redistribution programmes were not successfully implemented because of political constraints, therefore the government enacted the 1963 Tenancy Act. These laws enforced to took control of land from farmers into the hands of the State. At the same time the cultivators who under the Land Nationalization Act 1953 possessed the right to own the land now became lessees under this law. Agricultural policy under "Burmese way to Socialism" was actually based on three pillars. First, all farm lands belong to the State and farmers are given tillage right only. They did not have the official rights to exchange, transfer, lease, inherit or mortgage their land. Although children were usually given the rights to cultivate their parents' land. Although children were usually given the rights to cultivate their parents' land. The second pillar was the State's monopoly of agriculture marketing especially the compulsory procurement of crops from farmers at fixed price. The third pillar was the crop planning, the government instructed the farmers which crops to grown on which parcel of land.

#### 3.3 Military Government

After Burma Social Program Party Government collapsed in 1988, the State Law and Order Restoration Council or Military Government came to power and reigned till 2010. By 1988, the land sector was already in disarray. Rural poverty, landlessness and a deteriorating economy posed challenges for the new government. In addition, Western Power and neighboring countries had imposed sanctions and economic blockades. The military government retained several key laws such as the Land Nationalization Act, 1953 and the Tenancy Act, 1963 along with a focus on paddy production and crop prescriptions. Remarkable policy changes were occurred. In 1997, compulsory State's crop procurement was abandoned and private trade was allowed. In the same way crop planning system was officially abandoned.

To overcome the food crisis and social instability, in late 1988 the government issued an order on farm production (primarily paddy and cash crops). Produce was to be sold first to the government and cultivators could retain only the surplus. A slew of governments evicted "squatters" from vacant public land and asserted the government's right over land for public purpose. Along with these measures, the military government perpetrated large scale displacements of often ethnic nationality populations in Border States, particularly in the mid 1990's, as a control over strategic resources.

In this period there were no laws emerged by the Government but the Government formed the Central Committee for the Management of Cultivable Land, Fallow Land and waste Land to manage the expansion of agricultural lands. The State-owned organizations and cooperatives, societies, joint-ventures, other organizations and individuals that have the purposes for commercial use of agricultural land obtain the opportunity for their purposes.

Several policies were laid down by the government for the development of agricultural sector, including the very low land tax, irrigation investment and subsidized credit and fertilizer programme. Apart from them, in terms of agricultural policies the following three pillars are emphasized by the government:

- (a) To allow freedom of choice in agricultural production
- (b) To expand agricultural land and to safeguard the rights of the farmers
- (c) To encourage the participation of private sector in the commercial production

  In line with the three pillars, the specific objectives of the agricultural sector are:
- (a) A priori emphasis on fulfilling the needs for local consumption
- (b) Export of more surplus agricultural product for the increase of foreign exchange earnings
- (c) Assistance to rural development through agricultural development

But public intervention in agricultural production is still existed and they can be categorized as production control, marking control and input policies. Production control can be defined as cultivation of specific crops that impede the ability of farmers to adjust to price signals and also caused disincentives to investments which raise productivity production and rural income. Production controls also imply significant administrative implementation. Some existing land laws such as 1953 Land Nationalization Act and 1965 Amendment Act of Tenancy Act reinforce the above mentioned production control for the policy planners.

A secure land tenure system with a functioning land market that allows transfer of property of one owner (or a possessor of user rights) to another can help raise productivity by transferring land from less efficient cultivator to more efficient one. As per the open market oriented economy more freedom of choice for the agricultural holders to choose suitable crops to grow rather than planned is considerable aspect for the growth of productivity.

Marketing controls are more prominent now than production controls. Most prominent amongst these is the ban on export of commodities such as rice, onion, maize and certain pulses which was re-imposed in 2004 as a measure to suppress common prices of these important staples. Some relaxation of the ban was instituted with the provision that fallow and waste land development initiative could be exported officially. This cause the evasion of the ban that alleged to have occurred through overstatement of production on the newly developed land areas with additional supplies being purchased in the market for export. In addition to evasion, a number of temporary administrative measures appear to be applied as a response to raisin domestic commodity prices.

While progress has been made in reducing the role of the public sector and increasing that of the private sector in seed, fertilizer and pesticide production and marketing there is considerable scope for further liberalization to ensure that farmers have increased timely access to key inputs. But the net impact of these policies is one of the lowest input utilization rates in the world as indicated by fertilizer and agricultural machinery. The impact is that, although the farm sizes of the holdings of Myanmar are generally equally distributed and appropriate area to operate, the productivity of crop of Myanmar especially yields are lower than its counterparts. Despite the average farm size, the yield level is still only 3 tons per hectare for rice the main staple food crop for Myanmar, which is considerably lower than that of Asian neighbors such as Vietnam and China.

Land Taxation programme provide better incentives to increase the agricultural productivity. Myanmar does have a land taxation system which has provide the basic for maintaining a comprehensive cadastre of land holdings. In Myanmar land taxes were originally set at 2 kyats or less per acre and this has not been increased since the independence of Myanmar. The result is no incentive effect for better use of agricultural land. (MAF, 1986)

#### 3.4 Elected Government

Following the adoption of the 2008 Constitution and elections in Myanmar, a new government assumed power in early 2011. It confronted formidable challenges not only in rebuilding the economy but also due to growing calls for restitution of land confiscated during earlier regimes. Violent conflicts arose in some areas against monetary incentives and land access to favored business groups. While the

widespread protests did not stop the government from issuing new land leases/concession, it led to some "healing efforts." To assuage growing dissatisfaction over efforts to resolve forcible land takeovers and lack of compensation for the same, the government initiated a set of measures. (MAF, 1986)

In 2012, the Farmland Law and the VFV (Vacant, Fallow and Virgin Lands Management Law) were enacted. The government also announced it's international to enact a comprehensive land law that would serve as an umbrella legal instrument. According to the Farmland law, improved guarantee of ownership, farmland tenure security is increased, reduced land disputes, land should be provide security in credit and capital in investing is improvement.

At present, land administration in Myanmar is characterized by multiple and overlapping institutional mandates, laws and regulatory frameworks, and weak land classification. It is further complicated by indeterminate entitlements to land; lack of a comprehensive land registry and related geospatial information; lack of formal methods to protect and recognize customary rights to land; excessive application of the state's power of eminent domain; and a policy for the allocation of land concessions that ignores or overrides the customary rights and interests of other rights holders. Government control over land and unrestrained application of the 'State land' concept is also not helpful. The General Administration Department is responsible for administering and managing all non-forest and non-farm land in the country. This includes town, village, religious and common land, riverbanks, ponds, cemeteries, grazing pastures and disposable state land. While the General Administration Department holds management responsibility, technical functions rest with the Department of Agricultural Land Management and statistics in most cases. This dual arrangement also deserves attention as the country pursues measures to reform land administration and management.

A modern democratic government depends on high-quality spatial information to conduct its statutory land services and functions, including ensuring transparent ownership/use rights, participatory land-use planning and natural resource development. However, Myanmar lacks adequate investments in technological upgrades to support land administration and a long-term strategy to strengthen its land-information system. Consequently, support facilities, data verification and validation processes, and staff training are all inadequate. In moving forward, the

government will have to acknowledge that introducing modern technology for land administration is a long-term programme and needs adequate upfront investments.

Geographical Information System capacity within the Department of Agricultural Land Management and statistics is used only for cartography. This department has highlighted an acute need for training in remote sensing and access to satellite imagery, which is currently unavailable due to budgetary constraints.

Myanmar has 163 million acres (65.33 million ha) of land, 26.7 million acres (10.79 million ha) of which are arable; this increased at a relatively moderate 0.86 percent between 2006 and 2011. The 3.6 million acres (1.46 million ha) under permanent crops have increased rapidly at 8.97 percent in the past five years (2006-2011). Forest cover of 77.7 million acres (31.46 million ha) decreased at 0.96 percent between 2006 and 2011. Land availability is at 0.6 acres (0.23 ha) of arable land per capita, which corresponds to 1.48 acres (0.6 ha) per active population in agriculture. Most farm plots are used for paddy production, which uses low-level seed-production technologies. At present, the agricultural value added per agricultural worker is estimated at US\$194, which is half that of Vietnam (US\$367) and Cambodia (US\$434) and 3.5 times lower than that of Thailand (US\$706). Overall, Myanmar is resource-rich yet has low productivity (FAO, 2016).

According to official national account estimates for 2010, Myanmar's agriculture sector employed 52 percent of its workforce (mostly comprising small and marginal landholders) and generated almost 37 percent of its GDP. Smallholders accounted for around 90 percent of total parcels devoted to annual crops. These occupied 93 percent of the total area of the household crop holding. Paddy was produced on 22.87 million acres in 2010. By 2010, about 5 million households were engaged in the agricultural sector which employed approximately 20 million people (the total estimated labor force in agriculture was 26 million in 2010) as against a total rural labor force of close to 36 million. (DALMS, 2013)

Average farm size is around 7 acres (2.8 ha) for landholding households, with regional variations of 4.16 acres (1.6 ha) to about 8 acres (3.1 ha). Parcels of small and marginal farm households (holding less than 3 acres) in 2010 were at 1.8 million, a decrease of 9.84 percent from 2003. Increase in the number of parcels was registered by farms of 3 to 5 acres (16 percent), 5 to 10 acres (17.7 percent) and 50 acres and more (107.3 percent). Between 2003 and 2010, the highest increase in number of agricultural households occurred in the Dry Zone and Delta area. These

numbers suggest land consolidation. Often these large tracts of land are used (or merely held) to cultivate perennial crops, which does not redress food shortage in the country or improve food security. Meanwhile, the area held by smallholders is beginning to shrink. (DALMS, 2013)

The preliminary results of the Agricultural Census 2010 indicate that the sharpest increase in parcels occurred among those holding 50 acres and more, who form a small proportion of the total farmers in the country. The 2010 census showed a major increase (more than 100 percent) in the number of large holdings (50 acres or more) and in the number of households holding large farms. (DALMS, 2013)

Data indicates that close to 69 percent of farmland is controlled by 20 percent of rural households, while less than 30 percent of agricultural land is controlled by smaller farmers and sharecroppers. To improve agricultural production and the national economy, a push for large-scale land development in agriculture was made in the early 1990s. This led to a surge in large-scale plantations, in particular agriculture. As a result, large-scale plantations accounted for 30 percent of the total agriculture in the 2010 census. Available anecdotal evidence and field studies show that the government regularly clears lands (reportedly around 600 000 acres per year) for granting agribusiness leases or for non-farm purposes. While some aggregate numbers may suggest increased agricultural potential, they also show a corresponding increase in land concentration among large-scale holders.

Various factors have contributed to the dwindling size of smallholdings in Myanmar. Traditional inheritance norms subdivide landholdings over generations; each generation receives a smaller holding. Policies and programmes to support supply of new land to communities are lacking. Unfavorable government policies deter land investment. The Agricultural Census of 2010 seems to confirm these trends of land consolidation, land fragmentation and growing landlessness and near-landlessness among farming communities. These trends need a policy fix or they could spell economic problems like food shortage because Myanmar's smallholders are responsible for 90 percent of the country's paddy production. (DALMS, 2013)

Across the country, land development is disorderly and land-use planning is weak, triggering an uninformed land market that relies on unregistered transactions and speculative deals. This affects the ability of a farming household to subsist and climb out of poverty. In the future, focus must be on strengthening the national capacity to identify and prepare better programmes and projects to support improved

tenure security among smallholders and develop land-resource planning information and programmes for land conservation and rehabilitation. These efforts should be undertaken at all levels. This will help to balance land fragmentation and consolidation so that sectorial investments are well-targeted and support the development of livelihoods for the marginalized sections of rural society. Myanmar needs to build on its most important asset base (millions of small and medium farmers) by facilitating their access to credit, inputs and markets. Such an approach is appropriate to jump-start rural growth, increase food security, capture export markets, generate jobs and reduce poverty.

#### 3.4.1 Land Governance

Myanmar has accumulated a body of knowledge on land-governance issues over the past two decades and researchers and policy-makers drawn from several areas of specialization have contributed to it. Studies have assessed land governance in critical areas such as rapid changes in land use associated with large-scale land leases, economic development, climate change, urbanization and growing demand for food and industrial materials. These highlight the need for policies to guide land use and define rights to services or benefit streams associated with land. These studies found that Myanmar has poorly managed its agriculture and urban expansion, poverty is evident in rural and urban areas, and land tenure and land ownership rights are unclear, resulting in conflicts over land. It reasoned that these issues justify land administration and policy responses to strengthen tenure security and create an environment for economic development.

## 3.4.2 Management of State Land

The lack of clear definition, reliable inventory and a database on state land and state-held land makes government authority over land an issue. Myanmar does not pursue a system of 'custodianship' over land areas but government agencies are seen as 'owners'. This further limits the Department of Agricultural Land Management and Statistic's ability to administer non-forest land. In fact, this department now functions more as a data-holding agency on land. Mechanisms required for the institutional coordination, apart from farmland areas, have yet to be established. Further, little information on state-held land is publicly available and regional governments and departments lack data on the amount of state land under their control. CSOs (civil society organization) note that the government's inability to award and oversee land leases transparently prompts concession holders to extract resources from land with

little consideration for long-term sustainability and leaves local communities with few opportunities to participate in revenue streams from resources.

Land expropriated by the government for public interest must accord with existing spatial (land-use) plans. In recent years, landholders have received some compensation for land acquired, but less is offered to those holding land on the basis of tax receipts or under customary law and none at all to squatters and informal occupants. Delays in compensation payments are frequent; the fairness of compulsory acquisition has also been contested.

## 3.4.3 Land Disputes and Conflict Resolution

Since the late 1990s, protests against land grabbing have been increasing. Most of such land-grabbing cases are attributed to arbitrary grants of state land leases by the government as part of the Wasteland Instructions of 1991 and thereafter for various economic-development projects. The government established two bodies in 2012 to deal specifically with land disputes and confiscation – the Land Allocation and Scrutinizing Committee and the Parliament's Farmland Investigation Commission (with a mandate to accept complaints from the public and propose resolution). The Myanmar National Human Rights Commission established by the President in 2011 has also been mandated to deal with land grabs and land disputes. Under the Farmland Law and as part of implementing the LUCs (Land Use Certificate), the government mandated FABs (Farmland Administration Body) (in a hierarchical manner) to resolve farmland disputes. This assignment represented a conflict of interest as FABs hold both administrative and resolution responsibilities at the same time.

At present, different institutions in Myanmar possess parallel and somewhat overlapping mandates and competencies to handle land-related conflicts. However, as several reviews indicate, the functioning of these bodies is limited largely to treating the symptoms rather than the causes of conflicts and resolving them. This is partly due to lack of orientation, capacities and coordination between different agencies and inconsistent policies and guidelines. As the formal dispute resolution system generally favors government agencies, they are less effective in settling disputes between the communities and the state. Access to justice is hampered by political instability in some areas, geographical conditions, costs or lack of familiarity with procedures. Several of these bodies, though familiar with local customary practices, tend to rely on broader government templates, often inappropriate to the context, to address disputes. Appeals are costly and time consuming. Public confidence in these bodies is

conditional and people tend to look for alternative dispute-resolution mechanisms. Informal and community-based dispute resolution methods have yielded positive results in some areas, particularly upland areas where customary traditions are respected. The government must examine available informal and quasi-formal, community-based dispute-resolution mechanisms and pilot them to resolve land conflicts. A proper dispute-resolution mechanism would contribute to strengthening good land governance if well managed and resourced.

#### 3.4.4 Civil Society Engagement

Myanmar has an increasingly large presence of NGOs and CSOs working on various issues affecting the poor and the disadvantaged. This number increased after Cyclone Nargis in 2008. Like many other countries, rural and urban land rights have emerged as a source of conflict between the government and the public, especially farming, forest-dwelling and urban poor communities. In the standoff between the government and affected people, CSOs generally ensure that the voice of the people is heard. They have also taken on the responsibility of disseminating pertinent information among the people to increase awareness. Since the mid-2000s, CSOs have taken on an active role to facilitate dialogue on pro-poor and impartial land reforms by highlighting historical land confiscation and poor enforcement of land acquisition principles and compensation (within the understanding of FPIC (Free, Prior and Inform consent) although it is not directly cited in many instances) in the case of land concessions. Their work has been significantly strengthened through consistent research by organizations such as the Food Security Working Group, Land Core Working Group, Myanmar Environment and Natural Resources Network, Mine Action Network, etc. In policy and legal debates, CSOs remain critical of ineffective government policies and processes that sideline the rights of weaker groups in favour of wealthy corporations and the national elite, including families that own large plantations or large-scale land concessions.

While the 'tussle' between the government and CSOs continues on several policy and programme issues, positive developments have occurred in the past decade or so. In recent years, the government has been willing to create mechanisms to include CSOs in its work to understand grassroots issues. Recognizing the need to work in partnership with the government, CSOs have started educating the public about proposed policy reforms (e.g. consultations on the draft NLUP (National Land Use Policy) and a road map for recognition of customary tenure). The government, in

turn, understands the benefits of popularizing policies and programmes, creating room for a more positive relationship between the government and CSOs.

Despite such positives, there is considerable ambiguity around the present and future role of CSOs in Myanmar. The CSOs exist in a limbo with only partial government acknowledgement of their role. Their capacity is nascent, fragile and rife with both risks and opportunities, especially with regard to land sector engagement in rural and urban areas. CSOs are under pressure to do more to engage the government and the public as the main stakeholders on land issues. Opportunities exist for future engagement between the government and CSOs on land-tenure issues in forests and surrounding areas. For example, the government is currently establishing instruments to implement its commitments tenure reforms, etc. These will need policies aligned across land and forestry sectors and synchronized with broader political and economic plans. For this, the government will have to work with CSOs, who will play a critical role in coordinating and strengthening efforts between implementing agencies and those responsible for land allocation, and forest uses.

#### 3.4.5 Public Awareness-Raising on Land issues

Past experiences suggest that increased public awareness and community participation in land governance is critical. In monitoring progress and strengthening land governance, public awareness, community participation and dispute resolution must be emphasized. Effective and comprehensive public awareness and communication are essential for the successful implementation of land administration and management policies and programmes. Unless people and communities are well informed before programmes commence, they will not participate in a systematic and substantive manner. The public must also be well informed of mechanisms to address their grievances and disputes. Government mechanisms are often not well-known or understood and lack expedient resolution and transparency. Thus, any land-related investment project should incorporate mechanisms to enhance public awareness, community participation and community monitoring, and must include functional, complaint and dispute-resolution mechanisms

#### 3.4.6 Land Policy and Legal environment

The complex legal and institutional environment in Myanmar is obvious when one looks at the number of existing laws and regulations alone. By the end of 2014, the land sector was governed by an estimated 70 laws and regulations, creating ambiguities and overlaps. The persisting historical scars arising out of land

confiscations and forced acquisitions since the 1990s have yet to be addressed, and the enactment of the new laws in 2012 (Farmland Law and VFV Law) has added a new layer of administrative mechanisms. The impact of this new land is not yet clear. In turn, tenure uncertainty is affecting farmer views on these new laws. There is concern that the less clear provisions in the VFV law that could result in declaring a land parcel as fallow without due process and thus provide a space for land 'confiscation' from farming communities for 'public purposes'. In all, the overlapping legal instruments do create opportunities and a space to acquire land without due process.

In Myanmar, roles and responsibilities for most government functions are dispersed. Land administration is no exception. At all levels, the work of land administration agencies is fragmented, with significant overlaps. Lack of clear judicial authority and sectorial approaches to land management and administration result in inconsistent and discretional application of policy. A sectorial and compartmentalized approach differentiating between land administration, land-use management and state land results in policy inconsistencies that have not been reconciled. Customary tenure rights are maintained as 'invisible' rights and largely ignored in practice. It is also not clear how inputs from public participation, particularly on land acquisition and spatial management, will be incorporated into actual decisions, more so following the adoption of the proposed Land Use Policy.

Despite changes in governments and in the legal environment, the land administrative structure has remained intact. Responsibilities are distributed among 10 different government entities. In general, the Ministry of Home Affairs (through GAD) and the DALMS (through the MOAI) continue to play a major role in all levels of non-forest land administration. Others like the Ministry of Mines hold sectorial responsibilities on land, but land maps and data responsibilities rest with the DALMS.

The GAD, of the Ministry of Home Affairs, has branches at township and state/region levels and acts as the representative of the central government at these levels. The DALMS under the MOALI is responsible for maintaining land registry and cadastral maps and has branches at state, district and township levels. Each township is further divided into a number of circles, each headed by a land inspector (assistant staff officer) who is responsible for, among other things, validating and checking land records.

Administering land and its uses mainly falls under the purview of three ministries, i.e. GAD, the MOALI/ DALMS. These administrators are also responsible for protecting the land under their jurisdiction from encroachment and squatting and ensuring adherence to prescribed land use. Any transfer of tenancy rights (all farmers being tenants) and any request for change in land use must be initiated at the village tract or ward level and go through successive tiers in the structure to be eventually endorsed/approved at the state level, after going through factual verification by the DALMS branch at the township and district levels. The administrative unit responsible for processing such applications is the GAD branch at the township level. Thus, the process of land rights' transfer or change of land use is lengthy, requiring considerable time and frequent visits to various offices.

The role of the military in land administration and management is, in theory, limited to protecting national boundaries. However, post1991, the military has acquired large tracts of land for its encampments and also retained control over 'conflict zones' in Kachin and Karen states. The DALMS has not mapped several of these conflict zones or maintained any data on these areas. The military's role in land matters remains a serious concern in discussions on reforms. The fragile peace process and the military's continued influence further complicate land administration. Thus far, no comprehensive peace agreements have been finalized, although progress has been made towards political dialogue on many fronts. Several groups have documented increased land grabbing and land confiscation in the context of ceasefire agreements and peace negotiations in Karen and Mon states in particular and to a certain extent in Karenni and Shan as well.

Overall, state interventions in land tenure and control structures are hallmarks of Myanmar's land administration and management, particularly farm, forest and, in recent years, urban land. Community and individual rights have, over time, become essentially dependent on government discretion, giving rise to conflicts between the state and people. Land-tenure arrangements involve social relations and social institutions, have complex histories, and are multidimensional. Thus, to understand Myanmar's land-related problems and appreciate the challenges in land sector reforms in the country, it is necessary to understand the history of both land's role in Myanmar's political economy and land legislation and ownership. A closer study must thus be made of the precolonial, colonial and post. Independence eras under different political regimes to study the government approach to land and related

issues. The results of such a study should feed into the government's current efforts to streamline the legislative framework and the institutions that administer land (DAMLS, GAD). This should be advocated as a priority as the government moves forward with its land reforms agenda in the coming years.

# CHAPTER IV SURVEY ANALYSIS

## 4.1 Study Profile

Hmawbi Township is situated in northern part of Yangon region, with 183.78 square miles. It is bordered with Hlaeguu Township, Tikekyi Township, Shwepyithar Township, Htantabin Township and Minglardon Township. Hlaing River which is flowing directed from East to West, the main source for plantation in the region. It is one of the most populated township as well as per urban area According to GAD, there are 191,020 with sex ratio of 1:1.1. There are four wards and village tracts are composed as Hmawbi Township.

Hmawbi Township is mainly rely on agricultural and one of the main source of paddy for the Yangon region. Some livestock industry is main economic source of the area. Hmawbi Township is juncture for the transportation and communicate with Bago West region and the main Pyay road passing through the township.

The net arable land is 66,970 acres where farm land, garden land are scattered around the township. Most of the land can be used with the irrigated water from the Hlaing River. Paddy is the main product from the land and other crop such as peanut, several types of beans can be cultivated.

Myaung Da Gar industrial zone is established and garment factory, mining industry and food production are produced in the area. Out of 51361 population of working population, around 13000 people are engaged in agricultural sector and estimated 10000 population working as general labor seemed to work at seasonal planation and other categories of work such as livestock and others industrial sector. There is no local based CSOs working for land issues.

## 4.2 Survey Design

In this study, the impact of the changing agricultural land administration in Yangon region is examined by the survey as well as analyzing the secondary data. The study area is Hmawbi Township, and data were collected by using structured questionnaire for quantitative information and semi-structured question guide was used to collect qualitative information to complement the quantitative findings. The study period is from 1.7.2019 to 20.7.2019 for collecting the data for survey questionnaire and preliminary findings were analyzed based on the thesis objective the study is cross-sectional descriptive study design to observe, describe and record the aspects changing agricultural and administrative practices. The respondents with more than 18 years of age are selected as a study population.

Even though, the minimal sample size required is 234 and additional 20 sample are added, and the final sample size is 254. Data were collected in two village tracts where majority of the villagers cultivated paddy. Among them, to collect the quantitative data, two village tract were randomly selected, and the respondents were taken by systematic random sampling method getting household list from village tract administrators.

This study is the descriptive study with primary and secondary data. Survey Questionnaire was used as the primary data. Reports from Department of Agricultural Land management and Statistics and from UN-Habitat and source of internet were used as the secondary data. The study area was Hmawbi Township, Yangon region and 254 landholders were included in this study. The simple random sampling method was used in this study. The questionnaires consist of socio-demographic characteristics, economic characteristics.

## 4.3 Survey Results

The study carried out to assess the impact of the changes in agricultural land administration after 2013. It includes three parts - demographic characteristics, economic condition, and living condition of respondents.

#### **4.3.1** Demographic Characteristics of Respondents

The two hundred and fifty four numbers of the respondents were conducted in this survey. Demographic characteristics include age, sex, and occupation, household size and level of education.

**Table (4.1)** Demographic Characteristics of Respondents

Sex	Number	Percentage (%)
Male	149	58.7
Female	105	41.3
Total	254	100
Age	Number	Percentage (%)
Under 20 years	3	1.2
21- 30 years	40	15.7
31- 40 years	58	22.8
41-50 years	73	28.7
51-60 years	45	17.7
61-70 years	33	13.0
71 years and above	2	0.8
Total	254	100
Level of education	Number	Percentage (%)
Primary	144	56.7
Secondary	87	34.2
Tertiary	23	9.1
Total	254	100
Occupation	Number	Percentage (%)
Farm	180	70.9
Employed for wage	28	11.0
Other	46	18.1
Total	254	100
Household size	Number	Percentage (%)
1-3	94	37.1
3-6	121	47.6
>6	39	15.3
Total	254	100

Source: Survey data (2019)

According to Table (4.1), 59% of total respondents are male, while 41% are female. Therefore in the survey, the interview comprised slightly more male than female percentage.

The age of respondents were categorized into seven groups: the age group of less than 20 years, 31 to 40 years, 41 to 50 years, 51 to 60 years, 61 to 70 years, and

70 years and older. It was found that 3 (1.2%) of the respondents were in the age group of younger than 20 years, 40 (15.7%) in the age group of 21 to 30 years, 58 (22.8%) in the age group of 31 to 40 years and 73 (28.7%) in the age group of 41 years to 50 years, 45 (17.7%) in the age group of 51 years to 60 years, 33 (13.0%) in the age group of 61 years to 70 years and 2 (0.8%) in the age group of older than 70 years respectively. In this survey, the 85% of farmers should be between the age groups of 21-30 years and 51-60 years.

In this study, the education level of study population was categorized into three groups: 0 to 5 years (primary education), 6 to 11 years (secondary education) and more than 12 years (tertiary education). It was found that 144 (56.7%) had attained primary education, 87 (34.2%) had attained secondary education and 23 (9.1%) had attained tertiary education respectively.

According to the occupation of respondents, 180 (70.9%) of respondents were employed in farm, 28 (11%) of respondents were employed for wage, 46 (18.1%) were employed other.

Household size was categorized into three groups: 1 to 3 members, 4 to 6 members and more than 6 members. It was found that 94 (37.1%) of respondents were in the household size of 1 to 3 members, 121 (47.6%) in 3 to 6 members and 39 (15.3%) in more than 6 members respectively.

#### **4.3.2** Economic Condition of Respondents

Economic characteristics include Land acres owned by respondents, Income per acre in rainy season, Opinion of Farm Income by respondents, Ownership of Farm Equipment by respondents, and Opinion on Agriculture Loan by respondents after getting land use certificates (LUCs, also known as Form 7).

**Table (4.2)** Land acres owned by respondents

<b>Total Planted Acres</b>	No. of Respondents	Percentage (%)
1-5	161	63.4
6-10	70	27.6
11-15	18	7.1
16-20	3	1.2
21-25	2	0.8
Total	254	100.0

Source: Survey Data, 2019

According to Table (4.2), it was found that 161 (63.4%) of respondents owned 1 to 5 acres, 70 (27.6%) owned 6-10 acres, 18 (7.1%) owned 11-15 acres, 3 (1.2%) owned 16-20 acres and 2 (0.8%) owned 21-25 acres respectively. The most of the respondents are owned 1-5 acres of farmland.

Table (4.3) Income status of respondents after 2013

Income Status	No. of Respondents	Percentage (%)
Greatly Increased	7	3
Moderately Increased	168	66
Unchanged	69	27
Less Decreased	10	4
Total	254	100

Source: Survey Data, 2019

Table (4.1) described the income status of respondents after 2013. Majority of respondents 168 (66.0%) of respondents were moderately increased income, 69 (27%) were unchanged, 10 (4.0%) were less moderately and 7 (3.0%) were increased income greatly.

Table (4.4) Income per Acre of respondents in rainy season

Income Per Acre (Rainy)	No. of Respondents	Percentage (%)
Under 300,000 Kyats	185	72.8
300,000 - 400,000 Kyats	59	23.2
400,000 - 500,000 Kyats	7	2.8
500,000 - 600,000 Kyats	1	0.4
Above 600,000 Kyats	2	0.8
Total	254	100.0

Source: Survey Data, 2019

Table (4.3) was described income per acre in rainy season. According to the income per acre in rainy season, 185 (72.8%) of respondents were in the income group of under 300,000 Kyats, 59(23.2%) were in 300,000 - 400,000 Kyats, 7(2.8%) were in 500,000 - 600,000 Kyats and 2(0.8%) were above 600,000 Kyats respectively.

Table (4.5) Income per Acre of respondents in summer season

Income Per Acre (Summer)	No. of Respondents	Percentage (%)
0	10	4.0
Under 300,000 Kyats	17	6.69
300,000 - 400,000 Kyats	78	30.71
400,000 - 500,000 Kyats	69	27.17
500,000 - 600,000 Kyats	63	24.80
Above 600,000 Kyats	17	6.63
Total	254	100.0

Source: Survey Data, 2019

Table (4.4) described income per acre in summer season. According to the income per acre in rainy season, 78 (30.71%) of respondents were in the income group of 300,000 - 400,000 Kyats, 69 (27.17%) were in 400,000 - 500,000 Kyats, 63 (24.8%) were in 500,000 - 600,000 Kyats, 17 (6.63%) were in above 600,000 Kyats, 17 (6.63%) were under 300,000 Kyats and 10 (4.0%) were not grow in summer season.

Table (4.6) Opinion of Farm Income by respondents

<b>Opinion of Farm Income</b>	No. of respondents	Percentage (%)
Lower Income	77	30.3
Moderate Income	177	69.7
Total	254	100.0

Source: Survey Data, 2019

According to the opinion on farm income by respondents, 77 (29.1%) remarked as lower income and 177 (69.7%) remarked as Moderate income. The most of respondents were suggested their income should be moderate income.

**Table (4.7) Ownership of Farm Machines by respondents** 

Ownership of Farm Equipment	No. of Respondents	Percentage (%)
No	142	55.9
Tractor	80	31.5
Tractor and Combine Harvester	23	9.1
Three categories	9	3.5
Total	254	100.0

Source: Survey data, 2019

According to Table (4.6), the ownership of farm equipment by respondents, 142 (55.9%) of respondents don't have the farm equipment, 80 (31.5%) have one category, 23 (9.1%) have two categories and 9 (3.5%) of respondents have three categories of farm equipment respectively.

Table (4.8) Opinion on Agriculture Loan by respondents

Taking Agriculture Loan	No. of Respondents	Percent
More Easy	132	52.0
Unchanged	95	37.4
More Difficult	27	10.6
Total	254	100.0

Source: Survey Data, 2019

According to the opinion on Agriculture loan by respondents, 132 (52.0%) of respondents remarked more easy during loan process, 95 (37.4%) remarked as same as previous condition and 27 (10.6%) remarked as more difficult during loan process after getting the Form No. 7.

# 4.3.3 Living Condition of Respondents

Living condition of respondents include Type of home, Ownership of Motor cycle, Ownership of Motor vehicle, Usage of Mobile Phone by the respondents.

**Table (4.9)** Type of Home owned by respondents

Type of Home	Before 2013		After 2013	
	Frequency	Percentage	Frequency	Percentage
Concrete Building	21	8.3	30	11.8
Wooden Building	156	61.4	178	70.1
With Brick	14	5.5	19	7.5
Wooden wall	46	18.1	24	9.4
Bamboo and thatch	17	6.7	3	1.2
Total	254	100.0	254	100.0

Source: Survey data, 2019

According to the type of home owned by respondents, it was found that 21 (8.3%) of respondents owned concrete building before 2013 and increased to 30 (11.8%) owned concrete building after 2013, 156 (61.4%) owned wooden building before 2013 and increased to 178 (70.1%) owned it after 2013, 14 (5.5%) owned building with Brick before and increased to 19 (7.5%) owned it after 2013, 46 (18.1%) owned wooden wall before 2013 and decreased to 24 (9.4%) owned it after 2013, 17 (6.7%) owned Bamboo and thatch before 2013 and decreased to 3 (1.2%) owned it after 2013 respectively.

Table (4.10) Ownership of Motorcycle by respondents

Ownership of	Before 2013		After 2013	r 2013
Motorcycle	Frequency	Percentage	Frequency	Percentage
1	65	25.6	143	56.3
2	11	4.3	33	13.0
3	3	1.2	8	3.1
No	175	68.9	70	27.6
Total	254	100.0	254	100.0

Source: Survey data, 2019

According to the ownership of Motorcycle by respondents 65 (25.6%) of respondents owned 1 motorcycle before 2013 and increased 143 (11.8%) owned 1 motorcycle after 2013, 11 (4.3%) owned 2 motorcycles before 2013 and increased to 33 (13.0%) after 2013, 3 (1.2%) owned 3 motorcycles before 2013 and increased to 8

(3.1%) owned it after 2013, and 175 (68.9%) owned no motorcycle and decreased to 70 (27.6%) owned it after 2013 respectively.

Table (4.11) Ownership of Motor Car by respondents

Ownership of Car	Before 2013		After 2013	
ownership or car	Frequency	Percentage	Frequency	Percentage
Yes	14	5.5	18	7.1
No	240	94.5	236	92.9
Total	254	100	254	100

Source: Survey data, 2019

According to the ownership of Motor Car by respondents, it was found that 14 (5.5%) of respondents owned motor car before 2013 and increased 18 (7.1%) owned after 2013, and majority of respondents 240 (94.5%) owned no motor car before 2013 and decreased to 236 (92.9%) after 2013 respectively.

Table (4.12) Ownership of Mobile Phone in Respondents' Family members

Usage of Mobile Phone	Before 2013		After 2013	
Osage of Mobile I holic	Frequency	Percentage	Frequency	Percentage
No Mobile Phone	248	97.6	58	22.8
1 Mobile Phone	6	2.4	88	34.6
2 to 4 Mobile Phone	0	0	99	38.9
Above 5 Mobile Phone	0	0	9	3.7
Total	254	100	254	100

Source: Survey data, 2019

According to the ownership of mobile phones by Respondents' Family Member, it was found that 58 (97.6%) of households have no mobile phone before 2013 and decreased to 58 (22.8%) have no mobile after 2013, and 6 (2.4%) owned 1 mobile phone before 2013 and increased to 88 (34.6%) after 2013, and also remark increased 99(38.9%) have 2 to 4 mobile phones and 9 (3.7%) have above 5 mobile phones after 2013 respectively.

# 4.3.3 Education, Healthcare and Social characteristics of Respondents

Education, Healthcare and Social characteristics of Respondents include number of graduate in family members, Access to education of family members, Access to Healthcare of family members,

**Table (4.13)** Number of Graduate in Respondents' Family Members

No. of Graduate	Before	e 2013	After	2013
110. 01 Graduate	Frequency	Percentage	Frequency	Percentage
No Graduate	244	96.1	225	88.6
1	8	3.1	22	8.6
2	2	0.8	5	2.0
3	0	0	2	0.8
Total	254	100	254	100

Source: Survey Data, 2019

According to the number of graduate in Respondents' Family Member, it was found that 224 (96.1%) of households have no graduate in family members before 2013 and decreased to 225 (88.6%) after 2013, 8 (3.1%) have 1 graduate before 2013 and increased to 22 (8.6%) after 2013, 2 (0.8%) have 2 graduate before 2013 and increased to 5 (2.0%) after 2013, and increased 2 (0.8%) have 3 graduate in family members after 2013 respectively.

**Table (4.14)** Access to Education of Respondents' Family Members

Access to Education	Before	e 2013	After 2013		
recess to Education	Frequency	Percentage	Frequency	Percentage	
No access	80	31.5	50	19.7	
Fewer	39	15.4	43	16.9	
One Half	4	1.6	2	0.8	
Majority	6	2.4	6	2.4	
All	125	49.2	153	60.2	
Total	254	100	254	100	

Source: Survey Data, 2019

According to the access to Education of Respondents' Family Members, it was found that 80 (31.5%) of households cannot access to education for family members before 2013 and decreased to 50 (19.7%) after 2013, 39 (15.4%) can access a few of the family member before 2013 and increased to 43 (16.9%) after 2013, 4 (1.6%) can access half of the family members before 2013 and decreased to 2 (0.8%) after 2013, 6(2.4%) can access majority of family members before 2013 and still same 6 (2.4%) after 2013, 125 (49.2%) of households can accessed education for all family members before 2013 and increased 153 (60.2%) after 2013 respectively.

Table (4.15) Access to Healthcare of Respondents' Family Members

Type of Health Care	Befor	e 2013 After 2013		r 2013
Type of Health Care	Frequency	Percentage	Frequency	Percentage
No Clinics	24	9.4	2	0.8
Village Clinics	180	70.9	184	72.4
Township Hospital	17	6.7	20	7.9
Specialist Clinic	33	13.0	48	18.9
Total	254	100	254	100

Source: Survey Data, 2019

According to the access to healthcare of Respondents' Family Members, it was found that 24 (9.4%) of households cannot access to healthcare for family members before 2013 and decreased to 2 (0.8%) after 2013, 180 (70.9%) can access Village clinics before 2013 and increased to 184 (72.4%) after 2013, 17 (6.7%) can access Township Hospital before 2013 and increased to 20 (7.9%) after 2013, and 33 (13.0%) can accessed Specialist clinic before 2013 and increased to 48 (18.9%) after 2013 respectively.

Table (4.16) Number of family trip per year of respondents

No. of family trip	Befor	e 2013	After 2013	
No. of family trip	Frequency	Percentage	Frequency	Percentage
No Trip	80	31.5	7	2.8
1-2	152	59.8	204	80.3
3-4	22	8.7	43	16.9
Total	254	100	254	100

Source: Survey Data, 2019

According to the number of family trip per year of respondents, it was found that 80(31.5%) of households cannot go family trip before 2013 and decreased to 7 (2.8%) after 2013, 152 (59.8%) can go 1-2 trip per a year before 2013 and increased to 204 (80.3%) after 2013, 22 (8.7%) can go 3-4 trip per a year before 2013 and increased to 43 (16.9%) after 2013 respectively.

#### **CHAPTER V**

#### **CONCLUSION**

#### 5.1 Findings

Myanmar is the second largest country in Southeast Asia, richly endowed with land and water resources and favorable climate for agricultural production. Out of Myanmar's total land area of 161 million acres (or 65.2 million ha) about 25 percent or 42.6 million acres (17.2 million ha) are suitable for cultivation. In 2015, land cover in Myanmar was composed of over 31.5 million acres (12.7 million ha) of agricultural land, or 19 percent of total land area, and an additional 71.8 million acres (29.1 million ha), or 45 percent of the total land area under forests. (Micah L, 2018)

With regard to agricultural land use, in 2015 there were 26.9 million acres of arable land, which formed 85 percent of all agricultural land. Permanent crops covered 3.8 million acres or 12 percent of agricultural land, compared to 0.76 million acres for permanent meadows and pastures, which is only 3 percent of agricultural land. Agricultural land has increased at an average annual rate of around 1 percent since 1996. Agriculture is a major sector in Myanmar's economy, forming 32 percent of GDP and employs 52.4 percent of the labor force. (Department of Population, 2017)

In 2010, Myanmar embarked on a political transition that resulted in broad reforms. The land agenda is an important element of these broad reforms. Land reform aims to establish a unified land governance framework of laws, regulations and norms to manage the access to, use of and control over land and natural resources. These reforms are particularly important for the development of Myanmar where the agricultural sector has suffered from poor and sometimes predatory state policies, but is still considered to be the backbone of the economy.

In 2012, two new land laws were passed by parliament, namely the Farmland Law and the Vacant, Fallow and Virgin Land Management Law (VFVLM Law). The objective of the 2012 Farmland Law was to establish a system for securing rural land

for smallholders through a land-use certificate registration system. The Farmland Law and issuance of land use certificates (LUCs, also known as Form 7), provide a formalization of tenure recognition for many farmers, supplementing existing forms of tenure documentation such as land tax receipts, with the additional formalization of the right to transfer, sell or mortgage land, which has stimulated the land market. In total 9.6 million farmers have been issued a certificate and it covering around 90 percent of land eligible under the Farmland Law. (Micah L, 2018)

This study aimed to assess the impact of the changing agricultural land administration after 2013 and to study effects on land holders after changing agricultural land administration in 2013.

The two hundred and fifty four numbers of the respondents were included in this study and 59% of total respondents are male, while 41% are female. Majority of respondents fall into the age group of 41 to 50 years old and which represents 28.7% and this age group possess high maturity level for this study. The second largest group was between 31 to 40 years old representing 58%. Minority of respondents were under 20 years old are only 1.2%. Education levels were varied among the respondents and most of the respondents were attained primary education represented by 56.7%, and graduated were included only 5%. Therefore most of the respondents are not well educated. According to the occupation of respondents, majority of respondents were employed in farm and which represented 70.9%. It was found that majority of respondents were in 3 to 6 members of household size and represented by 47.6%.

After getting land use certificates (LUCs, also known as Form 7), the majority of respondents were own 1 to 5 acres and represented by 63.4%. the income status of respondents after 2013. According to the income status of respondents, it was found that the majority of respondents 168 (66.0%) were moderately increased income after 2013. According to the income per acre in rainy season, majority of the respondents 72.8% were in the income group of under 300,000 Kyats, income per acre in summer season, majority of the respondents 78 (30.71%) were in the income group of 300,000 - 400,000 Kyats and majority of the respondents 69.7% gave the opinion as moderate income was getting from farm income. Majority of respondent 55.9% have no farm equipment and 31.5% have one category of equipment. Majority of respondent 52.0% suggested that it was easier in process of agricultural loan.

According to the Living condition of respondents, majority of respondent owned wooden building and it increased 61.4% to 70.1% after 2013, minority of respondents 6.7% owned bamboo and thatch and it decreased 6.7% to 1.2% after 2013. Majority of respondent owned no motor cycle and it decreased 68.9% to 27.6% and ownership of one motor cycle increased from 25.6% to 56.3% after 2013. And also ownership of motor car increased from 5.5% owned to 7.1% after 2013. Moreover, ownership of mobile phones by family member was also found that no mobile phone decreased 97.6% of households to 22.8% after 2013. This data was showing that living condition of the respondents was improved after 2013.

According to the education of respondents, no graduate from university in family members decreased 96.1% to 88.6% after 2013 and at least one graduate in family member increase 3.1% to 8.6%. According to assess to education of family members, respondents choose the category of all family member access the education from 49.2% to 60.2% after 2013. According to the access to healthcare of family members majority of respondents choose village clinic and increase 70.9% to 72.4% after 2013. According to the number of family trip per year, majority of respondents went one trip and it increased 40.2% to 44.9% after 2013. These data showing that the education, healthcare and social characteristics of Respondents were more improved after 2013.

#### 5.2 Recommendations

The government's economic development strategy gives high priority to the agriculture sector. Of the four economic development objectives of the government, agriculture sector development is regarded as one of the major driving forces and the basis for uplifting of social well-being. In accordance with the government's plans, the major role of the agriculture sector is to fulfill food security, to increase foreign exchange earnings through agricultural exports, and to spur rural development generally. Some major policy agricultural reforms have been implemented and give credence to the government's plans.

This study assessed the effects on farmers was found that the living condition, the education, healthcare and social characteristics of Respondents were more improved after changing the agricultural land administration in 2013.

The agriculture sector still faces many challenges, including access to technology, capital, and markets and land tenure issues. However, the Myanmar

government is dedicating significant efforts towards developing a sustainable development plan with specific objectives of improving the export sector and the agricultural industry. Myanmar developed a National Export Strategy, with a focus on increasing production and value-added of certain agricultural products, including: beans, pulses and oilseeds, fisheries; forestry products; rice; and rubber. The government has also been attempting to improve the business climate by enacting regulatory reforms to attract investors. The development of the Agriculture Development Strategy plan is promising and signals the government's commitment to improve access to finance, trade facilitation and logistics, and trade information and promotion initiatives.

Myanmar is richly endowed with natural resources, has a high land / labor ratio, and a growing domestic market; with correct policies and investments, the agriculture sector in Myanmar has great potential to expand.

#### REFERENCES

Aimee Zaw. (2016). Analysis of Land Use Policy Reform in Myanmar

DALMS. (2013), Agricultural Statistics Census Report.

DALMS. (2018). Agricultural Statistics Report.

DALMS. (2018). Annual Report.

Deininger, K. (2003). Land Policies for Growth and Poverty Reduction. *World Bank Policy Research Report*.

Deininger, K. (2004). *Land Policies and Land Reform*. Retrieved from <a href="http://siteresources.worldbank.org/INTISPMA/Resources/Training-Events-and-">http://siteresources.worldbank.org/INTISPMA/Resources/Training-Events-and-</a>

Materials/land\_policies\_reform.pdf

Deininger, K., Binswanger, H., (1999). The evolution of the World Bank's land policy: principles, experience, and future challenges: *The World Bank Research Observer: Vol.14 Issue* 2, 247-276.

Department of Population. (2017). *Census Atlas Myanmar: The 2014 Myanmar Population and Housing Census*. Nay Pyi Taw: Ministry of Labor, Immigration and Population. Department of Population, Myanmar.

FAO. (2015). MYANMAR: Land Tenure issues and the impact on Rural Development.

FAO. (2016). LAND TENURE AND ADMINISTRATION.

French Diplomat. (2018). *Land policy*. Retrieved from <a href="https://www.diplomatie.gouv.fr/en/french-foreign-policy/governance/state">https://www.diplomatie.gouv.fr/en/french-foreign-policy/governance/state</a> reform/article/land-policy-a-crucial-aspect-of

Freshwater, D. (2009). *Farmland Conversation*. Retrieved from <a href="https://www.oecd.org/agriculture/44535648.pdf">https://www.oecd.org/agriculture/44535648.pdf</a>

Maung Yee Win. (2008). Development of Land Policy, Land Administration, Land Fragmentation and Farm Size in Myanmar

Micah, L. (2018). *State of Land in the Mekong Region*. Centre for Development and Environment (CDE), University of Bern, Switzerland, and Mekong Region Land Governance (MRLG), Vientiane, Lao PDR with Bern Open Publishing (BOP).

Ministry of Agriculture and Forestry. (1986). The History of Myanmar's farmland.

MOALI. (2018). Myanmar Agriculture Development strategy and investment plan (2018-19 to 2022-23). MOALI, Myanmar.

National Action Plan for Agriculture (NAPA) Working Paper 10: Land Tenure and Administration. MOALI, Yangon

North, D. C. (1989) *Institutions, Institutional Change and Economic Performance*. Retrieved from <a href="https://epdf.tips/queue/institutions-institutional-change-and-economic-performance-political-economy-of-.html">https://epdf.tips/queue/institutions-institutional-change-and-economic-performance-political-economy-of-.html</a>

The World Bank. (1975). Land Reform Policy Paper.

Ting, L. A. (2002), *Principles for An Integrated Land Administration System to support Sustainable Development*. Retrieved from <a href="http://www.csdila.unimelb.edu.au/publication/theses/LisaTing">http://www.csdila.unimelb.edu.au/publication/theses/LisaTing</a> <a href="http://www.csdila.unimelb.edu.au/publication/theses/LisaTing">http://www.csdila.unimelb.edu.au/publication/theses/LisaTing</a> <a href="http://www.csdila.unimelb.edu.au/publication/theses/LisaTing">phD</a> <a href="http://www.csdila.unimelb.edu.au/publication/theses/LisaTing">http://www.csdila.unimelb.edu.au/publication/theses/LisaTing</a> <a href="http://www.csdila.unimelb.edu.au/publication/theses/LisaTing">http://www.csdila.unimelb.edu.au/publication/theses/LisaTing</a> <a href="http://www.csdila.unimelb.edu.au/publication/theses/LisaTing">phD</a> <a href="http://www.csdila.unimelb.edu.au/publication/theses/LisaTing">http://www.csdila.unimelb.edu.au/publication/theses/LisaTing</a> <a href="http://www.csdila.unimelb.edu.au/publication/theses/LisaTing">http://www.csdila.unimelb.edu.au/publication/theses/Lisa

UNECE. (2006). Social and Economic Benefits of Good Land Administration (Second Edition).

UN-Habitat. (2018), LAMP Project Report.

United Nations. (1996), *LAND ADMINISTRATION GUIDELINES*. Retrieved from <a href="http://www.unece.org/fileadmin/DAM/hlm/documents/Publications/land.administrati">http://www.unece.org/fileadmin/DAM/hlm/documents/Publications/land.administrati</a> on.guidelines.e.pdf

Williamson, I. P. (2000). Best Practices for Land Administration Systems in Developing Countries. Retrieved from <a href="http://www.csdila.unimelb.edu.au/publication/conferences/Best\_practices\_LAS.pdf">http://www.csdila.unimelb.edu.au/publication/conferences/Best\_practices\_LAS.pdf</a>

# Appendix

A Study on Impact of the Changes in Agricultural land		land	1. Geographical Data				
ASI	• -	ion in Yangon	O	ianu	1.1 Region /	/ State :	
		of Hmawbi Tov	O			·	
	(Case Study (	or ilmawor 10	viisiiip)		1.3 Townshi	ip :	
	Survey	Questionnaire	·S		1.4 Village	Fract:	
	Buivey	Questionnaire	.5		1.5 Village :		
2. D	ata of Respondents						
To as	sk about households	s in series from	the head of	the fa	mily, wife or	husband and c	hildren (son or
	hter) who live with p	v	v	v			,
Total	Households -	person					
No.	Name of	Relationship	Sex	Age	Education	Occupation	Remark
	members	to head	1. Male		Level	(to write	
		(to write	2. Female		(to write	code no.	
		code no.	(to write		code no.	only)	
		only)	code no.		only)	<i>J</i> ,	
			only)				
1.			, , , , , , , , , , , , , , , , , , ,				
2.							
3.							
4.							
5.							
6.							
7.							
Relat	tionship to head C	Code:	Education 1	Level	Code:	Occupation	Code:
1. He	ead		1. didn't go to school		1. Own farm		
2. W	ife / Husband		2. Primary			2. Employee	to other's farm
3. Sc	on / Daughter		3. Secondary		3. Other		
	n-in-law / Daughter	-in-law	4. High School				
	and Children		5. High School Graduate				
	rents / Grand Parent	ts	6. University / Collage				
7. Si	•		7. Bachelor				
	her Relatives		8. Post Graduate				
9. No	on Relatives		9. Other				
	conomic Condition						
3.1 What is the total agricultural land area of your owned?							
1. 0 to 5 acres 2. 6 to 10 acres 3. 11 to 15 acres 4. 16 to 20 acres							
	3.2 Income status of respondents after 2013 or getting Land Use Certificates (Form 7)						
1	. Improve a lot	2. Improve m	oderately	3. U	nchanged	4. Less mod	erately -

3.3 After getting Form 7, how much your income per acre for paddy in Rain Season?	
1. Under 300,000 Kyats 2. Between 300000 and 400000	
3. Between 400000 and 500000 4. Between 500000 and 600000 5. Above 600000	
3.4 After getting Form 7, how much your expenditure per acre for paddy in Rain Season?	
1. Under 100,000 Kyats 2. Between 100000 and 200000	
3. Between 200000 and 300000 4. Between 300000 and 400000 5. Above 400000	
3.5 After getting Form 7, how much your income per acre for paddy in Summer Season?	
1. Under 300,000 Kyats 2. Between 300000 and 400000	
3. Between 400000 and 500000 4. Between 500000 and 600000 5. Above 600000	
3.6 After getting Form 7, how much your expenditure per acre for paddy in Summer Season?	
1. Under 100,000 Kyats 2. Between 100000 and 200000	
3. Between 200000 and 300000 4. Between 300000 and 400000 5. Above 400000	
3.7 What is your think about income from the farming?	
1. Poor 2. Less 3. Moderate 4. Much	
3.8 How many farming machines did you buy?	
1. None 2. 1 item 3. 2 item 4. 3 item	
3.9 Do you get loan after getting Form 7 is than before?	
1. Easier 2. The same 3. More difficult	
4. Living Condition	
4.1 What is your house built of?	
•	
1 .Brick 2. Wood 3. Brick and Wood 4. Wood and Bamboo wall	
1 .Brick 2. Wood 3. Brick and Wood 4. Wood and Bamboo wall 5. Bamboo and thatched rood	
1 .Brick 2. Wood 3. Brick and Wood 4. Wood and Bamboo wall 5. Bamboo and thatched rood 4.2 How many motor cycle did you buy?	$\frac{\square}{\square}$
1 .Brick 2. Wood 3. Brick and Wood 4. Wood and Bamboo wall 5. Bamboo and thatched rood	
1 .Brick 2. Wood 3. Brick and Wood 4. Wood and Bamboo wall 5. Bamboo and thatched rood 4.2 How many motor cycle did you buy?	
1 .Brick 2. Wood 3. Brick and Wood 4. Wood and Bamboo wall 5. Bamboo and thatched rood 4.2 How many motor cycle did you buy? 1. None 2. 1 No. 3. 2 Nos. 4. 3 Nos. 5. 4 Nos.	
1 .Brick 2. Wood 3. Brick and Wood 4. Wood and Bamboo wall 5. Bamboo and thatched rood 4.2 How many motor cycle did you buy? 1. None 2. 1 No. 3. 2 Nos. 4. 3 Nos. 5. 4 Nos. 4.3 Do you own a motor car?	
1 .Brick 2. Wood 3. Brick and Wood 4. Wood and Bamboo wall 5. Bamboo and thatched rood  4.2 How many motor cycle did you buy?  1. None 2. 1 No. 3. 2 Nos. 4. 3 Nos. 5. 4 Nos.  4.3 Do you own a motor car?  1. Yes 2. No	
1 .Brick 2. Wood 3. Brick and Wood 4. Wood and Bamboo wall 5. Bamboo and thatched rood  4.2 How many motor cycle did you buy? 1. None 2. 1 No. 3. 2 Nos. 4. 3 Nos. 5. 4 Nos.  4.3 Do you own a motor car? 1. Yes 2. No  4.4 How many mobile phone do your family have?	
1 .Brick 2. Wood 3. Brick and Wood 4. Wood and Bamboo wall 5. Bamboo and thatched rood  4.2 How many motor cycle did you buy? 1. None 2. 1 No. 3. 2 Nos. 4. 3 Nos. 5. 4 Nos.  4.3 Do you own a motor car? 1. Yes 2. No  4.4 How many mobile phone do your family have? 1. None 2. 1 to 2 3. 3 to 4 4. 5 and above	
1 .Brick 2. Wood 3. Brick and Wood 4. Wood and Bamboo wall 5. Bamboo and thatched rood  4.2 How many motor cycle did you buy? 1. None 2. 1 No. 3. 2 Nos. 4. 3 Nos. 5. 4 Nos.  4.3 Do you own a motor car? 1. Yes 2. No  4.4 How many mobile phone do your family have? 1. None 2. 1 to 2 3. 3 to 4 4. 5 and above  5. Social, Education and Health care	
1 .Brick 2. Wood 3. Brick and Wood 4. Wood and Bamboo wall 5. Bamboo and thatched rood  4.2 How many motor cycle did you buy? 1. None 2. 1 No. 3. 2 Nos. 4. 3 Nos. 5. 4 Nos.  4.3 Do you own a motor car? 1. Yes 2. No  4.4 How many mobile phone do your family have? 1. None 2. 1 to 2 3. 3 to 4 4. 5 and above  5. Social, Education and Health care  5.1 How many graduate children do you have? 1. No 2. One 3. Two 4. Three and above	
1 .Brick 2. Wood 3. Brick and Wood 4. Wood and Bamboo wall 5. Bamboo and thatched rood  4.2 How many motor cycle did you buy? 1. None 2. 1 No. 3. 2 Nos. 4. 3 Nos. 5. 4 Nos.  4.3 Do you own a motor car? 1. Yes 2. No  4.4 How many mobile phone do your family have? 1. None 2. 1 to 2 3. 3 to 4 4. 5 and above  5. Social, Education and Health care  5.1 How many graduate children do you have?	
1 .Brick 2. Wood 3. Brick and Wood 4. Wood and Bamboo wall 5. Bamboo and thatched rood  4.2 How many motor cycle did you buy? 1. None 2. 1 No. 3. 2 Nos. 4. 3 Nos. 5. 4 Nos.  4.3 Do you own a motor car? 1. Yes 2. No  4.4 How many mobile phone do your family have? 1. None 2. 1 to 2 3. 3 to 4 4. 5 and above  5. Social, Education and Health care  5.1 How many graduate children do you have? 1. No 2. One 3. Two 4. Three and above  5.2 I can provide education for	
1 .Brick 2. Wood 3. Brick and Wood 4. Wood and Bamboo wall 5. Bamboo and thatched rood  4.2 How many motor cycle did you buy? 1. None 2. 1 No. 3. 2 Nos. 4. 3 Nos. 5. 4 Nos.  4.3 Do you own a motor car? 1. Yes 2. No  4.4 How many mobile phone do your family have? 1. None 2. 1 to 2 3. 3 to 4 4. 5 and above  5. Social, Education and Health care  5.1 How many graduate children do you have? 1. No 2. One 3. Two 4. Three and above  5.2 I can provide education for	
1 .Brick 2. Wood 3. Brick and Wood 4. Wood and Bamboo wall 5. Bamboo and thatched rood  4.2 How many motor cycle did you buy? 1. None 2. 1 No. 3. 2 Nos. 4. 3 Nos. 5. 4 Nos.  4.3 Do you own a motor car? 1. Yes 2. No  4.4 How many mobile phone do your family have? 1. None 2. 1 to 2 3. 3 to 4 4. 5 and above  5. Social, Education and Health care  5.1 How many graduate children do you have? 1. No 2. One 3. Two 4. Three and above  5.2 I can provide education for	
1 .Brick 2. Wood 3. Brick and Wood 4. Wood and Bamboo wall 5. Bamboo and thatched rood  4.2 How many motor cycle did you buy? 1. None 2. 1 No. 3. 2 Nos. 4. 3 Nos. 5. 4 Nos.  4.3 Do you own a motor car? 1. Yes 2. No  4.4 How many mobile phone do your family have? 1. None 2. 1 to 2 3. 3 to 4 4. 5 and above  5. Social, Education and Health care  5.1 How many graduate children do you have? 1. No 2. One 3. Two 4. Three and above  5.2 I can provide education for	