

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

**A STUDY ON SOCIO-ECONOMIC DEVELOPMENT OF
HLEGU TOWNSHIP (2009-2018)**

**ZAR NI SU HLAING
MDevS -24 (14th BATCH)**

MAY, 2019

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HLEGU TOWNSHIP (2009-2018)**

A thesis submitted as a partial fulfillment of the requirements for the degree of
Master of Development Studies (MDevS)

Supervised by:

Daw Cho Cho Mar
Lecturer
Department of Economics
Yangon University of Economics

Submitted by:

Zar Ni Su Hlaing
Roll No - 24
MDevS (14th Batch)
(2017 - 2019)

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ABSTRACT

This study highlights the socio-economic condition in Hlegu Township during the period 2009-2010 to 2017-2018. The purpose of the study is to identify the changes in socio-economic condition in the study area. This paper uses descriptive method based on the secondary data from the records of government offices in Hlegu Township. Among economic sectors, production sector is the largest share in GDP. Major economy of Hlegu Township is agriculture. It is seen that industrial sector in Hlegu Township has the good opportunities for development. In service sectors, communication and transportation sectors are well increasing in the study period. In social sectors, it is seen that progress of education and health status are the main factors for the quality of human resources development. In education sector, the number of schools has been increased in all levels but the quantity of teacher should be appointed in middle schools and high schools levels for increased teacher-student ratio. In health sector, more doctors and health care workers should be provided. Thus, it is found that Hlegu Township is trying to get the development goals and it will be a developed township if required plans and projects are implemented with government and non-government organization's supports to provide the necessary in urban and rural development.

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ABBREVIATIONS

AEC	ASEAN Economic Community
ASEAN	Association of South East Asia Nation
DRD	Department of Rural Development
GDP	Gross National Product
GMS	Greater Mekong Sub Region
GSM/CDMA	Global System for Mobile Communication / Code-Division Multiple Access
GWh	Gig watt hour
HDI	Human Development Index
HIV/AIDS	Human Immunodeficiency Virus Infection and Acquired Immune Deficiency Syndrome
HYV	High Yielding Variety
ID	Identity
KOFIH	Korea Foundation for International Health Care
KOICA	Korea International Cooperation Agency
kWh	Kilowatt hour
MNPED	Myanmar National Planning and Economic Development
MPT	Myanmar Post and Telegraph
MSDP	Myanmar Sustainable Development Plan
MW	Megawatt
NEP	National Electrification Project
NESP	National Education Strategic Plan
NGO	Non-Government Organization
ODA	Official Development Aid
PHC	Primary Health Care
PLT	Principles of Learning and Teaching
TB	Tuberculosis
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization

VDP	Village Development Plan
WB	World Bank
WHO	World Health Organization
YBS	Yangon Bus Services
YRG	Yangon Region Government

Chapter (1)

Introduction

1.1 Rationale of the study

Development is a multi-dimensional phenomenon. Some of its major dimensions include level of economic growth, level of education, level of health services, degree of modernization, status of women, level of nutrition, quality of housing, distribution of goods and services, and access to communication. It requires a balanced human resource development in the country. Most developing countries are making efforts to adopt effective policies and strategies for overall development of urban and rural area for nation's interests.

Policymakers focus on balanced economic development across States and Regions. Government concentrate on agricultural sector in rural development because approximately 70 percent of the populations live in rural areas and their main livelihood is agriculture which is the backbone of the economy of the country. At present, human resource plans envisions an education system in Myanmar that will support our country's human resources, our people, to develop their full potential. A strong and healthy population makes for a strong and healthy nation. The government of Myanmar strives to get the right balance between economic and social development, and environmental protection and sustainability. The government also seeks to help reduce the rural-urban divide in terms of access to markets, to information, to technology, to finance, to education, to basic infrastructure and healthcare, amongst others.

Myanmar has 330 townships. Yangon region has 45 townships. Among of them 34 townships are urban township and 11 are rural townships. Hlegu Township sits 45 km northeast of Yangon. It is a rural township within Yangon Region. But Hlegu Township has fortunate geographical position and well development opportunities. Hlegu currently has a primarily agricultural economy, with a large proportion of the population involved in rice farming. And some people are engaged

in livestock and fisheries, private owned industry, transporting and trading. Yangon Region Government is trying to get the sustainable economic growth in Yangon Region. YRG is implementing the industrial project in Hlegu Township. So, Hlegu will improve the industrial development and job opportunities for local people. These are why this socio-economic study focuses on the economic sector of Hlegu Township.

Solid education system plays a critical role in a healthy economy. It creates higher income, advanced technology, industrialization, develop knowledge and skillful workers. This reason is the study of education sector to the socio economic development of Hlegu Township. Health sector support production sector that will help to improve strong labor force and healthy new generations. It can be provided by the education sector.

In Myanmar, all states and regions are helping to develop the nation. Therefore, to study the development of whole nation, it would be needed to basically socio-economic development of each state and region which comprise all townships and then its contribution to Myanmar Economy. The study is to know the socio-economic condition of Hlegu Township, to provide require development policies and projects.

1.2 Objective of the Study

The objectives of the study are

- (1) to know the sectorial performance of economic and social sectors of Hlegu Township and
- (2) to identify socio-economic conditions of Hlegu Township

1.3 Method of Study

The method of the study is descriptive method based on secondary data from General Administration Department of Hlegu Township, Planning Department of Hlegu Township, Immigration and Manpower Department Hlegu Township, Department of Statistics and Farmland Management Hlegu Township, Department of Agriculture and Irrigation Hlegu Township, Department of Animal Husbandry Hlegu Township, The Office of Education Hlegu Township, Health Department of Hlegu Township, Myanmar Agricultural Development Bank Hlegu Township, books and Internet Websites.

1.4 Scope and Limitation of the Study

The Scope of the study is limited to Socio-economic Development of Hlegu Township during 2009-2010 to 2017-2018.

1.5 Organization of the Study

This study consists of five chapters. Chapter (1) includes introduction with rationale, objective, method, scope and organization of the study. Chapter (2) describes the literature review. Chapter (3) is the Socio-Economic Development in Myanmar. Chapter (4) examines the Socio-Economic Development of Hlegu Township and Chapter (5) shows conclusion of the study with finding and suggestion.

Chapter (2)

Literature Review

2.1 Economic growth and Economic development

Economic growth is the increase in the market value of the goods and services produced by an economy over time. It is conventionally measured as the percent rate of increase in real gross domestic product, or real GDP. In economics, "economic growth" or "economic growth theory" typically refers to growth of potential output, i.e., production at "full employment." As an area of study, economic growth is generally distinguished from development economics. The former is primarily the study of how countries can advance their economies. The latter is the study of the economic aspects of the development process in low-income countries.

Economic growth is one of the most important indicators of a healthy economy. One of the biggest impacts of long-term growth of a country is that it has a positive impact on national income and the level of employment, which increases the standard of living. As the country's GDP is increasing, it is more productive which leads to more people being employed. This increases the wealth of the country and its population.

Economic Growth is not the same as Economic Development. Development alleviates people from low standards of living into proper employment with suitable shelter. Economic Growth does not take into account the depletion of natural resources which might lead to pollution, congestion & disease. Development, however, is concerned with sustainability which means meeting the needs of the present without compromising future needs.

Development has been defined as "a process of growth, expansion or realization of potential; bringing regional resources into full productive use" In another words development is a process of change aiming at socio-economic transformation of a traditional societies into modern one which is greatly influence by

human beings. Activities related to the development are generally directed towards national buildings and socio-economic transformation.

Development is defined as “the process of improving the quality of all human lives and capabilities by raising people’s levels of living, self-esteem and freedom.”

Michael Todaro specified three objectives of development:

1. **Life sustaining goods and services:** To increase the availability and widen the distribution of basic life-sustaining goods such as food, shelter, health and protection.
2. **Higher incomes:** To raise levels of living, including, in addition to higher incomes, the provision of more jobs, better education, and greater attention to cultural and human values, all of which will serve not only to enhance material well-being but also to generate greater individual and national self-esteem
3. **Freedom to make economic and social choices:** To expand the range of economic and social choices available to individuals and nations by freeing them from servitude and dependence not only in relation to other people and nation-states but also to the forces of ignorance and human misery. (Todaro, M.P., and S.C.Smith, 2015)

Economists believe that economic growth is affected mainly by the level of infrastructure development in a given time period, the education and productivity of the work force, the freedom of their movement from agriculture to industry, from rural to urban areas, their ability to save and invest, and the existence of corruption and system of governance in a country.

Development being concerned with how the lives of the people are actually affected, incorporates measures including real income per capita, literacy level and the standard of education, skill development, quality of healthcare and the number of doctors per thousand people, life expectancy, availability of housing and environmental standards. The Human Development Index (HDI) is used to measure the level of development. HDI is developed by the United Nations Development Program (UNDP) to analyze systematically and comprehensively the comparative status of socioeconomic development in different countries and which based on combining measures of education, health, and adjusted real income per capita.

2.2 Regional development

Regional development is the provision of aid and other assistance to regions which are less economically developed. The implications and scope of regional development may therefore vary in accordance with the definition of a region, and how the region and its boundaries are perceived internally and externally.

The notion of development in the context of regional development refers to a value positive concept which aims at enhancing the levels of the living of the people and general conditions of human welfare in a region. It is a value positive concept because development is not only a change but a change for better, just as plant develops into a tree and a child into an adult and there is no reversal of the position attained. Development is neither class neutral nor it is uniformly available across the regions. The development process benefits some classes of the society more than other classes. It helps certain regions to attain higher levels of development than other regions. This gives rise to social disparities as well as regional disparities. Such a situation operates because of the behaviour of parameters of development.

Regional development has been interpreted as intra-regional development design to solve the problems of particular regions. The concept has a multidisciplinary approach. The other connotation of regional development is economic in which the difference in growth in terms of volume and structure of production, income, and employment is measured to know differences in the levels of development. This procedure is employed both for national as well as subnational areas.

The concept of regional development may further be viewed in connection with plan, policies and balanced development. The policies of regional development are aimed at reducing the regional disparities existing in a particular to minimum and to find out the possible means for developing the region as a whole. Balanced regional development does not mean equal development of all regions. It simply implies fullest development of the potentialities of an area according to its capacity so that the benefits of overall economic growth are shared by the inhabitants of all the regions.

2.3 Socio-economic development

Socio-economic development is the process of social and economic development in a society. Socio-economic development is measured with indicators, such as GDP, life expectancy, literacy and levels of employment. Changes in less-tangible factors are also considered, such as personal dignity, freedom of association, personal safety and freedom from fear of physical harm, and the extent of participation in civil society. Causes of socio-economic impacts are, for example, new

technologies, changes in laws, changes in the physical environment and ecological changes. (Orunsolu, A.A., O.R., Adebayo A.A and Bamgboye O.O, 2010)

Socio-economic development of any region or area depends upon various factors or components, which belong to different parameters and it is very difficult task to discuss each and every component of socio-economic development in detail. However, here, few major components of socio-economic development are worked out. These are the following major components of socio-economic development:

- (i) Income Per Capita
- (ii) Level of Agriculture Development
- (iii) Level of Industrial Development
- (vi) Level of Urbanization
- (v) Occupational Structure
- (vi) Level of Educational Development
- (vii) Health Status
- (viii) Transport and Communication
- (ix) Population Characteristics

Per capita income is widely accepted as a general measure of development. It is customary to identify whether a region has been backward or advanced in the levels of development using the estimates of per capita income. The regions which enjoy higher per capita income are deemed to be more developed than the states or regions with low per capita income. Generally per capita income has been taken at current price. This variable or component is commonly used for measuring economic development. Under-developed economies are distinguished from the developed economies on the basis of their low per capita income. (Rao, H. 1984)

Agricultural development is a pre-requisite of economic growth in our country. Agriculture is important not only to meet the ever growing and ever pressing demand for food and fibers for human consumption but also for providing forage for animals, raw materials for non-agricultural sector, employment opportunities to rural population and improves their standard of living. Agriculture is the mainstay of almost all the states of the nation.

According to an UNESCO group of experts, agriculture can contribute to growth by increasing efficiency of popular and releasing resources to other sector by adjusting the consumption and of agricultural production in proportion with the growth in internal and external demands. Rising agricultural productivity supports and

sustains industrial development in several important ways; firstly, to permit agriculture to release part of its labour force for industrial employment while meeting the increasing food needs of the nonagricultural sectors. Secondly, it raises agricultural incomes, thereby creating the rural purchasing power needed to buy the new industrial goods and rural savings and which may then be modified by direct or indirect means of finance industrial development. (Sen, A., 1982)

Agricultural development also brings social and cultural developments, as increased per capita income in rural areas invariably results in increased literacy and level of education which are conducive for social transformation. It is clear that under all circumstances agricultural productivity makes important contribution to regional development and that within considerable limit at least it is one of the pre-conditions which must be established before a take-off into self-sustained economic growth becomes possible. It is equally clear that social and cultural change necessary to integrate new industrial and technological development is possible through increased agricultural production. Agricultural development can be measured both in terms of inputs such as High Yielding Variety (HYV) seeds, chemical fertilizers, irrigation, mechanization, etc. (Malassis, L. 1975)

Industrialization is a key force of rapid development of any economy. Most of the economists have accepted industrialization as the most pre-dominant component of their development strategies. Industrial units of organize sectors generally provide life blood to the economic system by their leading role in transmitting growth impulses to the surrounding area through their backward and forward linkages. Most of the infrastructure facilities such as, means of transportation and communication, power and banking expand along with industrial development, while, their availability in the area causes concentration of industries. Industrialization not only provides employment opportunities and reduces the dependence of workforce on agriculture but also acts as an agent of socio-cultural transformation by bringing about urbanization.

Education is a crucial factor of social, economic and cultural development. It provides economic opportunities and helps to overcome social barriers. It also enhances earning potential and productivity of people through acquisition of skill and information for various opportunities and jobs. Thus, the level of education determines the quality of people and development of a region. Importance of

education hardly needs any elaboration. Investment in human resources is more important than in any other resources.

It is education that contributes significantly in improving conditions of people from state of deprivation to prosperity. Education not only yields a huge set of benefits to individual concerned as well as to the society in the form of a larger set of externalities, but, it also regarded as a great equalizer in income distribution and reducing poverty and disparities. (Mandelbaum, D.G)

The social significance of education lies in its impact on elevating the population squeezes as well as in changing the structure of stimuli to labour. The significance of literacy lies in the fact that it forms the basis of multilevel educational pyramid. A literate person can distinguish between right and wrong and take right decision. Owing to the vital role which literacy plays in the socio-economic upliftment of people, the founding father of Indian constitution recommended that education be made free and compulsory. The universalization of literacy and primary education has been recognized as one of the major goal of planning in our country.

Health is defined as a state of complete physical and mental well-being by WHO. Thus, health is a state of soundness of mind and body of an individual in which he is free from any sort of disorder. Pain of sickness and all organs of body function well and are conducive for efficient and prolonged life. Health and nutrition are the most important and essential aspect of social concern. These are the basic needs of the social well-being, because a sound body and mind are the basic requisites for the maintenance of a healthy society function. Likewise the proper nourishment is also pre requisite to maintain both sound physical and mental health. The proximity to health care facilities is of paramount importance, because this is one of the most noteworthy social facilities in which geographical space creates impurity. (Smith, D.M., 1984)

The nation should have health approach in all its socio-economic schemes and give health education to the masses; the nation should give good and adequate health services to the community. Public health services like hospitals, dispensaries, clinics, doctors, nurses, health centres, etc., should go to the rural areas and our village folks should have easy accessibility to these services. Health sector should develop along with other sectors of economy. In many countries a large proportion of the health resources are expanded in a few cities for the benefit of a small proportion of the population.

2.4 Rural development

Rural development is the process of improving the quality of life and economic well-being of people living in rural areas, often relatively isolated and sparsely populated areas. Rural development has traditionally centered on the exploitation of land-intensive natural resources such as agriculture and forestry. The need for rural communities to approach development from a wider perspective has created more focus on a broad range of development goals rather than merely creating incentive for agricultural or resource based businesses. Education, entrepreneurship, physical infrastructure, and social infrastructure all play an important role in developing rural regions. Rural development is also characterized by its emphasis on locally produced economic development strategies. In contrast to urban regions, which have many similarities, rural areas are highly distinctive from one another. For this reason there is a large variety of rural development approaches used globally.

Rural development actions are intended to further the social and economic development of rural communities. Rural development programs have historically been top-down from local or regional authorities, regional development agencies, NGOs, national governments or international development organizations. Local populations can also bring about endogenous initiatives for development. The term is not limited to issues of developing countries. In fact many developed countries have very active rural development programs. Rural development aims at finding ways to improve rural lives with participation of rural people themselves, so as to meet the required needs of rural communities. The outsider may not understand the setting, culture, language and other things prevalent in the local area. As such, rural people themselves have to participate in their sustainable rural development.

The achievement of the Millennium Development Goals is at the center of sustainable development. Sustainable rural development is vital to the economic, social and environmental viability of nations. It is essential for poverty eradication since global poverty is overwhelmingly rural. The manifestation of poverty goes beyond the urban-rural divide; it has sub regional and regional contexts. It is therefore critical, and there is great value to be gained, by coordinating rural development initiatives that contribute to sustainable livelihoods through efforts at the global, regional, national and local levels, as appropriate. Strategies to deal with rural development should take into consideration the remoteness and potentials in rural areas and provide targeted differentiated approaches.

A healthy and dynamic agricultural sector is an important foundation of rural development, generating strong linkages to other economic sectors. Rural livelihoods are enhanced through effective participation of rural people and rural communities in the management of their own social, economic and environmental objectives by empowering people in rural areas, particularly women and youth, including through organizations such as local cooperatives and by applying the bottom-up approach. Close economic integration of rural areas with neighbouring urban areas and the creation of rural off-farm employment can narrow rural-urban disparities, expand opportunities and encourage the retention of skilled people, including youth, in rural areas. There is considerable potential for rural job creation not only in farming, agro processing and rural industry but also in building rural infrastructure, in the sustainable management of natural resources, waste and residues.

. The success of sustainable rural development depends on, inter alia, developing and implementing comprehensive strategies for dealing with climate change, drought, desertification and natural disaster. Related actions include:

- (a) Promoting poverty eradication in rural areas;
- (b) Promoting pro-poor planning and budgeting at the national and local levels;
- (c) Addressing basic needs and enhancing provision of and access to services as a precursor to improve livelihoods and as an enabling factor of people engagement in productive activities;
- (d) Providing social protection programmes to benefit, inter alia, the vulnerable households, in particular the aged, persons with disabilities and unemployed many of whom are in rural areas.

2.5 Reviews on Previous Studies

Government of India (1952), has examined, The First Five year Plan: A Summary, Planning Commission. Development planning is being done by the state; it has the dual purpose of economic growth and social structural change; it is comprehensive, covering every sector, region and aspect of life. The study found that development has been defined as a process of growth, expansion or realization of potential, bringing regional resources into full productive use.

Rao, H. 1984 has examined “Regional disparities and development in India”. This study is designed to examine regional disparities in Karnataka karnataka subject

category: Geographic Entities. The study found that the Income per capita is a major component of socio-economic development.

Todaro, M.P., and S.C.Smith (2015) studied the “economic development”, presents the latest thinking in economic development with the clear and comprehensive approach that has been so well received in both the developed and developing worlds. The study found that development is defined as the process of improving the quality of all human lives and capabilities by raising people’s levels of living, self-esteem and freedom. It specified three objectives of development.

Orunsolu, A.A., O.R., Adebayo A.A and Bamgboye O.O(2010) studied on Collaborative Research : A Synergistic Approach to Socio-economic Development. The study found that collaborative research, which is any research project in which at least two experts pool their resources together, has several benefits to the socio-economic development of any progressive society. Good collaborative research has to be well planned so that expertise involved in the project can be optimally utilized through clear role definitions.

Sen, A. (1982) studies on “Poverty and Famines : An Essay on Entitlement and Deprivation”. This study found that the causation of starvation in general and of famines in particular. It also provides a general analysis of the characterization and measurement of poverty. Various approaches used in economics, sociology and political theory are critically examined. It found that agricultural development is a pre-requisite of economic growth in a country.

Mandelbaum, D.G. studies on “Some Effects of Population Growth in India, On Social Interaction and Region.”. This study found that the relationship between the population growth and development. It studied the interaction of level of educational development and economic opportunities for India society.

Smith, D.M. (1984), has examined, “Human Geography - A Welfare Approach”. Smith seeks to put people back as the central concern of human geography, asking us to abandon the assumption of homogeneity which had become so popular. This study found that a healthy nation can emerge only when there is adequate supply of proper balanced food, when people are not undernourished or malnourished. Poverty and health do not go together and hence in order to improve the health standard it is imperative to eliminate poverty.

Kraas F, Spohner R, Myint A.A (2017) studied the “ Socio-Economic Atlas of Myanmar”, The focus is on social-economic developments and their uneven manifestation in the states and regions of the country. The study found the overview of socio-economic condition of Myanmar.

Schellhase J. and Sun L (2017), studied “the Banking Sector in Myanmar: An Assessment of Recent Progress”. This paper was prepared to inform the discussion during the strategic planning roundtable for financial-sector development in Myanmar hosted jointly by the Myanmar Development Institute and the Milken Institute. The study found that the overview of banking sector in Myanmar.

Chapter (3)

Socio-Economic Development in Myanmar

3.1 Profile of Myanmar

Myanmar plays a significant role with geographically, economically and politically in the most rapidly advancing region in the world. Myanmar is trying to get the socio-economic development in across country. The government of Myanmar strives to strike the right balance between economic and social development, and environmental protection and sustainability. Moreover, the government seeks to help reduce the rural-urban divide in terms of access to information, to technology, to finance, to education, to basic infrastructure and healthcare, amongst others.

3.1.1 Location, States and Regions

The Republic of the Union of Myanmar is the largest country in the mainland of Southeast Asia with an area of 676,577 square kilometers. The country spans 2,056 km from north to south and 933 km from east to west – between 9° 32' N and 28° 31' N latitude and 92°10' E and 101° 11' E longitude. Scarcely developed borders mountains and uplands separate Myanmar from the neighboring states of Bangladesh (271.92 km common border), India (1,452.93 km), China (2,226.85 km), Laos (234.91 km) and Thailand (2,098.14 km). The full length of the border of Myanmar is 6,284.75 km. The territory of the Republic of the Union of Myanmar is made up administratively of Nay Pyi Taw Union Territory, 14 Regions and States, which in turn comprise 74 districts, 330 townships, 442 towns, 3,301 wards, 13,588 village tracts and 63,798 villages (MNPED 2016).

3.1.2 Land Cover

Out of Myanmar's 167,186,000 acres of land area, 43,871,000 acres were classed as reserved forests (26.24%; 2014/2015) and 36,409,000 acres as other woodland (21.78%); 29,617,000 acres consisted of net area sown (17.72%), 13,014,000 acres of

cultivable waste other than fallows (7.78%) and the rest of other forms of land use, including village land (1,216,000 acres), 638,000 acres of irrigation systems (canals, reservoirs, tanks and embankments), transport (740,000 acres) and settlements (490,000 acres).

3.1.3 Climate

As Myanmar is located in the tropical and subtropical zone, most regions have a monsoon climate. Four or five seasons can be distinguished for Myanmar: the pre-monsoon season (mid-April to mid-May), the monsoon or rainy season (mid-May to mid-October), the post-monsoon season (mid-October to end-November), the dry and cool season (end-November to mid-March) and the hot season (mid-March to mid-April). Countrywide, the annual mean temperature ranges between almost 30 and 15°C. In the Central part of the country lies an area with an annual average rainfall of 30 inches (762 mm) and certain parts of the coastal region receives an annual average rainfall of 200 inches (5080 mm).

3.1.4 Population Status

The 2014 nationwide census in Myanmar enabled the key socioeconomic data required for planning and development purposes to be updated. Regional population statuses are the essential basis for all socio-economic analyses, while the status for states and regions are a very good starting point for spatially differentiated comparisons.

Table 3.1 **Population status of Myanmar (2014)**

Sr. No	States and Region	Population	Percentage	Total Population
1	Kachin State	1,689,654	3.28%	51,486,253
2	Kayah State	286,627	0.56%	51,486,253
3	Kayin State	1,572,657	3.06%	51,486,253
4	Chin State	478,690	0.93%	51,486,253
5	Sagaing Region	5,320,299	10.34%	51,486,253
6	Tanintharyi Region	1,406,434	2.73%	51,486,253
7	Bago Region	4,863,455	9.45%	51,486,253
8	Magway Region	3,912,711	7.60%	51,486,253
9	Mandalay Region	6,165,723	11.98%	51,486,253
10	Mon State	2,050,282	3.98%	51,486,253
11	Rakhine State	3,188,963	6.20%	51,486,253
12	Yangon Region	7,360,703	14.31%	51,486,253
13	Shan State	5,815,384	11.30%	51,486,253
14	Ayeyarwady Region	6,184,829	12.02%	51,486,253
15	Nay Pyi Taw Capital Region	1,158,367	2.25%	51,486,253

Sources: 2014 Census data.

The most populous areas are Yangon Region (7,360,703 inhabitants; 14.3% of the population), Ayeyarwady Region (6,184,829 inhabitants; 12.0%), Mandalay Region (6,165,723 inhabitants; 12.0%), Shan State (5,815,384 inhabitants), Sagaing Region (5,320,299 inhabitants) and Bago Region (4,863,455 inhabitants), followed by Magway Region (3,912,711 inhabitants), Rakhine State (3,188,963 inhabitants), Mon State (2,050,282 inhabitants), Kachin State (1,689,654 inhabitants), Kayin State (1,572,657 inhabitants), Tanintharyi Region (1,406,434 inhabitants) and Nay Pyi Taw Capital Region (1,158,367 inhabitants; 2.3% of the population). Chin State (478,690 inhabitants; 0.9%) and Kayah State (286,627 inhabitants; 0.6%) have the lowest population figures.

(a) Population Density

Looking at the population densities based on the land area of the 330 townships, the divide is striking. In the extensive central lowlands of the Ayeyarwady River and Sittaung River, the Ayeyarwady Delta and intermittently along the coast, densities generally range from 100 to 500 persons/ km². The figures are substantially lower in townships in the mountain regions of Chin State, the north-western Sagaing Region, Kachin State, southern and eastern Shan State, Kayah State, northern Kayin State and in Tanintharyi Region, with fewer than 10 persons/ km². The highest densities are reached in the townships in urban areas, particularly Yangon and Mandalay, with values ranging from more than 5,000 to a maximum of 49,377 persons / km².

(b) Urban and Rural Population

The 15 regions and states have highly diverse urbanization rates. Nationally, the urban population averages 29.6% of the total population. the percentage is very much higher in Yangon (70.1%) and Mandalay (34.8%) Regions, and Nay Pyi Taw Union Territory (32.3%). In Kachin State, too, there is a high population concentration in urban centres, due to the security situation. The rural population figures, as a percentage of the total population, are highest in Ayeyarwady Region (85.9%), Magway Region (85%) and Sagaing Region (82.9%). The rural-urban gender ratio is broadly similar across the country. There is a slight gender imbalance, with females predominating in both urban and rural areas, reflecting the fact that more men are labour migrants in neighboring countries. In rural regions the natural growth rates often twice as high as the national average, with simultaneously increasing migration rates.

(c) Household Condition

The number of households has risen to 10.87 million, with the highest increases since 1983 in Shan State (119%), Kayin State (116%) and the Yangon Region (108%). Household size has fallen to an average of 4.4 persons per household. 70.2% of households have between two and five members; the largest average household sizes are to be found in Kachin State (5.1 persons/household), the lowest in the Ayeyarwady Region, Magway Region and Nay Pyi Taw (4.1 persons/household). More than 86% of households own their home, 7% rent, and 3% of homes are provided by the government. 79% of houses are built of wood or bamboo.

There are large countrywide disparities in the provision of households with electricity for lighting. This basic infrastructure is provided to almost all households in the inner-city districts of Yangon, Mandalay and Nay Pyi Taw, although it is common knowledge that temporary power cuts are also frequent in these areas. Otherwise, high percentages of households with electricity for lighting are found only in Myitkyina, several regional cities and a few townships along the eastern border; in the central lowland of Myanmar 25-50% of all households have access to electricity for lighting. Considerable supply deficits are revealed by the household information for large parts of the rural region, the mountainous regions of Chin, Kachin, Shan and Kayin States, and the Tanintharyi Region. With less than 5% of all households accessing electricity for lighting, the greatest supply deficits are found in large areas of Rakhine State and Nagaland, in the central Shan State and in the townships of Yebyu, Dawai and Thayetchaung.

(d) Labor and Employment

In 2016, over 1,198 thousand persons were registered in 76 labour offices of the Department of Labour placed in different towns, 16 in Yangon and 60 in other States and Regions. Along the whole year, the vacancies notified decreased by about 1.6%, the persons placed in employment by 2.3% compared with 2015. According to the Myanmar Labour Force, Child Labour and School-to-Work and Transition Survey- 2015, more than 80 men and 52 women out of 100 are economically active. Unemployment rate was 0.8% and Labour underutilization rate was 6.9%. The main destinations for overseas employment of people from Myanmar were Thailand, Malaysia, Korea, Japan and Singapore.(Statistical Year Book, 2017)

3.2 Economic policies of the Union of Myanmar

Launched in July of 2016, the Economic Policy of the Union of Myanmar encapsulates the overall framework that guides Myanmar's economic and social development. This MSDP has been developed to ensure full alignment with this Policy framework.

3.2.1 Visions

The economic policy of the Union of Myanmar is people-centered and aims to achieve inclusive and continuous development. It aims to establish an economic framework that supports national reconciliation, based on the just balancing of sustainable natural resource mobilization and allocation across the States and Regions.

3.2.2 Objectives

The objectives of the economic policies of Myanmar are -

1. To support national reconciliation and the emergence of a united democratic federal Union.
2. To achieve balanced economic development across the States and Regions.
3. To create opportunities for the emergence of capable and skilled new generations for the benefit of the country.
4. To establish an economic system that can achieve and maintain positive development outcomes through the participation, innovation and efforts of all citizens.

3.2.3 Policies

The economic policies of Myanmar are -

1. Expanding our financial resources through transparent and effective public financial management.
2. Improving the operations of State-owned enterprises and privatising those State-owned enterprises that have the potential to be reformed, while promoting and assisting small and medium enterprises as generators of employment and growth.
3. Fostering the human capital that will be needed for the emergence of a modern developed economy and improving and expanding vocational education and training.
4. Prioritizing the rapid development of fundamental economic infrastructure, such as electricity generation, roads and ports, and

establishing a data ID card system, a digital government strategy, and an e-government system.

5. Creating employment opportunities for all citizens including those returning from abroad and giving greater priority in the short term to economic enterprises that create many job opportunities.
6. Establishing an economic model that balances agriculture and industry and supports the holistic development of the agriculture, livestock and industrial sectors, so as to enable rounded development, food security and increased exports.
7. Asserting the right of individuals to freely pursue the economic opportunities they choose, so as to enable private sector growth in line with a market economy system; formulating specific policies to increase foreign investment; and strengthening property rights and the rule of law.
8. Achieving financial stability through a finance system that can support the sustainable long term development of households, farmers and businesses.
9. Building environmentally sustainable cities, upgrading public services and utilities, expanding public spaces, and making greater efforts to protect and conserve our cultural heritage.
10. Establishing a fair and efficient tax system in order to increase government revenues and protecting individual rights and property rights through enacting laws and regulations.
11. Establishing technical systems and procedures to support intellectual property rights that can encourage innovation and the development of advanced technology.
12. Identifying the changing and developing business environment both in ASEAN and beyond, so as to enable our own businesses to situate themselves to take advantage of potential opportunities.

3.2.4 Expected Impacts of Policies and Plans

Myanmar's economic growth is expected to slow from 6.8 percent in 2017/18 to 6.2 percent in 2018/19, which is still robust by regional and global standards. Growth is projected to recover to 6.6 percent by 2020/21, helped by recent policy changes such as the adoption of the Myanmar Sustainable Development Plan,

liberalization of wholesale and retail trade, implementation of the Myanmar Companies Law and large investments in infrastructure projects including those related to the Belt and Road Initiative. (WB, 2018)

The Myanmar Sustainable Development Plan (MSDP) is the expression of our national development vision. MSDP provides an integrated set of goals, strategies and Action Plans to be pursued by the government of Myanmar over the medium-to long term. Doing so will contribute in no small way to the achievement of genuine, inclusive and transformational economic growth. The MSDP seeks to develop fundamental infrastructure, soft and hard, individual and institutional, that will radically and positively shift Myanmar's development trajectory, while addressing the needs of all our people, fostering broad-based, equitable and sustainable development.

This MSDP is structured around 3 Pillars, 5 Goals, 28 Strategies and 251 Action Plans. All are firmly aligned with the SDGs, the 12 Point Economic Policy of the Union of Myanmar, and various regional commitments which Myanmar has made as part of the Greater Mekong Subregion (GMS) Strategic Framework, the ASEAN Economic Community (AEC) and many others.

3.3 Government Program for Socio-Economic development for Rural Communities in Myanmar

For rural development in Myanmar, mainly, Department of Rural Development (DRD) under the Ministry of Agriculture, Livestock and Irrigation is the focal department and is mandated to construct rural road and bridge, rural water supply and sanitation, rural electrification and rural housing and to enhance livelihood and income generation, and aims to improve the socio-economic development of rural population. In accordance with the United Nations' Sustainable Development Goals, the DRD is undertaking sustainable rural development measured for the sake of improvement of quality of life of people and their living standard.

As a focal department of rural development, major focuses to improve socio-economic development of rural people through providing basic social infrastructure and enhancing livelihood and income generation activities in rural area. DRD, currently, develops basic social infrastructure in the rural areas adopting community driven approach to enhance livelihoods income of rural community such as providing revolving fund, to get sustainable resources and establish block grant. Meanwhile,

DRD conducts vocational trainings for capacity building to fulfill the needs of skilled labors in rural areas, and reconstruct the rural housing and latrines for rural community if they were destroyed by emergency situation and natural disaster.

In order to enhance all stakeholder participation by adopting Decentralization Approach in implementing sustainable rural development activities, DRD employed effective major strategies such as prioritizing and implementing all-round development; sustainable financing for rural development; effective collaboration; and good governance process for progressive rural development. Among the major responsibilities of DRD, the main performance are to facilitate the social infrastructure to improve in rural area by practice in people centered approach (community driven approach), to enhance livelihoods and incomes generation activities of rural people by establishing the revolving fund, to conduct vocational training to support enhancing livelihood and income generation.

DRD has been implementing many rural development as a focal departments. Some are funded by Government budget and some of them are provided by International Organizations such as World Bank and Asia Development Bank. There were seven major projects that has been implementing by DRD.

These are –

- (a) National Community Driven Development Project
- (b) Evergreen Village Development Project (Mya Sein Yaung Project)
- (c) Myanmar National Electrification Project
- (d) Village Development Plan (VDP)
- (e) Enhancing Rural Livelihoods and Income Project
- (f) Towns Water Supply Project (Japan ODA Loans)
- (g) Myanmar Off-Grid Analytics

(DRD,2018)

3.4 Overview of Economic Development in Myanmar

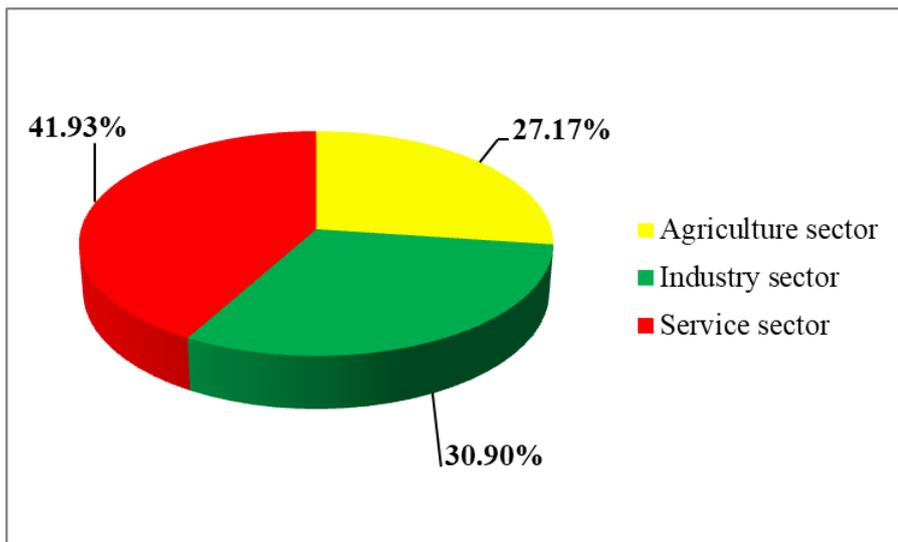
Economic development is the development of economic wealth and resources of the nations or regions for the well-being of the individuals. The Government of

Myanmar is trying to get economic stability with strong macroeconomic management and good governance on the economic side. A studying on economic development of Myanmar includes GDP, Agriculture sector, Livestock Sector, Forest Sector and Industrial Sector.

3.4.1 GDP in Myanmar

The regional listing of Gross Domestic Product, based on Myanmar's 330 townships, provides more detailed information about each region's contribution to the country's economy. Apart from Yangon's dominant position as Myanmar's main economic center, what is striking about these figures is the familiar division of the country, with a strong economy in the central lowlands and comparatively weak economic performance in the mountain regions. Leading the field is Yangon, Mandalay and Nay Pyi Taw. Per capita GDP allows economic regions of various sizes to be compared with each other. It is also a measure of a region's material prosperity as it shows the total output of a country broken down by the number of inhabitants. (MNPED 2015)

Figure 3.1 Shares of Sectors in Myanmar's GDP (2016-2017)



Source: Planning Department

According to table 3.1, the individual economic sectors make different contributions to total gross domestic product (GDP) in Myanmar. According to statistics from the Department of Planning, the Agriculture sector (agriculture, livestock and fisheries, forestry) generates 27.17% of GDP, the industry sector

(energy, mining, processing and manufacturing, electric power, construction) accounts for 30.90% and service sector (transportation, communications, financial institutions, social and administrative services, rental and other services, trade) contribute 41.93%.

Table 3.2 Gross Domestic Product at Constant Prices by Sector of Activity Years 2010/2011, 2012/2013-2016/2017 (2010-2011 Constant Price)

Sectors	2010/2011	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017
Agriculture sector	14658961.3	14807052.2	15346105.9	15768771.3	16306177.9	16243869.9
Industry Sector	10528139.7	12533395.1	13963076.0	15659182.3	16962757.1	18477950.3
Services Sector	14589663.9	17740214.2	19569976.6	21357097.2	23207290.1	25070723.8
GDP	39776765	45080662	48879159	52785051	56476225	59792544
Growth Rate	-	13.33	8.43	7.99	6.99	5.87

Source: Planning Department

According Table 3.2, the quantity of GDP of Myanmar is increasing from year by year. In 2016-2017, its GDP become significantly increased. But GDP growth rate little decreased in 2016-2017 because Primary sector is not progress in that year. Service and trade sector are progressing now.

3.4.2 Agricultural Sector in Myanmar

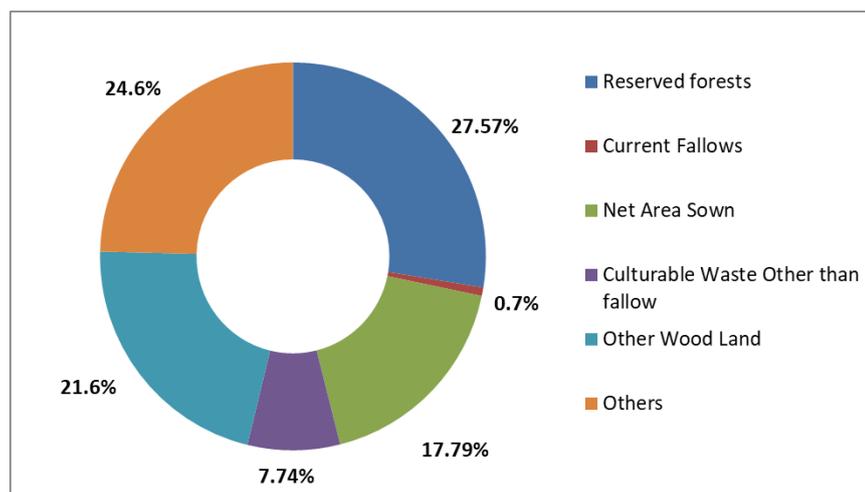
Agricultural Sector is the most important economic pillar of the country and the main basis of employment. The sector contributes a good third of gross domestic product, i.e. 27.17 % of national GDP (2016-17) and 17.5% of total export earnings and employs 61.2% of the labour force. About 26% of the country's entire area is used for agriculture and permanent crops.

(a) Paddy Production

The most important product for domestic consumption is rice. Rice is also Myanmar's main agricultural product and the second most important exportable agricultural commodity after beans and pulses, and is thus a very important income source for farmers. In 2010-2011, the area under paddy accounted for 70% of the total arable area and it contributed about 30% of Myanmar's gross agricultural and 95% of total cereal output. Less than 20% of agricultural land is artificially irrigated; this is primarily located in the Ayeyarwady Delta, near the Bago Yoma dams, in the drier central area (dry zone) and parts of the north of the country. Over 30% of 161,303,131 acres Myanmar land area was arable in 2016-2017. About 17.79% of Agriculture area was net area sown equal to 29,745,799 acres. 12,945,619 acres were devoted to cultivable waste other than fallow land and 36,106,999 acres to wood land in 2015-2016. (Kraas F, Spohner R, Myint A.A, 2017)

Figure 3.2 Percentage of Area Classified by Type of Land in Myanmar, 2016/2017

(thousand acres)



Source: Department of Agricultural Land Management and Statistics

Over 30% of 161,303,131 acres Myanmar land area was arable in 2016-2017. About 17.79% of Agriculture area was net area sown equal to 29,745,799 acres. 12,945,619 acres were devoted to cultivable waste other than fallow land and 36,106,999 acres to wood land in 2015-2016. According to table 3.2, the biggest area is reserved forest with 27.57% and the least area is others. The net area swan is 17.79% of total area.

Figure 3.3 Sown Acreage and Production of Paddy in Myanmar (2011/2012-2016-2017)

Particulars	2010/ 2011	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017
Sown (Acre)	19885	17893	17999	17722	17821	17695
Harvested(Acre)	19796	17270	17181	16975	16728	16615
Production (Ton)	32065.1	26216.6	26372.1	26423.3	26210.3	25672.8

Source: Department of Agricultural Land Management and Statistics (2017)

According to table 3.3, the sown acre of paddy was 19885 thousand acres, with a paddy production of 32065.1 thousand tons in 2010-2011. In 2015-2016 sown crops of paddy were equal to 17,695 thousand acres, with a paddy production of 25,673 thousand tons. By comparing 2010-2011 and 2016-2017, the sown acres of paddy were decreased in recent years.

(b) Livestock and Breeding

Animal husbandry is practiced nationwide, with a focus on poultry in the Ayeyarwady Delta and pigs in the mountain regions and in the north of the country. Pasture land is developed in the Sagaing, Bago, Magway, Mandalay and Yangon Regions and Mon State. Dairy farming in the mountain regions of Shan, Kayah and Kachin States has been declining for some years; there are not enough pastures due to deforestation and the expansion of tillage. (Kraas F, Spohner R, Myint A.A, 2017)

Table 3.4 Livestock Breeding in Myanmar, Years 2010/2011, 2012/2013-2016/2017

(thousand)

Particulars	2010/ 2011	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017
Cattle	13609	14559	15046	15543	16574	16571
Buffalo	2977	3211	3321	3426	3641	3641
Sheep & Goat	4084	5370	6124	6945	8770	8786
Pig	9416	11600	12725	13932	16541	16524
Fowl	156407	196641	219377	244030	296413	296267
Duck	14051	16941	18442	20128	23662	23636
Turkey, Geese, Muscovy Duck and Bar-rock	1751	2182	2441	2735	3466	3455

Sources: 1. Livestock Breeding and Veterinary Department. (2017)

2. Office of the Ministry of Defence. (2017)

Figures of all types of Livestock increased in 2016-2017 as compared to the previous period: Cattle -0.02%, Sheep and Goats +0.18%, Pigs -0.10%, Fowl -7.00% and Duck -0.15%.

(c) Fishery Sector

Fish production in Myanmar is derived from marine capture fish, freshwater capture fish or from aquacultures. Fishery sector is found in almost all the country but are concentrated in the coastal and delta regions, in the Ayeyarwady Delta and in the vicinity of Yangon. Shrimps and prawns are cultivated along the coast, especially in Rakhine State and the Tanintharyi Region. More than double the amount of labour is invested in fish-farming than in rice farming. A significant proportion is recruited on a

temporary basis and used for the labor-intensive fish harvest or pond construction and repair. (Kraas F, Spohner R, Myint A.A, 2017)

Table 3.5 Production of Fish and Prawns by Nature of Catch Years 2010/2011, 2012/2013 - 2016/2017, absolute values in thousand viss

Particulars	2010/ 2011	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017
Fresh Water Fisheries	1220107	1367083	1436162	1508179	1589222	1616143
Marine Fisheries	1327930	1521109	1654843	1747898	1835191	1859487

Source: Department of Fisheries.

According to the table 3.5, fresh water fisheries production was equal to 1,616,143 thousand Viss and Marine Fisheries to 1,859,487 thousand Viss. The quantity of production of fish and prawns are increasing year by year.

(d) Forestry Production

Around 42.11% of devoted total land was forest cover area, approximately 110,018 square-miles in 2016-2017. Permanent forest estate increased by 0.49% in 2016-2017. Major forest production was Teak and Hardwood Logs, with a production of 50,786 and 473,802 cubic tons respectively in 2016-2017. Working elephants used in timber extraction increased by 22.5% in 2016-2017 as compared to the previous period. (Statistical Year Book, 2017)

3.4.3 Industrial Sector

Nationalized businesses currently suffer from inadequate modernization, low labour efficiency, undercapitalization, renovation backlogs, poor horizontal networking and weak sales markets, while private-sector companies are hampered by bureaucratic obstacles, poor basic infrastructure, inadequate access to electricity and financial loans and insufficient preparedness for international competition. Privatization is also hindered by the institutional environment, a poorly trained

workforce, limited market-economy thinking and a shortage of managers. Furthermore, there is a lack of standards for waste disposal, hygiene, environmental protection and sustainability awareness.

Geographically, enterprises in the secondary sector (Industrial sector) that contribute to the gross domestic product (GDP) are concentrated on the one hand in some centres of mining and energy generation and on the other in industrial manufacturing sites, the majority of which are located in the central lowlands and the regional cities. In the peripheral parts of the country, GDP is generated mainly by the construction sector. Privately owned factories are concentrated in two separate areas: the Mandalay Region (17.7%) and the Yangon Region (14.0%). With the addition of the Bago, Sagaing and Ayeyarwady Regions, almost 70% of all private-sector industrial companies are located in these five areas. Textile manufacture, metal processing and machinery production are concentrated in the area in and around Mandalay, while Yangon is the center of chemical, paper, plastic, rubber and non-metallic production. (Kraas F, Spohner R, Myint A.A, 2017)

Table 3.6 Public Industrial Enterprises Years 2010/2011, 2012/2013-2016/2017

Particulars	2010/ 2011	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017
Food and beverages	80	33	38	38	39	58
Clothing	41	48	38	38	28	39
Construction Materials	109	109	94	93	93	98
Personal Goods	39	14	25	17	16	21
Household goods	22	11	12	18	17	18
Printing and Publishing	34	24	27	27	44	44
Industrial Raw Materials	40	40	40	42	41	39
Mineral and Petroleum	24	20	18	18	19	21
Agricultural equipment	15	15	5	3	13	3
Machinery and Equipment	18	14	14	14	16	16
Transport Vehicles	9	10	10	12	11	8
Workshops and Dockyards	116	135	115	127	116	120

Miscellaneous	92	332	334	342	340	343
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Source: Statistical Year Book (2017)

Table 3.6 shows the Public Industrial Enterprises Years 2010-2011, 2012-2013-2016-2017 in Myanmar. By comparing 2010-2011, 2012-2013-2016-2017, Printing and publishing, Workshops and dockyards and Miscellaneous was increased in public industrial enterprises in Myanmar. Other public industrial enterprises were decreased in recent years. This situation shows that the government is transforming the industrial sector from public to private.

Table 3.7 Businesses Owning Various Types of Assets (%), By States and Regions

States and Regions	Land	Buildings	Machinery and equipment	Vehicles Other	fixed assets	Intellectual property assets	Total no. of business
Kachin State	63.9	77.5	67.6	56.4	79.5	2.5	2,103
Kayah State	72.3	73.2	66.8	46.0	86.6	0.1	990
Kayin State	64.5	81.6	57.7	18.1	50.5	-	3,018
Chin State	64.2	67.2	53.5	82.5	85.4	-	1,341
Sagaing Region	67.8	84.3	68.7	17.5	57.1	0.3	11,003
Tanintharyi Region	62.6	65.2	45.4	26.4	63.9	1.8	10,856
Bago Region	78.7	81.5	56.5	18.0	58.0	1.0	9,125
Magway Region	78.4	86.4	60.0	28.8	77.8	0.4	11,032
MandalayRegion	72.3	73.9	55.5	24.6	29.6	0.3	18,811
Mon State	85.4	46.2	68.9	40.5	55.2	-	10,140
Rakhine State	50.2	73.0	64.3	25.1	79.1	-	5,973
Yangon Region	41.2	57.0	64.4	21.6	70.5	0.7	22,699
Shan State	60.2	66.1	56.1	35.2	62.3	1.1	10,855
Ayeyarwady Region	81.0	89.8	62.9	31.0	63.0	0.5	6,399
Nay Pyi Taw	56.0	75.3	67.2	44.7	79.0	4.2	2,586
Total	65.2	70.7	60.3	27.6	60.7	0.7	126,928

Source: Myanmar Business Survey (2015)

According to table 3.7, Myanmar Business Survey (2015) covered the distribution 126,928 businesses which are registered across the economic sectors. The largest number of businesses shows the Manufacturing sector was 40%, Resale/Trade sector was 33% and Service sector was 27%. Rangon Region has the largest number of businesses and the smallest number of businesses has been by Kayah State.

3.4.4 Service Sector

The service sector plays the most important economic role in Myanmar, and includes transportation, communication, finance, social and management and rents. The service sector's contribution to GDP rose from 33.0% in 2000/01 to 36.7% in 2010/11 and 37.7% in 2014/15. (MNPED 2015: 203).

(a) Transportation Sector

The development of transportation and communication is the most important to develop across the country. So, the government is more implementing the number of construction and provision as well as to improve the quality of infrastructure.

(1) Roads, Railroads, Airports, Ports

National development was given a boost by a large number of new infrastructural projects which extended into previously more inaccessible peripheral regions. In the process, the road network was extended from 27,840 km (1995) to 40,575 km (2015); more importantly, however, major improvements were achieved in the quality of road building. Road network expansion focused mainly on the Ayeyarwady, Magway, Mandalay and Sagaing Regions and on Chin, Kachin, Rakhine and Shan States. The backbone of Myanmar's transport system is the 587 km Yangon-Mandalay Expressway, constructed from 2005 onwards and opened in late 2010, which connects its three major political and economic centres, i.e. Nay Pyi Taw, Yangon and Mandalay. Currently, road transportation, as compared to other modes such as rail and inland waterways, is the most important public service for logistics; this applies to both passenger and cargo transport. The rail network was extended from 3,977 km (1995) to 6,107 km (2015), and the number of railway stations rose from 612 to 960.

Although the provision of state aviation services decreased between 1995 and 2015 measured in terms of the number of flights (down from 5,090 to 4,474), distance

flown (down from 4,501,000 to 3,885,000 km) and number of aircraft in service (down from 13 to just 10) – the volume of private civil aviation increased substantially, with a sharp rise from 2011 onwards: the number of flights per year increased almost tenfold from 2,360 (1995) to 21,361 (2015), and from just two aircraft in 1995, there were 64 in service in 2015. Alongside the major ports of Yangon, Sittwe, Thandwe, Patheingyi, Myeik and Kawthaung and the new major terminal at Thilawa, Myanmar has a number of smaller harbours. Deep-sea ports are currently planned in Kyaukpadaung, Mawlamyine and Dawai. (Kraas F, Spohner R, Myint A.A, 2017)

Table 3.8 Earnings from Principal Means of Public Transport Years 2010/2011, 2012/2013-2016/2017

(kyat Millions)

Particulars	2010/ 2011	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017
Railways	33164.63	61681.07	62208.19	61810.70	70280.85	64396.59
Airways	15336.55	40721.62	39538.04	50869.45	66034.06	114900.70
Inland Waterways	7740.06	12265.61	10605.40	9534.30	8341.84	6258.89
Road	7488.13	8251.75	7593.62	11521.05	9617.50	7584.12

Source: Statistical Year Book (2017)

According to table 3.8, airway is the most quantity of earnings and road is the second largest earnings in public transportation.

(b) Energy and Electrical Power Sector

Myanmar’s energy sector continues to develop. The installed energy capacities available have increased from 980 MW (2000) to 3,735 MW (2013); of these 2,780 MW (66.9%) are produced using hydropower, 996 MW (29.5%) from natural gas and 120 MW (3.2%) from coal. However, despite expanding production in the natural gas sector, mostly based on foreign investment, only a very small proportion is used for domestic energy supplies due to existing export obligations. From 2000 to 2013 electricity consumption in Myanmar increased threefold to 10,112 GWh, but the

country remains nonetheless among those with the lowest per-capita energy consumption in the world: 165 kWh.

The areas with the best energy supplies are Nay Pyi Taw, Yangon and Mandalay, followed by a few regional centers. However, in the majority of the country less than half and often only a quarter of households have access to electricity. Energy supplies in Chin State are not quite as poor, a situation that can be attributed to external support provided by charitable organizations. Thirty hydropower plants are currently in existence, 29 of them with a capacity of less than 10 MW; 17 are multipurpose dams that store water for irrigation as well as for electricity production and also help control flooding. Three of the 15 largest hydropower plants were erected before 2000. These include the Baluchaung-2-Project, built in 1960 and financed by post-war Japanese reparations, which supplies electricity primarily to Yangon and Mandalay. Other large-scale projects, including the Kinda Multipurpose Dam and Yeywa, supply Mandalay and Nay Pyi Taw. . (Kraas F, Spohner R, Myint A.A, 2017)

(c) Telecommunication

The telecommunications sector was restructured in 2010. Nonetheless, until 2014, Myanmar Post and Telecommunication (MPT) was the only nationwide provider of mobile services, mainly serving Yangon, Mandalay and Nay Pyi Taw. With the subsequent award of nationwide licenses, first to two local providers (MPT and MEC) and then to two foreign operators (Telenor und Ooredoo), the number of mobile phone and internet users has rapidly increased. (Kraas F, Spohner R, Myint A.A, 2017)\

(d) Banking Sector

Since 2011, policymakers have enacted a series of reforms meant to develop the financial sector as part of a wider agenda for accelerating economic growth. Recent efforts to develop the banking sector have included both policy reforms and investments in the payment infrastructure. On the legislative and regulatory front, the government has enacted several new laws, including the Foreign Exchange Management Law in 2012, the Central Bank of Myanmar Law in 2013, and the Financial Institutions Law in 2016. These laws ended Myanmar's system of dual

exchange rates, established central bank independence, and set strong prudential standards for the banking sector.

Table 3.9 Financial Institutions in Myanmar

Sr. No	Particulars	Quantity	Remark
1.	Government Banks (State-Owned)	4	
2.	Government Banks (Municipality-Owned)	3	
3.	Semi-Private Banks Privately Owned Banks	7	
4.	Privately Owned Banks	14	
5.	Foreign Bank Branches	13	
6.	Finance Companies	19	
7.	Foreign Bank Representative Offices	48	

Source: Central Bank of Myanmar (2017)

According to table 3.9, there are 28 domestic banks operating in Myanmar. This number includes four state-owned banks, three banks owned by municipal governments, 10 semi-private banks that trade privately but are partially owned by, or closely associated with, government agencies, and 14 privately owned banks. There are 14 private owned banks, 19 finance companies and 48 foreign bank representative offices in Myanmar.

3.5 Overview of Social Development in Myanmar

Social development means investing in people. It requires the removal of barriers so that all citizens can journey toward their families and community in a

meaningful way. Healthy and well educated persons will get good training and successful in their workplace. Their families will also do well and the whole of society will benefit. A studying on overview of social development of Myanmar includes education sector and health sector.

3.5.1 Education Sector

Education helps children to fulfill their potential and is critical to all aspects of socio-economic development. Today there is a system of national mandatory education under the 30-Year Long- Term Education Development Plan, which was implemented in 2001/02. The system requires pupils aged between six and sixteen to complete eleven years of schooling, consisting of five years of primary schooling (one year of kindergarten followed by four years of elementary school), four years of middle school and two years of high school leading to a school-leaving examination to qualify for university attendance from age 16 upward.

(a) Basic Education

Table 3.10 Schools, Teachers and Students, Academic Years 2012/2013-2016/2017

Years	Schools			Teachers			Students		
	Primary	Middle	High	Primary	Middle	High	Primary	Middle	High
2012/ 2013	36,359	2,245	1,343	184,743	67,883	27,200	5,139,632	2,370,861	669,056
2013/ 2014	37,579	2,267	1,549	187,327	69,212	28,817	5,166,317	2,542,830	730,866
2014/ 2015	38,651	2,511	1,779	197,124	80,660	33,924	5,121,203	2,687,801	792,670
2015/ 2016	38,017	2,615	1,924	234,605	97,455	39,051	5,071,458	2,730,879	840,706
2016/ 2017	38,197	2,635	1,972	226,357	99,437	39,478	5,139,305	2,843,363	925,410

Source: Ministry of Education.

According to table 3.10, the quantity of high school, middle school and primary school were increased in 2016-2017, by comparing with 2012-2013. That pointed to the development of Education sector in Myanmar. 226,357 primary school teachers, 99,437 middle school teachers and 39,478 high school teachers were

appointed in 2016-2017 academic year. The quantity of teachers was increased in 2016-2017, by comparing with 2012-2013. The quantity of primary school students was not significantly increased in 2016-2017, by comparing with 2012-2013. But the quantities of middle and high school students were quite increased in 2016-2017 academic year, by comparing with 2012-2013. In 2016-2017, for every 100 young students of the same age-group about 102 went in Primary School, 70 in Middle and 47 in High school. Pupil-teacher ratio at the primary level was 23 and secondary level was 27 in 2016-2017.

Monastic education plays a major role in providing schooling, mainly for children from underprivileged social groups and in remote and sparsely populated regions. Officially 12,111 novices and 5,571 nuns together with 115,658 boys and 85,767 girls were being taught at primary school level in the country's monastic schools; the number of primary schools was put at 972, of which 208 the majority were in the Mandalay Region, 134 in the Yangon Region and 121 in the Ayeyarwady Region. Middle schools – a total of 557 nationwide – were attended by 10,458 novices, 5,844 nuns, 29,879 boys and 23,454 girls. Myanmar also has two monastic high schools, both in the Mandalay Region, attended by 3,455 boys and 2,025 girls. Monastic education is needed because although attending a public school is free of charge in principle, school uniforms, books and other materials still have to be purchased. There are numerous private schools, especially in the cities; the number is estimated at about 100. The literacy rate is very high overall for a developing country, being 89.5% for the population on average (92.6% of men, 86.9% of women).

(b) Higher Education

The number of higher education institutions (i.e. universities, degree colleges and colleges) in the country has risen steadily from 32 (1988) to the most 171. New colleges and universities have been opened even in peripheral parts of the country (for example most recently in Hakha/Chin State). Both historically and in terms of current leading roles in research and teaching, the University of Yangon – the country's top university – and the University of Mandalay are the peak educational institutions. In all, 653,475 students are registered at universities, degree colleges and colleges in Myanmar. The University of Distance Education, with 306,987 enrolments, is the largest institution; it was formed from precursor institutions in 1992 and has two hubs,

one for Lower Myanmar in Yangon (160,889 students in 2015), the other for Upper Myanmar in Mandalay (160,718 students in 2015).

3.5.2 Health Sector

Fundamental improvement in health care services was not achieved until after 2011. Myanmar currently spends between just 2.4% (2011) and 5.2% (2017) of GDP on health. Life expectancy has risen from 55.0 years (1980; 56.5 for women and 53.7 for men) to 61.9 years (2000; 63.3 for women, 60.5 for men). According to the 2014 census, the crude birth rate was 18.9 per 1,000 populations, with annual population growth of 0.89% in the period between 2003 and 2014. The total fertility rate has fallen from 6.1 (1965) to 2.3 (2015); in 2015 regional differences ranged from 1.7 in Yangon Region and 1.9 in Mandalay Region, 2.1 in Magway Region and 2.3 in Sagaing Region to 3.4 in Kayin State and 4.4 in Chin State. Mortality rates – especially infant and child mortality – are declining (infant mortality rate: 1990 – 47.0 per 1,000 live births, 2005 – 45.1).

Non-communicable diseases – principally cardiovascular diseases, malignant neoplasms and respiratory diseases are the cause of around 40% of deaths; this percentage has been rising for some years. Among infectious and parasitic diseases, tuberculosis, diarrhoeal diseases and HIV/AIDS are the main causes of death. The top five causes of disability-adjusted life years are lower respiratory tract infections, tuberculosis, diarrhoeal diseases, HIV/ AIDS and heart stroke, road injury and cirrhosis of the liver is also increasing. The top five risk factors are dietary risks, tobacco smoking, household air pollution from solid fuels, high blood pressure and high blood sugar.

Table 3.11 Hospital and Healthcare Center, Years 2010/2011, 2012/2013-2016/2017

Particular	2010/ 2011	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017
Government Hospital	898	945	969	975	1,054	1,115
Healthcare Center (1) Rural	1,558	1,635	1,684	1,696	1,778	1,778

(2) Primary and Secondary	86	87	87	88	90	90
(3) Maternity and Child Health	348	348	348	348	348	348

Source: Department of Public Health (2017)

According to table 3.11, in 2016-2017, the number of Government Hospitals increased by 24.16% over 2010-2011. In 2016-2017, the quantity of healthcare centers increased by 14% over 2010-2011.

Table 3.12 Health Personnel, Years 2010/2011, 2012/2013 - 2016/2017

Particular	2010/ 2011	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017
Doctor	26,435	29,832	31,542	32,861	8,936	10,479
Dental Surgeon	2,562	3,011	3,219	3,413	498	760
Health Assistant	1,883	2,013	2,026	2,074	2,156	2,156
Nurse	25,644	28,254	29,532	32,609	21,598	20,881
Midwife	19,556	20,617	21,435	22,258	13,811	13,651
Lady Health Visitor	3,344	3,397	3,467	3,578	2,329	1,897

Sources: 1. Department of Public Health (2017)

2. Department of Medical Services (2017)

Table 3.12 shows the health personnel in Myanmar with years 2010/2011, 2012/2013 - 2016/2017. Among the Medical and Health Personal, the number of Doctors showed a less by 43.61%, Dental Surgeons by 52.32%, Nurses by 5.59% in 2016-2017. The number of LHV reduced from (2,329) to (1,897) because they have been promoted to health Assistant and to Township Health Nurse or they resign, retire have been removed. The number of midwife reduced from (13,811) to (13,651) because they have been promoted to Nurse and lady Health Visitor or they resign, retire have been removed.

For the country as a whole, there are 61 doctors, 100 nurses and 7 midwives within the public health care system per 100,000 populations, which places Myanmar below the ASEAN average. Facilities are distributed virtually countrywide, but the majority – including specialist clinics and by far the highest doctor-hospital ratios – are to be found in Yangon, Nay Pyi Taw, Mandalay and a few regional cities. The greatest challenge in improving the health system is that of reducing health inequities in relation to the availability of and access to health services across the country. (Kraas F, Spohner R, Myint A.A, 2017)

Chapter (4)

Soio-Economic Development of Hlegu Township

4.1 Profile of Hlegu Township

Hlegu Township is located in 29 miles for from Eastern North of Yangon division. One of the townships includes in Northern District of Yangon. It is a rural township within Yangon Region. But Hlegu Township has fortunate geographical position and well development opportunities.

4.1.1 Background History

Like a crocodile laying its tail into Bago River, Hlegu Township having a narrow width of south and north but strengthening east and west, is situated lying on the range of Bago. Originated as a creek of edge of the range of Bago, the big creek flowing together with Bago River is like a backbone of crocodile. Such a big creek, from the fairy tale till now from the fairy tale of Nga Moe Yeik crocodile, while makes endless talk till now from time to time. Learning this Nga Moe Yeik creek, people built and dwelt between Oktha city and Okkalapa, Dagon city. On marching by land, this area was to be crossed. The main road, which king Tapinshwehtee entered, now Inntaing village, the lane from Setsu village and Phayagyar to Meekhokankwin Takontaing village tract was known as Tapinshwehtee Lane still.

Moat and damaged old city are still being found and existed in the village of Okapho, Sarpho, Mittar and Myogikone in the Waryaykone village tract, Minkone village tract, Myolaykone and Waryonesunn village tract. According to Hmawby Saya, it is known that old city of Phaunglin was replaced by Myogyikone likewise Mau village itself was separated stone pillar of province set up by the time of King Ahlaung Phaya has been still laid near the Mau village. The present Tanmagyi street is a main road in connecting both Myogyikone and two Ywama villages. First it was called as Hlegu Seik and later come to know as Hlegu Myo. The current Ywama ward is the place where Hlegu Myo comes into being.

The British seized Yangon and all of Lower Burma in the Second Anglo-Burmese War of 1852. Yangon was the capital of British Burma and Hanthawaddy Province, which covered today's Yangon and Bago Regions. Hlegu was a town within Hanthawaddy Province. After Myanmar gained independence from the United Kingdom in 1948, the Hanthawaddy Province was renamed Bago Division. In 1964, Yangon Division was split from Bago Division. In 1974, Hlegu Township was transferred from Bago Division to Yangon Division.

4.1.2 Location and Area

It is situated between North Latitude 16° 59' and 17° 19', and between East longitude 96° 13' and 96° 25'. It is 576.92 square miles wide. It is about 13.5 miles from East West and 35 miles from North and South. The Hlegu Township consists of 5 wards, 52 village tract and 168 villages.

The township is bounded by Bago Township and Kawa Township in the East, Hmawbi Township and Taikgyi Township in the West, Dagon Myothit Township and Thanlyin Township in the South and Bago Yoma in the North. The map of Hlegu Township can be seen in **appendix**. The Northwest and the Northern region of Hlegu Township is located in Bago Yoma vanish stationary position and it is situated in the hills low plains region.

4.1.3 Topography, Climate and Environment

Types of soil found widespread in Hlegu Township are Meadow soil, Meadow-alluvial soils, swampy meadow gluey soil, and inducing forest soil. This type of soil covers the ridges and spurs of Bago Yoma in the West-north. Meadow soil occupies the central lowland region. Meadow gluey soil is the most suitable for cultivation of paddy at a commercial scale.

Nearly, 46.56 percent of Hlegu Township is covered by surface water. The Climate of Hlegu Township is warm and wet. The plateau in the west is covered with forest. The township receive monsoon for four months from June to September. The annual average rainfall is between 90 inches and 120 inches. The minimum temperature is 20 HC and maximum temperature is 40 HC. The rainfall ranges from 98.61 inches to 115.31 inches during year 2009 to 2018. Paddy cultivation is done only in those areas where minimum rainfall is 45 inches. Although the regions are having average annual rainfall between 69-118 inches are the most suitable. The

optimum temperature for paddy cultivation is between 25 HC and 35 HC. So, the rainfall and temperature of Hlegu Township is most suitable for paddy cultivation.

Table. 4.1 Rainfalls and Temperatures

Sr. No	Year	Rainfall		Temperature	
		Raining days	Total Rainfall	Hot Season (HC)	Cold Season (HC)
				Maximum	Minimum
1	2009	123	98.3	34	23
2	2010	132	94.04	36	20
3	2011	144	119.1	35	23
4	2012	125	111.28	34	21
5	2013	125	115.31	34	20
6	2014	112	110.13	35	20
7	2015	112	111.53	38	25
8	2016	111	98.61	35	25
9	2017	112	103.8	34	20
10	2018	115	95.41	40	20

Source: Department of Agriculture, Hlegu Township (2018).

According to the table 4.1, the rain fall condition of Hlegu Township in 2009 is 123 raining days and 98.3 average annual inches. In 2010 and 2011, the rainfall conditions significantly increased. By comparing rainfall condition of 2009 and 2018, it was observed that the quantity of raining days decreased from 123 days to 115 days. The maximum temperature of Hlegu Township is 40 HC in 2018 and more than other years.

4.1.4 Rivers and Water Resources

Hlegu Township has rather streams and creeks and those commonly flow from north to south. Nga Moe Yeik creek started source form Bago Yoma and downs in to the Bago River. There are some brooks including Paung Lin and Ma Hu Yar into Nag Moe Yeik creek. Other creeks are La Guan Pyin, Ka Li Htaw, Ka Yain and Bar Lar and they flow from north to south in Hlegu Township. Nga Moe Yeik Dam was built in 1995, La Gyun Pyin Dam in 2001, Ka Li Htaw Dam in 2003 and Ma Hu Yar Dam and Paung Lin Dam in 2004 in Hlegu Township. Rivers water pumping projects are

eight and water gates are seventeen in Hlegu Township. Mostly Water resources are fresh water in Hlegu Township and it can be used in agriculture and household water.

4.1.5 Ethnic Groups and Religions

The structure of population by Races in Hlegu Township is Kachin, Kayah, Kayin, Chin, Bama, Mon, Rakine and Shan. The majority of people are Bama which is the highest in percentage, and Kayah is the least in percentage. Foreign immigrants such as Chinese, India and other also reside in township.

There are Buddhists, Christians, Hindus, Islam and Others. The number of Buddhist is the largest. The number of Christian is second largest. Islamic is the third most and there are few people whose religion is Hinduism. The Number of Religion Idols in Hlegu Township are 347 Pagodas and 428 Monasteries in Hlegu Township. And there are 19 Churches, 5 Mosques, 4 Hindu temples and 2 Chinese Temples.

4.1.6 Population of Hlegu Township

(a) Population Status

Population structure having great subjective significance in the fields of sociology, demography and economics are gaining increasing objective significance with the growing emphasis on the regional planning and regional approach to the population policy and utilization of human resources. Moreover, population is the major source of poverty in a developing country. The population of Hlegu Township from 2009-2010 to 2017-2018 is shown the following table according to the age group.

Table 4.2 Population by age group

Sr. No	Gender	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014 / 2015	2015/ 2016	2016/ 2017	2017/ 2018
1	Under 15 years old	58619	56275	57902	64970	68523	78135	73832	77669	84245
2	15-59 years old	138554	136569	135382	153145	155192	172191	161337	163660	165292
3	Above 60 years old	15987	15659	14996	13923	15043	20415	38284	36061	32529
4	Population Density	142.7	139.5	139.4	155.3	159.8	181.2	183.0	185.6	188.8

Source: Department of Immigration and Manpower, Hlegu Township (2018).

Table 4.3 Population of Hlegu Township

Location	Gender	2009/	2010/	2011/	2012/	2013/	2014 /	2015/	2016/	2017/
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		2010	2011	2012	2013	2014	2015	2016	2017	2018
Urban	Population	31547	31672	32372	34110	35217	40070	40417	41054	42349
	Male	15728	15677	16024	16884	17432	19845	20044	20362	20033
	Female	15819	15995	16348	17226	17785	20225	20373	20692	22316
Rural	Population	181613	186751	189351	197928	203541	230671	233036	236336	239717
	Male	90545	92442	93729	97975	100753	114242	115569	117214	119750
	Female	91068	94309	95622	99953	102788	116429	117467	119122	119967
Total	Population	213160	218423	221723	232038	238758	270741	273453	277390	282066
	Male	106273	108119	109753	114859	118185	134087	135613	137576	139783
	Female	106887	110304	111970	117179	120573	136654	137840	139814	142283
Population Density		142.7	146.2	148.4	155.3	159.8	181.2	183.0	185.6	188.8

Source: Department of Immigration and Manpower, Hlegu Township (2018).

According to the table 4.2, the population between 15 and 60 is the most and Under 15 is the second most. The population upper 60 is the least in Hlegu Township. Much quantity of population between the age 15 and 60 which are the main workforce for township is the good prospect of township economy. In study period, population by age group is increasing year by year because of the birth rate of township is decreasing but migration rate of township is increasing. According to 2014 census data, north Yangon Districts (also Hlegu Township) is the most migration rate. Increased internal migration rate of township is slowly the progress of township development. The dependency ratio is the number of dependents in a population divided by the number of working age people. Working age is from 15 to 64. The ratio describes how much pressure an economy faces in supporting its non-productive population. The dependency ratio of Hlegu Township is 41.39% in 2017-2018.

According to the table 4.3, the total population of Hlegu Township was 213160 in 2009-2010, and then 282066 in 2017-2018. The population increased 32.3%. In 2017-2018, the majority of the people in the township live in rural areas with only 15% living in urban areas. The percentage of male population is about 49.5% and female is 50.5% in 2017-2018. The percentage of gender population is very important for township economic growth. Major economic activities of township are affected by the imbalance of gender population. Major economy of township is agriculture. So, male are more suitable for agricultural work than female. Hlegu Township has little more women than men. This condition shows that the income growth of township faces rising challenges and needs to create job opportunities for female labour. Population density is defined as how many people live in a square mile area. The population density increased from 142.1 (per Km²) in 2009-2010 to 188.8 (per Km²) in 2017-2018.

(a) Household Condition

According to the township report of General administration department, there are total of 7664 houses buildings and 8502 households in 5 wards of urban area and there are 39405 houses buildings and 41638 households in total of 52 village tracks in rural areas. Therefore there are total of 47069 houses buildings, and total of 50140 households in both of 5 wards of urban and 52 village tracts of rural area in Hlegu Township. Household size is 4.3 persons which is consistent with both the Union and Yangon Region household sizes. The poverty rate of township is 16.2% in 2017-2018. It is necessary to know the urban and rural population in formulating a development

plan. Government can supply the necessary services and facilities based on the population. The majority of the households in Hlegu Township are living in wooden houses 46.6% followed by households in bamboo houses 29.1%. Some 48.7 per cent of urban households and 46.2 per cent of rural households live in wooden houses.

4.1.7 Working Condition

Skills development of workforce is essential for equitable and sustainable growth and creating job opportunities for working population that increasing the role of labor in development. According to the population data of 2017-2018, there are 165292 who are aged between 15 and 59 years. The total population of 2017-2018 was about 282066, the labor power was 58.6%. Actual workforce is 154264 including daily wages workers and laborers. Thus, it can be estimated to have 11028 unemployed and 4% of total population. Government staffs, farmers, livestock workers, service workers, factory worker, daily paid worker and abroad workers are included in employees.

Types of job describe the distribution of its working population among different economic activities which are most significant aspect of an economy. It is one of the good indicators of social and economic inequality, because to a large extent it determines the level of living.

(a) Dispersion of Workforce

Most of the workforce is found in agricultural and livestock sector with 49% and only 32% is found in odd job, 3.04% in government sectors, 2.41% in service sector and 1.16% in industries.

(b) Job opportunity

One of the major economies of Hlegu Township is agriculture and many employees work in this sector. There are two livestock zones and it located in Nyaung Hna Pin area. It created the job opportunity for the neighboring villagers. Hlegu Township will be implemented three new development projects in next year. These are Korea-Myanmar Industrial Complex project, Eco Green City project and Hlegu Industrial Garden project. These projects can create many job opportunities for local people. Other private factories are establishing in Township that create job opportunities for Hlegu such as garment factories, shoe factories and other factories.

4.2 Background of Yangon Region

Yangon Region is the economic centre of Myanmar, located in the southern part of the country and home to 7.4 million people. Yangon Region accounted for

24% of the country's Gross Domestic Product (GDP) in 2017. It is the international gateway and commercial hub of Myanmar and the key to unlocking the nation's untapped potential. The City of Yangon is located in the south of the Yangon Region. It has the potential to establish itself as a vital economic and geographic entity both within Myanmar and beyond. The Union Government and the Yangon Region Government (YRG) recognize that infrastructure plays a critical role in the development of their economies and are therefore focused on developing needed infrastructure to support growth.

The Yangon Region comprises 45 townships, and spans 10,277 square kilometers, while Yangon City comprises 33 townships within the Yangon Region. The population of the Yangon Region is approaching 7.4 million. Yangon Region is a trade and logistics hub for the country. It is home to the country's main air and sea ports accounting for close to 90% of the country's trade and linked by road and rail networks to the rest of the country. Yangon City serves as the country's financial center. It is the location of the headquarters of all of the country's major banks and financial institutions as well as the newly established stock exchange.

4.2.1 Economic Vision of Yangon Region

YRG's economic vision is focused on the following four primary areas to drive sustainable economic growth while creating a vibrant, liveable city where talents are attracted to: industrial development, trade and logistics, urban public transport and sustainable urban development.

(a) Industrial Development

Industrial development to create employment for our young work force and to uplift the living standards of our citizens is the key priority of this government. YRG is planning to upgrade its 29 existing industrial zones and further develop another 11 new industrial parks across the Yangon Region.

(b) Trade and Logistics

Trade and logistics are core to the development of the Yangon Region and key enablers for the growth of its manufacturing and industrial base. Yangon Region is ideally placed to act as the primary logistics node connecting the Greater Mekong region to the Indian Ocean. Further, 90% of all import and export traffic to and from the Myanmar hinterland travels through Yangon.

(c) Urban Public Transport

As Yangon Region's population and economy grows, Urban Transportation Plan continues to develop. Yangon region have developed a sustainable, integrated public transport system plan that will be affordable and allow the easy transportation of goods and people to and from regional economic centres. This comprehensive integrated public transport masterplan will deliver a public transport system for Yangon's population and businesses with easier, more efficient and cheaper modes of transport.

(d) Sustainable Urban Development

Sustainable urban development remains critical to the Yangon Region as more people migrate to Yangon City and the Region in search of economic enhancement to their lives through better healthcare, housing, education and job prospects. Our citizens deserve a vibrant working city and YRG is intent on providing this.

YRG is implementing to align all of its policies and development plans with the Myanmar Sustainable Development Plan (MSDP). As Yangon strives to become more connected to the global and regional economies, it aims to improve the quality of life of its people, offering better services, improved job prospects and sustainable infrastructure to grow its economy.

4.3 Development of Economic Sector in Hlegu Township

Hlegu currently has a primarily agricultural economy, with a large proportion of the population involved in rice farming. Some part of the workforce depends on the livestock sector. Other earning transactions are horticulture (garden cultivation) and trade with regional products. As industrial business, private factories have been increased year by year in the region. A studying on economic development of Hlegu Township includes GDP in township, Agriculture sector, Livestock Sector, Forest Sector and Industrial Sector.

4.3.1 GDP in Hlegu Township

GDP means the value of final goods and services produced in an economy. It also measures the quantitative changes of economic growth and describes the condition of each economic sector. As the country's GDP is increasing, it is more productive which leads to more people being employed. This increases the wealth of the country and its population. GDP and the rate of growth of GDP of Hlegu Township can be studied from Table 4.4.

Table 4.4 Real Gross Domestic Product in Hlegu Township (2009-2018)

(Kyat Million)

Sr. No	Year	Production	Percentage (%)	Service	Percentage (%)	Trade	Percentage (%)	GDP	Percentage (%)	GDP Growth rate
1	2009-2010	5318912.66	58.7	1562147.43	17.24	2180119.91	24.06	90611.80	100	-
2	2010-2011	5737555.19	58.7	1700740.38	17.4	2336074.43	23.90	97743.70	100	7.87
3	2011-2012	6447491.68	59	1846823.89	16.9	2633636.43	24.10	109279.52	100	11.80
4	2012-2013	10110903.6	60	2881607.53	17.1	3858994.87	22.90	168515.06	100	54.21
5	2013-2014	10049060.26	58.6	3000999.23	17.5	4098507.51	23.90	171485.67	100	1.76
6	2014-2015	12016394.3	59	3523451.21	17.3	4826924.49	23.70	203667.70	100	18.77
7	2015-2016	12548236.11	59.1	3821797.80	18	4862176.09	22.90	212322.10	100	4.25
8	2016-2017	13069401	58	4033487.55	17.9	5430561.45	24.10	225334.50	100	6.13
9	2017-2018	14399735.04	58.7	4499917.20	17.24	6099887.76	24.06	249995.40	100	10.94

Source: Planning Department of Hlegu Township (2018)

According Table 4.4, the rate of GDP of Hlegu Township is increasing from year by year. In 2017-2018, its GDP become significantly increased. So, GDP growth rate was increasing rapidly from 11.80% in 2011-2012 to 54.21% in 2012-2013 and from 1.76% in 2013-2014 to 18.77% in 2014-2015. In 2012-2013, GDP growth rate quite increased because industrial and service sectors well improved in that year. Similarly, GDP growth rate quite increased in 2014-2015 because service sector very progressed in that year. As production sector, agricultural sector the major economy of Hlegu Township is seeing downward condition but other sectors are improving such as fishery, energy, electrical power and construction in recent year. Service and trade sector are progressing now because Hlegu Township is situating in good transportation and fitting suitable infrastructures. Thus, The GDP growth rate of Hlegu Township is little increasing in each sector year by year.

(a) Income Per Capita

Table 4.5 Income per capita in Hlegu Township

Sr. No	Year	Population	Income per capita (MMK)
1	2009-2010	213160	508511
2	2010-2011	218423	516128
3	2011-2012	221723	530436
4	2012-2013	232038	565788
5	2013-2014	238758	622652
6	2014-2015	270741	751980
7	2015-2016	273453	878909
8	2016-2017	277390	966166
9	2017-2018	282066	1053423

Source: Department of General Administration, Hlegu Township (2018).

According to Department of General Administration recorded data, the Income Per Capita of Hlegu Township is MMK 508511 in 2009-2010. Income Per Capita of Hlegu Township is increasing year by year. In 2017-2018, the Income Per Capita of Hlegu Township is MMK 1053423.

4.3.2 Agricultural Sector in Hlegu Township

(a) Land Utilization in Hlegu Township

Land use pattern of Hlegu Township can be seen from the Table 4.6.

Table 4.6 Land Utilization in Hlegu Township (2009-2010 to 2017-2018)

(Acre)

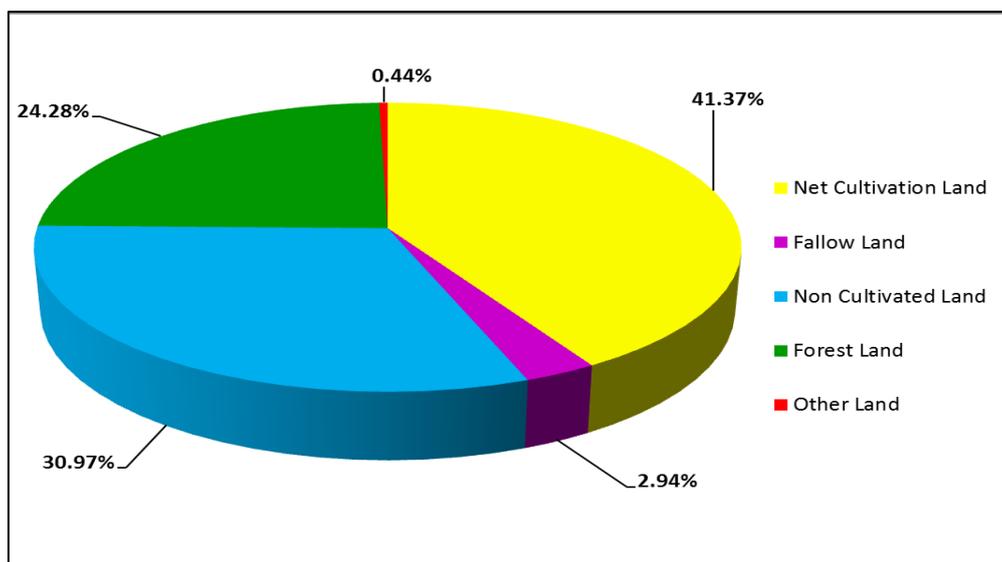
Sr. No	Year	Net cultivable Land		Fallow Land		Non cultivated Land		Forest Land		Other land		Total area of Township
		Area	%	Area	%	Area	%	Area	%	Area	%	
1	2009-2010	154723	41.87	12363	3.35	109213	29.56	91623	24.80	1595	0.43	369517
2	2010-2011	157780	42.70	8581	2.32	111845	30.27	89716	24.28	1595	0.43	369517
3	2011-2012	158764	42.97	7573	2.05	111845	30.27	89716	24.28	1619	0.44	369517
4	2012- 2013	160647	43.47	5710	1.55	111825	30.26	89716	24.28	1619	0.44	369517
5	2013-2014	160647	43.47	5710	1.55	111825	30.26	89716	24.28	1619	0.44	369517
6	2014- 2015	160575	43.46	5710	1.55	111897	30.28	89716	24.28	1619	0.44	369517
7	2015- 2016	157975	42.79	5935	1.61	114033	30.88	89666	24.28	1619	0.44	369228
8	2016- 2017	150940	40.88	12677	3.43	114326	30.96	89666	24.28	1619	0.44	369228
9	2017- 2018	152740	41.37	10870	2.94	114333	30.97	89666	24.28	1619	0.44	369228

Source: Land Record Department of Hlegu Township (2018)

According to table 4.6, the total land area of Hlegu Township was 369517 acres in 2009-2010. During 2009-2010 and 2014-2015, the total area of Township is not change. In 2015-2016, the total area of Hlegu decreased to 369228 acres because the measurement system of land area is more specification.

The form of land utilization in Hlegu Township can be expressed from Figure 4.1.

Figure 4.1 The form of Land Utilization in Hlegu Township (2017-2018)



Source: Land Record Department of Hlegu Township (2018)

According to the Figure 4.1, the total land area of Hlegu Township is 369228 acres. In 2017-2018, the net cultivatable land area was 152740 and that was 41.37% of total area. Forest areas of Township are 89666 acres comprising 24.28% of total area. In recent years, timber extraction from Hlegu Township has been halted.

(b) The situation of Paddy cultivation

The most important product for domestic consumption is rice. Rice is the country's primary agricultural product, which accounts for nearly 43% of the total agricultural production value. Paddy cultivation is the major economy of Hlegu Township. Hlegu included one of the good yields of rice productivity of townships in Myanmar. In 2017-2018, monsoon paddy was cultivated about 83629 acres in Hlegu Township. Types of paddy are Sin Thwe Latt (207 acres), Ma Naw Thukha (4092 acres), Thee Htet Yin (4691 acres), Yadana Toe (14426 acres), Shwe War Tun (105 acres) and Sin Thu Kha (23839 acres). Aye Yar Min (5442 acres) which is the advanced species and Nga Kywe (22990 acres), Nga Sein (360 acres) and Kyaut Nyin

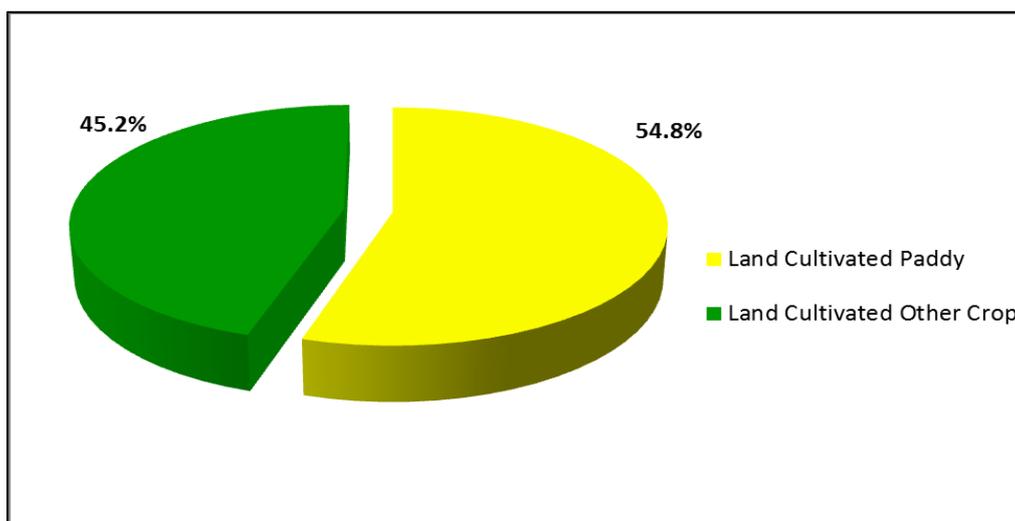
(7477 acres) which are regional species were also cultivated in Hlegu Township. Sin Thu Kha variety is the most cultivated in Hlegu Township because it is resistant to disease, good market demand and farmers' preference. Yield per acre of Sin Thu Kha is 68.07 baskets and more than yield per acre quantity of other varieties. Summer paddy was cultivated with the irrigation water from 3 public dams, 8 Rivers water pumping projects and 17 flood gates in Hlegu Township. Due to the presence of only three public dams in Hlegu Township, cultivation of Township has to depend for irrigation on Nga Moe Yeik Dam, La Gyun Pyin Dam and Ka Li Htaw Dam.

Table 4.7 The Area of Net Arable Land in Hlegu Township

No	Types of Land	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	Net Arable Land (%)
1	Land Cultivated Paddy	88988	88588	89716	89716	89716	88353	88138	82932	83629	54.8
2	Land Cultivated Other Crop	65735	69192	69048	70931	70931	72222	69837	68008	69111	45.2
3	Total Land	154723	157780	158764	160647	160647	160575	157975	150940	152740	100

Source: Land Record Department of Hlegu Township (2018)

Figure 4.2 The Area of Net Arable Land in Hlegu Township



Source: Land Record Department of Hlegu Township (2018)

As mentioned in the Table 4.7 and Figure 4.2, the total land area of Hlegu Township is 369228 acres. In 2017-2018, the net cultivation land area is 152740 acres amounted to 41.37% of total area. The land cultivated paddy is nearly equal area of land cultivated other crop. But the main crop of Hlegu Township is Paddy. Other cultivated crops of Hlegu Township are groundnut, sunflower, black gram (bean), green gram (bean) and other earning crops. Other earning perennial plants are rubber, cashew and Thit-Seint.

Table 4.8 Paddy Cultivation

Sr. No	Year	Sown Acre (Monsoon + Summer)	Harvested Acre (Monsoon + Summer)	Yield Per Acre	Yield (Bsk)
1.	2009-2010	121800	121800	71.99	8768524
2.	2010-2011	119266	119266	70.93	8459799
3.	2011-2012	120949	120949	72.53	8773009
4.	2012- 2013	118876	118876	72.50	8618389
5.	2013-2014	119472	119472	71.72	8569242
6.	2014- 2015	119496	119496	72.29	8638581
7.	2015- 2016	118846	118846	71.75	8527993
8.	2016- 2017	109912	109881	68.98	7580373
9.	2017- 2018	113335	113030	68.93	7791773

Source: Department of Agriculture, Hlegu Township (2018).

According to table 4.8, the paddy production of Hlegu Township in 2017-2018 is 7791773 baskets. The total production of paddy was 8768524 baskets in 2009-2010. It can be seen that the yield of paddy decreased and total of 976751 baskets of paddy loosed in 2017-2018. The yield production in 2017-2018 was 68.93 baskets per acre. And it has been decreased from 71.99 baskets per acre in 2009-2010. During 2009-2010 and 2017-2018, the cultivated acre decreased to 8770 acres. The condition of cultivated acres and harvested acres are not the same each year in Hlegu Township depending on weather variation. Decreased paddy cultivated acres caused by decline market demand, increasing production cost and scare farm labor. In recent years, the paddy production of Hlegu Township is a little decreasing. Because of some difficulties in paddy harvesting, there has been a little decrease in its production. One of the problems is weather variation in township. Untimely flooding was seen as a severe constraint to rice production. Other problems are seed quality, diseases, using modern machines and crops rotations.

(c) Oilseeds Cultivation

In Hlegu Township, groundnut is mainly cultivated as oilseeds. The total oilseeds cultivated acre is about 453 acres in 2017-2018. And groundnut cultivated acre is 437 acre and sesame is 16 acre. Yield per acre of groundnut is 47.75 baskets and sesame is 6.69 baskets. Most of the oilseeds crops cultivation in Hlegu Township intended regional consumption.

Table 4.9 Types of Cultivated Crops

No	Types of Crops	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018
1	Paddy (Total)	121800	119266	120949	118876	119472	119496	118846	109912	113335
	Paddy (Monsoon)	89553	89360	89061	88860	89029	89056	88831	83625	83629
	Paddy (Summer)	32247	29906	31888	30016	30443	30440	30015	26287	29706
2	Groundnut	3548	3564	3252	3163	3264	3378	3439	1722	437
3	Matpe (Bean)	2494	2596	2566	2556	2564	2566	2564	1865	884
4	Green gram	9246	9365	8990	8633	8664	8670	8897	6250	3102

Source: Department of Agriculture, Hlegu Township (2018).

Types of cultivated crops in Hlegu Township are shown by table 4.9. The paddy is the main crop with the largest area and the other crops are dependent for export and some are also for local consumption in Township. Paddy is the most cultivated crop in Hlegu Township. In 2017-2018, the total cultivated acre of paddy is about 113335 acres and average yield of paddy is 68.93 baskets per acre for the whole township in general. In study the cultivation of monsoon and summer paddy, the cultivated acres were decreased in the year for 2009-2010 to 2017-2018. The possible reasons of decreasing cultivated acres are mentioned above. The cultivated acres of groundnut, black gram and green gram also significantly decreased in 2017-2018 because beans' export market is facing few problems in recent years. India were getting increase yield of beans in last year. India is one of the beans trade partners of Myanmar which is protecting local bean market that it is specifying a ban on import of beans. This ban impacts exports of bean crop from Myanmar. So farmers have reduced varieties of beans cultivation in Hlegu Township. Agricultural sector of Hlegu Township is decreased in recent year.

Table 4.10 Cash Crops Cultivation and Production in 2017-2018

No	Crops	Acre		Cultivated Acre	Harvested Acre	Yield Per Acre	Yield (Bsk)
1	Paddy	Monsoon	83629	83629	83324	63.88	5322418
		Summer	29706	29706	29706	83.13	2469355
2	Groundnut	Winter	437	437	437	47.75	20866
3	Black gram (Matpe)	□	884	884	884	12.95	11448
4	Green gram	□	3102	3102	3102	13.90	43118
5	Sesame	□	16	16	16	6.69	107

Source: Department of Agriculture, Hlegu Township (2018).

The cash crops cultivation and production in 2017-2018 is expressed by table 4.10. The cultivated acre of paddy (Monsoon) is about 5322418 acres and average yield of paddy is 63.88 baskets. The cultivated acre of paddy (Summer) is about 2469355 acres and average yield of paddy is 83.13 baskets. The quantity of average yield of summer paddy is higher than the quantity of monsoon paddy. The groundnut

cultivated acres are about 20866 acres and average yield of groundnut is 47.75 baskets. The cultivated acres and average yield of black gram and green gram are 11448 acres and 43118 acres and 12.95 baskets and 13.90 baskets.

Table 4.11 Rubber Plantation and Production from 2013-2014 to 2017-2018

Sr. No	Year	Cultivated Acre	Harvested Acre	Yield Per Acre (Viss)	Total Yield (Viss)
1	2013-2014	23579	2359	120.22	283598.98
2	2014- 2015	24636	2367	119.31	282406.77
3	2015- 2016	24775	2234	119	265846
4	2016- 2017	24788	2383	118.30	281908.90
5	2017- 2018	24888	3305	119.19	393922.95

Source: Department of Agriculture, Hlegu Township (2018).

According to the table 4.11, the cultivated area of rubber is 23579 acres, harvested acre is 2359 acres, yield per acre and total yield are 120.22 viss and 283598.98 viss in 2013-2014. The cultivated and harvested acres are increasing year by year. But harvested acres decreased in 2015-2016 and yield per acre declined in 2016-2017.

Table 4.12 Long-term Plants Plantation and Production in 2017-2018

No	Crops	Cultivated Acre	Harvested Acre	Yield Per Acre (Viss)	Total Yield (Viss)
1	Rubber	24888	3305	119.19	393922.95
2	Cashew nut	10212	2989	25.55	204145

Source: Department of Agriculture, Hlegu Township (2018).

In table 4.12, during the year 2017-2018, long-term plants plantation are rubber and cashew. The cultivated area of rubber is 24888 acres, harvested acre is 3305 acres, yield per acre and total yield are 119.19 viss and 393922.95 viss. The cultivated acre of cashew is 10212 acres, harvested acre is 2989 acres, yield per acre is 25.55 viss and 204145 viss.

Table 4.13 Other Cash Crops Cultivation and Production in 2017-2018

Sr. No	Crops	Cultivated Acre	Harvested Acre	Yield Per Acre (Viss)	Total Yield (Viss)
1	Chili	65	65	380	24700
2	Black Pepper	99	99	35	3465
3	Vegetable	1907	1907	3744	7139808

Source: Department of Agriculture, Hlegu Township (2018).

According to table 4.13, during 2017-2018, other earning crops are chili, black pepper and vegetable. The cultivated acre of chili is 65 acres, harvested acre is 65 acres, and yield per acre is 380 viss and 24700 viss. The cultivated area of black pepper is 99 acres, harvested acre is 99 acres and yield per acre is 35 viss and 3465 viss. The cultivated area of vegetable is 1907 acres, harvested acre is 1907 acres and yield per acre is 3744 acres and 7139808 acres.

4.3.3 Financial Institutions

Myanmar Agricultural Development Bank are providing loan to farmer for the purpose of agriculture development. Microfinance loans are served by Mya Sein Yaung village project in 25 villages. The number of cooperative credit unions and sub cooperative credit unions is 108 and 2 in township. Myanmar Agricultural Development Bank (Hlegu Township) has credited year loan for agricultural development. There are two types of loans, loans for monsoon season and loans for winter season.

Table 4.14 Agricultural loans of Hlegu Township

Sr. No	Year	Monsoon Season Loan (Kyats)	Winter Season Loan (Kyats)
1	2009-2010	1900000000	400000000
2	2010-2011	37622440000	840000000
3	2011-2012	52653560000	25320600000
4	2012-2013	52653500000	25320000000
5	2013-2014	10053100000	3496900000
6	2014-2015	10230900000	3520000000
7	2015-2016	6256000000	26392000000
8	2016-2017	10265400000	4350000000
9	2017-2018	10713000000	4434600000

Source: Myanmar Agricultural Development Bank, Hlegu Township (2018)

As shown in table Table 4.14, loans for monsoon season are greater than winter season. Each year, amount of loan fluctuated. When the borrowers increased, the amount of loan increased.

4.3.4 Livestock and Fishery Sector

Hlegu Township is also depending on livestock and fishery for regional income. Hlegu Township has two zones of livestock breeding and fishery for development of Livestock. Other one zone is participating in Hmawbi Township. It is located at Nyaung Hna Pin area. The total area of Nyaung Hna Pin zone is 12453 acres and 10627 acres are situated in Hlegu Township.

(a) Fishery

Fisheries play a vital role in the culture and economy of Hlegu. Fish serves as major source of animal protein of its people who largely consume rice and fish in their daily meals. Hlegu Township has uncultivated land which were especially wetland. It can be turned into fish pond and raising fishery. There is integrated poultry which fish production is increasingly practiced; the poultry usually ducks, chicken or geese which are kept in elongated houses over the fishponds. Fishery business is running in Nyaung Hna Pin zone and other private fisheries. There are fishery farms which are managed by private farm business. The total quantity and area of fishery

farms are 477 lakes and 3072 acres in Hlegu Township. The total output quantities of fishes are 13470 viss in 2017-2018.

(b) Livestock

Buffaloes, cows, pigs, goats, chickens and ducks are found livestock breeding in Hlegu Township for egg, meat and dairy products.

Table 4.15 The progress of Livestock Breeding in Hlegu Township (2009-2010 to 2017-2018)

Sr. No	Year	Buffaloes	Cows	Pigs	Goats	Chickens	Ducks
1.	2009-2010	15846	35545	34490	6542	2248945	62205
2.	2010-2011	15734	35650	34505	6433	2257584	62528
3.	2011-2012	15620	34950	34870	6391	2368975	61217
4.	2012-2013	15528	35582	34609	5812	2376368	58327
5.	2013-2014	14915	35478	33789	5506	2399500	57678
6.	2014-2015	14785	36549	32564	5385	2356444	55625
7.	2015-2016	14610	30800	31820	5250	2310795	54527
8.	2016-2017	14370	26103	34275	5130	2155388	59638
9.	2017-2018	14328	24352	34570	5137	2224380	56104

Source: Department of Animal Husbandry, Hletu Township (2018)

In table 4.15, during the year 2009-2010 and 2017-2018, it is described that the quantity of buffalo decreased from 15846 to 14328. The quantity of cow also decreased from 35545 to 24352. The reason of quantity decreasing of cow and buffalo is that they are not widely used in farming sector and modern farming machine are more improved nowadays. The quantity of pigs increased from 34490 to 34570. The quantity of chicken and duck little decreased from 2248945 to 2224380 and from 62205 to 56104. The reason of quantity decreasing of chicken is that the chicken farms are facing diseases concern and periodic outbreaks such as pathogenic avian influenza (Bird flu) in recent years. Last year, this bird flu virus led to lower chicken and egg consumption, which severely affected chicken farms. The reason of quantity decreasing of duck is that the duck meat is low demand and rising price of poultry feed.

4.3.5 Forest Sector

In Hlegu Township, the total areas of reserved forest are 89666 acres. Deforestation has occurred across much of Hlegu Township in recent year. Contributory factors are (legal and illegal) forest clearance, over extraction of teak, growth in fuel wood use, expansion of agricultural land and settlement areas. As the reforestation, there are government owned plantation and private owned plantation in Paung Lin, Ma Hu Yar and Ka Li Htaw and there is 7196 acres altogether with the purpose of profit making. The production of forest is halted by government in recent years. Some forest resources can be extracted such as bamboo, cane and fire wood.

(a) Forest Resource Conservation

Forest Department is planning to replace the damage forest area and to protect forest resources. For providing local consumption, extending wood plantation and promoting private forest plantation and protecting wildlife forest department has made plans to expand forest plantations, distribute seed, create new species and act law.

4.3.6 Industrial Sector

Industrialization is a key force of rapid development of any economy. There is only one stated owned hepatitis B disease prevention medicine factory under ministry of Industry. And there are 2 garment factories, 1 shoe factories and 1 bag factory operated by private companies. Other types of factories are dairy factory, dry meat factory, fiber factory, bandage factory, rice mills and cooking oil mills which are operated in Hlegu Township.

Hlegu Township will be implemented industrial development projects in next year. These are Korea-Myanmar Industrial Complex project and Hlegu Industrial Garden project. Korea-Myanmar Industrial Complex Project is located near Nyaung Hna Pin, Hlegu Township just west of mile post 5 miles 6 furlong of Yangon-Mandalay Expressway. The project will comprise of small, medium and heavy industries, one stop services, labour-intensive sector, staff housing, park, water treatment plant, a management office and business service zones. This project will provide 50,000 to 100,000 jobs opportunities for local people. Hlegu Industrial Garden project has been approved by Members of Parliament for the regional Hluttaw of Yangon. This project is located nearly Hlegu and create 75,000 jobs opportunities. Most of the industries are private owned cottage industry and there are 47 sculpture factories, 14 powdery mills, dynamo motor industry, dyeing and printing industry, machine loom, blacksmith's forge, tin and gold smith industry and sewing are found

ing as home industry in Hlegu. Private owned industries are small unregistered family businesses.

4.3.7 Service Sector

Hlegu Township has many services, such as merchants, dealers, transportation, construction, trading, selling groceries, private schools, laborers, lodging house and shopping mall services.

(a) Transportation Sector

Transport is an essential economic infrastructure for the rapid development of any region. In an economy, location of industries, development of backward areas, decentralization of economic activities, better distribution of products, better maintenance of law and order, justice, defence and security all necessitate a proper system of transport and communication. If there is a proper transportation network within a region it can be implemented regional development.

Hlegu Township nearby situated Yangon-Mandalay high way road (new) and through situated Yangon-Mandalay high way road (old). In overland transportation, there are Yangon Bus Services (YBS) such as YBS 1, YBS 37 and YBS 44 that are running Yangon city and Hlegu Township. And there are YBS 45 which is running Hlegu and Phaunggyi-Mingon villages. Bicycle, motorcycles, tricycles, trishaws and cars are mostly used in transportation sector of Hlegu Township.

(1) Modern Roads and Bridges Construction

There are government department of construction and private construction companies in Hlegu Township. The large urbanization projects which are concerned with modern roads and bridges constructions are implemented and managed by the department of roads and bridges constructions of Hlegu Township and private companies which are permitted by tender.

(2) Rural-Transportation

(i) Roads

Hlegu Township has tarred road and concrete roads to communicate with neighboring Townships and villages. It has 77.1 miles in township and 70.3 miles long roads connecting to neighboring townships.

(ii) Bridges

Hlegu Township has many bridges among as the bridges over 180 feet are Gyogone bridge 220 feet, Phaunggyi bridge 240 feet, Nga Moe Yeik bridge (Hlegu) 400 feet, Dayalbo bridge 220 feet, Tamanyoe bridge 180 feet and Nag Moe Yeik bridge (Ma Lit) 660 feet. And under 180 feet bridges are 9 bridges.

(iii) Village Roads

Most of the people in rural Hlegu travel by bicycle, motorcycle and on foot. Motorcycle are widely used to go anywhere in Hlegu Township. Only travelling on foot is the most suitable around some villages in the rainy season. Now, some of the village roads to communicate with neighboring village are being constructed in concrete roads by VDP under the guidance of department of rural development.

(b) Energy and Electrical Power Sector

In Hlgetu Township, there are four fuel filling stations and sell 17830 barrals and 25860 barrals of diesel in a year. In the use of electricity, there are 19 transformers which are provided by the private and government owned electric power supplies. The electricity is taken from 33/11 KV (3+5+10) 18MVA Hlegu substation, 33/11 KV 10 Inn Taing substation, 33/11 KV 5MVA Phaunggyi substation and 33/11 KV 5 MVA Dar Pein substation. Some villages currently lack electricity in Hlegu Township and which are preparing to install electricity by the supporting of the fund of Yangon Region government and National Electrification Project (NEP). The percentage of electricity availability is 85%.

(c) Telecommunication Sector

Development of communication system is vital in creating economic infrastructure for the industrial and agricultural development of the economy. Communication is not merely an amenity but in fact a key sector in economic development and constitutes the life of industry and commerce. There is a direct and positive relationship between communication and economic development. The development of telecommunication sector of Hlegu Township is described in the following table 4.16.

Table 4.16 Telecommunication Facilities in Hlegu Township in (2009-2010 to 2017-2018)

Sr. No	Year	Post Office	Telegraph	Auto Line Telephone	GSM/CDMA Phone
1	2009-2010	6	1	2006	258
2	2010-2011	6	1	2013	258
3	2011-2012	6	1	2054	1562
4	2012-2013	6	1	2027	5570
5	2013-2014	6	1	1995	24281
6	2014-2015	6	1	1962	24989
7	2015-2016	6	1	1967	57782
8	2016-2017	6	1	1980	65537
9	2017-2018	6	1	1995	75890

Source: Myanmar Post and Telegraph, Hlegu Township (2018)

According to table 4.16, there is no change in the quantity of post and telegraph services. The quantity of auto line phones decreased between 2009-2010 and 2017-2018 because the usage of auto line phones were being substituted the usage of GSM/CDMA Phones. The usages of GSM/ CDMA Phones in 2009-2010 were 258, and then increased usage as 1562 in 2011-2012, and then it was increased to 75890 in 2017-2018. The progress of communication sector is the essential development of socio-economic development, it can say that Hlegu Township could be developed the cause of communication developed.

(d) Banking Sector

Banks play an important position in the country's economy. They play a particular role in the development of the industry and trade. The general role of commercial banks is to provide financial services to general public and business, ensuring economic and social stability and sustainable growth of the economy. Thus, more commercial banks shows the development of financial services and trade in Hlegu Township.

Table 4.17 Banks in Hlegu Township

Sr. No	Bank Name	Opened year
1.	Myanmar Economic Bank	1976
2.	Myanmar Agricultural Development Bank	1994
3.	AGD Bank (mini branch)	2013
4.	Cooperative Bank	2015
5.	Kanbawza Bank	2016
6.	Ayeyarwaddy Bank	2017
7.	Innwa Bank	2017

Source: Department of General Administration, Hlegu Township (2018).

According to table 4.17, Myanmar Economic Bank, Myanmar Agricultural Development Bank, Cooperative Bank, Kanbawza Bank, Ayeyarwaddy Bank, Innwa Bank and AGD Bank (mini branch) are opened in Hlegu Township by relevant yearly.

4.4 Development of Social Sector in Hlegu Township

Social sector is an important sector for economy and includes several important components such as education, health and other social activities that play a vital contribution in human development. Social development also means that the fulfillment of the basic needs of people and achieving fair distribution of wealth gained and a result of economic growth, development of human resources and expanding the scope of options before the people with emphasis on social justice, equal opportunities and eradication of poverty and illiteracy, taking into consideration that social development equal to and an integral part of economic development.

4.4.1 Development of Education Sector

The MSDP envisions an education system in Myanmar that will support our country's human resources, our people, to develop their full potential. To achieve this goal the Government of Myanmar is determined to promote more equitable access and higher quality outcomes for students – commitments which are clearly set out in the National Education Strategic Plan (2016-2021). The NESP was launched in February, 2017. The Plan includes a common policy framework which sets the strategic directions for the next five years; a clear road map for guiding all investments in the sector, both domestic and international; and a vehicle for coordinated implementation efforts. The educational sector and the development of educational sector of Hlegu Township are shown in following table.

Table 4.18 The Situation of School in Hlegu Township

Sr. No	Grade of School	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018
1	High School	5	5	5	5	7	9	9	9	9
	Sub High School	8	9	10	10	9	7	7	11	12
2	Middle School	6	4	5	5	5	7	7	6	6
	Sub Middle School	7	10	10	10	15	13	13	18	17
	Attached Middle School	1	-	-	-	-	-	-	-	-
3	Primary School	124	122	119	121	118	117	121	110	110
	Post-Primary School	26	28	29	29	26	27	27	30	30
4	Monastery School	11	11	12	12	12	14	14	19	20
5	Private School	-	-	-	-	-	1	3	7	7
	Total	188	189	190	192	192	195	201	210	211

Source: The Education Office of Hlegu Township.(2018)

According to the table 4.18, the quantity of High School, Middle School, Primary School and Monastery School are increased in 2017/2018, by comparing with 2009-2010. That pointed to the development of Education sector in Hlegu Township.

There are 2 Colleges and 1 sub University. 2 Colleges are Educational College Hlegu and Cooperative College Phaunggyi. Only one sub University is Sub Agricultural University Hlgeu. There are 9 high schools and 12 sub high schools, 229 teachers and 6129 students, the ratio of teacher and student is 1:27. There are 6 middle schools, 17 sub middle schools and 1 attach middle school, 743 teachers and 16340 students, the ratio of teacher and student is 1:22. There are 110 primary schools and 30 post primary schools, 765 teachers and 24465 students, the ratio of teacher and student is 1:32. The quantity of monastery school in Hlegu Township is 20 and there are 125 teachers and 3979 students. The total quantity of private school is 7 and there are 72 teachers and 657 students. Five years old students' enrollment is 2180 boys and 2184 girls and enrollment rate is 100%. Adult literacy rate for Hlegu Township is 96.2%.

Table 4.19 The Number of Basic Education School in Hlegu Township

Sr. No	Academic Year	High School			Middle School			Primary School		
		Teacher	Student	Ratio	Teacher	Student	Ratio	Teacher	Student	Ratio
1	2009-2010	180	4400	1:24	723	12074	1:17	655	25181	1:38
2	2010-2011	192	4054	1:21	721	12541	1:17	644	25241	1:39
3	2011-2012	186	4102	1:22	752	13133	1:18	621	26116	1:42
4	2012-2013	176	4405	1:25	743	14062	1:19	638	26924	1:42
5	2013-2014	184	4710	1:26	726	15786	1:22	815	25216	1:31
6	2014-2015	206	4352	1:21	754	15907	1:21	757	25233	1:34
7	2015-2016	223	4349	1:20	758	15862	1:21	835	25193	1:30
8	2016-2017	238	5036	1:21	725	16066	1:22	772	24397	1:32
9	2017-2018	229	6129	1:27	743	16340	1:22	765	24465	1:32

Source: The Education Office of Hlegu Township.(2018)

According to table 4.19, in 2009-2010 academic year, 180 high school teachers were appointed and in 2017-2018 academic year, 229 high school teachers were appointed. The number of high school students has increased from 4400 to 6129. So, the ratio between the number of teachers and students has changed from 1:24 to 1:27. In 2009-2010 academic year, 723 middle school teachers were appointed and in 2017-2018 academic year, 743 middle school teachers were appointed. The number of middle school students has increased from 12074 to 16340. So, the ratio between the number of teacher and teachers has changed from 1:17 to 1:22. In 2009-2010 academic year, 655 primary schools teachers were appointed and in 2017-2018 academic year, 765 primary school teachers were appointed. The quantity of primary school students has increased from 25181 to 24465. So, the ratio between the number of teachers and students has little declined from 1:38 to 1:32. But the teacher-student ratio of high school and middle school levels increased in 2017-2018 academic year.

To develop educational sector, being higher education and passing matriculation examination are important. The following table 4.11 shows the matriculation pass rate in Hlegu Township from the academic year 2009-2010 to 2017-2018.

Table 4.20 Pass Rate of Matriculation in Hlegu Township

Sr. No	Year	Enrollment	Passed	Pass Rate (%)
1	2009-2010	4119	1068	25.93
2	2010-2011	3575	856	23.94
3	2011-2012	3337	722	21.64
4	2012-2013	3417	740	21.66
5	2013-2014	3672	834	22.71
6	2014-2015	3536	902	25.51
7	2015-2016	3513	828	23.57
8	2016-2017	3603	1031	28.62
9	2017-2018	4165	1213	29.12

Source: The Education Office of Hlegu Township.(2018)

According to table 4.20, the matriculation pass rate of 2009-2010 academic year is 25.93 percent and then the matriculation pass rate of 2017-2018 academic year is 29.12 percent. That pointed to the development of Education sector in Hlegu

Township. It resulted from good management and teaching of teachers and students and parents were tried hard to get this result.

(a) Multimedia Learning Center

For the purpose of modern Education, 9 high schools have installed 7 multimedia learning centers and 2 Principles of Learning and Teaching (PLT). 17 middle schools have installed 3 PLT and 1 middle school has installed 2PLT in Hlgtu Township. 26 primary schools have installed 3PLT, 37 primary schools have installed 2 PLT and 71 primary schools have installed 1 PLT each.

(b) Libraries

There are many libraries in Hlegu Township. 184 libraries are opened by education department. 12 libraries and 17 libraries are opened by information and public relation department and other associations.

4.4.2 Development of Health Sector

A strong and healthy population makes for a strong and healthy nation. Health is the most important and essential aspect of social concern. These are the basic needs of the social well-being, because a sound body and mind are the basic requisites for the maintenance of a healthy society function. The health sector and the development of health sector in Hlegu Township are described in the following tables.

(a) Public Hospitals

There is only one 50-bedded public hospital in Hlegu Township. In urban areas, 3 16-bedded public hospitals, 8 rural health center and 32 sub-rural health center are situating for healthcare services to public. The hospital, healthcare centers and clinics of Hlegu Township are shown in the following table.

Table 4.21 The Hospital, Healthcare Center and Clinic in Hlegu Township

Sr. No	Health Department	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014 / 2015	2015/ 2016	2016/ 2017	2017/ 2018
1	Township hospital (50-beded Hospital)	1	1	1	1	1	1	1	1	1
2	16-beded Hospital	3	3	3	3	3	3	3	3	3
3	Rural Health Centre	8	8	8	8	8	8	8	8	8
4	Sub-Rural Health Centre	32	32	32	35	35	35	35	37	37
5	Private Clinic (Registered)	12	12	10	10	14	14	16	22	22

Source: Public Health Department of Hlegu Township.(2018)

According to the table 4.21, the hospital, healthcare center and clinic of Hlegu Township (2017-2018) are more increased than 2009-2010. Sub-rural health centers are increased year by year. 16-bedded hospitals and rural healthcare centers are being modified and upgraded with government budget and supporting of Korea Foundation for International Health Care KOFIH (Health System Strengthening). Private clinics increased. Doctor patient ratio in Hlegu Township is described in the following table.

Table 4.22 The Indicators of Health

Sr. No	Types of Manpower	2009/2010 (Appointed Number)	2017/2018 (Appointed Number)	Ratio of Population (December, 2018)
1	Doctor	12	10	1:24253
2	Nurse	17	30	1:8363
3	Health Officer	12	10	1:24253
4	Midwife	39	67	1:3624
5	Health Staff	110	166	1:1461
6	Bed	(50+16+16+16)	(50+16+16+16)	1:2475
7	Birth Rate	21.6/1000	19/1000	-
8	Maternal Mortality Rate	0.7/1000	1.1/1000	-
9	Under 1 Mortality Rate	16.9/1000	8.7/1000	-
10	Birth Rate with Skillful staffs	70.5	94.5	-

Source: Public Health Department of Hlegu Township.(2018)

According to table 4.22, there are 10 doctors in 2017-2018 less than that of in 2009-2010. So, ratio of doctor to population is 24253 people per doctor in 2017-2018. The nurse was 17 in 2009-2010 and 30 in 2017-2018. Other staffs of healthcare are increased within nine years. The rate of birth and Under 1 Mortality rate is decreased. But the rate of maternal mortality rate is little increased in recent year. This situation shows that health sector development of Hlegu is improvement in overall and little need to take care of some section. Regarding to the health personnel ratio in Hlegu Township, it is needed to improve for more appointed of manpower of health sector.

According to the township report of Department of General Administration, common diseases in Township are malaria, diarrhea, TB, dysentery and liver disease.

2 peoples died of HIV/AIDS in 2017-2018. Birth rate is 19, maternal mortality rate is 1.1 and Under 1 mortality rate is 8.7.

Public hospital, rural health centers and sub rural health centers are opened in Hlegu Township. Health care project, public health care, family health care and nutrient plan are carried out by the health department of the township. The department of external patients is opened for public health of the town. The department of rural health care opens on Monday, Tuesday and Wednesday, and field service is carried out on other days.

Government health budget is 617,711,651 Kyats and expense is 617,711,651 Kyats in 2017-2018 budget years. KOFIH and the Ministry of health and sport had jointly developed a six-year project to strength the PHC system in Hlegu Township at Yangon Region in response to the agreement for Health System and Capacity Building Cooperation on 19 June 2013. The project design is based on five core principles: equity, building on scientific evidence and international consensus, building on existing national policies, health systems strengthening and sharing lessons learned among two countries. World Vision is supporting the nutrition activities for malnutrition cases in Township especially children.

4.4.3 Supportable Condition of NGO and INGO

Many NGOs and INGOs are supporting to Hlegu Township. NGOs are Myanmar Women Affair, Myanmar Maternity and Child Welfare Association, Red Cross Association and Auxiliary Fire Brigade. As INGOs, there are KOFIH (Myanmar), World Vision (Myanmar) and KOICA (Myanmar) which are supporting social and economic sector in Hlegu Township.

Table 4.23 Supportable condition of INGO

Sr. No	Name of INGO	Performing Tasks	From	To	Remark
1	KOFIH	Primary Healthcare System Strengthening Project	2014	2019	-
2	World Vision	Nutrition Activities	2008	2019	-
3	KOICA	Project on the Saemaul Undong (New Village Movement) in Myanmar	2013	2019	(Selected Villages)

Source: Department of General Administration, Hlegu Township (2018).

According to the table 4.23, KOFIH (Myanmar) is coordinating with Ministry of Health and Sport to strengthened health system and sharing health knowledge. World Vision (Myanmar) is supporting not only the nutrition activities for malnutrition cases especially children but also microfinance loans for household in township. KOICA (Myanmar) is implementing the “Project on the Saemaul Undong (New Village Movement) in Myanmar” in Hlegu Township (selected villages).

Chapter (5)

Conclusion

5.1 Findings

In economic sector of Hlegu Township, the growth rate of GDP is improving in recent year. According to the 2009-2010 to 2017-2018 GDP of Hlegu Township, Production sector is the largest quantity of the whole GDP. Production sector included agricultural, livestock and fishery, energy, forest, industry, electrical power and construction. In agriculture sector, the land cultivated paddy is little more than area of land cultivated other crops. But the paddy production is decreasing in recent year. There are many problems in paddy production such as weather variation, seed quality, diseases, using modern machines and crops rotations. The net harvested rate for paddy decreased from 71.99 baskets in 2009-2010 to 68.93 baskets in 2017-2018. The cultivated acres of paddy fields decreased from 121800 acres in 2009-2010 to 113335 acres in 2017-2018. The harvested acres of paddy decreased from 121800 in 2009-2010 to 113030 acres in 2017-2018. The Other crops are groundnut, sunflower, black gram (bean), green gram (bean) and other earning crops and there is 45.2 percent in total cultivated acres. Other cultivated crops are also declining in recent years. The cultivated and yield per acres of other crops decreased in 2017-2018. So, agricultural sector of Hlegu Township decreased in recent year. In livestock sector, the quantity of buffalo, cow and duck declined.

For industrial sector, Hlegu Township will be implemented new industrial development projects in next year. Hlegu currently has four factories that operate in the township with legal authorization. These factories provide job opportunities for the local population. Most of the industries are private owned cottage industry and small unregistered family businesses.

In service sectors, communication and transportation sectors are well increasing in the study period. For transportation sector, people can have easily access

to travel by motor road because Hlegu Township is nearby situated old and new Yangon-Mandaly Highway roads. Hlegu Township is trying to build the bridges and roads that are supporting to be better and smooth transportation. YBS is serving to be convenient for people in Hlegu. Now, people can have access to go to Yangon and Hlegu Township in few hours. Most of the people in rural Hlegu travel by bicycle, motorcycle and on foot. Telecommunication sector is more improving than last eight years ago in Hlegu Township. As good infrastructure provide the economic growth and regional development of Hlegu Township.

For education sector, the number of school has been increased from 118 schools in 2009-2010 to 211 schools in 2017-2018. The government opened new schools in Hlegu Township. Most of the schools increased in this period are opened in rural area. So that, people from rural area can get opportunities to learn and it will increase more educated persons in rural area in the long term. There is little change in the number of increase teachers. There has been increased from 180 teachers in 2009-2010 to 229 teachers in 2017-2018 for High School teachers. There were 723 teachers for Middle School, 655 teachers for Primary School in 2009-2010 but there are 743 teacher for Middle School and 765 teachers for Primary School in 2017-2018. The number of students is no significantly improved in Primary school levels during the last three years because the rate of birth of Hlegu Township is decreased in recent years. Generally, the teacher-student ratio is still high in all levels. The matriculation pass rate of 2016-2017 and 2017-2018 academic years are significantly increased. Monastery schools are also developed and it is more helpful for low income families and rural areas.

For health sector, The Township currently has three government hospitals with a combined total of 98 beds, eight public rural health centers, 37 sub rural health centers and 22 private health clinics. There is little increase of new building for health care services. The indicator of health, the ratio of patient per doctor is one doctor has to take care and serve for 24253 in 2017-2018 and the ratio of other staffs of health care is also high. These ratios are not matching with the population of Township. The rate of birth and Under 1 Mortality rate is decreased. But the rate of maternal mortality rate is little increased in recent year.

5.2 Suggestions

According to the above findings, Hlegu Township has improvement in economic, social and infrastructure sector. In economic sector, agricultural sector declined in recent years. Basically, the enhancement of agriculture sector would raise the overall standard of local people in Hlegu Township. Traditional agriculture is needed to transform the industrialized agriculture that is one of the ways to develop the agriculture sector in long term. Providing the awareness of agriculture knowledge, technique for cultivation and machines would help to support the agriculture sector. Usages of fertilizer, cultivated in time and harvested in time avoiding the rain and drying system are also important for paddy production. Government should provide project with cultivated in time for making installment machines, hybrid seeds and fertilizers. Quality breeds, technology and capital play an important role in promoting the livestock farming sector.

Most of the industries are private owned cottage industries which are not registered as SMEs. So regional government should make to support SMEs and find the ways to provide SMEs. For example; regional government should connect financial institutions to improve the financing environment for SMEs in terms of enhanced credit and direct financing channels. And they should assist SMEs to improve their market access by helping them enhance their skills.

More appointed of teachers could decrease the ratio of teacher and students and the education will be more developed in education sector. For health sector, there is needed more health personnel such as doctors, nurses, health officers, midwives and health staffs. This means that it is needed to improve for more appointed of manpower of health sector. The ratio of maternal mortality rate is little increased in Hlegu Township. This means that it is needed to provide for health care awareness to pregnancy. The quality of health care system and disease control programs should be more implemented.

Hlegu Township must be invested in local road and bridge infrastructure to increase the accessibility of the township and must be enabled local growth for both the urban and rural populations. So, Hlegu is well placed to develop and grow, and to leverage the opportunities available to it based on its fortunate geographical position.

Hlegu Township would benefit greatly from the creation of a development plan that is coordinated with the development plans of both the region and Union governments.

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ABSTRACT

This study highlights the socio-economic condition in Hlegu Township during the period 2009-2010 to 2017-2018. The purpose of the study is to identify the changes in socio-economic condition in the study area. This paper uses descriptive method based on the secondary data from the records of government offices in Hlegu Township. Among economic sectors, production sector is the largest share in GDP. Major economy of Hlegu Township is agriculture. It is seen that industrial sector in Hlegu Township has the good opportunities for development. In service sectors, communication and transportation sectors are well increasing in the study period. In social sectors, it is seen that progress of education and health status are the main factors for the quality of human resources development. In education sector, the number of schools has been increased in all levels but the quantity of teacher should be appointed in middle schools and high schools levels for increased teacher-student ratio. In health sector, more doctors and health care workers should be provided. Thus, it is found that Hlegu Township is trying to get the development goals and it will be a developed township if required plans and projects are implemented with government and non-government organization's supports to provide the necessary in urban and rural development.

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LIST OF ABBREVIATIONS

AEC	ASEAN Economic Community
ASEAN	Association of South East Asia Nation
DRD	Department of Rural Development
GDP	Gross National Product
GMS	Greater Mekong Sub Region
GSM/CDMA	Global System for Mobile Communication / Code-Division Multiple Access
GWh	Gig watt hour
HDI	Human Development Index
HIV/AIDS	Human Immunodeficiency Virus Infection and Acquired Immune Deficiency Syndrome
HYV	High Yielding Variety
ID	Identity
KOFIH	Korea Foundation for International Health Care
KOICA	Korea International Cooperation Agency
kWh	Kilowatt hour
MNPED	Myanmar National Planning and Economic Development
MPT	Myanmar Post and Telegraph
MSDP	Myanmar Sustainable Development Plan
MW	Megawatt
NEP	National Electrification Project
NESP	National Education Strategic Plan
NGO	Non-Government Organization
ODA	Official Development Aid
PHC	Primary Health Care
PLT	Principles of Learning and Teaching
TB	Tuberculosis
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
VDP	Village Development Plan
WB	World Bank
WHO	World Health Organization
YBS	Yangon Bus Services
YRG	Yangon Region Government

CHAPTER I

INTRODUCTION

1.1 Rationale of the Study

Development is a multi-dimensional phenomenon. Some of its major dimensions include level of economic growth, level of education, level of health services, degree of modernization, status of women, level of nutrition, quality of housing, distribution of goods and services, and access to communication. It requires a balanced human resource development in the country. Most developing countries are making efforts to adopt effective policies and strategies for overall development of urban and rural area for nation's interests.

Policymakers focus on balanced economic development across States and Regions. Government concentrate on agricultural sector in rural development because approximately 70 percent of the populations live in rural areas and their main livelihood is agriculture which is the backbone of the economy of the country. At present, human resource plans envisions an education system in Myanmar that will support our country's human resources, our people, to develop their full potential. A strong and healthy population makes for a strong and healthy nation. The government of Myanmar strives to get the right balance between economic and social development, and environmental protection and sustainability. The government also seeks to help reduce the rural-urban divide in terms of access to markets, to information, to technology, to finance, to education, to basic infrastructure and healthcare, amongst others.

Myanmar has 330 townships. Yangon region has 45 townships. Among of them 34 townships are urban township and 11 are rural townships. Hlegu Township sits 45 km northeast of Yangon. It is a rural township within Yangon Region. But Hlegu Township has fortunate geographical position and well development opportunities. Hlegu currently has a primarily agricultural economy, with a large proportion of the population involved in rice farming. And some people are engaged

in livestock and fisheries, private owned industry, transporting and trading. Yangon Region Government is trying to get the sustainable economic growth in Yangon Region. YRG is implementing the industrial project in Hlegu Township. So, Hlegu will improve the industrial development and job opportunities for local people. These are why this socio-economic study focuses on the economic sector of Hlegu Township.

Solid education system plays a critical role in a healthy economy. It creates higher income, advanced technology, industrialization, develop knowledge and skillful workers. This reason is the study of education sector to the socio economic development of Hlegu Township. Health sector support production sector that will help to improve strong labor force and healthy new generations. It can be provided by the education sector.

In Myanmar, all states and regions are helping to develop the nation. Therefore, to study the development of whole nation, it would be needed to basically socio-economic development of each state and region which comprise all townships and then its contribution to Myanmar Economy. The study is to know the socio-economic condition of Hlegu Township, to provide require development policies and projects.

1.2 Objectives of the Study

The objectives of the study are:

- (1) to know the sectorial performance of economic and social sectors of Hlegu Township and
- (2) to identify socio-economic conditions of Hlegu Township

1.3 Method of Study

The method of the study is descriptive method based on secondary data from General Administration Department of Hlegu Township, Planning Department of Hlegu Township, Immigration and Manpower Department Hlegu Township, Department of Statistics and Farmland Management Hlegu Township, Department of Agriculture and Irrigation Hlegu Township, Department of Animal Husbandry Hlegu Township, The Office of Education Hlegu Township, Health Department of Hlegu Township, Myanmar Agricultural Development Bank Hlegu Township, books and Internet Websites.

1.4 Scope and Limitation of the Study

The Scope of the study is limited to Socio-economic Development of Hlegu Township during 2009-2010 to 2017-2018.

1.5 Organization of the Study

This study consists of five chapters. Chapter (1) includes introduction with rationale, objective, method, scope and organization of the study. Chapter (2) describes the literature review. Chapter (3) is the Socio-Economic Development in Myanmar. Chapter (4) examines the Socio-Economic Development of Hlegu Township and Chapter (5) shows conclusion of the study with finding and suggestion.

CHAPTER II

LITERATURE REVIEW

2.1 Economic Growth and Economic Development

Economic growth is the increase in the market value of the goods and services produced by an economy over time. It is conventionally measured as the percent rate of increase in real gross domestic product, or real GDP. In economics, "economic growth" or "economic growth theory" typically refers to growth of potential output, i.e., production at "full employment." As an area of study, economic growth is generally distinguished from development economics. The former is primarily the study of how countries can advance their economies. The latter is the study of the economic aspects of the development process in low-income countries.

Economic growth is one of the most important indicators of a healthy economy. One of the biggest impacts of long-term growth of a country is that it has a positive impact on national income and the level of employment, which increases the standard of living. As the country's GDP is increasing, it is more productive which leads to more people being employed. This increases the wealth of the country and its population.

Economic Growth is not the same as Economic Development. Development alleviates people from low standards of living into proper employment with suitable shelter. Economic Growth does not take into account the depletion of natural resources which might lead to pollution, congestion & disease. Development, however, is concerned with sustainability which means meeting the needs of the present without compromising future needs.

Development has been defined as "a process of growth, expansion or realization of potential; bringing regional resources into full productive use" In another words development is a process of change aiming at socio-economic transformation of a traditional societies into modern one which is greatly influence by

human beings. Activities related to the development are generally directed towards national buildings and socio-economic transformation.

Development is defined as “the process of improving the quality of all human lives and capabilities by raising people’s levels of living, self-esteem and freedom.”

Michael Todaro specified three objectives of development:

1. **Life sustaining goods and services:** To increase the availability and widen the distribution of basic life-sustaining goods such as food, shelter, health and protection.
2. **Higher incomes:** To raise levels of living, including, in addition to higher incomes, the provision of more jobs, better education, and greater attention to cultural and human values, all of which will serve not only to enhance material well-being but also to generate greater individual and national self-esteem
3. **Freedom to make economic and social choices:** To expand the range of economic and social choices available to individuals and nations by freeing them from servitude and dependence not only in relation to other people and nation-states but also to the forces of ignorance and human misery. (Todaro, M.P., and S.C.Smith, 2015)

Economists believe that economic growth is affected mainly by the level of infrastructure development in a given time period, the education and productivity of the work force, the freedom of their movement from agriculture to industry, from rural to urban areas, their ability to save and invest, and the existence of corruption and system of governance in a country.

Development being concerned with how the lives of the people are actually affected, incorporates measures including real income per capita, literacy level and the standard of education, skill development, quality of healthcare and the number of doctors per thousand people, life expectancy, availability of housing and environmental standards. The Human Development Index (HDI) is used to measure the level of development. HDI is developed by the United Nations Development Program (UNDP) to analyze systematically and comprehensively the comparative status of socioeconomic development in different countries and which based on combining measures of education, health, and adjusted real income per capita.

2.2 Regional Development

Regional development is the provision of aid and other assistance to regions which are less economically developed. The implications and scope of regional development may therefore vary in accordance with the definition of a region, and how the region and its boundaries are perceived internally and externally.

The notion of development in the context of regional development refers to a value positive concept which aims at enhancing the levels of the living of the people and general conditions of human welfare in a region. It is a value positive concept because development is not only a change but a change for better, just as plant develops into a tree and a child into an adult and there is no reversal of the position attained. Development is neither class neutral nor it is uniformly available across the regions. The development process benefits some classes of the society more than other classes. It helps certain regions to attain higher levels of development than other regions. This gives rise to social disparities as well as regional disparities. Such a situation operates because of the behaviour of parameters of development.

Regional development has been interpreted as intra-regional development design to solve the problems of particular regions. The concept has a multidisciplinary approach. The other connotation of regional development is economic in which the difference in growth in terms of volume and structure of production, income, and employment is measured to know differences in the levels of development. This procedure is employed both for national as well as subnational areas.

The concept of regional development may further be viewed in connection with plan, policies and balanced development. The policies of regional development are aimed at reducing the regional disparities existing in a particular to minimum and to find out the possible means for developing the region as a whole. Balanced regional development does not mean equal development of all regions. It simply implies fullest development of the potentialities of an area according to its capacity so that the benefits of overall economic growth are shared by the inhabitants of all the regions.

2.3 Socio-economic Development

Socio-economic development is the process of social and economic development in a society. Socio-economic development is measured with indicators, such as GDP, life expectancy, literacy and levels of employment. Changes in less-tangible factors are also considered, such as personal dignity, freedom of association,

personal safety and freedom from fear of physical harm, and the extent of participation in civil society. Causes of socio-economic impacts are, for example, new technologies, changes in laws, changes in the physical environment and ecological changes. (Orunsolu, A.A., O.R., Adebayo A.A and Bamgboye O.O, 2010)

Socio-economic development of any region or area depends upon various factors or components, which belong to different parameters and it is very difficult task to discuss each and every component of socio-economic development in detail. However, here, few major components of socio-economic development are worked out. These are the following major components of socio-economic development:

- (i) Income Per Capita
- (ii) Level of Agriculture Development
- (iii) Level of Industrial Development
- (vi) Level of Urbanization
- (v) Occupational Structure
- (vi) Level of Educational Development
- (vii) Health Status
- (viii) Transport and Communication
- (ix) Population Characteristics

Per capita income is widely accepted as a general measure of development. It is customary to identify whether a region has been backward or advanced in the levels of development using the estimates of per capita income. The regions which enjoy higher per capita income are deemed to be more developed than the states or regions with low per capita income. Generally per capita income has been taken at current price. This variable or component is commonly used for measuring economic development. Under-developed economies are distinguished from the developed economies on the basis of their low per capita income. (Rao, H. 1984)

Agricultural development is a pre-requisite of economic growth in our country. Agriculture is important not only to meet the ever growing and ever pressing demand for food and fibers for human consumption but also for providing forage for animals, raw materials for non-agricultural sector, employment opportunities to rural population and improves their standard of living. Agriculture is the mainstay of almost all the states of the nation.

According to an UNESCO group of experts, agriculture can contribute to growth by increasing efficiency of popular and releasing resources to other sector by

adjusting the consumption and of agricultural production in proportion with the growth in internal and external demands. Rising agricultural productivity supports and sustains industrial development in several important ways; firstly, to permit agriculture to release part of its labour force for industrial employment while meeting the increasing food needs of the nonagricultural sectors. Secondly, it raises agricultural incomes, thereby creating the rural purchasing power needed to buy the new industrial goods and rural savings and which may then be modified by direct or indirect means of finance industrial development. (Sen, A., 1982)

Agricultural development also brings social and cultural developments, as increased per capita income in rural areas invariably results in increased literacy and level of education which are conducive for social transformation. It is clear that under all circumstances agricultural productivity makes important contribution to regional development and that within considerable limit at least it is one of the pre-conditions which must be established before a take-off into self-sustained economic growth becomes possible. It is equally clear that social and cultural change necessary to integrate new industrial and technological development is possible through increased agricultural production. Agricultural development can be measured both in terms of inputs such as High Yielding Variety (HYV) seeds, chemical fertilizers, irrigation, mechanization, etc. (Malassis, L. 1975)

Industrialization is a key force of rapid development of any economy. Most of the economists have accepted industrialization as the most pre-dominant component of their development strategies. Industrial units of organize sectors generally provide life blood to the economic system by their leading role in transmitting growth impulses to the surrounding area through their backward and forward linkages. Most of the infrastructure facilities such as, means of transportation and communication, power and banking expand along with industrial development, while, their availability in the area causes concentration of industries. Industrialization not only provides employment opportunities and reduces the dependence of workforce on agriculture but also acts as an agent of socio-cultural transformation by bringing about urbanization.

Education is a crucial factor of social, economic and cultural development. It provides economic opportunities and helps to overcome social barriers. It also enhances earning potential and productivity of people through acquisition of skill and information for various opportunities and jobs. Thus, the level of education

determines the quality of people and development of a region. Importance of education hardly needs any elaboration. Investment in human resources is more important than in any other resources.

It is education that contributes significantly in improving conditions of people from state of deprivation to prosperity. Education not only yields a huge set of benefits to individual concerned as well as to the society in the form of a larger set of externalities, but, it also regarded as a great equalizer in income distribution and reducing poverty and disparities. (Mandelbaum, D.G)

The social significance of education lies in its impact on elevating the population squeezes as well as in changing the structure of stimuli to labour. The significance of literacy lies in the fact that it forms the basis of multilevel educational pyramid. A literate person can distinguish between right and wrong and take right decision. Owing to the vital role which literacy plays in the socio-economic upliftment of people, the founding father of Indian constitution recommended that education be made free and compulsory. The universalization of literacy and primary education has been recognized as one of the major goal of planning in our country.

Health is defined as a state of complete physical and mental well-being by WHO. Thus, health is a state of soundness of mind and body of an individual in which he is free from any sort of disorder. Pain of sickness and all organs of body function well and are conducive for efficient and prolonged life. Health and nutrition are the most important and essential aspect of social concern. These are the basic needs of the social well-being, because a sound body and mind are the basic requisites for the maintenance of a healthy society function. Likewise the proper nourishment is also pre requisite to maintain both sound physical and mental health. The proximity to health care facilities is of paramount importance, because this is one of the most noteworthy social facilities in which geographical space creates impurity. (Smith, D.M., 1984)

The nation should have health approach in all its socio-economic schemes and give health education to the masses; the nation should give good and adequate health services to the community. Public health services like hospitals, dispensaries, clinics, doctors, nurses, health centres, etc., should go to the rural areas and our village folks should have easy accessibility to these services. Health sector should develop along with other sectors of economy. In many countries a large proportion of the health

resources are expanded in a few cities for the benefit of a small proportion of the population.

2.4 Rural Development

Rural development is the process of improving the quality of life and economic well-being of people living in rural areas, often relatively isolated and sparsely populated areas. Rural development has traditionally centered on the exploitation of land-intensive natural resources such as agriculture and forestry. The need for rural communities to approach development from a wider perspective has created more focus on a broad range of development goals rather than merely creating incentive for agricultural or resource based businesses. Education, entrepreneurship, physical infrastructure, and social infrastructure all play an important role in developing rural regions. Rural development is also characterized by its emphasis on locally produced economic development strategies. In contrast to urban regions, which have many similarities, rural areas are highly distinctive from one another. For this reason there is a large variety of rural development approaches used globally.

Rural development actions are intended to further the social and economic development of rural communities. Rural development programs have historically been top-down from local or regional authorities, regional development agencies, NGOs, national governments or international development organizations. Local populations can also bring about endogenous initiatives for development. The term is not limited to issues of developing countries. In fact many developed countries have very active rural development programs. Rural development aims at finding ways to improve rural lives with participation of rural people themselves, so as to meet the required needs of rural communities. The outsider may not understand the setting, culture, language and other things prevalent in the local area. As such, rural people themselves have to participate in their sustainable rural development.

The achievement of the Millennium Development Goals is at the center of sustainable development. Sustainable rural development is vital to the economic, social and environmental viability of nations. It is essential for poverty eradication since global poverty is overwhelmingly rural. The manifestation of poverty goes beyond the urban-rural divide; it has sub regional and regional contexts. It is therefore critical, and there is great value to be gained, by coordinating rural development initiatives that contribute to sustainable livelihoods through efforts at the global,

regional, national and local levels, as appropriate. Strategies to deal with rural development should take into consideration the remoteness and potentials in rural areas and provide targeted differentiated approaches.

A healthy and dynamic agricultural sector is an important foundation of rural development, generating strong linkages to other economic sectors. Rural livelihoods are enhanced through effective participation of rural people and rural communities in the management of their own social, economic and environmental objectives by empowering people in rural areas, particularly women and youth, including through organizations such as local cooperatives and by applying the bottom-up approach. Close economic integration of rural areas with neighbouring urban areas and the creation of rural off-farm employment can narrow rural-urban disparities, expand opportunities and encourage the retention of skilled people, including youth, in rural areas. There is considerable potential for rural job creation not only in farming, agro processing and rural industry but also in building rural infrastructure, in the sustainable management of natural resources, waste and residues.

. The success of sustainable rural development depends on, inter alia, developing and implementing comprehensive strategies for dealing with climate change, drought, desertification and natural disaster. Related actions include:

- (a) Promoting poverty eradication in rural areas;
- (b) Promoting pro-poor planning and budgeting at the national and local levels;
- (c) Addressing basic needs and enhancing provision of and access to services as a precursor to improve livelihoods and as an enabling factor of people engagement in productive activities;
- (d) Providing social protection programmes to benefit, inter alia, the vulnerable households, in particular the aged, persons with disabilities and unemployed many of whom are in rural areas.

2.5 Reviews on Previous Studies

Government of India (1952), has examined, *The First Five year Plan: A Summary*, Planning Commission. Development planning is being done by the state; it has the dual purpose of economic growth and social structural change; it is comprehensive, covering every sector, region and aspect of life. The study found that development has been defined as a process of growth, expansion or realization of potential, bringing regional resources into full productive use.

Rao, H. 1984 has examined “Regional disparities and development in India”. This study is designed to examine regional disparities in Karnataka karnataka subject category: Geographic Entities. The study found that the Income per capita is a major component of socio-economic development.

Todaro, M.P., and S.C. Smith (2015) studied the “economic development”, presents the latest thinking in economic development with the clear and comprehensive approach that has been so well received in both the developed and developing worlds. The study found that development is defined as the process of improving the quality of all human lives and capabilities by raising people’s levels of living, self-esteem and freedom. It specified three objectives of development.

Orunsolu, A.A., O.R., Adebayo A.A and Bamgboye O.O (2010) studied on *Collaborative Research: A Synergistic Approach to Socio-economic Development*. The study found that collaborative research, which is any research project in which at least two experts pool their resources together, has several benefits to the socio-economic development of any progressive society. Good collaborative research has to be well planned so that expertise involved in the project can be optimally utilized through clear role definitions.

Sen, A. (1982) studies on “Poverty and Famines: An Essay on Entitlement and Deprivation”. This study found that the causation of starvation in general and of famines in particular. It also provides a general analysis of the characterization and measurement of poverty. Various approaches used in economics, sociology and political theory are critically examined. It found that agricultural development is a pre-requisite of economic growth in a country.

Mandelbaum, D.G. studies on “Some Effects of Population Growth in India, On Social Interaction and Region.”. This study found that the relationship between the population growth and development. It studied the interaction of level of educational development and economic opportunities for India society.

Smith, D.M. (1984), has examined, “Human Geography - A Welfare Approach”. Smith seeks to put people back as the central concern of human geography, asking us to abandon the assumption of homogeneity which had become so popular. This study found that a healthy nation can emerge only when there is adequate supply of proper balanced food, when people are not undernourished or malnourished. Poverty and health do not go together and hence in order to improve the health standard it is imperative to eliminate poverty.

Kraas F, Spohner R, Myint A.A (2017) studied the “ Socio-Economic Atlas of Myanmar”, The focus is on social-economic developments and their uneven manifestation in the states and regions of the country. The study found the overview of socio-economic condition of Myanmar.

Schellhase J. and Sun L (2017), studied “the Banking Sector in Myanmar: An Assessment of Recent Progress”. This paper was prepared to inform the discussion during the strategic planning roundtable for financial-sector development in Myanmar hosted jointly by the Myanmar Development Institute and the Milken Institute. The study found that the overview of banking sector in Myanmar.

CHAPTER III

SOCIO-ECONOMIC DEVELOPMENT IN MYANMAR

3.1 Profile of Myanmar

Myanmar plays a significant role with geographically, economically and politically in the most rapidly advancing region in the world. Myanmar is trying to get the socio-economic development in across country. The government of Myanmar strives to strike the right balance between economic and social development, and environmental protection and sustainability. Moreover, the government seeks to help reduce the rural-urban divide in terms of access to information, to technology, to finance, to education, to basic infrastructure and healthcare, amongst others.

3.1.1 Location, States and Regions

The Republic of the Union of Myanmar is the largest country in the mainland of Southeast Asia with an area of 676,577 square kilometers. The country spans 2,056 km from north to south and 933 km from east to west – between 9° 32' N and 28° 31' N latitude and 92°10' E and 101° 11' E longitude. Scarcely developed borders mountains and uplands separate Myanmar from the neighboring states of Bangladesh (271.92 km common border), India (1,452.93 km), China (2,226.85 km), Laos (234.91 km) and Thailand (2,098.14 km). The full length of the border of Myanmar is 6,284.75 km. The territory of the Republic of the Union of Myanmar is made up administratively of Nay Pyi Taw Union Territory, 14 Regions and States, which in turn comprise 74 districts, 330 townships, 442 towns, 3,301 wards, 13,588 village tracts and 63,798 villages (MNPED 2016).

3.1.2 Land Cover

Out of Myanmar's 167,186,000 acres of land area, 43,871,000 acres were classed as reserved forests (26.24%; 2014/2015) and 36,409,000 acres as other woodland (21.78%); 29,617,000 acres consisted of net area sown (17.72%), 13,014,000 acres of cultivable waste other than fallows (7.78%) and the rest of other

forms of land use, including village land (1,216,000 acres), 638,000 acres of irrigation systems (canals, reservoirs, tanks and embankments), transport (740,000 acres) and settlements (490,000 acres).

3.1.3 Climate

As Myanmar is located in the tropical and subtropical zone, most regions have a monsoon climate. Four or five seasons can be distinguished for Myanmar: the pre-monsoon season (mid-April to mid-May), the monsoon or rainy season (mid-May to mid-October), the post-monsoon season (mid-October to end-November), the dry and cool season (end-November to mid-March) and the hot season (mid-March to mid-April). Countrywide, the annual mean temperature ranges between almost 30 and 15°C. In the Central part of the country lies an area with an annual average rainfall of 30 inches (762 mm) and certain parts of the coastal region receives an annual average rainfall of 200 inches (5080 mm).

3.1.4 Population Status

The 2014 nationwide census in Myanmar enabled the key socioeconomic data required for planning and development purposes to be updated. Regional population statuses are the essential basis for all socio-economic analyses, while the status for states and regions are a very good starting point for spatially differentiated comparisons.

Table (3.1) Population Status of Myanmar (2014)

Sr. No	States and Region	Population	Percentage	Total Population
1	Kachin State	1,689,654	3.28%	51,486,253
2	Kayah State	286,627	0.56%	51,486,253
3	Kayin State	1,572,657	3.06%	51,486,253
4	Chin State	478,690	0.93%	51,486,253
5	Sagaing Region	5,320,299	10.34%	51,486,253
6	Tanintharyi Region	1,406,434	2.73%	51,486,253
7	Bago Region	4,863,455	9.45%	51,486,253
8	Magway Region	3,912,711	7.60%	51,486,253
9	Mandalay Region	6,165,723	11.98%	51,486,253
10	Mon State	2,050,282	3.98%	51,486,253
11	Rakhine State	3,188,963	6.20%	51,486,253
12	Yangon Region	7,360,703	14.31%	51,486,253
13	Shan State	5,815,384	11.30%	51,486,253
14	Ayeyarwady Region	6,184,829	12.02%	51,486,253
15	Nay Pyi Taw Capital Region	1,158,367	2.25%	51,486,253

Source: 2014 Census data

The most populous areas are Yangon Region (7,360,703 inhabitants; 14.3% of the population), Ayeyarwady Region (6,184,829 inhabitants; 12.0%), Mandalay Region (6,165,723 inhabitants; 12.0%), Shan State (5,815,384 inhabitants), Sagaing Region (5,320,299 inhabitants) and Bago Region (4,863,455 inhabitants), followed by Magway Region (3,912,711 inhabitants), Rakhine State (3,188,963 inhabitants), Mon State (2,050,282 inhabitants), Kachin State (1,689,654 inhabitants), Kayin State (1,572,657 inhabitants), Tanintharyi Region (1,406,434 inhabitants) and Nay Pyi Taw Capital Region (1,158,367 inhabitants; 2.3% of the population). Chin State (478,690 inhabitants; 0.9%) and Kayah State (286,627 inhabitants; 0.6%) have the lowest population figures.

(a) Population Density

Looking at the population densities based on the land area of the 330 townships, the divide is striking. In the extensive central lowlands of the Ayeyarwady River and Sittaung River, the Ayeyarwady Delta and intermittently along the coast, densities generally range from 100 to 500 persons/ km². The figures are substantially lower in townships in the mountain regions of Chin State, the north-western Sagaing Region, Kachin State, southern and eastern Shan State, Kayah State, northern Kayin State and in Tanintharyi Region, with fewer than 10 persons/ km². The highest densities are reached in the townships in urban areas, particularly Yangon and Mandalay, with values ranging from more than 5,000 to a maximum of 49,377 persons / km².

(b) Urban and Rural Population

The 15 regions and states have highly diverse urbanization rates. Nationally, the urban population averages 29.6% of the total population. the percentage is very much higher in Yangon (70.1%) and Mandalay (34.8%) Regions, and Nay Pyi Taw Union Territory (32.3%). In Kachin State, too, there is a high population concentration in urban centres, due to the security situation. The rural population figures, as a percentage of the total population, are highest in Ayeyarwady Region (85.9%), Magway Region (85%) and Sagaing Region (82.9%). The rural-urban gender ratio is broadly similar across the country. There is a slight gender imbalance, with females predominating in both urban and rural areas, reflecting the fact that more men are labour migrants in neighboring countries. In rural regions the natural growth rates often twice as high as the national average, with simultaneously increasing migration rates.

(c) Household Condition

The number of households has risen to 10.87 million, with the highest increases since 1983 in Shan State (119%), Kayin State (116%) and the Yangon Region (108%). Household size has fallen to an average of 4.4 persons per household. 70.2% of households have between two and five members; the largest average household sizes are to be found in Kachin State (5.1 persons/household), the lowest in the Ayeyarwady Region, Magway Region and Nay Pyi Taw (4.1 persons/

household). More than 86% of households own their home, 7% rent, and 3% of homes are provided by the government. 79% of houses are built of wood or bamboo.

There are large countrywide disparities in the provision of households with electricity for lighting. This basic infrastructure is provided to almost all households in the inner-city districts of Yangon, Mandalay and Nay Pyi Taw, although it is common knowledge that temporary power cuts are also frequent in these areas. Otherwise, high percentages of households with electricity for lighting are found only in Myitkyina, several regional cities and a few townships along the eastern border; in the central lowland of Myanmar 25-50% of all households have access to electricity for lighting. Considerable supply deficits are revealed by the household information for large parts of the rural region, the mountainous regions of Chin, Kachin, Shan and Kayin States, and the Tanintharyi Region. With less than 5% of all households accessing electricity for lighting, the greatest supply deficits are found in large areas of Rakhine State and Nagaland, in the central Shan State and in the townships of Yebyu, Dawai and Thayetchaung.

(d) Labor and Employment

In 2016, over 1,198 thousand persons were registered in 76 labour offices of the Department of Labour placed in different towns, 16 in Yangon and 60 in other States and Regions. Along the whole year, the vacancies notified decreased by about 1.6%, the persons placed in employment by 2.3% compared with 2015. According to the Myanmar Labour Force, Child Labour and School-to-Work and Transition Survey- 2015, more than 80 men and 52 women out of 100 are economically active. Unemployment rate was 0.8% and Labour underutilization rate was 6.9%. The main destinations for overseas employment of people from Myanmar were Thailand, Malaysia, Korea, Japan and Singapore. (Statistical Year Book, 2017)

3.2 Economic Policies of the Union of Myanmar

Launched in July of 2016, the Economic Policy of the Union of Myanmar encapsulates the overall framework that guides Myanmar's economic and social development. This MSDP has been developed to ensure full alignment with this Policy framework.

3.2.1 Visions

The economic policy of the Union of Myanmar is people-centered and aims to achieve inclusive and continuous development. It aims to establish an economic framework that supports national reconciliation, based on the just balancing of sustainable natural resource mobilization and allocation across the States and Regions.

3.2.2 Objectives

The objectives of the economic policies of Myanmar are -

1. To support national reconciliation and the emergence of a united democratic federal Union.
2. To achieve balanced economic development across the States and Regions.
3. To create opportunities for the emergence of capable and skilled new generations for the benefit of the country.
4. To establish an economic system that can achieve and maintain positive development outcomes through the participation, innovation and efforts of all citizens.

3.2.3 Policies

The economic policies of Myanmar are -

1. Expanding our financial resources through transparent and effective public financial management.
2. Improving the operations of State-owned enterprises and privatising those State-owned enterprises that have the potential to be reformed, while promoting and assisting small and medium enterprises as generators of employment and growth.
3. Fostering the human capital that will be needed for the emergence of a modern developed economy and improving and expanding vocational education and training.
4. Prioritizing the rapid development of fundamental economic infrastructure, such as electricity generation, roads and ports, and establishing a data ID card system, a digital government strategy, and an e-government system.

5. Creating employment opportunities for all citizens including those returning from abroad and giving greater priority in the short term to economic enterprises that create many job opportunities.
6. Establishing an economic model that balances agriculture and industry and supports the holistic development of the agriculture, livestock and industrial sectors, so as to enable rounded development, food security and increased exports.
7. Asserting the right of individuals to freely pursue the economic opportunities they choose, so as to enable private sector growth in line with a market economy system; formulating specific policies to increase foreign investment; and strengthening property rights and the rule of law.
8. Achieving financial stability through a finance system that can support the sustainable long term development of households, farmers and businesses.
9. Building environmentally sustainable cities, upgrading public services and utilities, expanding public spaces, and making greater efforts to protect and conserve our cultural heritage.
10. Establishing a fair and efficient tax system in order to increase government revenues and protecting individual rights and property rights through enacting laws and regulations.
11. Establishing technical systems and procedures to support intellectual property rights that can encourage innovation and the development of advanced technology.
12. Identifying the changing and developing business environment both in ASEAN and beyond, so as to enable our own businesses to situate themselves to take advantage of potential opportunities.

3.2.4 Expected Impacts of Policies and Plans

Myanmar's economic growth is expected to slow from 6.8 percent in 2017/18 to 6.2 percent in 2018/19, which is still robust by regional and global standards. Growth is projected to recover to 6.6 percent by 2020/21, helped by recent policy changes such as the adoption of the Myanmar Sustainable Development Plan, liberalization of wholesale and retail trade, implementation of the Myanmar

Companies Law and large investments in infrastructure projects including those related to the Belt and Road Initiative. (WB, 2018)

The Myanmar Sustainable Development Plan (MSDP) is the expression of our national development vision. MSDP provides an integrated set of goals, strategies and Action Plans to be pursued by the government of Myanmar over the medium-to long term. Doing so will contribute in no small way to the achievement of genuine, inclusive and transformational economic growth. The MSDP seeks to develop fundamental infrastructure, soft and hard, individual and institutional, that will radically and positively shift Myanmar's development trajectory, while addressing the needs of all our people, fostering broad-based, equitable and sustainable development.

This MSDP is structured around 3 Pillars, 5 Goals, 28 Strategies and 251 Action Plans. All are firmly aligned with the SDGs, the 12 Point Economic Policy of the Union of Myanmar, and various regional commitments which Myanmar has made as part of the Greater Mekong Subregion (GMS) Strategic Framework, the ASEAN Economic Community (AEC) and many others.

3.3 Government Program for Socio-Economic Development for Rural Communities in Myanmar

For rural development in Myanmar, mainly, Department of Rural Development (DRD) under the Ministry of Agriculture, Livestock and Irrigation is the focal department and is mandated to construct rural road and bridge, rural water supply and sanitation, rural electrification and rural housing and to enhance livelihood and income generation, and aims to improve the socio-economic development of rural population. In accordance with the United Nations' Sustainable Development Goals, the DRD is undertaking sustainable rural development measured for the sake of improvement of quality of life of people and their living standard.

As a focal department of rural development, major focuses to improve socio-economic development of rural people through providing basic social infrastructure and enhancing livelihood and income generation activities in rural area. DRD, currently, develops basic social infrastructure in the rural areas adopting community driven approach to enhance livelihoods income of rural community such as providing revolving fund, to get sustainable resources and establish block grant. Meanwhile, DRD conducts vocational trainings for capacity building to fulfill the needs of skilled

labors in rural areas, and reconstruct the rural housing and latrines for rural community if they were destroyed by emergency situation and natural disaster.

In order to enhance all stakeholder participation by adopting Decentralization Approach in implementing sustainable rural development activities, DRD employed effective major strategies such as prioritizing and implementing all-round development; sustainable financing for rural development; effective collaboration; and good governance process for progressive rural development. Among the major responsibilities of DRD, the main performance are to facilitate the social infrastructure to improve in rural area by practice in people centered approach (community driven approach), to enhance livelihoods and incomes generation activities of rural people by establishing the revolving fund, to conduct vocational training to support enhancing livelihood and income generation.

DRD has been implementing many rural development as a focal departments. Some are funded by Government budget and some of them are provided by International Organizations such as World Bank and Asia Development Bank. There were seven major projects that has been implementing by DRD.

These are –

- (a) National Community Driven Development Project
- (b) Evergreen Village Development Project (Mya Sein Yaung Project)
- (c) Myanmar National Electrification Project
- (d) Village Development Plan (VDP)
- (e) Enhancing Rural Livelihoods and Income Project
- (f) Towns Water Supply Project (Japan ODA Loans)
- (g) Myanmar Off-Grid Analytics (DRD, 2018)

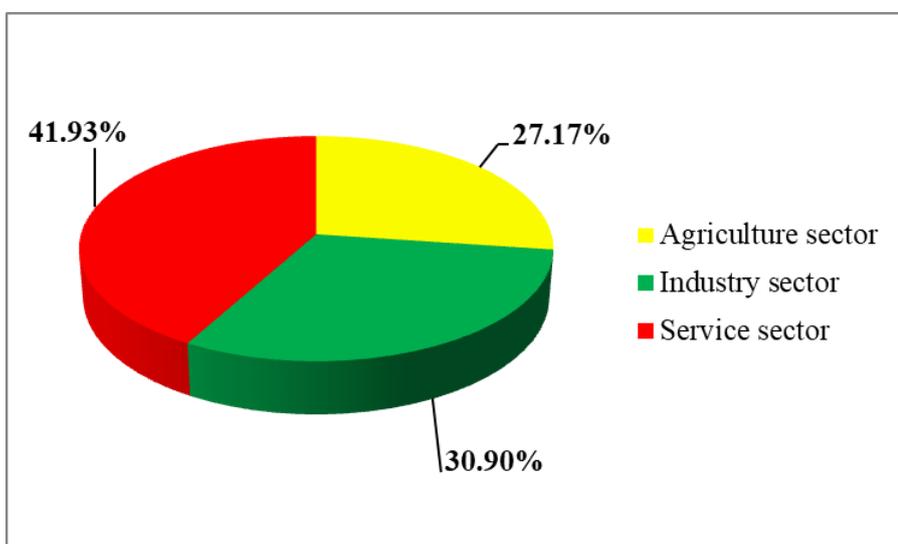
3.4 Overview of Economic Development in Myanmar

Economic development is the development of economic wealth and resources of the nations or regions for the well-being of the individuals. The Government of Myanmar is trying to get economic stability with strong macroeconomic management and good governance on the economic side. A studying on economic development of Myanmar includes GDP, Agriculture sector, Livestock Sector, Forest Sector and Industrial Sector.

3.4.1 GDP in Myanmar

The regional listing of Gross Domestic Product, based on Myanmar's 330 townships, provides more detailed information about each region's contribution to the country's economy. Apart from Yangon's dominant position as Myanmar's main economic center, what is striking about these figures is the familiar division of the country, with a strong economy in the central lowlands and comparatively weak economic performance in the mountain regions. Leading the field is Yangon, Mandalay and Nay Pyi Taw. Per capita GDP allows economic regions of various sizes to be compared with each other. It is also a measure of a region's material prosperity as it shows the total output of a country broken down by the number of inhabitants. (MNPED 2015)

Figure (3.1) Shares of Sectors in Myanmar's GDP (2016-2017)



Source: Planning Department

According to figure (3.1), the individual economic sectors make different contributions to total gross domestic product (GDP) in Myanmar. According to statistics from the Department of Planning, the Agriculture sector (agriculture, livestock and fisheries, forestry) generates 27.17% of GDP, the industry sector (energy, mining, processing and manufacturing, electric power, construction) accounts for 30.90% and service sector (transportation, communications, financial institutions, social and administrative services, rental and other services, trade) contribute 41.93%.

Table (3.2) Gross Domestic Product at Constant Prices by Sector of Activity Years 2010/2011, 2012/2013-2016/2017 (2010-2011 Constant Price)

Sectors	2010/2011	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017
Agriculture sector	14658961.3	14807052.2	15346105.9	15768771.3	16306177.9	16243869.9
Industry Sector	10528139.7	12533395.1	13963076.0	15659182.3	16962757.1	18477950.3
Services Sector	14589663.9	17740214.2	19569976.6	21357097.2	23207290.1	25070723.8
GDP	39776765	45080662	48879159	52785051	56476225	59792544
Growth Rate	-	13.33	8.43	7.99	6.99	5.87

Source: Planning Department

According to table (3.2), the quantity of GDP of Myanmar is increasing from year by year. In 2016-2017, its GDP become significantly increased. But GDP growth rate little decreased in 2016-2017 because Primary sector is not progress in that year. Service and trade sector are progressing now.

3.4.2 Agricultural Sector in Myanmar

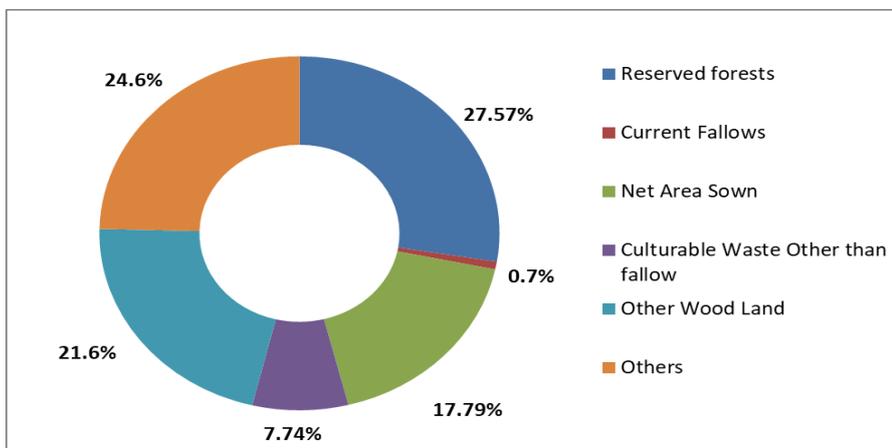
Agricultural Sector is the most important economic pillar of the country and the main basis of employment. The sector contributes a good third of gross domestic product, i.e. 27.17 % of national GDP (2016-17) and 17.5% of total export earnings and employs 61.2% of the labour force. About 26% of the country's entire area is used for agriculture and permanent crops.

(a) Paddy Production

The most important product for domestic consumption is rice. Rice is also Myanmar's main agricultural product and the second most important exportable agricultural commodity after beans and pulses, and is thus a very important income source for farmers. In 2010-2011, the area under paddy accounted for 70% of the total arable area and it contributed about 30% of Myanmar's gross agricultural and 95% of total cereal output. Less than 20% of agricultural land is artificially irrigated; this is primarily located in the Ayeyarwady Delta, near the Bago Yoma dams, in the drier central area (dry zone) and parts of the north of the country. Over 30% of 161,303,131 acres Myanmar land area was arable in 2016-2017. About 17.79% of Agriculture area was net area sown equal to 29,745,799 acres. 12,945,619 acres were devoted to

cultivable waste other than fallow land and 36,106,999 acres to wood land in 2015-2016. (Kraas F, Spohner R, Myint A.A, 2017)

Figure (3.2) Percentage of Area Classified by Type of Land in Myanmar, 2016/2017 (thousand acres)



Source: Department of Agricultural Land Management and Statistics

Over 30% of 161,303,131 acres Myanmar land area was arable in 2016-2017. About 17.79% of Agriculture area was net area sown equal to 29,745,799 acres. 12,945,619 acres were devoted to cultivable waste other than fallow land and 36,106,999 acres to wood land in 2015-2016. According to table 3.2, the biggest area is reserved forest with 27.57% and the least area is others. The net area swan is 17.79% of total area.

Table (3.3) Sown Acreage and Production of Paddy in Myanmar (2011/2012 - 2016/2017)

Particulars	2010/ 2011	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017
Sown (Acre)	19885	17893	17999	17722	17821	17695
Harvested(Acre)	19796	17270	17181	16975	16728	16615
Production (Ton)	32065.1	26216.6	26372.1	26423.3	26210.3	25672.8

Source: Department of Agricultural Land Management and Statistics (2017)

According to table (3.3), the sown acre of paddy was 19885 thousand acres, with a paddy production of 32065.1 thousand tons in 2010-2011. In 2015-2016 sown crops of paddy were equal to 17,695 thousand acres, with a paddy production of

25,673 thousand tons. By comparing 2010-2011 and 2016-2017, the sown acres of paddy were decreased in recent years.

(b) Livestock and Breeding

Animal husbandry is practiced nationwide, with a focus on poultry in the Ayeyarwady Delta and pigs in the mountain regions and in the north of the country. Pasture land is developed in the Sagaing, Bago, Magway, Mandalay and Yangon Regions and Mon State. Dairy farming in the mountain regions of Shan, Kayah and Kachin States has been declining for some years; there are not enough pastures due to deforestation and the expansion of tillage. (Kraas F, Spohner R, Myint A.A, 2017)

Table (3.4) Livestock Breeding in Myanmar, Years 2010/2011, 2012/2013 - 2016/2017

(thousand)

Particulars	2010/ 2011	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017
Cattle	13609	14559	15046	15543	16574	16571
Buffalo	2977	3211	3321	3426	3641	3641
Sheep & Goat	4084	5370	6124	6945	8770	8786
Pig	9416	11600	12725	13932	16541	16524
Fowl	156407	196641	219377	244030	296413	296267
Duck	14051	16941	18442	20128	23662	23636
Turkey, Geese, Muscovy Duck and Bar-rock	1751	2182	2441	2735	3466	3455

Source: 1. Livestock Breeding and Veterinary Department. (2017)

2. Office of the Ministry of Defence. (2017)

Figures of all types of Livestock increased in 2016-2017 as compared to the previous period: Cattle -0.02%, Sheep and Goats +0.18%, Pigs -0.10%, Fowl -7.00% and Duck -0.15%.

(c) Fishery Sector

Fish production in Myanmar is derived from marine capture fish, freshwater capture fish or from aquacultures. Fishery sector is found in almost all the country but are concentrated in the coastal and delta regions, in the Ayeyarwady Delta and in the vicinity of Yangon. Shrimps and prawns are cultivated along the coast, especially in Rakhine State and the Tanintharyi Region. More than double the amount of labour is invested in fish-farming than in rice farming. A significant proportion is recruited on a temporary basis and used for the labor-intensive fish harvest or pond construction and repair. (Kraas F, Spohner R, Myint A.A, 2017)

Table (3.5) Production of Fish and Prawns by Nature of Catch Years 2010/2011, 2012/2013 - 2016/2017, Absolute Values in Thousand Viss

Particulars	2010/ 2011	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017
Fresh Water Fisheries	1220107	1367083	1436162	1508179	1589222	1616143
Marine Fisheries	1327930	1521109	1654843	1747898	1835191	1859487

Source: Department of Fisheries

According to the table (3.5), fresh water fisheries production was equal to 1,616,143 thousand Viss and Marine Fisheries to 1,859,487 thousand Viss. The quantity of production of fish and prawns are increasing year by year.

(d) Forestry Production

Around 42.11% of devoted total land was forest cover area, approximately 110,018 square-miles in 2016-2017. Permanent forest estate increased by 0.49% in 2016-2017. Major forest production was Teak and Hardwood Logs, with a production of 50,786 and 473,802 cubic tons respectively in 2016-2017. Working elephants used in timber extraction increased by 22.5% in 2016-2017 as compared to the previous period. (Statistical Year Book, 2017)

3.4.3 Industrial Sector

Nationalized businesses currently suffer from inadequate modernization, low labour efficiency, undercapitalization, renovation backlogs, poor horizontal

networking and weak sales markets, while private-sector companies are hampered by bureaucratic obstacles, poor basic infrastructure, inadequate access to electricity and financial loans and insufficient preparedness for international competition. Privatization is also hindered by the institutional environment, a poorly trained workforce, limited market-economy thinking and a shortage of managers. Furthermore, there is a lack of standards for waste disposal, hygiene, environmental protection and sustainability awareness.

Geographically, enterprises in the secondary sector (Industrial sector) that contribute to the gross domestic product (GDP) are concentrated on the one hand in some centres of mining and energy generation and on the other in industrial manufacturing sites, the majority of which are located in the central lowlands and the regional cities. In the peripheral parts of the country, GDP is generated mainly by the construction sector. Privately owned factories are concentrated in two separate areas: the Mandalay Region (17.7%) and the Yangon Region (14.0%). With the addition of the Bago, Sagaing and Ayeyarwady Regions, almost 70% of all private-sector industrial companies are located in these five areas. Textile manufacture, metal processing and machinery production are concentrated in the area in and around Mandalay, while Yangon is the center of chemical, paper, plastic, rubber and non-metallic production. (Kraas F, Spohner R, Myint A.A, 2017)

Table (3.6) Public Industrial Enterprises Years 2010/2011, 2012/2013 - 2016/2017

Particulars	2010/ 2011	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017
Food and beverages	80	33	38	38	39	58
Clothing	41	48	38	38	28	39
Construction Materials	109	109	94	93	93	98
Personal Goods	39	14	25	17	16	21
Household goods	22	11	12	18	17	18
Printing and Publishing	34	24	27	27	44	44
Industrial Raw Materials	40	40	40	42	41	39
Mineral and Petroleum	24	20	18	18	19	21
Agricultural equipment	15	15	5	3	13	3
Machinery and Equipment	18	14	14	14	16	16
Transport Vehicles	9	10	10	12	11	8
Workshops and Dockyards	116	135	115	127	116	120
Miscellaneous	92	332	334	342	340	343

Source: Statistical Year Book (2017)

Table (3.6) shows the Public Industrial Enterprises Years 2010-2011, 2012-2013-2016-2017 in Myanmar. By comparing 2010-2011, 2012-2013-2016-2017, Printing and publishing, Workshops and dockyards and Miscellaneous was increased in public industrial enterprises in Myanmar. Other public industrial enterprises were decreased in recent years. This situation shows that the government is transforming the industrial sector from public to private.

Table (3.7) Businesses Owning Various Types of Assets (%), By States and Regions

States and Regions	Land	Buildings	Machinery and Equipment	Vehicles Other	Fixed Assets	Intellectual Property Assets	Total No. of Business
Kachin State	63.9	77.5	67.6	56.4	79.5	2.5	2,103
Kayah State	72.3	73.2	66.8	46.0	86.6	0.1	990
Kayin State	64.5	81.6	57.7	18.1	50.5	-	3,018
Chin State	64.2	67.2	53.5	82.5	85.4	-	1,341
Sagaing Region	67.8	84.3	68.7	17.5	57.1	0.3	11,003
Tanintharyi Region	62.6	65.2	45.4	26.4	63.9	1.8	10,856
Bago Region	78.7	81.5	56.5	18.0	58.0	1.0	9,125
Magway Region	78.4	86.4	60.0	28.8	77.8	0.4	11,032
Mandalay Region	72.3	73.9	55.5	24.6	29.6	0.3	18,811
Mon State	85.4	46.2	68.9	40.5	55.2	-	10,140
Rakhine State	50.2	73.0	64.3	25.1	79.1	-	5,973
Yangon Region	41.2	57.0	64.4	21.6	70.5	0.7	22,699
Shan State	60.2	66.1	56.1	35.2	62.3	1.1	10,855
Ayeyarwady Region	81.0	89.8	62.9	31.0	63.0	0.5	6,399
Nay Pyi Taw	56.0	75.3	67.2	44.7	79.0	4.2	2,586
Total	65.2	70.7	60.3	27.6	60.7	0.7	126,928

Source: Myanmar Business Survey (2015)

According to table (3.7), Myanmar Business Survey (2015) covered the distribution 126,928 businesses which are registered across the economic sectors. The largest number of businesses shows the Manufacturing sector was 40%, Resale/Trade sector was 33% and Service sector was 27%. Rangoon Region has the largest number of businesses and the smallest number of businesses has been by Kayah State.

3.4.4 Service Sector

The service sector plays the most important economic role in Myanmar, and includes transportation, communication, finance, social and management and rents. The service sector's contribution to GDP rose from 33.0% in 2000/01 to 36.7% in 2010/11 and 37.7% in 2014/15. (MNPED 2015: 203).

(a) Transportation Sector

The development of transportation and communication is the most important to develop across the country. So, the government is more implementing the number of construction and provision as well as to improve the quality of infrastructure.

(1) Roads, Railroads, Airports, Ports

National development was given a boost by a large number of new infrastructural projects which extended into previously more inaccessible peripheral regions. In the process, the road network was extended from 27,840 km (1995) to 40,575 km (2015); more importantly, however, major improvements were achieved in the quality of road building. Road network expansion focused mainly on the Ayeyarwady, Magway, Mandalay and Sagaing Regions and on Chin, Kachin, Rakhine and Shan States. The backbone of Myanmar's transport system is the 587 km Yangon-Mandalay Expressway, constructed from 2005 onwards and opened in late 2010, which connects its three major political and economic centres, i.e. Nay Pyi Taw, Yangon and Mandalay. Currently, road transportation, as compared to other modes such as rail and inland waterways, is the most important public service for logistics; this applies to both passenger and cargo transport. The rail network was extended from 3,977 km (1995) to 6,107 km (2015), and the number of railway stations rose from 612 to 960.

Although the provision of state aviation services decreased between 1995 and 2015 measured in terms of the number of flights (down from 5,090 to 4,474), distance flown (down from 4,501,000 to 3,885,000 km) and number of aircraft in service (down from 13 to just 10) – the volume of private civil aviation increased substantially, with a sharp rise from 2011 onwards: the number of flights per year increased almost tenfold from 2,360 (1995) to 21,361 (2015), and from just two aircraft in 1995, there were 64 in service in 2015. Alongside the major ports of Yangon, Sittwe, Thandwe, Patheingyi, Myeik and Kawthaung and the new major terminal at Thilawa, Myanmar has a number of smaller harbours. Deep-sea ports are currently planned in Kyaukpyu, Mawlamyine and Dawai. (Kraas F, Spohner R, Myint A.A, 2017)

Table (3.8) Earnings from Principal Means of Public Transport Years 2010/2011, 2012/2013-2016/2017

(Kyat Millions)

Particulars	2010/ 2011	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017
Railways	33164.63	61681.07	62208.19	61810.70	70280.85	64396.59
Airways	15336.55	40721.62	39538.04	50869.45	66034.06	114900.70
Inland Waterways	7740.06	12265.61	10605.40	9534.30	8341.84	6258.89
Road	7488.13	8251.75	7593.62	11521.05	9617.50	7584.12

Source: Statistical Year Book (2017)

According to table (3.8), airway is the most quantity of earnings and road is the second largest earnings in public transportation.

(b) Energy and Electrical Power Sector

Myanmar's energy sector continues to develop. The installed energy capacities available have increased from 980 MW (2000) to 3,735 MW (2013); of these 2,780 MW (66.9%) are produced using hydropower, 996 MW (29.5%) from natural gas and 120 MW (3.2%) from coal. However, despite expanding production in the natural gas sector, mostly based on foreign investment, only a very small proportion is used for domestic energy supplies due to existing export obligations. From 2000 to 2013 electricity consumption in Myanmar increased threefold to 10,112 GWh, but the country remains nonetheless among those with the lowest per-capita energy consumption in the world: 165 kWh.

The areas with the best energy supplies are Nay Pyi Taw, Yangon and Mandalay, followed by a few regional centers. However, in the majority of the country less than half and often only a quarter of households have access to electricity. Energy supplies in Chin State are not quite as poor, a situation that can be attributed to external support provided by charitable organizations. Thirty hydropower plants are currently in existence, 29 of them with a capacity of less than 10 MW; 17 are multipurpose dams that store water for irrigation as well as for electricity production and also help control flooding. Three of the 15 largest hydropower plants

were erected before 2000. These include the Baluchaung-2-Project, built in 1960 and financed by post-war Japanese reparations, which supplies electricity primarily to Yangon and Mandalay. Other large-scale projects, including the Kinda Multipurpose Dam and Yeywa, supply Mandalay and Nay Pyi Taw. (Kraas F, Spohner R, Myint A.A, 2017)

(c) Telecommunication

The telecommunications sector was restructured in 2010. Nonetheless, until 2014, Myanmar Post and Telecommunication (MPT) was the only nationwide provider of mobile services, mainly serving Yangon, Mandalay and Nay Pyi Taw. With the subsequent award of nationwide licenses, first to two local providers (MPT and MEC) and then to two foreign operators (Telenor und Ooredoo), the number of mobile phone and internet users has rapidly increased. (Kraas F, Spohner R, Myint A.A, 2017)

(d) Banking Sector

Since 2011, policymakers have enacted a series of reforms meant to develop the financial sector as part of a wider agenda for accelerating economic growth. Recent efforts to develop the banking sector have included both policy reforms and investments in the payment infrastructure. On the legislative and regulatory front, the government has enacted several new laws, including the Foreign Exchange Management Law in 2012, the Central Bank of Myanmar Law in 2013, and the Financial Institutions Law in 2016. These laws ended Myanmar's system of dual exchange rates, established central bank independence, and set strong prudential standards for the banking sector.

Table (3.9) Financial Institutions in Myanmar

Sr. No	Particulars	Quantity	Remark
1.	Government Banks (State-Owned)	4	
2.	Government Banks (Municipality-Owned)	3	
3.	Semi-Private Banks Privately Owned Banks	7	
4.	Privately Owned Banks	14	
5.	Foreign Bank Branches	13	
6.	Finance Companies	19	
7.	Foreign Bank Representative Offices	48	

Source: Central Bank of Myanmar (2017)

According to table (3.9), there are 28 domestic banks operating in Myanmar. This number includes four state-owned banks, three banks owned by municipal governments, 10 semi-private banks that trade privately but are partially owned by, or closely associated with, government agencies, and 14 privately owned banks. There are 14 private owned banks, 19 finance companies and 48 foreign bank representative offices in Myanmar.

3.5 Overview of Social Development in Myanmar

Social development means investing in people. It requires the removal of barriers so that all citizens can journey toward their families and community in a meaningful way. Healthy and well educated persons will get good training and successful in their workplace. Their families will also do well and the whole of society will benefit. A studying on overview of social development of Myanmar includes education sector and health sector.

3.5.1 Education Sector

Education helps children to fulfill their potential and is critical to all aspects of socio-economic development. Today there is a system of national mandatory education under the 30-Year Long- Term Education Development Plan, which was implemented in 2001/02. The system requires pupils aged between six and sixteen to complete eleven years of schooling, consisting of five years of primary schooling (one year of kindergarten followed by four years of elementary school), four years of middle school and two years of high school leading to a school-leaving examination to qualify for university attendance from age 16 upward.

(a) Basic Education

Table (3.10) Schools, Teachers and Students, Academic Years 2012/2013 - 2016/2017

Years	Schools			Teachers			Students		
	Primary	Middle	High	Primary	Middle	High	Primary	Middle	High
2012/ 2013	36,359	2,245	1,343	184,743	67,883	27,200	5,139,632	2,370,861	669,056
2013/ 2014	37,579	2,267	1,549	187,327	69,212	28,817	5,166,317	2,542,830	730,866
2014/ 2015	38,651	2,511	1,779	197,124	80,660	33,924	5,121,203	2,687,801	792,670
2015/ 2016	38,017	2,615	1,924	234,605	97,455	39,051	5,071,458	2,730,879	840,706
2016/ 2017	38,197	2,635	1,972	226,357	99,437	39,478	5,139,305	2,843,363	925,410

Source: Ministry of Education

According to table (3.10), the quantity of high school, middle school and primary school were increased in 2016-2017, by comparing with 2012-2013. That pointed to the development of Education sector in Myanmar. 226,357 primary school teachers, 99,437 middle school teachers and 39,478 high school teachers were appointed in 2016-2017 academic year. The quantity of teachers was increased in 2016-2017, by comparing with 2012-2013. The quantity of primary school students was not significantly increased in 2016-2017, by comparing with 2012-2013. But the

quantities of middle and high school students were quite increased in 2016-2017 academic year, by comparing with 2012-2013. In 2016-2017, for every 100 young students of the same age-group about 102 went in Primary School, 70 in Middle and 47 in High school. Pupil-teacher ratio at the primary level was 23 and secondary level was 27 in 2016-2017.

Monastic education plays a major role in providing schooling, mainly for children from underprivileged social groups and in remote and sparsely populated regions. Officially 12,111 novices and 5,571 nuns together with 115,658 boys and 85,767 girls were being taught at primary school level in the country's monastic schools; the number of primary schools was put at 972, of which 208 the majority were in the Mandalay Region, 134 in the Yangon Region and 121 in the Ayeyarwady Region. Middle schools – a total of 557 nationwide – were attended by 10,458 novices, 5,844 nuns, 29,879 boys and 23,454 girls. Myanmar also has two monastic high schools, both in the Mandalay Region, attended by 3,455 boys and 2,025 girls. Monastic education is needed because although attending a public school is free of charge in principle, school uniforms, books and other materials still have to be purchased. There are numerous private schools, especially in the cities; the number is estimated at about 100. The literacy rate is very high overall for a developing country, being 89.5% for the population on average (92.6% of men, 86.9% of women).

(b) Higher Education

The number of higher education institutions (i.e. universities, degree colleges and colleges) in the country has risen steadily from 32 (1988) to the most 171. New colleges and universities have been opened even in peripheral parts of the country (for example most recently in Hakha/Chin State). Both historically and in terms of current leading roles in research and teaching, the University of Yangon – the country's top university – and the University of Mandalay are the peak educational institutions. In all, 653,475 students are registered at universities, degree colleges and colleges in Myanmar. The University of Distance Education, with 306,987 enrolments, is the largest institution; it was formed from precursor institutions in 1992 and has two hubs, one for Lower Myanmar in Yangon (160,889 students in 2015), the other for Upper Myanmar in Mandalay (160,718 students in 2015).

3.5.2 Health Sector

Fundamental improvement in health care services was not achieved until after 2011. Myanmar currently spends between just 2.4% (2011) and 5.2% (2017) of GDP on health. Life expectancy has risen from 55.0 years (1980; 56.5 for women and 53.7 for men) to 61.9 years (2000; 63.3 for women, 60.5 for men). According to the 2014 census, the crude birth rate was 18.9 per 1,000 populations, with annual population growth of 0.89% in the period between 2003 and 2014. The total fertility rate has fallen from 6.1 (1965) to 2.3 (2015); in 2015 regional differences ranged from 1.7 in Yangon Region and 1.9 in Mandalay Region, 2.1 in Magway Region and 2.3 in Sagaing Region to 3.4 in Kayin State and 4.4 in Chin State. Mortality rates – especially infant and child mortality – are declining (infant mortality rate: 1990 – 47.0 per 1,000 live births, 2005 – 45.1).

Non-communicable diseases – principally cardiovascular diseases, malignant neoplasms and respiratory diseases are the cause of around 40% of deaths; this percentage has been rising for some years. Among infectious and parasitic diseases, tuberculosis, diarrhoeal diseases and HIV/AIDS are the main causes of death. The top five causes of disability-adjusted life years are lower respiratory tract infections, tuberculosis, diarrhoeal diseases, HIV/ AIDS and heart stroke, road injury and cirrhosis of the liver is also increasing. The top five risk factors are dietary risks, tobacco smoking, household air pollution from solid fuels, high blood pressure and high blood sugar.

Table (3.11) Hospital and Healthcare Center, Years 2010/2011, 2012/2013-2016/2017

Particular	2010/ 2011	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017
Government Hospital	898	945	969	975	1,054	1,115
Healthcare Center						
(1) Rural	1,558	1,635	1,684	1,696	1,778	1,778
(2) Primary and Secondary	86	87	87	88	90	90
(3) Maternity and Child Health	348	348	348	348	348	348

Source: Department of Public Health (2017)

According to table (3.11), in 2016-2017, the number of Government Hospitals increased by 24.16% over 2010-2011. In 2016-2017, the quantity of healthcare centers increased by 14% over 2010-2011.

Table (3.12) Health Personnel, Years 2010/2011, 2012/2013 - 2016/2017

Particular	2010/ 2011	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017
Doctor	26,435	29,832	31,542	32,861	8,936	10,479
Dental Surgeon	2,562	3,011	3,219	3,413	498	760
Health Assistant	1,883	2,013	2,026	2,074	2,156	2,156
Nurse	25,644	28,254	29,532	32,609	21,598	20,881
Midwife	19,556	20,617	21,435	22,258	13,811	13,651
Lady Health Visitor	3,344	3,397	3,467	3,578	2,329	1,897

Sources: 1. Department of Public Health (2017)

2. Department of Medical Services (2017)

Table (3.12) shows the health personnel in Myanmar with years 2010/2011, 2012/2013 - 2016/2017. Among the Medical and Health Personal, the number of Doctors showed a less by 43.61%, Dental Surgeons by 52.32%, Nurses by 5.59% in 2016-2017. The number of LHV reduced from (2,329) to (1,897) because they have been promoted to health Assistant and to Township Health Nurse or they resign, retire have been removed. The number of midwife reduced from (13,811) to (13,651) because they have been promoted to Nurse and lady Health Visitor or they resign, retire have been removed.

For the country as a whole, there are 61 doctors, 100 nurses and 7 midwives within the public health care system per 100,000 populations, which places Myanmar below the ASEAN average. Facilities are distributed virtually countrywide, but the majority – including specialist clinics and by far the highest doctor-hospital ratios – are to be found in Yangon, Nay Pyi Taw, Mandalay and a few regional cities. The greatest challenge in improving the health system is that of reducing health inequities in relation to the availability of and access to health services across the country. (Kraas F, Spohner R, Myint A.A, 2017)

CHAPTER IV

SOIO-ECONOMIC DEVELOPMENT OF HLEGU TOWNSHIP

4.1 Profile of Hlegu Township

Hlegu Township is located in 29 miles for from Eastern North of Yangon division. One of the townships includes in Northern District of Yangon. It is a rural township within Yangon Region. But Hlegu Township has fortunate geographical position and well development opportunities.

4.1.1 Background History

Like a crocodile laying its tail into Bago River, Hlegu Township having a narrow width of south and north but strengthening east and west, is situated lying on the range of Bago. Originated as a creek of edge of the range of Bago, the big creek flowing together with Bago River is like a backbone of crocodile. Such a big creek, from the fairy tale till now from the fairy tale of Nga Moe Yeik crocodile, while makes endless talk till now from time to time. Learning this Nga Moe Yeik creek, people built and dwelt between Oktha city and Okkalapa, Dagon city. On marching by land, this area was to be crossed. The main road, which king Tapinshwehtee entered, now Inntaing village, the lane from Setsu village and Phayagyar to Meekhokankwin Takontaing village tract was known as Tapinshwehtee Lane still.

Moat and damaged old city are still being found and existed in the village of Okapho, Sarpho, Mittar and Myogikone in the Waryaykone village tract, Minkone village tract, Myolaykone and Waryonesunn village tract. According to Hmawby Saya, it is known that old city of Phaunglin was replaced by Myogyikone likewise Mau village itself was separated stone pillar of province set up by the time of King Ahlaung Phaya has been still laid near the Mau village. The present Tanmagyi street is a main road in connecting both Myogyikone and two Ywama villages. First it was called as Hlegu Seik and later come to know as Hlegu Myo. The current Ywama ward is the place where Hlegu Myo comes into being.

The British seized Yangon and all of Lower Burma in the Second Anglo-Burmese War of 1852. Yangon was the capital of British Burma and Hanthawaddy Province, which covered today's Yangon and Bago Regions. Hlegu was a town within Hanthawaddy Province. After Myanmar gained independence from the United Kingdom in 1948, the Hanthawaddy Province was renamed Bago Division. In 1964, Yangon Division was split from Bago Division. In 1974, Hlegu Township was transferred from Bago Division to Yangon Division.

4.1.2 Location and Area

It is situated between North Latitude 16° 59' and 17° 19', and between East longitude 96° 13' and 96° 25'. It is 576.92 square miles wide. It is about 13.5 miles from East West and 35 miles from North and South. The Hlegu Township consists of 5 wards, 52 village tract and 168 villages.

The township is bounded by Bago Township and Kawa Township in the East, Hmawbi Township and Taikgyi Township in the West, Dagon Myothit Township and Thanlyin Township in the South and Bago Yoma in the North. The map of Hlegu Township can be seen in **appendix**. The Northwest and the Northern region of Hlegu Township is located in Bago Yoma vanish stationary position and it is situated in the hills low plains region.

4.1.3 Topography, Climate and Environment

Types of soil found widespread in Hlegu Township are Meadow soil, Meadow-alluvial soils, swampy meadow gluey soil, and inducing forest soil. This type of soil covers the ridges and spurs of Bago Yoma in the West-north. Meadow soil occupies the central lowland region. Meadow gluey soil is the most suitable for cultivation of paddy at a commercial scale.

Nearly, 46.56 percent of Hlegu Township is covered by surface water. The Climate of Hlegu Township is warm and wet. The plateau in the west is covered with forest. The township receive monsoon for four months from June to September. The annual average rainfall is between 90 inches and 120 inches. The minimum temperature is 20 HC and maximum temperature is 40 HC. The rainfall ranges from 98.61 inches to 115.31 inches during year 2009 to 2018. Paddy cultivation is done only in those areas where minimum rainfall is 45 inches. Although the regions are

having average annual rainfall between 69-118 inches are the most suitable. The optimum temperature for paddy cultivation is between 25 HC and 35 HC. So, the rainfall and temperature of Hlegu Township is most suitable for paddy cultivation.

Table (4.1) Rainfalls and Temperatures

Sr. No	Year	Rainfall		Temperature	
		Raining Days	Total Rainfall	Hot Season (HC)	Cold Season (HC)
				Maximum	Minimum
1	2009	123	98.3	34	23
2	2010	132	94.04	36	20
3	2011	144	119.1	35	23
4	2012	125	111.28	34	21
5	2013	125	115.31	34	20
6	2014	112	110.13	35	20
7	2015	112	111.53	38	25
8	2016	111	98.61	35	25
9	2017	112	103.8	34	20
10	2018	115	95.41	40	20

Source: Department of Agriculture, Hlegu Township (2018).

According to the table (4.1), the rain fall condition of Hlegu Township in 2009 is 123 raining days and 98.3 average annual inches. In 2010 and 2011, the rainfall conditions significantly increased. By comparing rainfall condition of 2009 and 2018, it was observed that the quantity of raining days decreased from 123 days to 115 days. The maximum temperature of Hlegu Township is 40 HC in 2018 and more than other years.

4.1.4 Rivers and Water Resources

Hlegu Township has rather streams and creeks and those commonly flow from north to south. Nga Moe Yeik creek started source form Bago Yoma and downs in to the Bago River. There are some brooks including Paung Lin and Ma Hu Yar into Nag Moe Yeik creek. Other creeks are La Guan Pyin, Ka Li Htaw, Ka Yain and Bar Lar

and they flow from north to south in Hlegu Township. Nga Moe Yeik Dam was built in 1995, La Gyun Pyin Dam in 2001, Ka Li Htaw Dam in 2003 and Ma Hu Yar Dam and Paung Lin Dam in 2004 in Hlegu Township. Rivers water pumping projects are eight and water gates are seventeen in Hlegu Township. Mostly Water resources are fresh water in Hlegu Township and it can be used in agriculture and household water.

4.1.5 Ethnic Groups and Religions

The structure of population by Races in Hlegu Township is Kachin, Kayah, Kayin, Chin, Bama, Mon, Rakine and Shan. The majority of people are Bama which is the highest in percentage, and Kayah is the least in percentage. Foreign immigrants such as Chinese, India and other also reside in township.

There are Buddhists, Christians, Hindus, Islam and Others. The number of Buddhist is the largest. The number of Christian is second largest. Islamic is the third most and there are few people whose religion is Hinduism. The Number of Religion Idols in Hlegu Township are 347 Pagodas and 428 Monasteries in Hlegu Township. And there are 19 Churches, 5 Mosques, 4 Hindu temples and 2 Chinese Temples.

4.1.6 Population of Hlegu Township

(a) Population Status

Population structure having great subjective significance in the fields of sociology, demography and economics are gaining increasing objective significance with the growing emphasis on the regional planning and regional approach to the population policy and utilization of human resources. Moreover, population is the major source of poverty in a developing country. The population of Hlegu Township from 2009-2010 to 2017-2018 is shown the following table according to the age group.

Table (4.2) Population by Age Group

Sr. No	Gender	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014 / 2015	2015/ 2016	2016/ 2017	2017/ 2018
1	Under 15 years old	58619	56275	57902	64970	68523	78135	73832	77669	84245
2	15-59 years old	138554	136569	135382	153145	155192	172191	161337	163660	165292
3	Above 60 years old	15987	15659	14996	13923	15043	20415	38284	36061	32529
4	Population Density	142.7	139.5	139.4	155.3	159.8	181.2	183.0	185.6	188.8

Source: Department of Immigration and Manpower, Hlegu Township (2018)

Table (4.3) Population of Hlegu Township

Location	Gender	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014 / 2015	2015/ 2016	2016/ 2017	2017/ 2018
Urban	Population	31547	31672	32372	34110	35217	40070	40417	41054	42349
	Male	15728	15677	16024	16884	17432	19845	20044	20362	20033
	Female	15819	15995	16348	17226	17785	20225	20373	20692	22316
Rural	Population	181613	186751	189351	197928	203541	230671	233036	236336	239717
	Male	90545	92442	93729	97975	100753	114242	115569	117214	119750
	Female	91068	94309	95622	99953	102788	116429	117467	119122	119967
Total	Population	213160	218423	221723	232038	238758	270741	273453	277390	282066
	Male	106273	108119	109753	114859	118185	134087	135613	137576	139783
	Female	106887	110304	111970	117179	120573	136654	137840	139814	142283
Population Density		142.7	146.2	148.4	155.3	159.8	181.2	183.0	185.6	188.8

Source: Department of Immigration and Manpower, Hlegu Township (2018)

According to the table (4.2), the population between 15 and 60 is the most and Under 15 is the second most. The population upper 60 is the least in Hlegu Township. Much quantity of population between the age 15 and 60 which are the main workforce for township is the good prospect of township economy. In study period, population by age group is increasing year by year because of the birth rate of township is decreasing but migration rate of township is increasing. According to 2014 census data, north Yangon Districts (also Hlegu Township) is the most migration rate. Increased internal migration rate of township is slowly the progress of township development. The dependency ratio is the number of dependents in a population divided by the number of working age people. Working age is from 15 to 64. The ratio describes how much pressure an economy faces in supporting its non-productive population. The dependency ratio of Hlegu Township is 41.39% in 2017-2018.

According to the table 4.3, the total population of Hlegu Township was 213160 in 2009-2010, and then 282066 in 2017-2018. The population increased 32.3%. In 2017-2018, the majority of the people in the township live in rural areas with only 15% living in urban areas. The percentage of male population is about 49.5% and female is 50.5% in 2017-2018. The percentage of gender population is very important for township economic growth. Major economic activities of township are affected by the imbalance of gender population. Major economy of township is agriculture. So, male are more suitable for agricultural work than female. Hlegu Township has little more women than men. This condition shows that the income growth of township faces rising challenges and needs to create job opportunities for female labour. Population density is defined as how many people live in a square mile area. The population density increased from 142.1 (per Km²) in 2009-2010 to 188.8 (per Km²) in 2017-2018.

(a) Household Condition

According to the township report of General administration department, there are total of 7664 houses buildings and 8502 households in 5 wards of urban area and there are 39405 houses buildings and 41638 households in total of 52 village tracks in rural areas. Therefore there are total of 47069 houses buildings, and total of 50140 households in both of 5 wards of urban and 52 village tracts of rural area in Hlegu Township. Household size is 4.3 persons which is consistent with both the Union and Yangon Region household sizes. The poverty rate of township is 16.2% in 2017-2018.

It is necessary to know the urban and rural population in formulating a development plan. Government can supply the necessary services and facilities based on the population. The majority of the households in Hlegu Township are living in wooden houses 46.6% followed by households in bamboo houses 29.1%. Some 48.7 per cent of urban households and 46.2 per cent of rural households live in wooden houses.

4.1.7 Working Condition

Skills development of workforce is essential for equitable and sustainable growth and creating job opportunities for working population that increasing the role of labor in development. According to the population data of 2017-2018, there are 165292 who are aged between 15 and 59 years. The total population of 2017-2018 was about 282066, the labor power was 58.6%. Actual workforce is 154264 including daily wages workers and laborers. Thus, it can be estimated to have 11028 unemployed and 4% of total population. Government staffs, farmers, livestock workers, service workers, factory worker, daily paid worker and abroad workers are included in employees.

Types of job describe the distribution of its working population among different economic activities which are most significant aspect of an economy. It is one of the good indicators of social and economic inequality, because to a large extent it determines the level of living.

(a) Dispersion of Workforce

Most of the workforce is found in agricultural and livestock sector with 49% and only 32% is found in odd job, 3.04% in government sectors, 2.41% in service sector and 1.16% in industries.

(b) Job opportunity

One of the major economies of Hlegu Township is agriculture and many employees work in this sector. There are two livestock zones and it located in Nyaung Hna Pin area. It created the job opportunity for the neighboring villagers. Hlegu Township will be implemented three new development projects in next year. These are Korea-Myanmar Industrial Complex project, Eco Green City project and Hlegu Industrial Garden project. These projects can create many job opportunities for local

people. Other private factories are establishing in Township that create job opportunities for Hlegu such as garment factories, shoe factories and other factories.

4.2 Background of Yangon Region

Yangon Region is the economic centre of Myanmar, located in the southern part of the country and home to 7.4 million people. Yangon Region accounted for 24% of the country's Gross Domestic Product (GDP) in 2017. It is the international gateway and commercial hub of Myanmar and the key to unlocking the nation's untapped potential. The City of Yangon is located in the south of the Yangon Region. It has the potential to establish itself as a vital economic and geographic entity both within Myanmar and beyond. The Union Government and the Yangon Region Government (YRG) recognize that infrastructure plays a critical role in the development of their economies and are therefore focused on developing needed infrastructure to support growth.

The Yangon Region comprises 45 townships, and spans 10,277 square kilometers, while Yangon City comprises 33 townships within the Yangon Region. The population of the Yangon Region is approaching 7.4 million. Yangon Region is a trade and logistics hub for the country. It is home to the country's main air and sea ports accounting for close to 90% of the country's trade and linked by road and rail networks to the rest the country. Yangon City serves as the country's financial center. It is the location of the headquarters of all of the country's major banks and financial institutions as well as the newly established stock exchange.

4.2.1 Economic Vision of Yangon Region

YRG's economic vision is focused on the following four primary areas to drive sustainable economic growth while creating a vibrant, liveable city where talents are attracted to: industrial development, trade and logistics, urban public transport and sustainable urban development.

(a) Industrial Development

Industrial development to create employment for our young work force and to uplift the living standards of our citizens is the key priority of this government. YRG is planning to upgrade its 29 existing industrial zones and further develop another 11 new industrial parks across the Yangon Region.

(b) Trade and Logistics

Trade and logistics are core to the development of the Yangon Region and key enablers for the growth of its manufacturing and industrial base. Yangon Region is ideally placed to act as the primary logistics node connecting the Greater Mekong region to the Indian Ocean. Further, 90% of all import and export traffic to and from the Myanmar hinterland travels through Yangon.

(c) Urban Public Transport

As Yangon Region's population and economy grows, Urban Transportation Plan continues to develop. Yangon region have developed a sustainable, integrated public transport system plan that will be affordable and allow the easy transportation of goods and people to and from regional economic centres. This comprehensive integrated public transport master plan will deliver a public transport system for Yangon's population and businesses with easier, more efficient and cheaper modes of transport.

(d) Sustainable Urban Development

Sustainable urban development remains critical to the Yangon Region as more people migrate to Yangon City and the Region in search of economic enhancement to their lives through better healthcare, housing, education and job prospects. Our citizens deserve a vibrant working city and YRG is intent on providing this.

YRG is implementing to align all of its policies and development plans with the Myanmar Sustainable Development Plan (MSDP). As Yangon strives to become more connected to the global and regional economies, it aims to improve the quality of life of its people, offering better services, improved job prospects and sustainable infrastructure to grow its economy.

4.3 Development of Economic Sector in Hlegu Township

Hlegu currently has a primarily agricultural economy, with a large proportion of the population involved in rice farming. Some part of the workforce depends on the livestock sector. Other earning transactions are horticulture (garden cultivation) and trade with regional products. As industrial business, private factories have been increased year by year in the region. A studying on economic development of Hlegu

Township includes GDP in township, Agriculture sector, Livestock Sector, Forest Sector and Industrial Sector.

4.3.1 GDP in Hlegu Township

GDP means the value of final goods and services produced in an economy. It also measures the quantitative changes of economic growth and describes the condition of each economic sector. As the country's GDP is increasing, it is more productive which leads to more people being employed. This increases the wealth of the country and its population. GDP and the rate of growth of GDP of Hlegu Township can be studied from Table 4.4.

Table (4.4) Real Gross Domestic Product in Hlegu Township (2009-2018)

(Kyat Million)

Sr. No	Year	Production	Percentage (%)	Service	Percentage (%)	Trade	Percentage (%)	GDP	Percentage (%)	GDP Growth rate
1	2009-2010	5318912.66	58.7	1562147.43	17.24	2180119.91	24.06	90611.80	100	-
2	2010-2011	5737555.19	58.7	1700740.38	17.4	2336074.43	23.90	97743.70	100	7.87
3	2011-2012	6447491.68	59	1846823.89	16.9	2633636.43	24.10	109279.52	100	11.80
4	2012-2013	10110903.6	60	2881607.53	17.1	3858994.87	22.90	168515.06	100	54.21
5	2013-2014	10049060.26	58.6	3000999.23	17.5	4098507.51	23.90	171485.67	100	1.76
6	2014-2015	12016394.3	59	3523451.21	17.3	4826924.49	23.70	203667.70	100	18.77
7	2015-2016	12548236.11	59.1	3821797.80	18	4862176.09	22.90	212322.10	100	4.25
8	2016-2017	13069401	58	4033487.55	17.9	5430561.45	24.10	225334.50	100	6.13
9	2017-2018	14399735.04	58.7	4499917.20	17.24	6099887.76	24.06	249995.40	100	10.94

Source: Planning Department of Hlegu Township (2018)

According Table (4.4), the rate of GDP of Hlegu Township is increasing from year by year. In 2017-2018, its GDP become significantly increased. So, GDP growth rate was increasing rapidly from 11.80% in 2011-2012 to 54.21% in 2012-2013 and from 1.76% in 2013-2014 to 18.77% in 2014-2015. In 2012-2013, GDP growth rate quite increased because industrial and service sectors well improved in that year. Similarly, GDP growth rate quite increased in 2014-2015 because service sector very progressed in that year. As production sector, agricultural sector the major economy of Hlegu Township is seeing downward condition but other sectors are improving such as fishery, energy, electrical power and construction in recent year. Service and trade sector are progressing now because Hlegu Township is situating in good transportation and fitting suitable infrastructures. Thus, The GDP growth rate of Hlegu Township is little increasing in each sector year by year.

(a) Income Per Capita

Table (4.5) Income per Capita in Hlegu Township

Sr. No	Year	Population	Income per capita (MMK)
1	2009-2010	213160	508511
2	2010-2011	218423	516128
3	2011-2012	221723	530436
4	2012-2013	232038	565788
5	2013-2014	238758	622652
6	2014-2015	270741	751980
7	2015-2016	273453	878909
8	2016-2017	277390	966166
9	2017-2018	282066	1053423

Source: Department of General Administration, Hlegu Township (2018)

According to Department of General Administration recorded data, the Income Per Capita of Hlegu Township is MMK 508511 in 2009-2010. Income Per Capita of Hlegu Township is increasing year by year. In 2017-2018, the Income Per Capita of Hlegu Township is MMK 1053423.

4.3.2 Agricultural Sector in Hlegu Township

(a) Land Utilization in Hlegu Township

Land use pattern of Hlegu Township can be seen from the Table (4.6).

Table (4.6) Land Utilization in Hlegu Township (2009-2010 to 2017-2018)

(Acre)

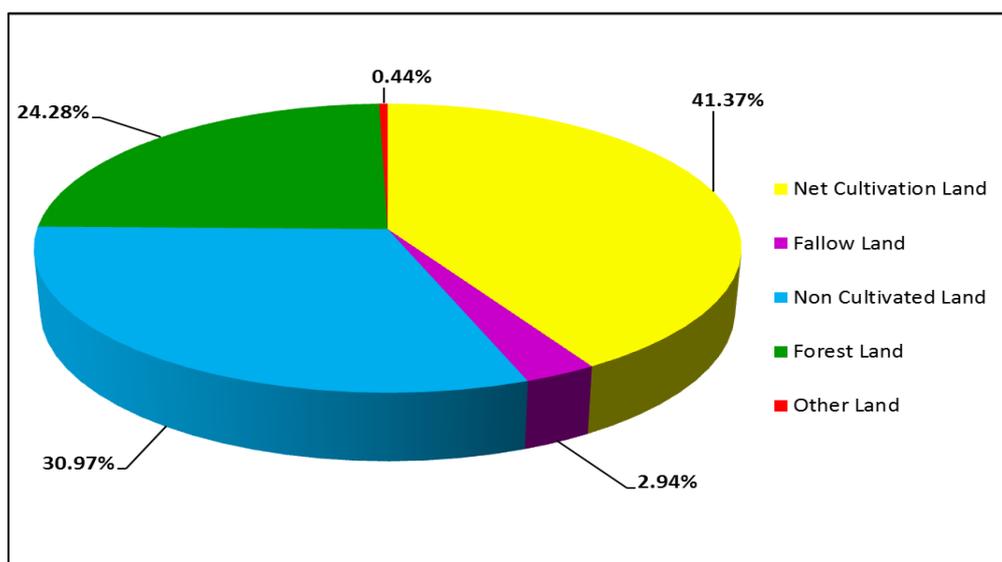
Sr. No.	Year	Net Cultivable Land		Fallow Land		Non Cultivated Land		Forest Land		Other land		Total Area of Township
		Area	%	Area	%	Area	%	Area	%	Area	%	
1	2009-2010	154723	41.87	12363	3.35	109213	29.56	91623	24.80	1595	0.43	369517
2	2010-2011	157780	42.70	8581	2.32	111845	30.27	89716	24.28	1595	0.43	369517
3	2011-2012	158764	42.97	7573	2.05	111845	30.27	89716	24.28	1619	0.44	369517
4	2012- 2013	160647	43.47	5710	1.55	111825	30.26	89716	24.28	1619	0.44	369517
5	2013-2014	160647	43.47	5710	1.55	111825	30.26	89716	24.28	1619	0.44	369517
6	2014- 2015	160575	43.46	5710	1.55	111897	30.28	89716	24.28	1619	0.44	369517
7	2015- 2016	157975	42.79	5935	1.61	114033	30.88	89666	24.28	1619	0.44	369228
8	2016- 2017	150940	40.88	12677	3.43	114326	30.96	89666	24.28	1619	0.44	369228
9	2017- 2018	152740	41.37	10870	2.94	114333	30.97	89666	24.28	1619	0.44	369228

Source: Land Record Department of Hlegu Township (2018)

According to table (4.6), the total land area of Hlegu Township was 369517 acres in 2009-2010. During 2009-2010 and 2014-2015, the total area of Township is not change. In 2015-2016, the total area of Hlegu decreased to 369228 acres because the measurement system of land area is more specification.

The form of land utilization in Hlegu Township can be expressed from Figure (4.1).

Figure (4.1) The form of Land Utilization in Hlegu Township (2017-2018)



Source: Land Record Department of Hlegu Township (2018)

According to the Figure (4.1), the total land area of Hlegu Township is 369228 acres. In 2017-2018, the net cultivatable land area was 152740 and that was 41.37% of total area. Forest areas of Township are 89666 acres comprising 24.28% of total area. In recent years, timber extraction from Hlegu Township has been halted.

(b) The Situation of Paddy Cultivation

The most important product for domestic consumption is rice. Rice is the country's primary agricultural product, which accounts for nearly 43% of the total agricultural production value. Paddy cultivation is the major economy of Hlegu Township. Hlegu included one of the good yields of rice productivity of townships in Myanmar. In 2017-2018, monsoon paddy was cultivated about 83629 acres in Hlegu Township. Types of paddy are Sin Thwe Latt (207 acres), Ma Naw Thukha (4092 acres), Thee Htet Yin (4691 acres), Yadana Toe (14426 acres), Shwe War Tun (105

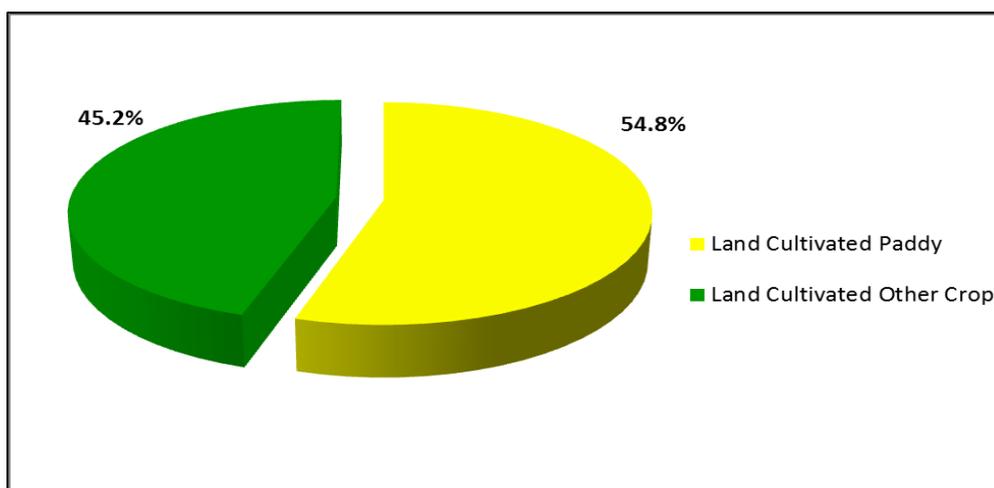
acres) and Sin Thu Kha (23839 acres). Aye Yar Min (5442 acres) which is the advanced species and Nga Kywe (22990 acres), Nga Sein (360 acres) and Kyaut Nyin (7477 acres) which are regional species were also cultivated in Hlegu Township. Sin Thu Kha variety is the most cultivated in Hlegu Township because it is resistant to disease, good market demand and farmers' preference. Yield per acre of Sin Thu Kha is 68.07 baskets and more than yield per acre quantity of other varieties. Summer paddy was cultivated with the irrigation water from 3 public dams, 8 Rivers water pumping projects and 17 flood gates in Hlegu Township. Due to the presence of only three public dams in Hlegu Township, cultivation of Township has to depend for irrigation on Nga Moe Yeik Dam, La Gyun Pyin Dam and Ka Li Htaw Dam.

Table (4.7) The Area of Net Arable Land in Hlegu Township

No	Types of Land	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	Net Arable Land (%)
1	Land Cultivated Paddy	88988	88588	89716	89716	89716	88353	88138	82932	83629	54.8
2	Land Cultivated Other Crop	65735	69192	69048	70931	70931	72222	69837	68008	69111	45.2
3	Total Land	154723	157780	158764	160647	160647	160575	157975	150940	152740	100

Source: Land Record Department of Hlegu Township (2018)

Figure (4.2) The Area of Net Arable Land in Hlegu Township



Source: Land Record Department of Hlegu Township (2018)

As mentioned in the Table (4.7) and Figure (4.2), the total land area of Hlegu Township is 369228 acres. In 2017-2018, the net cultivation land area is 152740 acres amounted to 41.37% of total area. The land cultivated paddy is nearly equal area of land cultivated other crop. But the main crop of Hlegu Township is Paddy. Other cultivated crops of Hlegu Township are groundnut, sunflower, black gram (bean), green gram (bean) and other earning crops. Other earning perennial plants are rubber, cashew and Thit-Seint.

Table (4.8) Paddy Cultivation

Sr. No	Year	Sown Acre (Monsoon + Summer)	Harvested Acre (Monsoon + Summer)	Yield Per Acre	Yield (Bsk)
1.	2009-2010	121800	121800	71.99	8768524
2.	2010-2011	119266	119266	70.93	8459799
3.	2011-2012	120949	120949	72.53	8773009
4.	2012- 2013	118876	118876	72.50	8618389
5.	2013-2014	119472	119472	71.72	8569242
6.	2014- 2015	119496	119496	72.29	8638581
7.	2015- 2016	118846	118846	71.75	8527993
8.	2016- 2017	109912	109881	68.98	7580373
9.	2017- 2018	113335	113030	68.93	7791773

Source: Department of Agriculture, Hlegu Township (2018)

According to table (4.8), the paddy production of Hlegu Township in 2017-2018 is 7791773 baskets. The total production of paddy was 8768524 baskets in 2009-2010. It can be seen that the yield of paddy decreased and total of 976751 baskets of paddy loosed in 2017-2018. The yield production in 2017-2018 was 68.93 baskets per acre. And it has been decreased from 71.99 baskets per acre in 2009-2010. During 2009-2010 and 2017-2018, the cultivated acre decreased to 8770 acres. The condition of cultivated acres and harvested acres are not the same each year in Hlegu Township depending on weather variation. Decreased paddy cultivated acres caused by decline market demand, increasing production cost and scare farm labor. In recent years, the paddy production of Hlegu Township is a little decreasing. Because of some difficulties in paddy harvesting, there has been a little decrease in its production. One of the problems is weather variation in township. Untimely flooding was seen as a severe constraint to rice production. Other problems are seed quality, diseases, using modern machines and crops rotations.

(c) Oilseeds Cultivation

In Hlegu Township, groundnut is mainly cultivated as oilseeds. The total oilseeds cultivated acre is about 453 acres in 2017-2018. And groundnut cultivated acre is 437 acre and sesame is 16 acre. Yield per acre of groundnut is 47.75 baskets and sesame is 6.69 baskets. Most of the oilseeds crops cultivation in Hlegu Township intended regional consumption.

Table (4.9) Types of Cultivated Crops

No	Types of Crops	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018
1	Paddy (Total)	121800	119266	120949	118876	119472	119496	118846	109912	113335
	Paddy (Monsoon)	89553	89360	89061	88860	89029	89056	88831	83625	83629
	Paddy (Summer)	32247	29906	31888	30016	30443	30440	30015	26287	29706
2	Groundnut	3548	3564	3252	3163	3264	3378	3439	1722	437
3	Matpe (Bean)	2494	2596	2566	2556	2564	2566	2564	1865	884
4	Green gram	9246	9365	8990	8633	8664	8670	8897	6250	3102

Source: Department of Agriculture, Hlegu Township (2018).

Types of cultivated crops in Hlegu Township are shown by table 4.9. The paddy is the main crop with the largest area and the other crops are dependent for export and some are also for local consumption in Township. Paddy is the most cultivated crop in Hlegu Township. In 2017-2018, the total cultivated acre of paddy is about 113335 acres and average yield of paddy is 68.93 baskets per acre for the whole township in general. In study the cultivation of monsoon and summer paddy, the cultivated acres were decreased in the year for 2009-2010 to 2017-2018. The possible reasons of decreasing cultivated acres are mentioned above. The cultivated acres of groundnut, black gram and green gram also significantly decreased in 2017-2018 because beans' export market is facing few problems in recent years. India were getting increase yield of beans in last year. India is one of the beans trade partners of Myanmar which is protecting local bean market that it is specifying a ban on import of beans. This ban impacts exports of bean crop from Myanmar. So farmers have reduced varieties of beans cultivation in Hlegu Township. Agricultural sector of Hlegu Township is decreased in recent year.

Table (4.10) Cash Crops Cultivation and Production in 2017-2018

No	Crops	Acre		Cultivated Acre	Harvested Acre	Yield Per Acre	Yield (Bsk)
1	Paddy	Monsoon	83629	83629	83324	63.88	5322418
		Summer	29706	29706	29706	83.13	2469355
2	Groundnut	Winter	437	437	437	47.75	20866
3	Black gram (Matpe)	□	884	884	884	12.95	11448
4	Green gram	□	3102	3102	3102	13.90	43118
5	Sesame	□	16	16	16	6.69	107

Source: Department of Agriculture, Hlegu Township (2018)

The cash crops cultivation and production in 2017-2018 is expressed by table (4.10). The cultivated acre of paddy (Monsoon) is about 5322418 acres and average yield of paddy is 63.88 baskets. The cultivated acre of paddy (Summer) is about 2469355 acres and average yield of paddy is 83.13 baskets. The quantity of average

yield of summer paddy is higher than the quantity of monsoon paddy. The groundnut cultivated acres are about 20866 acres and average yield of groundnut is 47.75 baskets. The cultivated acres and average yield of black gram and green gram are 11448 acres and 43118 acres and 12.95 baskets and 13.90 baskets.

Table (4.11) Rubber Plantation and Production from 2013-2014 to 2017-2018

Sr. No	Year	Cultivated Acre	Harvested Acre	Yield Per Acre (Viss)	Total Yield (Viss)
1	2013-2014	23579	2359	120.22	283598.98
2	2014- 2015	24636	2367	119.31	282406.77
3	2015- 2016	24775	2234	119.00	265846.00
4	2016- 2017	24788	2383	118.30	281908.90
5	2017- 2018	24888	3305	119.19	393922.95

Source: Department of Agriculture, Hlegu Township (2018)

According to the table (4.11), the cultivated area of rubber is 23579 acres, harvested acre is 2359 acres, yield per acre and total yield are 120.22 viss and 283598.98 viss in 2013-2014. The cultivated and harvested acres are increasing year by year. But harvested acres decreased in 2015-2016 and yield per acre declined in 2016-2017.

Table (4.12) Long-term Plants Plantation and Production in 2017-2018

No	Crops	Cultivated Acre	Harvested Acre	Yield Per Acre (Viss)	Total Yield (Viss)
1	Rubber	24888	3305	119.19	393922.95
2	Cashew nut	10212	2989	25.55	204145

Source: Department of Agriculture, Hlegu Township (2018)

In table (4.12), during the year 2017-2018, long-term plants plantation are rubber and cashew. The cultivated area of rubber is 24888 acres, harvested acre is 3305 acres, yield per acre and total yield are 119.19 viss and 393922.95 viss. The cultivated acre of cashew is 10212 acres, harvested acre is 2989 acres, yield per acre is 25.55 viss and 204145 viss.

Table (4.13) Other Cash Crops Cultivation and Production in 2017-2018

Sr. No	Crops	Cultivated Acre	Harvested Acre	Yield Per Acre (Viss)	Total Yield (Viss)
1	Chili	65	65	380	24700
2	Black Pepper	99	99	35	3465
3	Vegetable	1907	1907	3744	7139808

Source: Department of Agriculture, Hlegu Township (2018)

According to table (4.13), during 2017-2018, other earning crops are chili, black pepper and vegetable. The cultivated acre of chili is 65 acres, harvested acre is 65 acres, and yield per acre is 380 viss and 24700 viss. The cultivated area of black pepper is 99 acres, harvested acre is 99 acres and yield per acre is 35 viss and 3465 viss. The cultivated area of vegetable is 1907 acres, harvested acre is 1907 acres and yield per acre is 3744 acres and 7139808 acres.

4.3.3 Financial Institutions

Myanmar Agricultural Development Bank are providing loan to farmer for the purpose of agriculture development. Microfinance loans are served by Mya Sein Yaung village project in 25 villages. The number of cooperative credit unions and sub cooperative credit unions is 108 and 2 in township. Myanmar Agricultural Development Bank (Hlegu Township) has credited year loan for agricultural development. There are two types of loans, loans for monsoon season and loans for winter season.

Table (4.14) Agricultural Loans of Hlegu Township

Sr. No	Year	Monsoon Season Loan (Kyats)	Winter Season Loan (Kyats)
1	2009-2010	1900000000	400000000
2	2010-2011	37622440000	840000000
3	2011-2012	52653560000	25320600000
4	2012-2013	52653500000	25320000000
5	2013-2014	10053100000	3496900000
6	2014-2015	10230900000	3520000000
7	2015-2016	6256000000	26392000000
8	2016-2017	10265400000	4350000000
9	2017-2018	10713000000	4434600000

Source: Myanmar Agricultural Development Bank, Hlegu Township (2018)

As shown in table (4.14), loans for monsoon season are greater than winter season. Each year, amount of loan fluctuated. When the borrowers increased, the amount of loan increased.

4.3.4 Livestock and Fishery Sector

Hlegu Township is also depending on livestock and fishery for regional income. Hlegu Township has two zones of livestock breeding and fishery for development of Livestock. Other one zone is participating in Hmawbi Township. It is located at Nyaung Hna Pin area. The total area of Nyaung Hna Pin zone is 12453 acres and 10627 acres are situated in Hlegu Township.

(a) Fishery

Fisheries play a vital role in the culture and economy of Hlegu. Fish serves as major source of animal protein of its people who largely consume rice and fish in their daily meals. Hlegu Township has uncultivated land which were especially wetland. It can be turned into fish pond and raising fishery. There is integrated poultry which fish production is increasingly practiced; the poultry usually ducks, chicken or geese which are kept in elongated houses over the fishponds. Fishery business is running in Nyaung Hna Pin zone and other private fisheries. There are fishery farms which are managed by private farm business. The total quantity and area of fishery

farms are 477 lakes and 3072 acres in Hlegu Township. The total output quantities of fishes are 13470 viss in 2017-2018.

(b) Livestock

Buffaloes, cows, pigs, goats, chickens and ducks are found livestock breeding in Hlegu Township for egg, meat and dairy products.

Table (4.15) The Progress of Livestock Breeding in Hlegu Township (2009-2010 to 2017-2018)

Sr. No	Year	Buffaloes	Cows	Pigs	Goats	Chickens	Ducks
1.	2009-2010	15846	35545	34490	6542	2248945	62205
2.	2010-2011	15734	35650	34505	6433	2257584	62528
3.	2011-2012	15620	34950	34870	6391	2368975	61217
4.	2012-2013	15528	35582	34609	5812	2376368	58327
5.	2013-2014	14915	35478	33789	5506	2399500	57678
6.	2014-2015	14785	36549	32564	5385	2356444	55625
7.	2015-2016	14610	30800	31820	5250	2310795	54527
8.	2016-2017	14370	26103	34275	5130	2155388	59638
9.	2017-2018	14328	24352	34570	5137	2224380	56104

Source: Department of Animal Husbandry, Hletu Township (2018)

In table (4.15), during the year 2009-2010 and 2017-2018, it is described that the quantity of buffalo decreased from 15846 to 14328. The quantity of cow also decreased from 35545 to 24352. The reason of quantity decreasing of cow and buffalo is that they are not widely used in farming sector and modern farming machine are more improved nowadays. The quantity of pigs increased from 34490 to 34570. The quantity of chicken and duck little decreased from 2248945 to 2224380 and from 62205 to 56104. The reason of quantity decreasing of chicken is that the chicken farms are facing diseases concern and periodic outbreaks such as pathogenic avian influenza (Bird flu) in recent years. Last year, this bird flu virus led to lower chicken and egg consumption, which severely affected chicken farms. The reason of quantity decreasing of duck is that the duck meat is low demand and rising price of poultry feed.

4.3.5 Forest Sector

In Hlegu Township, the total areas of reserved forest are 89666 acres. Deforestation has occurred across much of Hlegu Township in recent year. Contributory factors are (legal and illegal) forest clearance, over extraction of teak, growth in fuel wood use, expansion of agricultural land and settlement areas. As the reforestation, there are government owned plantation and private owned plantation in Paung Lin, Ma Hu Yar and Ka Li Htaw and there is 7196 acres altogether with the purpose of profit making. The production of forest is halted by government in recent years. Some forest resources can be extracted such as bamboo, cane and fire wood.

(a) Forest Resource Conservation

Forest Department is planning to replace the damage forest area and to protect forest resources. For providing local consumption, extending wood plantation and promoting private forest plantation and protecting wildlife forest department has made plans to expand forest plantations, distribute seed, create new species and act law.

4.3.6 Industrial Sector

Industrialization is a key force of rapid development of any economy. There is only one stated owned hepatitis B disease prevention medicine factory under ministry of Industry. And there are 2 garment factories, 1 shoe factories and 1 bag factory operated by private companies. Other types of factories are dairy factory, dry meat factory, fiber factory, bandage factory, rice mills and cooking oil mills which are operated in Hlegu Township.

Hlegu Township will be implemented industrial development projects in next year. These are Korea-Myanmar Industrial Complex project and Hlegu Industrial Garden project. Korea-Myanmar Industrial Complex Project is located near Nyaung Hna Pin, Hlegu Township just west of mile post 5 miles 6 furlong of Yangon-Mandalay Expressway. The project will comprise of small, medium and heavy industries, one stop services, labour-intensive sector, staff housing, park, water treatment plant, a management office and business service zones. This project will provide 50,000 to 100,000 jobs opportunities for local people. Hlegu Industrial Garden project has been approved by Members of Parliament for the regional Hluttaw of Yangon. This project is located nearly Hlegu and create 75,000 jobs opportunities. Most of the industries are private owned cottage industry and there are 47 sculpture factories, 14 powdery mills, dynamo motor industry, dyeing and printing industry,

machine loom, blacksmith's forge, tin and gold smith industry and sewing are founding as home industry in Hlegu. Private owned industries are small unregistered family businesses.

4.3.7 Service Sector

Hlegu Township has many services, such as merchants, dealers, transportation, construction, trading, selling groceries, private schools, laborers, lodging house and shopping mall services.

(a) Transportation Sector

Transport is an essential economic infrastructure for the rapid development of any region. In an economy, location of industries, development of backward areas, decentralization of economic activities, better distribution of products, better maintenance of law and order, justice, defence and security all necessitate a proper system of transport and communication. If there is a proper transportation network within a region it can be implemented regional development.

Hlegu Township nearby situated Yangon-Mandalay high way road (new) and through situated Yangon-Mandalay high way road (old). In overland transportation, there are Yangon Bus Services (YBS) such as YBS 1, YBS 37 and YBS 44 that are running Yangon city and Hlegu Township. And there are YBS 45 which is running Hlegu and Phaunggyi-Mingon villages. Bicycle, motorcycles, tricycles, trishaws and cars are mostly used in transportation sector of Hlegu Township.

(1) Modern Roads and Bridges Construction

There are government department of construction and private construction companies in Hlegu Township. The large urbanization projects which are concerned with modern roads and bridges constructions are implemented and managed by the department of roads and bridges constructions of Hlegu Township and private companies which are permitted by tender.

(2) Rural-Transportation

(i) Roads

Hlegu Township has tarred road and concrete roads to communicate with neighboring Townships and villages. It has 77.1 miles in township and 70.3 miles long roads connecting to neighboring townships.

(ii) Bridges

Hlegu Township has many bridges among as the bridges over 180 feet are Gyogone bridge 220 feet, Phaunggyi bridge 240 feet, Nga Moe Yeik bridge (Hlegu) 400 feet, Dayalbo bridge 220 feet, Tamanyoe bridge 180 feet and Nag Moe Yeik bridge (Ma Lit) 660 feet. And under 180 feet bridges are 9 bridges.

(iii) Village Roads

Most of the people in rural Hlegu travel by bicycle, motorcycle and on foot. Motorcycle are widely used to go anywhere in Hlegu Township. Only travelling on foot is the most suitable around some villages in the rainy season. Now, some of the village roads to communicate with neighboring village are being constructed in concrete roads by VDP under the guidance of department of rural development.

(b) Energy and Electrical Power Sector

In Hlgetu Township, there are four fuel filling stations and sell 17830 barrals and 25860 barrals of diesel in a year. In the use of electricity, there are 19 transformers which are provided by the private and government owned electric power supplies. The electricity is taken from 33/11 KV (3+5+10) 18MVA Hlegu substation, 33/11 KV 10 Inn Taing substation, 33/11 KV 5MVA Phaunggyi substation and 33/11 KV 5 MVA Dar Pein substation. Some villages currently lack electricity in Hlegu Township and which are preparing to install electricity by the supporting of the fund of Yangon Region government and National Electrification Project (NEP). The percentage of electricity availability is 85%.

(c) Telecommunication Sector

Development of communication system is vital in creating economic infrastructure for the industrial and agricultural development of the economy. Communication is not merely an amenity but in fact a key sector in economic

development and constitutes the life of industry and commerce. There is a direct and positive relationship between communication and economic development. The development of telecommunication sector of Hlegu Township is described in the following table (4.16).

Table (4.16) Telecommunication Facilities in Hlegu Township in (2009-2010 to 2017-2018)

Sr. No	Year	Post Office	Telegraph	Auto Line Telephone	GSM/CDMA Phone
1	2009-2010	6	1	2006	258
2	2010-2011	6	1	2013	258
3	2011-2012	6	1	2054	1562
4	2012-2013	6	1	2027	5570
5	2013-2014	6	1	1995	24281
6	2014-2015	6	1	1962	24989
7	2015-2016	6	1	1967	57782
8	2016-2017	6	1	1980	65537
9	2017-2018	6	1	1995	75890

Source: Myanmar Post and Telegraph, Hlegu Township (2018)

According to table (4.16), there is no change in the quantity of post and telegraph services. The quantity of auto line phones decreased between 2009-2010 and 2017-2018 because the usage of auto line phones were being substituted the usage of GSM/CDMA Phones. The usages of GSM/ CDMA Phones in 2009-2010 were 258, and then increased usage as 1562 in 2011-2012, and then it was increased to 75890 in 2017-2018. The progress of communication sector is the essential development of socio-economic development, it can say that Hlegu Township could be developed the cause of communication developed.

(d) Banking Sector

Banks play an important position in the country's economy. They play a particular role in the development of the industry and trade. The general role of commercial banks is to provide financial services to general public and business, ensuring economic and social stability and sustainable growth of the economy. Thus, more commercial banks shows the development of financial services and trade in Hlegu Township.

Table (4.17) Banks in Hlegu Township

Sr. No	Bank Name	Opened year
1.	Myanmar Economic Bank	1976
2.	Myanmar Agricultural Development Bank	1994
3.	AGD Bank (mini branch)	2013
4.	Cooperative Bank	2015
5.	Kanbawza Bank	2016
6.	Ayeyarwaddy Bank	2017
7.	Innwa Bank	2017

Source: Department of General Administration, Hlegu Township (2018)

According to table (4.17), Myanmar Economic Bank, Myanmar Agricultural Development Bank, Cooperative Bank, Kanbawza Bank, Ayeyarwaddy Bank, Innwa Bank and AGD Bank (mini branch) are opened in Hlegu Township by relevant yearly.

4.4 Development of Social Sector in Hlegu Township

Social sector is an important sector for economy and includes several important components such as education, health and other social activities that play a vital contribution in human development. Social development also means that the fulfillment of the basic needs of people and achieving fair distribution of wealth gained and a result of economic growth, development of human resources and expanding the scope of options before the people with emphasis on social justice, equal opportunities and eradication of poverty and illiteracy, taking into consideration that social development equal to and an integral part of economic development.

4.4.1 Development of Education Sector

The MSDP envisions an education system in Myanmar that will support our country's human resources, our people, to develop their full potential. To achieve this goal the Government of Myanmar is determined to promote more equitable access and higher quality outcomes for students – commitments which are clearly set out in the National Education Strategic Plan (2016-2021). The NESP was launched in February, 2017. The Plan includes a common policy framework which sets the strategic directions for the next five years; a clear road map for guiding all investments in the sector, both domestic and international; and a vehicle for coordinated implementation efforts. The educational sector and the development of educational sector of Hlegu Township are shown in following table.

Table (4.18) The Situation of School in Hlegu Township

Sr. No	Grade of School	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018
1	High School	5	5	5	5	7	9	9	9	9
	Sub High School	8	9	10	10	9	7	7	11	12
2	Middle School	6	4	5	5	5	7	7	6	6
	Sub Middle School	7	10	10	10	15	13	13	18	17
	Attached Middle School	1	-	-	-	-	-	-	-	-
3	Primary School	124	122	119	121	118	117	121	110	110
	Post-Primary School	26	28	29	29	26	27	27	30	30
4	Monastery School	11	11	12	12	12	14	14	19	20
5	Private School	-	-	-	-	-	1	3	7	7
	Total	188	189	190	192	192	195	201	210	211

Source: The Education Office of Hlegu Township (2018)

According to the table (4.18), the quantity of High School, Middle School, Primary School and Monastery School are increased in 2017/2018, by comparing with 2009-2010. That pointed to the development of Education sector in Hlegu Township.

There are 2 Colleges and 1 sub University. 2 Colleges are Educational College Hlegu and Cooperative College Phaunggyi. Only one sub University is Sub Agricultural University Hlgeu. There are 9 high schools and 12 sub high schools, 229 teachers and 6129 students, the ratio of teacher and student is 1:27. There are 6 middle schools, 17 sub middle schools and 1 attach middle school, 743 teachers and 16340 students, the ratio of teacher and student is 1:22. There are 110 primary schools and 30 post primary schools, 765 teachers and 24465 students, the ratio of teacher and student is 1:32. The quantity of monastery school in Hlegu Township is 20 and there are 125 teachers and 3979 students. The total quantity of private school is 7 and there are 72 teachers and 657 students. Five years old students' enrollment is 2180 boys and 2184 girls and enrollment rate is 100%. Adult literacy rate for Hlegu Township is 96.2%.

Table (4.19) The Number of Basic Education School in Hlegu Township

Sr. No	Academic Year	High School			Middle School			Primary School		
		Teacher	Student	Ratio	Teacher	Student	Ratio	Teacher	Student	Ratio
1	2009-2010	180	4400	1:24	723	12074	1:17	655	25181	1:38
2	2010-2011	192	4054	1:21	721	12541	1:17	644	25241	1:39
3	2011-2012	186	4102	1:22	752	13133	1:18	621	26116	1:42
4	2012-2013	176	4405	1:25	743	14062	1:19	638	26924	1:42
5	2013-2014	184	4710	1:26	726	15786	1:22	815	25216	1:31
6	2014-2015	206	4352	1:21	754	15907	1:21	757	25233	1:34
7	2015-2016	223	4349	1:20	758	15862	1:21	835	25193	1:30
8	2016-2017	238	5036	1:21	725	16066	1:22	772	24397	1:32
9	2017-2018	229	6129	1:27	743	16340	1:22	765	24465	1:32

Source: The Education Office of Hlegu Township (2018)

According to table (4.19), in 2009-2010 academic year, 180 high school teachers were appointed and in 2017-2018 academic year, 229 high school teachers were appointed. The number of high school students has increased from 4400 to 6129. So, the ratio between the number of teachers and students has changed from 1:24 to 1:27. In 2009-2010 academic year, 723 middle school teachers were appointed and in 2017-2018 academic year, 743 middle school teachers were appointed. The number of middle school students has increased from 12074 to 16340. So, the ratio between the number of teacher and teachers has changed from 1:17 to 1:22. In 2009-2010 academic year, 655 primary schools teachers were appointed and in 2017-2018 academic year, 765 primary school teachers were appointed. The quantity of primary school students has increased from 25181 to 24465. So, the ratio between the number of teachers and students has little declined from 1:38 to 1:32. But the teacher-student ratio of high school and middle school levels increased in 2017-2018 academic year.

To develop educational sector, being higher education and passing matriculation examination are important. The following table (4.11) shows the matriculation pass rate in Hlegu Township from the academic year 2009-2010 to 2017-2018.

Table (4.20) Pass Rate of Matriculation in Hlegu Township

Sr. No	Year	Enrollment	Passed	Pass Rate (%)
1	2009-2010	4119	1068	25.93
2	2010-2011	3575	856	23.94
3	2011-2012	3337	722	21.64
4	2012-2013	3417	740	21.66
5	2013-2014	3672	834	22.71
6	2014-2015	3536	902	25.51
7	2015-2016	3513	828	23.57
8	2016-2017	3603	1031	28.62
9	2017-2018	4165	1213	29.12

Source: The Education Office of Hlegu Township (2018)

According to table (4.20), the matriculation pass rate of 2009-2010 academic year is 25.93 percent and then the matriculation pass rate of 2017-2018 academic year

is 29.12 percent. That pointed to the development of Education sector in Hlegu Township. It resulted from good management and teaching of teachers and students and parents were tried hard to get this result.

(a) Multimedia Learning Center

For the purpose of modern Education, 9 high schools have installed 7 multimedia learning centers and 2 Principles of Learning and Teaching (PLT). 17 middle schools have installed 3 PLT and 1 middle school has installed 2PLT in Hlgtu Township. 26 primary schools have installed 3PLT, 37 primary schools have installed 2 PLT and 71 primary schools have installed 1 PLT each.

(b) Libraries

There are many libraries in Hlegu Township. 184 libraries are opened by education department. 12 libraries and 17 libraries are opened by information and public relation department and other associations.

4.4.2 Development of Health Sector

A strong and healthy population makes for a strong and healthy nation. Health is the most important and essential aspect of social concern. These are the basic needs of the social well-being, because a sound body and mind are the basic requisites for the maintenance of a healthy society function. The health sector and the development of health sector in Hlegu Township are described in the following tables.

(a) Public Hospitals

There is only one 50-bedded public hospital in Hlegu Township. In urban areas, 3 16-bedded public hospitals, 8 rural health center and 32 sub-rural health center are situating for healthcare services to public. The hospital, healthcare centers and clinics of Hlegu Township are shown in the following table.

Table (4.21) The Hospital, Healthcare Center and Clinic in Hlegu Township

Sr. No	Health Department	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014 / 2015	2015/ 2016	2016/ 2017	2017/ 2018
1	Township hospital (50-beded Hospital)	1	1	1	1	1	1	1	1	1
2	16-beded Hospital	3	3	3	3	3	3	3	3	3
3	Rural Health Centre	8	8	8	8	8	8	8	8	8
4	Sub-Rural Health Centre	32	32	32	35	35	35	35	37	37
5	Private Clinic (Registered)	12	12	10	10	14	14	16	22	22

Source: Public Health Department of Hlegu Township (2018)

According to the table 4.21, the hospital, healthcare center and clinic of Hlegu Township (2017-2018) are more increased than 2009-2010. Sub-rural health centers are increased year by year. 16-bedded hospitals and rural healthcare centers are being modified and upgraded with government budget and supporting of Korea Foundation for International Health Care KOFIH (Health System Strengthening). Private clinics increased. Doctor patient ratio in Hlegu Township is described in the following table.

Table (4.22) The Indicators of Health

Sr. No	Types of Manpower	2009/2010 (Appointed Number)	2017/2018 (Appointed Number)	Ratio of Population (December, 2018)
1	Doctor	12	10	1:24253
2	Nurse	17	30	1:8363
3	Health Officer	12	10	1:24253
4	Midwife	39	67	1:3624
5	Health Staff	110	166	1:1461
6	Bed	(50+16+16+16)	(50+16+16+16)	1:2475
7	Birth Rate	21.6/1000	19/1000	-
8	Maternal Mortality Rate	0.7/1000	1.1/1000	-
9	Under 1 Mortality Rate	16.9/1000	8.7/1000	-
10	Birth Rate with Skillful staffs	70.5	94.5	-

Source: Public Health Department of Hlegu Township (2018)

According to table (4.22), there are 10 doctors in 2017-2018 less than that of in 2009-2010. So, ratio of doctor to population is 24253 people per doctor in 2017-2018. The nurse was 17 in 2009-2010 and 30 in 2017-2018. Other staffs of healthcare are increased within nine years. The rate of birth and Under 1 Mortality rate is decreased. But the rate of maternal mortality rate is little increased in recent year. This situation shows that health sector development of Hlegu is improvement in overall and little need to take care of some section. Regarding to the health personnel ratio in Hlegu Township, it is needed to improve for more appointed of manpower of health sector.

According to the township report of Department of General Administration, common diseases in Township are malaria, diarrhea, TB, dysentery and liver disease. 2 peoples died of HIV/AIDS in 2017-2018. Birth rate is 19, maternal mortality rate is 1.1 and Under 1 mortality rate is 8.7.

Public hospital, rural health centers and sub rural health centers are opened in Hlegu Township. Health care project, public health care, family health care and nutrient plan are carried out by the health department of the township. The department of external patients is opened for public health of the town. The department of rural health care opens on Monday, Tuesday and Wednesday, and field service is carried out on other days.

Government health budget is 617,711,651 Kyats and expense is 617,711,651 Kyats in 2017-2018 budget years. KOFIH and the Ministry of health and sport had jointly developed a six-year project to strength the PHC system in Hlegu Township at Yangon Region in response to the agreement for Health System and Capacity Building Cooperation on 19 June 2013. The project design is based on five core principles: equity, building on scientific evidence and international consensus, building on existing national policies, health systems strengthening and sharing lessons learned among two countries. World Vision is supporting the nutrition activities for malnutrition cases in Township especially children.

4.4.3 Supportable Condition of NGO and INGO

Many NGOs and INGOs are supporting to Hlegu Township. NGOs are Myanmar Women Affair, Myanmar Maternity and Child Welfare Association, Red Cross Association and Auxiliary Fire Brigade. As INGOs, there are KOFIH (Myanmar), World Vision (Myanmar) and KOICA (Myanmar) which are supporting social and economic sector in Hlegu Township.

Table (4.23) Supportable Condition of INGO

Sr. No	Name of INGO	Performing Tasks	From	To	Remark
1	KOFIH	Primary Healthcare System Strengthening Project	2014	2019	-
2	World Vision	Nutrition Activities	2008	2019	-
3	KOICA	Project on the Saemaul Undong (New Village Movement) in Myanmar	2013	2019	(Selected Villages)

Source: Department of General Administration, Hlegu Township (2018)

According to the table (4.23), KOFIH (Myanmar) is coordinating with Ministry of Health and Sport to strengthened health system and sharing health knowledge. World Vision (Myanmar) is supporting not only the nutrition activities for malnutrition cases especially children but also microfinance loans for household in township. KOICA (Myanmar) is implementing the “Project on the Saemaul Undong (New Village Movement) in Myanmar” in Hlegu Township (selected villages).

CHAPTER V

CONCLUSION

5.1 Findings

In economic sector of Hlegu Township, the growth rate of GDP is improving in recent year. According to the 2009-2010 to 2017-2018 GDP of Hlegu Township, Production sector is the largest quantity of the whole GDP. Production sector included agricultural, livestock and fishery, energy, forest, industry, electrical power and construction. In agriculture sector, the land cultivated paddy is little more than area of land cultivated other crops. But the paddy production is decreasing in recent year. There are many problems in paddy production such as weather variation, seed quality, diseases, using modern machines and crops rotations. The net harvested rate for paddy decreased from 71.99 baskets in 2009-2010 to 68.93 baskets in 2017-2018. The cultivated acres of paddy fields decreased from 121800 acres in 2009-2010 to 113335 acres in 2017-2018. The harvested acres of paddy decreased from 121800 in 2009-2010 to 113030 acres in 2017-2018. The Other crops are groundnut, sunflower, black gram (bean), green gram (bean) and other earning crops and there is 45.2 percent in total cultivated acres. Other cultivated crops are also declining in recent years. The cultivated and yield per acres of other crops decreased in 2017-2018. So, agricultural sector of Hlegu Township decreased in recent year. In livestock sector, the quantity of buffalo, cow and duck declined.

For industrial sector, Hlegu Township will be implemented new industrial development projects in next year. Hlegu currently has four factories that operate in the township with legal authorization. These factories provide job opportunities for the local population. Most of the industries are private owned cottage industry and small unregistered family businesses.

In service sectors, communication and transportation sectors are well increasing in the study period. For transportation sector, people can have easily access

to travel by motor road because Hlegu Township is nearby situated old and new Yangon-Mandaly Highway roads. Hlegu Township is trying to build the bridges and roads that are supporting to be better and smooth transportation. YBS is serving to be convenient for people in Hlegu. Now, people can have access to go to Yangon and Hlegu Township in few hours. Most of the people in rural Hlegu travel by bicycle, motorcycle and on foot. Telecommunication sector is more improving than last eight years ago in Hlegu Township. As good infrastructure provide the economic growth and regional development of Hlegu Township.

For education sector, the number of school has been increased from 118 schools in 2009-2010 to 211 schools in 2017-2018. The government opened new schools in Hlegu Township. Most of the schools increased in this period are opened in rural area. So that, people from rural area can get opportunities to learn and it will increase more educated persons in rural area in the long term. There is little change in the number of increase teachers. There has been increased from 180 teachers in 2009-2010 to 229 teachers in 2017-2018 for High School teachers. There were 723 teachers for Middle School, 655 teachers for Primary School in 2009-2010 but there are 743 teacher for Middle School and 765 teachers for Primary School in 2017-2018. The number of students is no significantly improved in Primary school levels during the last three years because the rate of birth of Hlegu Township is decreased in recent years. Generally, the teacher-student ratio is still high in all levels. The matriculation pass rate of 2016-2017 and 2017-2018 academic years are significantly increased. Monastery schools are also developed and it is more helpful for low income families and rural areas.

For health sector, The Township currently has three government hospitals with a combined total of 98 beds, eight public rural health centers, 37 sub rural health centers and 22 private health clinics. There is little increase of new building for health care services. The indicator of health, the ratio of patient per doctor is one doctor has to take care and serve for 24253 in 2017-2018 and the ratio of other staffs of health care is also high. These ratios are not matching with the population of Township. The rate of birth and Under 1 Mortality rate is decreased. But the rate of maternal mortality rate is little increased in recent year.

5.2 Suggestions

According to the above findings, Hlegu Township has improvement in economic, social and infrastructure sector. In economic sector, agricultural sector declined in recent years. Basically, the enhancement of agriculture sector would raise the overall standard of local people in Hlegu Township. Traditional agriculture is needed to transform the industrialized agriculture that is one of the ways to develop the agriculture sector in long term. Providing the awareness of agriculture knowledge, technique for cultivation and machines would help to support the agriculture sector. Usages of fertilizer, cultivated in time and harvested in time avoiding the rain and drying system are also important for paddy production. Government should provide project with cultivated in time for making installment machines, hybrid seeds and fertilizers. Quality breeds, technology and capital play an important role in promoting the livestock farming sector.

Most of the industries are private owned cottage industries which are not registered as SMEs. So regional government should make to support SMEs and find the ways to provide SMEs. For example; regional government should connect financial institutions to improve the financing environment for SMEs in terms of enhanced credit and direct financing channels. And they should assist SMEs to improve their market access by helping them enhance their skills.

More appointed of teachers could decrease the ratio of teacher and students and the education will be more developed in education sector. For health sector, there is needed more health personnel such as doctors, nurses, health officers, midwives and health staffs. This means that it is needed to improve for more appointed of manpower of health sector. The ratio of maternal mortality rate is little increased in Hlegu Township. This means that it is needed to provide for health care awareness to pregnancy. The quality of health care system and disease control programs should be more implemented.

Hlegu Township must be invested in local road and bridge infrastructure to increase the accessibility of the township and must be enabled local growth for both the urban and rural populations. So, Hlegu is well placed to develop and grow, and to leverage the opportunities available to it based on its fortunate geographical position. Hlegu Township would benefit greatly from the creation of a development plan that is coordinated with the development plans of both the region and Union governments.

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