YANGON UNIVERSITY OF ECONOMICS
DEPARTMENT OF APPLIED ECONOMICS
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A STUDY ON THE POVERTY IN RURAL AREA OF YENANCHAUNG TOWNSHIP, MAGWAY REGION

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EMPA – 12 (19th BATCH)

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A thesis submitted as a partial fulfillment towards the requirement for the degree of Master of Public Administration (MPA)

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This is to certify that this thesis entitled **"A STUDY ON THE POVERTY IN RURAL AREA OF YENANCHAUNG TOWNSHIP, MAGWAY REGION",** submitted as a partial fulfillment towards the requirements for the degree of Master of Public Administration has been accepted by the Board of Examiners.

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ABSTRACT

This study examines the extent of income inequality and poverty in rural Yenanchaung Township, Magway Region, focusing on both the incidence and severity of poverty. Using a descriptive research approach, the study assesses poverty levels and the socio-economic factors contributing to poverty through primary and secondary data collected from a sample of 166 households, selected via random sampling based on Krejcie and Morgan's formula. The results reveal significant poverty levels, with certain villages experiencing pronounced issues, underscoring the need for targeted interventions. Income inequality was analyzed using the Gini coefficient and Lorenz curve, while poverty levels were measured with the headcount index, poverty gap index, and squared poverty gap index. The findings demonstrate widespread socio-economic disparities, indicating a pressing need for comprehensive social protection measures to improve access to resources and services for vulnerable populations. This study emphasizes the necessity to create the job opportunity in non-farm periods, to effectively combat poverty and support sustainable development in the region.

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CHAPTER (I)
INTRODUCTION

1.1 Rationale of the Study

In 2015, the 2030 Agenda for Sustainable Development introduced Goal 1, aimed at addressing one of the world's most pressing challenges: eradicating poverty in all its forms. As the world approaches the halfway point to 2030, numerous obstacles continue to hinder progress in poverty reduction, including widespread inequality, political instability, conflict, the ongoing climate crisis, recovery from the COVID-19 pandemic, and various economic challenges like the rising cost of living. By 2030, the goal is to reduce by at least half the proportion of people of all ages living in poverty, while also implementing nationally appropriate social protection measures. These measures should ensure that all individuals, particularly the poor and vulnerable, have equal access to economic resources, basic services, land ownership, property rights, inheritance, natural resources, modern technology, and financial services, including microfinance.

Since 2010, the Human Development Report Office (HDRO) of the United Nations Development Programme (UNDP) and the Oxford Poverty and Human Development Initiative (OPHI) have published the annual global Multidimensional Poverty Index (MPI), which is measured based on deprivations in education, health, and standard of living. The global MPI is the only counting-based index that measures overlapping deprivations for more than 100 countries and 1.2 billion people.

In 110 countries, 1.1 billion people out of a global population of 6.1 billion live in poverty. Identifying where these individuals are located is vital for developing effective policies. Approximately five out of every six people living in poverty are found in Sub-Saharan Africa or South Asia, with 534 million (47.8%) residing in Sub-Saharan Africa and 389 million (34.9%) in South Asia. The remaining poor population is largely concentrated in five countries—China, Indonesia, Myanmar, Sudan, and Yemen—accounting for about 65% of this group.

Half of the 1.1 billion individuals living in poverty, approximately 566 million, are children under the age of 18. These children face a lack of based necessities, such as proper sanitation, housing, or cooking fuel, and often reside in households with undernourished family members. A significant portion, 84%, of the world's

impoverished population resides in rural areas, where poverty is more prevalent compared to urban areas globally. In 42 of the 61 countries, more people experience multidimensional poverty, as defined by the global MPI, than face extreme monetary poverty under the World Bank's $2.15-a-day benchmark.

In Myanmar’s Multidimensional Poverty Index (MPI) estimation for 2015/2016, 38.3 percent of the population in Myanmar was classified as multidimensionality poor, while 21.9 percent was classified as vulnerable to multidimensional poverty in 2021. The intensity of deprivations in Myanmar, which is the average deprivation score, is 45.9 percent. The MIF value, which represents the percentage of people who are multidimensionality poor adjusted by the intensity of deprivations, is 0.176. In comparison, Cambodia and the Lao People's Democratic Republic have MPI values of 0.070 and 0.108, respectively.

The World Bank reported Myanmar's international extreme poverty rate for 2017. The country’s poverty rate was 24.8% in 2017, a decrease from 32.1% in 2015 and 48.2% in 2005. Based on the final UNDP survey, the poverty rate was 46.3% in 2022 and rose to 49.7% in 2023.

Poverty levels are most severe in the Hills, Mountains, and Coastal regions. Nevertheless, the majority of the impoverished population, around two-thirds, resides in the heavily populated Dry Zone and Delta regions. The poverty rate in Myanmar varies significantly by region. It was found that the poverty rate in Chin State is 58 percent, the highest in the country, while Rakhine State has the second-highest poverty rate at 41.6 percent. Kachin State has the third-highest poverty rate at 36.6 percent, followed by Magway Region with the fourth-highest rate at 35.6 percent.

The result of the UNDP final report did not indicate the level of the poverty rate, but it showed that the rate had significantly increased across all States and Regions. The poverty rate in Chin State is 73.4 percent, the highest, followed by Rakhine State with the second-highest rate at 66.9 percent. Kachin State has the third-highest poverty rate at 63.8 percent, and Magway Region has the fourth - highest at 55.7 percent (2023). Despite poverty being nearly twice as prevalent in rural regions compared to urban ones, with rates of 29 percent and 15 percent respectively in 2017, the disparity in poverty incidence between rural and urban areas was not substantially significant, standing at 52.9 percent in rural areas and 41.8 percent in urban areas. (UN, 2010 IHLCA Project, 2011; CSO and WBG, 2019; Poverty and the Household Economy of Myanmar: 2024, UNDP).

The Dry Zone covers 58 townships, stretching from the lower Sagaing region to the western and central parts of the Mandalay region and much of the Magway region. This region is home to about one-quarter of Myanmar's population. Among these areas, the Magway region is the poorest compared to the Mandalay and Lower Sagaing regions in central Myanmar. Poverty levels vary widely across different agro-ecological zones. The highest poverty rate is observed in the Coastal, Hills, and Mountain regions, at 43.9 percent. In the Dry Zone, the poverty rate stands at 32.1 percent, making it the second-highest, while the Delta region has the lowest rate at 26.2 percent. Despite having lower poverty rates, 65 percent of Myanmar's poor reside in the Delta and Dry Zone due to the high population density in these regions (CSO and WBG, 2019, 2017).

The above conditions in the Magway Region, located in the Dry Zone, provide significant reasons to study and analyze the poverty status of this area.

Magway Region comprises seven districts: Magway, Minbu, Thayet, Pakokku, Gangaw, Chauk, and Aunglan, which together encompass 25 townships and 1,696 ward village tracts. The total area is 44,821 km², with a population of 3,937,278 and a population density of 87.84/km². Yenanchaung Township is one of the poorest townships in the region, where most villagers rely on farming poor-quality land and face a lack of natural and physical resources in Chauk District, Magway Region.

As a result of these conditions, there is a need to investigate income distribution, the presence of poverty, the extent and severity of poverty, as well as the underlying causes in the rural areas of Yenanchaung Township, Magway Region.

1.2 Objective of the study

The study aims to measure the magnitude of income inequality, which is one of the components of the composite poverty index, and to identify the incidence and severity of poverty in the rural areas of Yenanchaung Township, Magway Region.

1.3 Method of Study

The study adopted a descriptive approach utilizing both primary and secondary data to fulfill its objectives, integrating various methods of analysis. To assess income inequality, the Gini coefficient and the Lorenz curve were applied. The evaluation of poverty levels was conducted through the calculation of the headcount index, poverty

gap index, and squared poverty gap index, following the framework proposed by Foster, Greer, and Thorbecke (1984).

The study area consists of 29 tracts, 145 villages, and 35,529 households (General Administration Department, 2019). The sample household size was determined using the random sampling method based on Krejcie and Morgan's formula. In the first stage, 14 villages were selected by simple random sampling without replacement from the list of villages. In the second stage, 166 households were selected from the list of households.

1.4 Scope and Limitation of the Study

Magway Region is located on the eastern and northern sides of the Ayeyarwaddy River. Economic growth significantly differs depending on the agricultural zone. According to agricultural geography, most townships east of the Ayeyarwaddy River are very poor.

The study is conducted at the household level across nine village tracts, 14 villages, and 166 households, which were selected by simple random sampling in Yenanchaung Township, Magway Region. The survey was conducted from July 21 to August 10, 2024.

1.5 Organization of the Study

This study is organized into five chapters. Chapter 1 includes the rationale of the study, objectives, methodology, scope and limitations, and organization of the study. Chapter 2 covers the concepts of poverty and income inequality, measurements of poverty extent, and a review of previous studies. Chapter 3 presents the poverty profile in Myanmar and Magway Region, as well as the background situation of Yenanchaung Township. Chapter 4 focuses on survey analysis. Chapter 5 provides the conclusions, findings, and suggestions based on the study.

CHAPTER (II)
LITERATURE REVIEW

2.1 Concepts of Poverty

Poverty is marked by disparities in well- being, insufficient income or spending, inability to obtain essential goods and services, and limited access to critical public services, quality housing, clean water, and sanitation. Typically, people with low-income levels face poverty, as their earnings do not cover the basic necessities of life. Poverty is often defined as a lack of access to basic needs, which is primarily linked to economic or consumption factors. It can also include various forms of deprivation, such as poor health, lack of education, inadequate food, limited knowledge, and reduced control over one's surroundings. Poverty can be evaluated based on three criteria: income poverty, sustainable livelihoods, and social inclusion, considering both present consumption and future security (Maxwell, 1999).

Poverty is identified by disparities in well-being, insufficient income or spending, the inability to obtain essential goods and services, and restricted access to crucial public amenities, quality housing, clean water, and sanitation. Typically, those with low -income levels face poverty because their earnings fall short of covering their daily needs. Poverty is often viewed as a deficit in acquiring fundamental necessities and goods, primarily focusing on economic or consumption aspects. It can also encompass multiple areas of deprivation, including health, education, nutrition, knowledge, influence over one's surroundings, and more. Assessing poverty involves three main criteria: income poverty, sustainable livelihoods, and social inclusion, as well as considering both present consumption and future security (Maxwell, S., 1999).

Poverty can exist regardless of whether there is income inequality. The dynamics between economic growth, income inequality, and poverty are interconnected. Even as the economy expands, income inequality can continue to be an issue. However, if economic growth is directed towards effective resource distribution and income redistribution, it has the potential to decrease income inequality despite an increase in average income. Thus, assessing the extent of income inequality in the research area is crucial.

2.2 Concepts of Income Inequality

Inequality is mentioned due to discrepancies in area such as income, wealth, education, health, nutrition, infrastructure, space, politics, and social security (Haughton, J.,& Khandker, R. S., 2009. Income inequality mainly focuses on how income is distributed among individuals compared to the overall income derived from labor, land, capital, and intangible assets.

The link between economic growth and income inequality is often represented by an inverse U-shaped curve (Todaro & Smith, 2011). Economic growth is widely recognized as a crucial factor in alleviating poverty (Stiglitz, Kaushik, & Hon, 2015). While inequality may rise during the initial phases of economic development, it generally tends to decrease over time as economic growth progresses (United Nations, 2020). Hence, examining income inequality is essential for assessing its effects across various regions in Myanmar.

A decline in average income can exacerbate poverty if a negative correlation exists between individuals living below the poverty line and the overall per capita income of population (Rebecca & Card,19933). Therefore, enhancing average income could leverage economic growth to alleviate poverty. Poverty encompasses not only the failure to satisfy essential physical needs—such as food, healthcare, education, and housing—but also the lack of fulfillment in non-physical areas like social participation and personal identity, both crucial for a meaningful existence (World Bank Institute, 2008).

The poverty index is determined by multiplying the Gini coefficient with the poverty gap index and the headcount ratio. This metric reflects the proportion of the population that must exceed the minimum income threshold if income were distributed equally (Amartya, S., 1976).

Income distribution plays a crucial role in determining poverty levels (World Development Report, 2000-2001). To assess income distribution, three primary methods are employed to measure income inequality: (1) "the proportion of total income held by the lowest 40 percent of the population," (2) "the ratio of income held by the top 20 percent," and (3) "the Gini coefficient." The Gini coefficient, derived from the Lorenz curve, is widely used by researchers and economists due to its effectiveness in quantifying income inequality. It is favored for its:

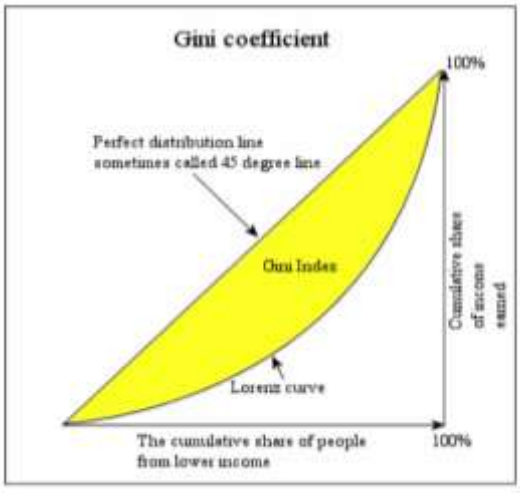
1) Mean Independence, meaning the measure remains unchanged if all incomes were to double.

2) Population Size Independence, indicating that the measure is unaffected by changes in population size.
3) Symmetry, meaning the measure remains consistent even if individual incomes fluctuate (Haughton & Khandker, 2009; Rohwerder, 2016).

In many developing nations, the Gini coefficient typically falls between 0.3 and 0.7, whereas in more developed nations, it usually hovers around 0.4 (Angelsen & Wunder, 2006). A Gini coefficient of 0 represents complete income equality, where everyone earns the same amount. On the other hand, a coefficient of 1 signifies total income inequality. These extreme values are seldom encountered. A coefficient ranging from 0.2 to 0.3 denotes relative income equality (Moges, 2019). Values between 0.3 and 0.4 are often described as reflecting "sufficient equality." When the coefficient falls between 0.4 and 0.5, it indicates a notable income disparity and is classified as showing a significant income gap. Coefficients above 0.5 might point to frequent political unrest and increasing social tensions (Moges, 2019).

The Lorenz curve illustrates the distribution of income across different segments of the population. On the horizontal axis, it displays the cumulative share of the population, ranging from the lowest to the highest income earners, while the vertical axis represents the cumulative share of income earned. The Lorenz curve compares the actual distribution of income with a theoretical equal income distribution line. In this curve, the cumulative values of income or consumption expenditure are plotted for segments of the population, such as the lowest 20%, 40%, 60%, 80%, and up to 100% of the total population, against the backdrop of a perfectly equal income distribution line.

Figure (2.1) Lorenz Curve and Gini Coefficient



Source: Michael P. Todaro, 2011

2.3 Measures of the Poverty Extent

The extent of poverty is assessed through various metrics, including the poverty rate or headcount index, poverty gap, squared poverty gap, and the poverty index. Analyzing poverty is essential to identify households or individuals experiencing poverty. The definition of poverty is based on income levels relative to the poverty line, which is determined by the minimum consumption expenditure or income required for basic needs (United Nations, 2010). According to the World Bank's Poverty Estimates, individuals earning up to $2 per day are classified as experiencing "moderate poverty," while those earning $1.25 per day or less are categorized under "extreme poverty."

(i) Headcount Index

The level of poverty is assessed using the Headcount Index. According to the approach developed by Foster, Greer, and Thorbecke (1984), the Headcount Index is expressed as the percentage of the population that is classified as poor. Known as the Headcount Ratio (HCR) or simply (H), this metric represents the proportion of individuals living in poverty relative to the entire population. It serves to indicate whether the state of poverty is remaining constant, decreasing, or rising.

$$PR = HCR = \frac{\text{Number of People Below Poveorty Line}}{\text{Total Population}}$$

Where, PR = Poverty Rate

HCR = Headcount Ratio

To evaluate poverty levels, the Headcount Ratio is employed as the primary metric. This fundamental measure indicates the proportion of individuals living in poverty. For assessing the presence of poverty, Foster, Greer, and Thorbecke (1984) suggested the following approach::

$$P_\alpha(y,z) = \frac{1}{n}\sum_{i=1}^{q}\left(\frac{z-yi}{z}\right)^\alpha$$

Where, z = Poverty line income or consumption expenditure level,

q = the number of HH whose income or expenditure is below the level of poverty line,

n = total number of sample households,

y = income or expenditure of households,

□ = the FGT parameter, which is called as poverty aversion or poverty elimination parameter.

The poverty elimination parameter "α" can take on values of "0," "1," or "2." The parameter "P" represents different aspects of poverty depending on the level of concern. When "α = 0," P0 is known as the Headcount Index, which indicates the proportion of the population living in poverty. When "α = 1," "P" reflects the intensity of poverty and is referred to as the Poverty Gap Index. When "α = 2," "P" denotes the severity of poverty, also known as the Squared Poverty Gap Index. The measure of headcount index is as follows:

Headcount Index	P_0	=	N_p / N ;
Where,	N_p	=	the Number of poor and
	N	=	Total population or sample
	OR		
Headcount Index	P_0	=	$q \frac{1}{N}$

If the level of aversion to poverty rises, α is equal to 1, reflecting the severity of poverty. This metric, known as the poverty gap or income gap index, is used to measure poverty.

(ii) Poverty Gap Index

The poverty gap index (P1), also known as the income gap index (I), quantifies the severity of poverty. This measure is defined as "the proportion of the difference between the poverty threshold and an individual's income or consumption level relative to the poverty threshold. It indicates the extent of poverty depth. This measure is also referred to as "the income gap ratio" (Amartya, S., 1976). The poverty gap (Gi) is calculated by subtracting an individual's actual consumption or income (yi) from the poverty line level (z). It represents the total amount required to elevate everyone below the poverty threshold up to that threshold. According to the Poverty Manual, the poverty gap reflects the average shortfall in income or consumption relative to the poverty line level. It is expressed as follows:

(Gi) = (z - yi) . I (yi < z), then poverty gap index (P1) is written as

$$\textbf{Poverty Gap Index } (P_1) = \frac{1}{n}\sum_{i=1}^{q}\left(\frac{z-yi}{z}\right)$$

where, y = per capita consumption expenditure

z = consumption expenditure level of poverty line

n = the numbers of sample households

The minimum expenditure required to eradicate poverty through transfers can be assessed by ensuring these transfers are utilized efficiently and effectively. A reduction in the poverty gap index indicates a lower need for budget allocation towards poverty alleviation. This measure is known as “the degree of income deficiency for each impoverished individual” (Amartya, S., 1976) and is associated with the poverty index.

(iii) Poverty Severity Index or Squared Poverty Gap Index

Poverty severity is quantified using P2, a metric designed to assess the conditions of the most impoverished individuals.

$$(P_2) = \frac{1}{n}\sum_{i=1}^{q}\left(\frac{z-yi}{z}\right)^2$$

The Poverty Severity Index is utilized to account for income inequality. It represents the "weighted sum of the poverty gap" and indicates the proportion of the poorest among the impoverished. The Squared Poverty Gap Index focuses on those whose income or consumption significantly falls below the poverty threshold.

(iv) Poverty Index

To address equal income distribution and bridge the income gap, the Poverty Index (P) is used. This index integrates poverty levels, the poverty gap, and the Gini coefficient. It is determined by multiplying the head-count ratio (H) with the income-gap ratio (I), then adding the Gini coefficient (G) of the income distribution among the poor, weighted by (1 - I) (Amartya, S., 1976). It can be expressed as:

Poverty Index = [I + (1 - I) G] H 15

where, (I) = Poverty gap or income gap ratio

(G) = Gini coefficient

(1-I) = the weighted ratio of the mean income of the poor to the poverty line income level.

If the poverty index (P) is 0, it indicates that there is no poverty in the region, meaning all individuals have income levels exceeding the poverty threshold.

Conversely, if (P) is 1, it would imply that everyone has no income and no consumption, which is unrealistic. Therefore, the value of (P) will never be 1 (Amartya, S., 1976). The index represents the proportion of the population that needs to exceed the poverty line, assuming an equal distribution of income.

2.4 Review on Previous Studies

The Myanmar Academy of Arts and Science (2019) conducted a study on income inequality among urban households in Mandalay District. This research involved a sample of 300 households across 10 wards in three townships: Pyi Gyi Tagun, Chan Mya Tharsi, and Amarapura, all within Mandalay District. The main aim of the study was to assess the level of income disparity among urban households in the district, using individual income data to evaluate poverty status. Gini coefficient is 0.37 percent in the urban area of Mandalay District that there is a moderately low of income. Consumption expenditure to household income is only 47.3 percent and households spend more than income or almost all income on consumption expenditure. The study found that some share of household income transfer into moneylenders, and households in debt have lesser share of income for consuming other food and non-food items. Moreover, low-income in the lower and bottom level have extremely high consumption expenditure to household income ratio; and one-fourth of households are in debt.

Gini is an overall measurement and the study of inequality should be much focuses on the real life of households in depth. In the policy perspective, deeper upstanding of why the poor are poor and how much is the severity of poverty will lead to better solution towards reducing poverty and inequality in the society.

Daw Kyi Kyi Win (2021) focuses on poverty analysis in the rural areas of Maubin District, Ayeyarwady Region. The study analyzed data from 1,668 households across 17 villages within 4 townships in Maubin District. The primary aims were to examine the level of poverty and income inequality in these rural areas. The research utilized per capita consumption expenditure to gauge poverty levels. The findings indicated a Headcount Index of 45.9%, a poverty gap index of 0.2771, a poverty severity index of 0.1302, and an overall poverty index of 0.322 for Maubin District. Additionally, the Gini coefficient was 0.597, highlighting a significant disparity in consumption due to a pronounced income gap.

The study analyzed the determinants of poverty using the Binary Logistic Regression Model, focusing on household per capita consumption expenditure. Key

independent variables included the gender, occupation, and education level of the household head, as well as household size, age dependency ratio, economic dependency ratio, land ownership, and the number of income sources. The gender of household heads was found to have no significant impact on poverty levels in the area studied. A significant proportion of household heads, specifically 42.4%, had completed only primary education and were employed in agriculture or low-wage, non-farm jobs. These positions generally do not require secondary, tertiary, or higher education and offer limited salaries, which contributes to poverty.

The majority of household heads were in their early fifties, with an average age of 53, placing them in the middle age range. The research indicated that the gender of the household head did not significantly impacts the level of poverty. Poverty rates were found to have a positive correlation with the size of the household. Additionally, there was a relationship between the diversification of income sources and household income levels. Landlessness emerged as a primary factor contributing to poverty, as a significant proportion of households, 80.3%, in Maubin District were landless.

The survey results indicated that only 6.3% of households in Maubin District had access to electricity, and this limited access was positively associated with poverty levels in the Ayeyarwady Region. The study identified several factors contributing to this issue, including inadequate credit access, poor transportation infrastructure, limited job opportunities, insufficient information and knowledge for expansion, and low levels of human resource development.

CHAPTER (III)

POVERTY IN MYANMAR AND MAGWAY REGION

3.1 Poverty in Myanmar

The Planning Department under the Ministry of National Planning and Economic Development of Myanmar initiated poverty analysis with the Integrated Household Living Condition Assessment (IHLCA), in collaboration with UNDP, in 2005 and 2010. This assessment surveyed 18,660 households from both urban and rural areas across Myanmar. Additionally, the MOPF, in partnership with the WBG, performed a poverty analysis using a multiple imputation technique. This analysis applied a Standard Imputation Approach and incorporated data from IHLCA-I, IHLCA-II, and the Myanmar Poverty and Living Conditions Survey (MPLCS).

Furthermore, the MPLCS, conducted jointly by the CSO and UNDP, took place from 2016 to 2017, covering 13,730 households across various states and regions (CSO and WBG, 2019).

According to data from the CSO and UNDP (2019), the poverty rate was recorded at 48.2% in 2005, decreased to 42.4% in 2010, and further fell to 32.1% by 2015. For the year 2017, poverty rates were 24.8% at the national level, 11.3% in urban areas, and 30.2% in rural regions. The UNDP's latest survey indicated poverty rates of 46.3% in 2022 and 49.7% in 2023 (UNDP, 2024). The various poverty rates derived from different benchmarks for poverty line consumption expenditures are presented in Table 3.1.

Table (3.1) Poverty Rate Estimation of Myanmar

Sources	Estimated Poverty Rate					
	2005	2010	2015	2017	2022	2023
Central Statistical Organization and World Bank Group, 2019	48.2 %	42.4 %	32.1 %	24.8 %	-	-
UNDP, Poverty and the household economy of Myanmar: April 2024	-	-	-	-	46.3 %	49.7%

Source: *Central Statistical Organization and World Bank Group, 2019*

Poverty and the household economy of Myanmar: April 2024, UNDP

The estimated poverty rates produced by the IHLCA Project Technical Unit are lower compared to those reported by the WBG and the MOPF for the same study periods. This discrepancy arises because the WBG and the MOPF used a poverty line benchmark from 2017, which is higher than that used by other sources. Consequently, there is a need for organizations to adopt a consistent methodology when assessing poverty in Myanmar to accurately reflect the true poverty situation in the same study area. Additionally, the poverty line should be determined based on the international benchmark of $1.25 per capita per day. For studies on extreme poverty, the minimum consumption level is set at $1.25, which is considered the international poverty line. For analyses of poverty in developed countries, the line is set at $1.90, and for studies of moderate poverty, it is set at $2.00 (Jolliffe & Prydz, 2016).

Poverty is understood as the shifts in the economic status of households over time. As some individuals fall into poverty, others may rise out of it. This dynamic is categorized into four types of poverty: entry into poverty, exit from poverty, chronic

poverty, and non-poverty. Households that persistently remain in poverty are classified as chronically poor, whereas those who transition in and out of poverty are considered transitory poor. Some households are classified as non-poor. According to the IHLCA Project's 2011 report, 28% of households in Myanmar experienced transitory poverty, while 10% were identified as chronically poor.

The IHLCA Project (2011) found that natural disasters, such as storms, floods, and fires, often push households into poverty, while chronic poverty was predominantly influenced by droughts and cyclones. The study indicated that economic dependency ratios were more significantly associated with new cases of poverty than with chronic poverty. Additionally, factors such as the inability to work or job loss were closely linked to entering poverty. Households with smaller family sizes were more likely to avoid poverty compared to those with larger family sizes. Workers in informal sectors, including construction, vending, and casual labor, were more prone to long-term poverty, often leading to chronic poverty. In contrast, households that managed to escape poverty were typically engaged in productive activities, industrial work, trading, owning small businesses like groceries and stores, or self-employed services.

The IHLCA Project (2011) found that many small farmers fall into poverty due to the loss of their land and high dependency burdens. Landless farmers are particularly prone to chronic poverty because they lack the capital needed for farming. In areas where land ownership is scarce, chronic poverty is often linked to landlessness. Although some small farmers may experience poverty, the proportion of landowners is relatively low. Thus, land ownership and the size of farmland are important factors in escaping poverty, with landlessness being a significant contributor to economic hardship in rural areas. Additionally, issues such as inadequate housing, limited access to clean water, poor sanitation, and lack of electricity exacerbate chronic poverty by affecting living standards. Literacy rates and enrollment in basic education are associated with better chances of escaping poverty. Contributing factors to poverty include a shortage of job opportunities, rising rates of landlessness, large family sizes (over five members), high economic dependency ratios, limited market access, low educational attainment, low wages for casual workers, underdeveloped infrastructure, and the impacts of climate change.

3.2 Poverty Characteristics in Myanmar

According to the HLCA Project (2011), there are notable differences in poverty characteristics not only between poor and non-poor individuals but also between rural and urban areas. The identified poverty characteristics are as follows:

- **Household Size:** Poor households typically have a larger household size compared to non-poor households (6 members vs. 4 members).
- **Economic Dependency Ratio:** Poverty is often linked to low returns from economic activities.
- **Agricultural Work:** 54% of individuals in poor households are employed as agricultural laborers.
- **Casual Labor:** 28% of members from poor households work in casual jobs in rural areas.
- **Land Ownership:** Poor households generally have smaller farm sizes, averaging 4.4 acres.
- **Child Labor Participation:** The participation rate of children aged 10 to 14 in labor is 18% among the poor, compared to 10% among the non-poor.
- **Unemployment:** The unemployment rate among poor families is 2.4%, higher than the 1.4% rate for non-poor families.
- **Employment:** The informal sector has a significant impact, with 73% of the labor force engaged in low-wage, informal work. Low-skilled casual laborers make up 18% of the workforce, and unpaid family workers account for 15%. A significant portion of these workers is located in rural areas.
- **Roofing Quality:** Regarding roofing quality, 32% of poor households use higher-quality roofing materials, which is lower compared to 59% of non-poor households.
- **Access to Drinking Water:** Access to drinking water differs between the poor and non-poor (62% vs. 72%), and also between rural and urban areas (65% vs. 81%).
- **Electricity Access:** There are considerable disparities in electricity access, with 28% of the poor having access compared to 55% of the non-poor, and a significant difference between rural (34%) and urban (89%) areas.
- **Malnutrition:** Malnutrition rates are 35% among the poor and 30.6% among the non-poor, with 33.7% in rural areas and 25.5% in urban areas.

- **Education:** Educational attainment shows that 35% of the poor and 59% of the non-poor have achieved a certain level of education, with 47% in rural areas and 75% in urban areas.

The MOPF, in collaboration with the WBG and the IHLCA Technical Unit, has conducted an analysis of household characteristics across rural, urban, and Union levels, as well as the availability of public utilities. This analysis includes household characteristics related to poverty status, such as household size, demographic dependency ratio, and the proportion of female-headed households, covering the years 2005, 2010, and 2015.

Table (3.2) Household Characteristics

Characteristics	Year	Poverty Status		Region		Union level
		Poor	Non Poor	Urban	Rural	
Household Size (Members)	2005	6.1	4.9	5.1	5.2	5.2
	2010	6	4.7	4.9	5	5.2
	2015	5.3	4	4.2	4.3	4.3
Demographic Dependency ratio (%)	2005	62	56	48	61	58
	2010	56	52	46	56	53
	2015	67.6	46.6	44.5	54.2	51.3
Female Headed Households (%)	2005	18.3	19.1	25.1	16.7	18.9
	2010	18.5	21.5	26.7	18.7	20.8
	2015	19.4	21.5	23.4	20.1	21.1

Source: *Ministry of Planning and Finance, World Bank Group and the IHLCA Technical Unit*

The WBG and the MOPF (2017) utilized a multiple regression model to examine the relationship between household characteristics and poverty status, focusing on household consumption and expenditure. It was found that food, cooking fuel, clothing, and soap together comprised almost 80% of the expenditures for the lowest income quintile. Rural households exhibited a higher dependency ratio, which was more closely related to education than factors such as household size, location, or the age of household heads. Lower education levels among household heads were linked to a higher likelihood of poverty. The multiple regression analysis revealed that education, health, public infrastructure, and productive and financial assets significantly impacted household consumption and income levels. The dropout rates

for children aged 13 to 18 who left school before completing primary education were 14%, while the rate for those leaving before completing lower secondary education was 17%. Health care spending averaged 6% of total household expenditures, with poor households spending approximately 5.8%. Thus, the difference in health care expenditure between the average household and poor households was minimal.

Among public utility services, only 32.5% of the population had access to electricity, with 10.6% relying on private grid sources and 40.6% using household systems powered by various energy sources. However, 16.3% of the population did not have any electricity access. In rural regions, 21.7% of residents had no electricity access at all, 12.6% were connected to the public grid, and 12.8% used private grids. Additionally, 52.9% of the population obtained electricity from alternative sources. Consequently, neither 56.8% of the population at the national level nor 74.6% in rural areas had the opportunity to use electricity for production purposes. In urban areas, 85% of households had access to safe drinking water, compared to 62% of rural households, who accessed safe drinking water through tube wells and purified bottles. According to the WBG and MOPF, 25% of rural households lacked access to luxurious toilet facilities, and 16% did not have fly-proof toilets.

There were found in the report as follows points:

1) Urban areas are experiencing faster expenditure growth compared to rural regions, according to the report.
2) Enhancing support for farms and villages is crucial for mitigating poverty and reducing inequality.
3) Improvements in welfare can be observed through indices like the depth of poverty and the squared poverty gap, which measure the severity of poverty.
4) Poor and non-poor households can be differentiated based on demographic characteristics such as the number of dependents, age, educational level of the household head, and asset ownership.
5) In Myanmar, poorer households typically rely heavily on agriculture with small land plots and limited irrigation, often participating in casual labor, reflecting a high degree of income diversification.
6) Households with fewer assets face greater challenges, including difficulties in obtaining credit and competing in markets.

7) Rural areas, particularly among the poor, suffer from inadequate public utilities, such as limited access to electricity, poor infrastructure, and insufficient clean water and health services.
8) Poverty arises from multiple deprivations, including high healthcare costs and significant transaction expenses for accessing resources, which undermine the well-being of the poor.
9) Unforeseen events like natural disasters, crop failures, fluctuating market prices, and health risks contribute to poverty by hindering economic growth.
10) One-fifth of households are heavily indebted due to loans taken to meet basic food needs, rather than investing through savings.

In 2015, the Gini coefficient for income inequality in Myanmar was 28% in rural areas, compared to 36.6% in urban areas, with a national average of 31.7%. This suggests that income inequality is more pronounced in urban areas than in rural ones. Households in the top 10% income bracket receive 10% of the total income, making up the highest income group. Conversely, 3.5% of households fall into the lowest quintile, receiving only 10% of the total income, thus belonging to the lowest income group. The details of income inequality measures are presented in Table 3.3.

Table (3.3) Country Measure of Income Inequality and Distribution of Income

Year	Gini Coefficient	Income Distribution			
		Top 10 %	Top 20%	Bottom 10%	Bottom 20%
2015	31.7%	25.9 %	40.2 %	3.5 %	8.4 %
2017	30.03 %	14.84 %	17.48 %	9.09 %	22.19 %

Source: *World Bank Group and Ministry of Planning and Finance (2017)*

3.3 Poverty Profile of Magway Region

In 2005 and 2010, the Ministry of Planning and Economic Development, in collaboration with UNDP, conducted a nationwide assessment survey on integrated household living conditions through the IHLCA Project. The Magway region, located in Myanmar's Dry Zone and a major area for oilseed production, has an economy primarily driven by agriculture, alongside petroleum production and other extractive industries. Climate change and drought events have exacerbated poverty in this region, with poverty rates increasing from 35.6% in 2017 to 55.7% in 2023, making it the fourth highest in terms of poverty rates (CSO and WBG, 2019; Poverty and the Household

Economy of Myanmar: April 2024, UNDP). The IHLCA Project conducted poverty assessments in Magway during the periods of 2005 and 2010.

Table (3.4) Poverty Headcount and Depth of Magway Region

Level	Poverty headcount			Poverty depth		
	2017	2022	2023	2017	2022	2023
National	24.8	46.3	49.7	5.2	18.5	24.4
Magway Region	35.6	53.0	55.7	7.6	22.6	28.9

Source: *Central Statistical Organization and World Bank Group, 2019*

Poverty and the household economy of Myanmar: April 2024, UNDP

Table (3.5) Poverty Profile and Characteristics of Magway Region

Poverty Profile and Characteristics	2005	2010
Headcount Index (Rural)	**44.0**	**28.2**
Poverty Gap Index (Rural)	**0.09**	**0.04**
Squared Poverty Gap Index (Rural)	**0.03**	**0.0096**
Poorest Quantile share in total consumption (%)	**12.5**	**13.3**
Average HH Size	**5.0**	**5.6**
Female headed households (%)	**19.9**	**20.1**
Primary education level of HHH (%)	**37.0**	**59.3**
Landless rate (%)	**26.2**	**33.4**
Access to Quality Roofing (%)	**13.5**	**10.6**
Safe and Convenient Drinking Water (%)	**53.7**	**60.2**
Fly Proof Toilet Use (Toilet Condition)	**53.9**	**75.3**
Electricity Access (%)	**22.4**	**24.4**

Source: *Ministry of Planning and Finance, World Bank Group and the IHLCA Technical Unit, 2010*

According to the IHLCA survey data, the Headcount Index for poverty in the Magway region was 44% in 2005 and dropped to 28.2% by 2010, indicating a significant reduction in poverty over this period. The Myanmar Living Conditions Survey conducted by the WBG and the MOPF in 2017 revealed that the Headcount Index for Magway in 2017 was 35.6%, based on a poverty threshold of 1590 Kyats per adult per day. The survey noted that poverty rates are most pronounced in the Hills,

Mountains, and Coastal regions. Despite this, the majority of the impoverished population resides in the more densely populated Dry Zone and Delta areas.

As depicted in Table (3-5), the share of consumption for the lowest quantile of total consumption rose from 12.5% in 2005 to 13.3% in 2010. Additionally, the average household size grew from 5.0 to 5.6, indicating a higher population rate in 2010 compared to 2005. This increase underscores the need for enhanced job opportunities to accommodate all family members. Furthermore, the percentage of female-headed households climbed from 19.9% to 20.1% by 2010, highlighting the importance of improving job prospects for women to enhance overall well-being.

The level of primary education among household heads was a crucial factor in household poverty, with the percentage rising from 37% in 2005 to 59.3% in 2010. The proportion of more educated household heads also increased. The rate of landless individuals was 26.2% in 2005, growing to 33.4%, indicating that many small-scale agricultural farmers were engaged in activities such as livestock rearing, casual labor, and working for wages on other farms. Housing conditions were negatively impacted by declining household income, which led to reduced access to quality roofing. The percentage of households with access to quality shelter fell from 13.5% in 2005 to 10.6% in 2010, reflecting a deterioration in living standards in the region over the decade.

The report indicates that the availability of safe and accessible drinking water improved, rising from 53.7% to 60.2%. In the sanitation sector, the use of fly-proof toilets among households increased to 75.3%, while 24.7% of households in certain rural areas did not use such toilets. Lastly, the percentage of electricity access in rural areas of the Magway region, encompassing public, communal, and private sources, was recorded at 24.4%.

Table (3.6) GDP and Growth rate by Sector in Magway Region at (2015-16) Constant Price: (Kyats Million)

Sr. No.	GDP and Growth rate by Sector	2019-2020	2020-2021	2021-2022	2022-2023
Magway Region		8,457,942.6	8,170,510.7	5,701,569.3	9,191,368.3
1	Agricultural Sector	1,619,735.9	1,663,559.7	1,198,973.3	1,947,367.0

	Growth rate of Agriculture Sector	-2.9	0.6	4.5	5.0
2	Industrial Sector	3,384,741.0	3,268,532.3	2,312,755.3	3,664,755.3
	Growth rate of Industrial Sector	5.9	-9.1	4.8	-2.4
3	Service Sector	3,453,465.7	3,238,418.7	2,189,840.7	3,579,246.0
	Growth rate of Service Sector	2.6	-7.8	4.3	2.5

Source: *Planning Department of Magway Region (2019-2023)*

If the production was decreased by sector within finical, according to the policy of Growth rate is compare with production of previous finical year and described that the result of Growth rate by minus (-) or plus (+).

3.4 Background Situation in Yenanchaung Township

Yenangyaung Township is part of the Chauk District in Myanmar's Magway Division. This area is notable for its significant mineral resources, particularly oil. Yenangyaung is situated along the Yangon-Mandalay Highway, on the east side of the Ayeyarwady River, within Myanmar's central basin. The township is positioned between 20.8° and 20.38° North latitude, and 90° 47' and 95° 13' East longitude. It is bordered by Pwintphyu and Salin Townships to the west, Magway Township to the south, Natmauk Township to the east, and Chauk and Kyaukpadaung Townships to the north. Covering an area of 388.95 square miles (or 248,931 acres), Yenangyaung represents 2.25% of the total land area of the Magway Region. The terrain includes several hills and valleys, with elevations ranging from over 600 feet at the lowest point to 700 feet at the highest. The city itself is situated more than 650 feet above sea level. The Irrawaddy River runs north to south through the township, while the Pinn stream flows from east to west.

The township is home to 35,529 households and a population of 159,921. It is divided into 14 Wards, 29 Village Tracts, and 145 villages.

3.4.2 Economic Situation

Yenanchaung Township situated in the Magway Region, experiences gradual economic growth. The predominant occupations of the local residents include

agriculture and service-related work. The number of seasonal migrant workers in the area has been rising each year. Peanuts, sesame, and onions are the principal crops produced, with various types of beans also being cultivated. The township has a total of 94,194 acres of agricultural land; 90.2% of this land is used for cultivation, 0.43% is classified as farmland, and the remaining 9.37% is dedicated to garden land.

In addition to agriculture, the Yenanchaung Industrial Zone hosts 88 private industrial enterprises, as detailed in the following table.

Table (3.7) Private Industrial Activities of Yenanchaung

Sr. No.	Name of industry	No of industry
1	Oil mill	16
2	Pondering Mills	2
3	Various curry spice industry	1
4	Coffee industry	1
5	Plum grinding industry	4
6	Purified Water industry	2
7	Timber industry	2
8	Plastic industry	1
9	Paper industry	1
10	Red soil grinding industry	1
11	Stone grinding industry	1
12	Draw the wire industry	2
13	Pre-iron industry	7
14	Batter industry	1
15	Oxygen industry	1
16	Iron repair (Twin-khon) industry	26
17	Car workshop industry	5
18	Car Body industry	10
19	Car Painting	4
Total		88

Source: *The General Administration Department, Yenanchaung Township, 2019*

The Myanmar Economic Bank, Myanmar Agriculture Development Bank, and four private institutions, namely CB Bank, Tun Foundation, Global Treasure Bank, and Kanbawza Bank, contribute to regional economic development through their services. Concurrently, the Myanmar Agriculture Development Bank (MADB) and several microfinance organizations are facilitating financial access to foster business creation.

3.4.3 Education and Health Care Service

Yenanchaung Township, situated closest to the regional city of Magway, has seen limited progress in its university infrastructure. It is home to a single university, which evolved from a degree college, and one Government Technical Institute. The township's proximity to the regional city offers a strategic advantage for educational development compared to other townships. Students can easily access various universities in Magway, including the Teacher Training Centre, University of Computer Studies, University of Health Sciences, University of Medicine, Government Technical University, and the University of Nursing.

The infrastructure for Basic High Schools and Basic Middle Schools has been expanding alongside the rise in enrollment rates. Yenanchaung Township currently has 12 Basic High Schools, 21 Sub-BHS, 18 Basic Middle Schools, 87 Basic Primary Schools, 2 Pre-Primary Schools, and 2 Monastic Education Schools. The teacher-to-student ratio varies between 15 and 25 students per teacher at each school level, as detailed below:

Table (3.8) Teachers and Students Ratio of Yenanchaung

Sr No	School	Teacher	Students	Ratio
1	Basic High Schools	341	8262	1:24
2	Sub-Basic High Schools	321	7455	1:23
3	Basic Middle Schools	183	3623	1:20
4	Sub-Basic Middle Schools	9	214	1:24
5	Basic Primary Schools	403	5506	1:14

Source: *The General Administration Department, Yenanchaung Township, 2019*

While health infrastructure in Yenanchaung Township is still incomplete, there are some facilities available. The township has one public hospital, one traditional

hospital, two station health hospitals, and 51 rural or sub-rural health centers. The ratio of health resources personnel to the population is illustrated in Table 3.9.

Table (3.9) Health Staff and Population Ratio of Yenanchaung

Health Resources Person		Total Population	Ratio
Doctors	3	159921	1:53307
Nurses	10	159921	1:15992
Health Assistants	11	159921	1:14538

Source: *The General Administration Department, Yenanchaung Township, 2019*

In the region, prevalent illnesses include malaria, diarrhea, tuberculosis, dysentery, and hepatitis. As a result of these health issues, some patients receive treatment at Magway Hospital and various private clinics.

3.4.4 Transportation

Yenanchaung is situated in the northeastern part of the Magway Region and near the boundary of the Mandalay Region's main business hub. It is positioned along the Yangon-Pyay-Magway and Mandalay highways. Transportation plays a crucial role in shaping economic growth, living standards, and regional development. Despite Yenanchaung having well-established transportation infrastructure and being a central business location, its economic progress is hindered by unstable agricultural output due to climate change and drought. Additionally, although it is located on the east bank of the Ayeyawady River which is not main utilized for business or income-generating activities.

The main road in the township border area spans approximately 30 miles from Magway to Kyaukpadaung, with a distance of 30 miles to Magway and 141 miles to Mandalay. This road is essential for businesses transporting goods from Pyay township and Magway to Mandalay, and it serves as a direct route for local products to reach markets in Mandalay.

CHAPTER (IV)
SURVEYS ANALYSIS

4.1 Survey Profile

The study area includes 29 tracts, 145 villages, and 35,529 households (General Administration Department, 2019). To determine the sample size of households, a random sampling method based on Krejcie and Morgan's formula was employed. Initially, 14 villages were randomly chosen from the list of first-stage units, with no replacements, and subsequently, 166 households were selected from the second-stage unit list.

The primary survey utilized a random sampling technique to determine the sample size. Data for this study was collected through personal interviews in 2024, focusing on information from household head profiles, household profiles, and community profiles. The sample size was calculated using the population proportion formula to select samples from the villages of Yenanchaung.

$$\mathbf{n} = \frac{\boldsymbol{N\,P\,(1-P)}}{\boldsymbol{(N-1)\;D + P\,(1-P)}}$$

where, n = sample size

N = population size =145

P = proportion = 0.5

B = Bound on the error of estimate = 0.25 (from pilot survey)

D = Margin of error $= \frac{B^2}{4} = \frac{0.25^2}{4} = 0.015625$

$$\mathbf{n} = \frac{\mathbf{145 \times 0.5 \times 0.5}}{\mathbf{(145-1) \times 0.015625 + 0.5 \times 0.5}} = \mathbf{14.25}$$

According to the result of Krejcie and Morgans formula, the random sampling method was selected 14 villages from 145 villages to interview and data collection process from the whole area as the first stage units (FSUs).

Table (4.1) Selected Villages

Sr. No.	No. of Village Tract	No .of Village	Sample Villages	Selected Villages
1	29	145	14	Kan Ni, Sar Gi, Than Pin Kone, A Lae Kan, Chan Kan (S),Tae Pin Kone, Tha Pyay San, Zee Pin Yoe, Phaung Kwe, Kyu Chaung Lay, Lae Kyin Yoe, Kone Ai, Thur Lu Kan, Ywar Thit Gyi

Source: *Compilation based on Survey data (2024)*

As second stage unit (SSU), to select the sample household size, Krejcie and Morgans formula adjusted to Cochran's method for quantitative variables is used.

$$\mathbf{n} = \frac{n_0}{1 + \frac{n_0}{\mathbf{N}}}$$

$$n_0 = \frac{\boldsymbol{N\,P\,(1-P)}}{\boldsymbol{(N-1)\,D + P\,(1-P)}}$$

Where, n = sample size

N = population size = 35529

P = proportion = 0.5

B = Bound on the error of estimate = 0.025

D = Margin of error $\frac{B^2}{4} = \frac{0.025^2}{4} = 0.0015625$

$$n_0 = \frac{35529 \times 0.5 \times 0.5}{(35529-1) \times 0.0015625 + 0.5 \times 0.5} = 159.29$$

$$\mathbf{n} = \frac{159.29}{1 + \frac{159.29}{35529}} = 158.58$$

Sample size =158.58/0.95 = 166.39 = 166 households

As second stage units, 166 households selected with the between 5 percent to 15 percent of total household from each village at stratified random sampling.

Table (4.2) Selected Sample Households

Sr. No.	Village Name	No. of Households	Random Sample Households
1	Kan Ni	46	10
2	Sar Gi	80	10
3	Than Pin Kone	115	12
4	A Lae Kan	79	8
5	Chan Kan (S)	98	7
6	Tae Pin Kone	89	10
7	Tha Pyay San	241	15
8	Zee Pin Yoe	125	10
9	Phaung Kwe	147	17
10	Kyun Chaung Lay	98	14
11	Lae Kyin Yoe	325	15
12	Kone Ai	145	12
13	Thar Lu Kan	186	14
14	Ywar Thit Gyi	220	12
Total		1994	166

Source: *Compilation based on Survey data (2024)*

4.2 Survey Design

Surveys are conducted through interviews with household heads, key community figures, and authorized individuals using two types of questionnaires: one for household-level data and another for community-level data. These questionnaires are designed to assess income inequality and identify poverty causes. The household-level questionnaire collects straightforward socio-economic data, including details about household characteristics, the head of the household, household members, employment status, living conditions, property, consumption expenditure, and income.

The community-level questionnaire, on the other hand, focuses on infrastructure development and income generation needs.

4.3 Socio-economic Characteristics

The characteristics of socio-economic status are measured by various factors, including income, occupation, education, and health. These characteristics can have either a positive or a negative impact on a community's well-being. (Nicki Lisa Cole, Ph.D.)

4.3.1 Social Characteristics

Social characteristics are linked to household economic growth and include factors such as household size, age distribution, gender, and the education level of the household head, reasons for school dropout or incomplete schooling, and sanitation conditions. The average values of these social characteristics for household heads are presented in Table (4.3).

Table (4.3) Social Characteristics of Household members

Sr. No.	Characteristics		Number	%
1	Age group	0-5	35	4.7
		6-18	205	27.4
		19-65	472	63.0
		above 65	37	4.9
	Total		**749**	**100**
2	Sex of HH members	Male	342	45.7
		Female	407	54.3
	Total		**749**	**100**
3	Number of Working People	Working people	449	59.9
		Dependent people	300	40.1
	Total		**749**	**100**

Source: *Compilation based on Survey data (2024)*

Table (4.3) Social Characteristics of Household members (Continued)

Sr. No.	Characteristics		Number	%
4	Occupation of Household members	Farmer	189	25.2
		Casual labor	133	17.8
		Construction(domestic/foreign)	31	4.1
		Factory (domestic/foreign)	32	4.3
		Livestock	14	1.9
		Carpenter/Mason	5	0.7
		Member of orchestral	3	0.4
		INGO Volunteer	2	0.3
		Palm worker	5	0.7
		Grocery store/Trading	21	2.8
		Public Staff/Teacher/Retired	9	1.2
		Driver, Hotel Services	5	0.7
		Dependent people	300	40.1
	Total		**749**	**100**

Source: *Own Compilation based on Survey Data (2024)*

Table (4.4) Social Characteristics of Household Heads.

Sr. No.	Characteristics		Number	%
1	Occupation of Household Heads	Farmer	91	54.8
		Casual labor	42	25.3
		Construction (domestic/foreign)	2	1.2
		Livestock	7	4.2
		Carpenter/Mason	5	3.0
		Member of orchestral	2	1.2
		Grocery store/Trading	7	4.2
		Public Staff/Teacher/Retired	4	2.4
		Driver, Hotel Services	6	3.6
	Total		**166**	**100**
2	Land ownership	Land Less	60	**36.1**
		Land owner 0-5 acres, 55. (51.9 %) 6-10 acres, 40 (37.7 %) above 10 acres, 11 (10.4 %)	106	**63.9**
	Total		166	**100**
3	Sex of HHH	Male	152	91.6
		Female	14	8.4
	Total		**166**	**100**
4	Education level of Household Heads	Monastic	16	9.6
		Primary	107	64.5
		Secondary	20	12.0
		High School	18	10.8
		Graduate	5	3.0
	Total		**166**	**100**
5	Family Size	1-3	36	21.6
		4-6	116	70.0
		Above 6	14	8.4
	Total		**116**	**100**

Source: *Compilation based on Survey data (2024)*

4.3.2 Economic Characteristics

In rural townships, where agriculture and livestock are the primary sources of income, the extent of farmland ownership, the employment status of household heads, and housing conditions can significantly impact family income and consumption expenditures. These factors are considered key economic characteristics of rural areas. While farmland ownership is a crucial element for households aiming to increase income and improve living standards, it has been decreasing due to factors such as family inheritance traditions, land division policies, and population growth. As a result, the size of individual households' farms has gradually diminished over the past ten decades.

The survey results show that 72.5 percent of respondents are landowners, while 27.5 percent are landless. However, in terms of land size, 48.3 percent of landowners possess less than 5 acres. Due to the poor soil quality and the types of infertile land in the Yenanchung township area, many farmers with less than 5 acres are experiencing similar poverty levels as casual workers or landless households. Consequently, 20.6 percent of household heads and their family members work as casual laborers on other farms. (*Table 4.4, Occupation of Household members*)

In agro-ecological zones, the poverty headcount rate is highest in the Coastal, Hills, and Mountains areas, at 43.9 percent, followed by the Dry Zone at 32.1 percent. Significant factors affecting the Dry Zone include drought, high temperatures, lack of drinking water, and inadequate resources for farming. In Yenanchuang, only 32.78 percent of the total land area of 287,180 acres is cultivated, with the majority of the remaining land being forestry or non-cultivated. As a result, the agriculture sector has not improved, which may exacerbate poverty in rural areas.

Household heads work as casual laborers, masons, carpenters, and palm workers in the local area after the farming season, which lasts about six months each year. All members of small farming and landless households work either domestically or abroad, primarily as construction workers and factory staff, engaging in seasonal migration. The occupations of household members are detailed in Table 4.3. In Yenanchaung, 46.8% of household members work as farmers, 20.6% as casual workers, 8.9% as factory staff, 7.0% as construction workers (both domestic and foreign), 5.1% in their own grocery or other businesses, and 2.2% as public or private employees.

4.3.3 Community Characteristics.

Community infrastructure is a crucial resource for generating household income and improving living standards. The government supports public utilities such as water supply and sanitation, transportation, electricity, and communication to develop rural areas as part of community infrastructure. Households enhance their business opportunities and living conditions based on these community infrastructures.

Table (4.5) Community Infrastructures of rural area, Yenanchaung

Sr No	Community Infrastructures.	Kind of Resources	Cover HH in rural
1	Drinking water	Tube well/borehole	71.5 %
		Pond/lake	14.5 %
		River and stream	5.9 %
		Water/piping system	0.1 %
2	Sanitation facilities		84.1 %
3	electricity	National grid electricity	16.4 %
		Solar Battery	44.4 %
4	Mobile phone		29.3 %

Source: *The General Administration Department, Yenanchaung Township, 2019*

In Yenanchaung Township's rural areas, 76.7% of households obtain drinking water from improved sources, which include tap water or piped systems, tube wells, boreholes, protected wells or springs, and bottled or purified water. Meanwhile, 71.5% of these households rely on tube wells or boreholes, and only 0.1% use tap water or piped systems. Additionally, 14.5% of households source their water from ponds or lakes, while 5.9% use water from rivers or streams. Furthermore, 23.4% of households in these rural areas depend on unimproved sources for their drinking water needs.

In Yenanchaung Township, 70.9% of households have access to improved sanitation facilities. In rural, 84.1% of households have access improved. Among electricity resources, 35.1% of households utilize electricity for lighting. In the Magway Region, 22.7% of households rely on electricity. In the predominantly rural area of Yenanchaung, 44.4% of households primarily used Solar batteries for lighting, while 16.4% rely solely on electricity. Furthermore, 29.3% of households in Yenanchaung

Township use mobile phones for communication, which is the highest rate in the Magway Region compared to other townships, where the overall percentage is just 23.9%. *(*Department of Population Ministry of Labor, Immigration and Population October 201*7)*

4.4 Measuring of Income Inequality

Income inequality in economics refers to the significant differences in income distribution among individuals, groups, populations, social classes, or nations. It represents a crucial aspect of social stratification and class divisions. This form of inequality interacts with other types of disparities, including those related to wealth, political influence, and social status. Income plays a key role in determining quality of life, influencing the health and well-being of people and families, and can vary based on social factors such as gender, age, and race or ethnicity. (Michael W. Howard, Valerie J. Carter)

To assess income inequality in Yenanchaung Township, the Gini coefficient is employed along with the Lorenz curve. The Gini coefficient is computed using the following formula:

$$\text{Gini coefficient} = \frac{\text{The Area between the Line of Perfect Equality and the Lorenz Curve}}{\text{The Area under Line of Perfect Equality}}$$

$$\text{The Area between the line of perfect equality and Lorenz Curve} = \text{The Area of line of perfect equality} - \text{Area under the Lorenz Curve}$$

Table(4.6) Five Groups, Share of Household income of the rural area, Yenanchaung.

Group	Share of Total income (%)	Cumulative Probability of Mean income	Area under the Lorenz Curve
1st Group 20 %	10	0.10	0.00954
2nd Group 40 %	13	0.33	0.03326
3rd Group 60 %	17	0.62	0.06225
4th Group 80 %	22	1.01	0.10133
5th Group 100 %	38	1.61	0.16123
			0.36761

Area under the Lorenz Curve = 0.36761

Area under the line of perfect equality = 0.5

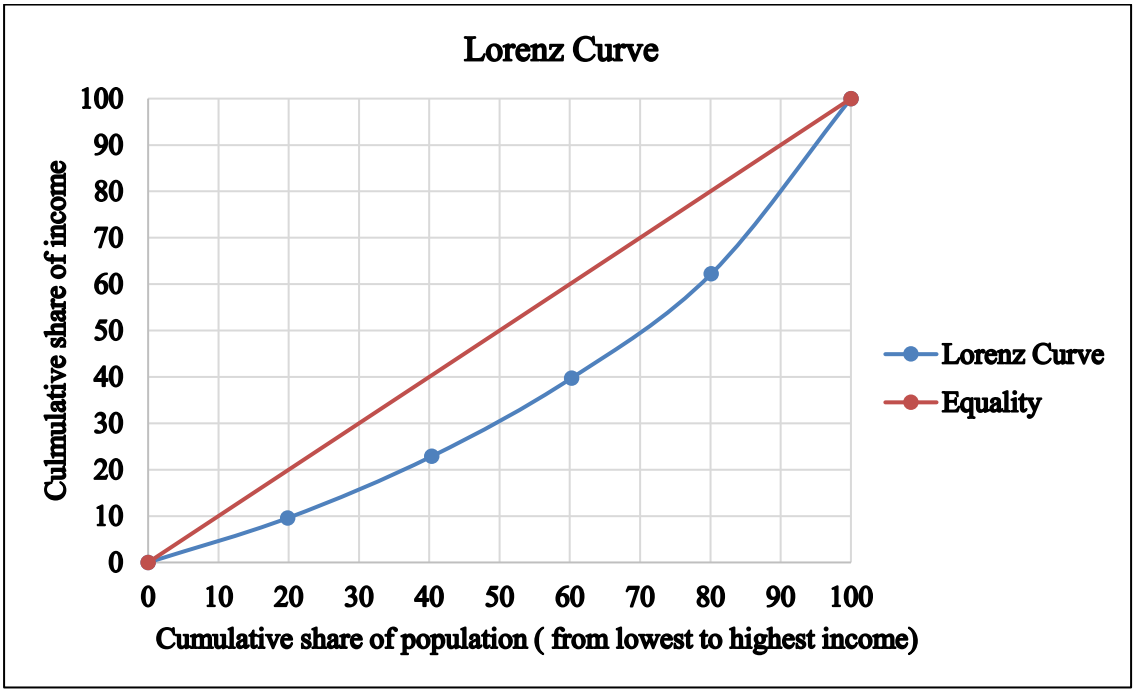
Area between the line of perfect equality and the Lorenz Curve = 0.5 - 0.36761

= 0.1324

Gini Coefficient = 0.1324/ 0.5 = 0.265

The Gini coefficient for Yenanchaung Township is 0.265. This value suggests a relatively equitable distribution of income within the community, where individuals have comparable income levels. According to Moges (2019), a Gini coefficient between 0.2 and 0.3 indicates a degree of income equality. In Yenanchaung, the observed income distribution points to a need for income redistribution efforts, which could enhance resource allocation, boost income generation, and create local job opportunities, especially during non-cultivation periods.

Figure (4.1) Lorenz Curve of the rural area, Yenanchaung Township



Source: *Compilation based on Survey data (2024)*

4.5 Measuring the Poverty

This study evaluates poverty by examining its presence, intensity, and severity. To assess these aspects, the headcount index is used to determine the extent of poverty,

the poverty gap index measures its intensity, and the squared poverty gap index evaluates its severity. Additionally, the poverty index is employed to gauge the proportion of the population reaching an income level above the poverty line while considering income equality.

To assess the presence and extent of poverty, household income is evaluated against a predefined income threshold known as the poverty line. This line is a benchmark for gauging severe global poverty and was recently updated to $2.15 per day to account for increased costs of essentials and inflation. The latest adjustment, made in September 2022, saw the World Bank set the international poverty line at $2.15 using the 2017 Purchasing Power Parity (PPP). Previously, in 2015, the line was established at $1.90 using the 2011 PPP. (World Bank Institute, 2024)

The exchange rate in Myanmar currently lacks stability due to inflation. While the Central Bank of Myanmar has set the official rate at 1 $ USD to 2,100 Kyats, transactions in business and financial markets often occur at rates exceeding 5,000 Kyats per USD. Consequently, for the purposes of this survey, the exchange rate used is 1 USD to 5,000 Kyats, representing an average and lower rate compared to current market values. As a result, the poverty line is established at 10,750 Kyats per capita per day. This figure reflects the prevailing market prices for consumption expenditure and income levels in rural areas.

(a) Poverty Rate or Headcount Index

The headcount index is used to assess the presence of poverty. It is calculated by measuring the poverty headcount index in the following manner:

$$P_a(y,z) = \frac{1}{n}\sum_{i=1}^{q}\left(\frac{z-yi}{z}\right)^a$$

Where, n = Total sample population

y_i = income per capita

z = Poverty line income level

q = Number of poor in the population

yi, …, yq < z < yq+1 , … yn

$$P_0(y,z) = \frac{1}{n}\sum_{i=1}^{q} I\,(y_i < z)$$

Where, I (yi < z) = an indicator function that takes on a value of 1 if the bracketed expression is true, and 0 otherwise.

Headcount Index $P_0 = \frac{Np}{N} x100.$

Where, Np = the Number of poor and

N = total sample

The measure of the Headcount Index in each township and in Yenanchaung Township is show in Table (4.7).

Table (4.7) Measures of Headcount Index of the rural area, Yenanchaung.

Sr. No.	Villages		Poverty Status		Total
			Poor	Non poor	
1	Kan Ni	Numbers	4	6	10
		Headcount index	40.0	60.0	100
2	Sar Gi	Numbers	6	4	10
		Headcount index	60.0	40.0	100
3	Than Pin Kone	Numbers	4	8	12
		Headcount index	33.3	66.7	100
4	A Lae Kan	Numbers	2	6	8
		Headcount index	25.0	75.0	100
5	Chan Kan (S)	Numbers	3	4	7
		Headcount index	42.9	57.1	100
6	Tae Pin Kone	Numbers	3	7	10
		Headcount index	30.0	70.0	100
7	Tha Pyay San	Numbers	5	10	15
		Headcount index	33.3	66.7	100
8	Zee Pin Yoe	Numbers	6	4	10
		Headcount index	60.0	40.0	100
9	Phaune Kwe	Numbers	9	8	17
		Headcount index	52.9	47.1	100
10	Kyun Chaung Lay	Numbers	6	8	14
		Headcount index	42.9	57.1	100

11	Law Kin Yoe	Numbers	4	11	15
		Headcount index	26.7	73.3	100
12	Kone Ai	Numbers	4	8	12
		Headcount index	33.3	66.7	100
13	Thar Lu Kan	Numbers	6	8	14
		Headcount index	42.9	57.1	100
14	Ywar Thit Gyi	Numbers	7	5	12
		Headcount index	58.3	41.7	100
Total Yenanchaung Township		**Numbers**	**69**	**97**	**166**
		Headcount index	**41.6**	**58.4**	**100**

Source: *Compilation based on Survey data (2024)*

The survey data covering 166 households reveals the headcount index, detailed in Table (4.7). This index, which represents the poverty rate, indicates that Sar Gi and Zee Pin Yoe villages have the highest poverty rate at 60.0 percent, while A Lae Kan village has the lowest at 25.0 percent among the villages in Yenanchaung. Overall, the poverty rate for the rural area of Yenanchaung Township is 41.6 percent, meaning that 41.6 percent of the total population in this area is considered poor.

(b) The Poverty Gap Index

To accurately assess the extent of poverty, the poverty gap index is used to indicate the percentage by which consumption levels fall short of the poverty line. When the aversion to poverty increases and $\alpha = 1$, the index specifically measures the poverty or income gap. The formula for this index is described as follows:

$$\textbf{Poverty Gap Index } (P_1) = \frac{1}{n} \sum_{i=1}^{q} \left(\frac{z - yi}{z} \right)$$

Where y = per capita consumption expenditure of individuals

z = consumption expenditure level of poverty line

n = numbers of sample households

The poverty gap index for the study areas in Yenanchaung Township is presented in Table (4.8).

Table (4.8) Poverty Gap Index of the rural area, Yenanchaung.

Sr. No.	Villages	Poverty Gap of year (kyats)	Poverty Gap Index
1	Kan Ni	304,154.5	0.078
2	Sar Gi	583,963.5	0.149
3	Than Pin Kone	233,174.2	0.059
4	A Lae Kan	448,630.6	0.114
5	Chan Kan (S)	560,535.7	0.143
6	Tae Pin Kone	45,625.0	0.012
7	Tha Pyay San	383,225.7	0.098
8	Zee Pin Yoe	845,595.5	0.216
9	Phaune Kwe	481,306.2	0.123
10	Kyun Chaung Lay	204,217.5	0.052
11	Law Kin Yoe	170,333.3	0.043
12	Kone Ai	182,500.0	0.047
13	Thar Lu Kan	260,740.4	0.066
14	Ywar Thit Gyi	534,846.7	0.136
Overall Yenanchaung Township		**363,777.5**	**0.0927**

Source: *Compilation based on Survey data (2024)*

In Yenanchaung Township, the poverty gap vlue is 363,777.5 Kyats, and the poverty gap index stands at 0.0927. Among the twelve villages surveyed, Zee Pin Yoe village has the highest poverty gap index, whereas Tae Pin Kone village has the lowest. The poverty line is set at 10,750 Kyats per person per day, or 3,923,750 Kyats per person per year. To calculate the poverty gap, we subtract this poverty line from the per capita income and compute the average. This results in a poverty gap value representing 9.27% of the annual poverty line income. Thus, an annual amount of 363,777.5 Kyats is needed for redistributing income to each impoverished individual in Yenanchaung Township. A lower poverty gap index indicates a reduced need for budget allocation to decrease poverty, whereas a higher index signifies a greater financial requirement for poverty alleviation.

(c) Poverty Severity Index

This study evaluates poverty severity using a metric defined as the weighted sum of the poverty gap, which is detailed in Table 4.9. The metrics for assessing poverty provide additional insights into its incidence. They allocate greater weight to individuals who fall significantly below the poverty line compared to those closer to it. In Sar Gi village, the poverty severity index is the highest, whereas it is the lowest in Tae Pin Kone village.

According to the survey results, the poverty severity index for rural areas in Yenancuang Township is 0.0708, indicating that 7.08% of the population consists of the most impoverished households. The government and regional authorities should prioritize these households, as indicated by the poverty severity index, in their action plans to mitigate poverty.

Table (4.9) Poverty Severity Index of the rural area, Yenenchaung

Sr. No.	Villages	Poverty Severity Index
1	Kan Ni	0.081
2	Sar Gi	0.263
3	Than Pin Kone	0.016
4	A Lae Kan	0.060
5	Chan Kan (S)	0.066
6	Tae Pin Kone	0.004
7	Tha Pyay San	0.073
8	Zee Pin Yoe	0.122
9	Phaune Kwe	0.112
10	Kyun Chaung Lay	0.012
11	Law Kin Yoe	0.088
12	Kone Ai	0.012
13	Thar Lu Kan	0.013
14	Ywar Thit Gyi	0.070
Yenanchaung Township		**0.0708**

Source: *Compilation based on Survey data (2024)*

(d) Poverty Index

The poverty index serves as a key indicator for assessing poverty levels. It provides a detailed evaluation of poverty by encompassing its prevalence, severity, and income distribution disparities.

Poverty Index(P) is Poverty Index (P) is calculated by the product of "the head-count ratio (H) multiplied by the income-gap ratio (I) augmented by the Gini coefficient (G) of the distribution of income among the poor weighted by (1 - I)". Equation for the measure of Poverty Index in Yenanchaung is as follows:

Poverty Index (P) = [I + (1 - I) G] H

Where, I = income gap ratio,

G = Gini coefficient,

H = head-count ratio

If the value of P is "0," it indicates that there is no poverty or poor households within the region, implying that every individual's income exceeds the poverty threshold. Conversely, if P equals "1," it suggests that everyone has no income and no consumption, which is unrealistic. Thus, P will never be equal to 1. The poverty index for the study area is presented in Table (4.9).

Table (4.10) Poverty Index of the rural area, Yenanchaung.

Sr No	Villages	Poverty Index (P)
1	Kan Ni	27.6
2	Sar Gi	50.2
3	Than Pin Kone	24.5
4	A Lae Kan	2.8
5	Chan Kan (S)	28.1
6	Tae Pin Kone	16.7
7	Tha Pyay San	20.7
8	Zee Pin Yoe	46.0
9	Phaune Kwe	37.1
10	Kyun Chaung Lay	29.9
11	Law Kin Yoe	18.5
12	Kone Ai	24.2
13	Thar Lu Kan	29.8
14	Ywar Thit Gyi	51.2
Yenanchaung Township		**28.8**

Source: *Compilation based on Survey data (2024)*

The poverty index in Yenanchaung Township stands at 28.8%. This figure represents the percentage of the population that needs to rise above the poverty line. In other words, assuming an equitable distribution of income, 28.8% of the population would need to improve their economic status to ensure that everyone is above the poverty threshold.

Yenanchaung Township has a Gini coefficient of 0.265, indicating relatively equal income distribution. However, this also suggests the presence of rising social tensions. Due to limited job opportunities in the area, some household heads are compelled to migrate for work. Poverty affects 41.6% of the population, with the remaining 58.4% considered non-poor. The poverty gap stands at 0.0927, indicating that 9.27% of the poverty line's consumption expenditures or 363,777.5 Kyats per capita annually, is needed to alleviate poverty. The squared poverty gap index is 0.0708, reflecting that 7.08% of the population are the most impoverished. The study indicates that addressing the needs of this 7.08% should be a priority for poverty reduction efforts. Additionally, to lift 28.8% of the population above the poverty line, targeted assistance is necessary. Thus, focusing on this 28.8% is crucial for improving their financial standing.

CHAPTER (V)
CONCLUSION

The study investigates poverty and income inequality in rural areas using the Gini coefficient and Lorenz curve. It evaluates poverty through indicators such as the Headcount Index, Poverty Gap Index, Poverty Severity Index, and Poverty Index. Additionally, the study explores the causes of poverty by analyzing primary survey data on social, economic, and community characteristics related to household income and consumption expenditure in the rural regions of Yenanchaung Township, Magway Region.

5.1 Finding

The Gini coefficient stands at 0.265, indicating a moderate level of income equality. This suggests that income distribution is relatively even, and current political

and inflationary conditions have minimal impact on the socio-economic sector. The coefficient of 0.265 reflects a relatively balanced income distribution. Differences in the Gini coefficient across various groups are moderate, pointing to a smaller income disparity. The study reveals a low level of income inequality in terms of average earnings.

The study measures poverty levels using several metrics, including the Headcount Index, Poverty Gap Index, Poverty severity Gap Index, and Overall Poverty Index.

The headcount ratio, indicating the poverty rate, stands at 41.6% in Yenanchaung Township, implying that 41.6% of the population lives in poverty, while 58.4% are classified as non-poor. The overall poverty gap value in the township amounts to 363,777.5 Kyats, with a poverty gap index of 0.0927. Among the 14 villages, Zee Pin Yoe has the highest income gap at 67,550 Kyats, while Yenanchaung Township overall reports the lowest. The poverty severity index is 0.0708, reflecting the depth of poverty, with 7.08% of the population categorized as the poorest households. These households are considered the most vulnerable and should be prioritized for assistance and village development planning. The poverty index is 28.8 in Yenanchaung Township, indicating that 28.8% of the population needs to rise above the poverty threshold. To address this, efforts should focus on ensuring that all members of the population achieve income levels above the poverty line, with an emphasis on equitable income distribution.

Based on the survey data, several factors significantly influence poverty status, including the gender and age of the household head, their education level, family size, the head's occupation, and the number of household members. In Yenanchaung Township, 90 percent of households are headed by males. Many of these male heads work as farmers and engage in additional occupations such as daily wage labor in farming, construction (as carpenters or masons), palm tree harvesting, and livestock rearing after planting season. Consequently, their skills in these trades can lead to higher household income.

Households with 4 to 6 family members make up over 70 percent, which influences income, consumption expenditures, and contributes to a reduction in poverty levels. In Yenanchaung Township, the poverty rate is not significantly high for families of this size, with those having more than 6 members representing only 10.0 percent. Larger family sizes are associated with higher poverty rates.

The most prevalent education level is primary, accounting for 68.5% of respondents, while secondary education follows at 12.5%, and graduate education at 9.2%. According to the survey data, primary education is the most common among respondents. Household heads with secondary or higher education levels have contributed to a reduction in household poverty, given the significant number of such individuals in these educational categories.

Sixty percent of household heads are employed as farmers, while only 15% are engaged in casual labor. The remaining household heads participate in various non-farming activities, including construction, livestock management, orchestral roles, public service, hotel services, and driving, which help mitigate poverty. A contributing factor to poverty and income inequality is the presence of factory staff and construction workers, both domestically and abroad, with over 20% of household members involved in seasonal migration for work.

The study, conducted in a rural setting, found that many households are engaged in farming or casual labor. Households that own farmland have generally seen an improvement in their poverty levels. However, the likelihood of poverty remains for those without land, influenced by a mix of factors such as family size and job opportunities. In Yenanchaung Township, 72.5% of households own varying sizes of farmland. Specifically, 48.3% of these households cultivate between 0 and 5 acres, 29.1% manage between 6 and 10 acres, and 12.6% oversee more than 10 acres.

In Yenanchaung Township, while 35.1% of households in the entire township have access to electricity, only 7.1% of households in rural areas do. As a result, the limited availability of electricity in these rural areas hampers efforts to alleviate poverty. Approximately 76.7% of households benefit from improved sources of drinking water, including tap water/piped systems, tube wells, boreholes, protected wells/springs, and bottled water/water purifiers. Additionally, 70.9% of rural households in Yenanchaung Township have access to enhanced sanitation facilities, contributing to better health and improved community conditions.

5.2 Suggestions

To transform the economic landscape at the household level, it is essential to focus on enhancing infrastructure within the education, electricity, and agricultural sectors. Community-based organizations should develop and implement cash-for-work programs aimed at small farmers and casual workers during periods of unemployment,

such as the summer season. These programs can serve as both job opportunities and local development initiatives. Additionally, establishing self-help groups for landless households can facilitate savings and investments to support income-generating activities.

The Gini coefficient of 0.265 indicates a level of income distribution that is relatively equitable, as it is lower than the line of perfect equality. This suggests a moderate level of income inequality among the average income earners. To address this and alleviate poverty, both regional and central governments should invest in the agricultural and livestock sectors.

In brief, priority should be given to sectors such as agriculture, agro-based industries, education, health, infrastructure (including national grid electricity access), and water supply to enhance opportunities. Regional and central governments need to focus on improving income generation to boost consumption expenditures among lower-income groups. Policy recommendations from poverty analysis should inform regional policy and planning efforts to address poverty challenges, particularly in rural areas like Yenanchaung Township.

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Date of Interview	
Village Name	
	Name
Interviewer	
Interviewee	

1) Family member's profile of Household

Sr No	M/F	Age	Occupation/ Student	Education	Salary/Wages/ Income	Remarks
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Occupation *:Private sector formal job – (1) , Public Staff- (2) , Farmer or Grocery store, Trader – (3), General worker –or Casual labor, Mason, Carpenter (4) Private staff, salary work such as domestic work and construction, painter, stonemason, goldsmith, silversmith and self-employment such as trade and retail, Retired – (5),Dependent (6)*

2) Housing

1	Housing Ownership	Own/ Rent	
2	Home status	Single/ Double	
3	Roof	Bamboo/ Clay/ Zinc	
4	Wall	Wood/ Concrete/ Others	
5	Floor	Wood/ Brick/ Others	

3) Livelihood Status

1	Does this household cultivate a farmland? (Yes, no).	
2	Size of farmland (Acre), If HH is working in the farm.	
3	Tenure of farmland (owned, leasehold, share tenancy, borrowed)	

4) Expenditure (Monthly) (Just Average)

	Food	Expense	Non Food	Expense
1	Rice		Fuel for cooking	
2	Meat/Fish		Clothing & Footwear	
3	Vegetable		School/Education	
4	Oil		Training (Computer, Language)	
5	**Eat out** (Breakfast/ Lunch/Dinner)		Donation/Offer	
6	**Confectionary** (Biscuit, Bread, Chocolate)		Interest Payment	
			Transportation (Fuel, Rent, ..)	
7	**Packaged Food** (Breakfast Cereals, Instant Noodles, Canned food)		Telecommunications (Fixed Phone Bill Mobile Phone Bill, Internet Fees (i.e., ADSL)	
			Rent (Housing)	

8	**Beverages (Non-alcoholic)** (Juice, soft drinks, ready-to- drink coffee/tea)		Utilities (Electricity, Water & Sanitation)	
			Personal Hygiene (Bath and Shower Products, Laundry products , Mouthwash, Toothbrushes Toothpaste)	
9	**Beverages** (alcoholic) (Beer, Whisky, Wine)		Salary of Domestic Helper	
			Healthcare and Fitness	
10	**Tobacco** (Cigarettes, Cigars, Tobacco)		Entertainment & Holidays	
			Business of livelihoods	

5) Saving

Saving		**Amount**	**Monthly? / Sometimes?**
1	Group Savings		
2	Informal		
3	Cooperative		
4	Microfinance		
Savings and Loans Association (At work)			
1	Savings at Bank (Bank deposit)		
2	Buying Stocks/ T-Bonds/T-Bills		
Others			
1	Interest Received per month		
2	Interest Rate		

6) Borrowing /Debt

	Purpose:	**Amount**	**Source of Loan**	**Remark**
1	Agricultural expenditure			
2	Buying cattle			
3	Health / Medical Treatment / Hospitalization			
4	school expense			
5	repaying old debt			
6	consumption			
7	others / social			
	Interest Payment per month			
	Interest Rate			
	Repayment Period			

Source of Loan:

Friends / Relatives/ Parents Business partner Money Lender (Informal) Daily Refund (Nay-pyan-toe) Cooperative Saving & Loan Association Pawn shop (Licensed) Microfinance / Microcredit Bank Others