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**“CHARACTERISTICS OF POVERTY HOUSEHOLD”  
(CASE STUDY: WEST SUMATERA, PERIOD FROM 1994-2013)**

**THESIS**



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PADANG  
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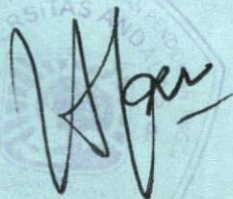


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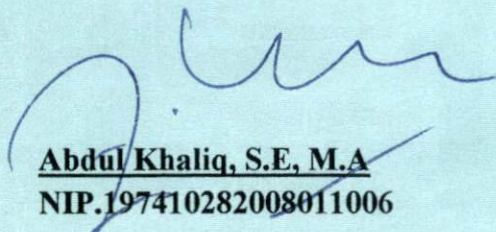
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**CHARACTERISTICS OF POVERTY HOUSEHOLD  
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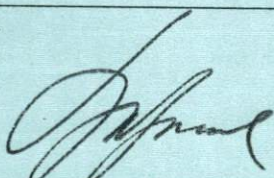
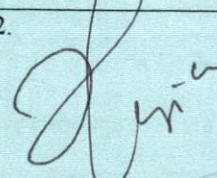
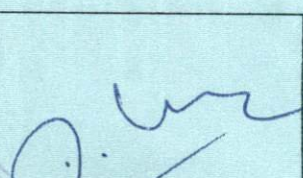
**ABSTRACT**

This aim of this research is to describing connections between education, income per capita and health to poverty in West Sumatera from 1994-2013. The research using secondary data and OLS (Ordinary Least Square). The research findings that education and income per capita has significant effect to poverty in West Sumatera, but the maternal mortality has not significant effect to poverty in west Sumatera. Government policy should be more intens to reduce the poverty

**Keywords : Education, Income Per Capita, Health, Poverty, and OLS.**

This thesis has been presented in the thesis examination and successfully passed the thesis examination on July 24<sup>th</sup>, 2015.

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## PREFACE



In the Name of Allah SWT, The most Beneficent, The most Merciful. ALL PRAISE BE to Allah SWT, Lord of all the worlds. First and fore most, praise and gratitude to Allah SWT. who had given grace and guidance, strength, health and His favor which have been given so that the author finally could accomplished this thesis entitled: **“Characteristics of Poverty Household in West Sumatera 1994-2013**

This thesis is proposed as a partial requirement to acquire Bachelor Degree at Economic Department of Economics Faculty of Andalas University. The reasons lying behind the chosen of this thesis is to examine the factor that affect the poverty of household in West Sumatera. The describing and forecasting about environmental quality based on economic analysis, expected can be references to keep our environment quality in order to maintain and sustain the future economic resources.

The author has given maximal effort in doing this thesis, but the author realize that this thesis is far from perfection. The author would generally welcome constructive criticism and suggestion that support from readers for perfection this thesis through [dyane.fitri@gmail.com](mailto:dyane.fitri@gmail.com). The author hopes this thesis can be useful and gives many functions to readers knowledge especially about subject matter which researched in this thesis.

Padang, 30 July 2015

dyane



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## CHAPTER I

### INTRODUCTION

#### 1.1. Background

Development of a country can be seen from the level of economic growth and per-capita income. However, economic growth and income per-capita of a country does not necessarily guarantee a high level of prosperity for its people. Several empirical studies have proven to provide a variety of conclusions. *Deininger* (1995) and *Squire* (1996) concluded that there is a positive correlation between a country's economic growth with poverty. However, based on research conducted by the World Bank (1990), *Field* and *Jakobson* (1989), *Ravallion* (1995) showed no correlation between economic growth and poverty.

The positive correlation between the level of per capita income to poverty is not only determined by the high growth in per-capita income, but must also be seen how much inequality of income or income distribution across the population, or what is called the Gini Ratio.

The pattern of poverty in Indonesia over the last 16 years is not much decreased. If the Gini ratio is used as an indicator of poverty are dominant. Meanwhile, Gini index increased from 0,30 in 2000 to 0,41 in 2013. This fact is quite in contrast to ASEAN countries such as Malaysia, Thailand and the Philippines, which have economic growth similar to Indonesia, but the level of the Gini ratio of these countries showed a significant decrease.



According to the Central Bureau of Statistics (*BPS*), in 2013 the population of Indonesia who are poor reaches 11,47% of the total population of 28,5 million people. While the poor people in West Sumatra Province in 2013, there were 380.626 poor households, consisting of 258.060 households in city and 122.566 in rural areas (*BPS*). Among the 12 (fourteen) District and 7 Municipality in the province of West Sumatra, Solok including areas with the highest poverty level in 2013, reaching 10,26% of the total population of 36.860 inhabitants (*BPS*).

Poverty is defined as the inability to meet the minimum standard of living (*Kuncoro, 1997*). Then *BPS* defines poverty in 2 (two) size is the size of income and non-income measure (*Bappenas, 2009*). Poverty based on income size seen from the level of income / expenditure of individuals to meet the minimum basic needs. Furthermore, poverty is based on the size of non-income poverty due to limited consumption / access to basic needs and basic services such as housing, education, health care, sanitation and clean water services, and limited access to finance and business capacity. Thus, it is known that poverty can occur as a result of internal and external factors, such as income per capita, level of education and maternal mortality.

The per capita income is the magnitude of the average income of the population in a country. The per capita income is obtained from the results of the Division of national income of a country with a total population of the country. Per capita income also reflect the GDP per capita. The per capita income is often used as a benchmark of prosperity and the level of development of a country; the greater the income per capita, the more prosperous countries..Further

education, education as one of the many vital and it needs as well as needs for food, clothing and the Board. Even in the small nation that is family, education is a basic requirement.

The rate of maternal mortality is also a determining factor of poverty. High level of maternal mortality such as malnutrition and high threat of disease due to unhealthy environment will affect the low productive work day, resulting in lower productivity and low incomes.

Limitations relating to agricultural land, causing difficulties for people earn income to meet household needs. In such conditions, encouraging people to seek other employment alternatives to meet the needs or increase income to avoid poverty.

Poverty is not just economic issues, but will have broad impact on the social issues that will form its own social values and ultimately become a culture of the poor. Therefore, poverty alleviation always be used as the main program and the target of development or ideals of a country. Referring to the national aspirations of achieving a just and prosperous society based on Pancasila and the 1945 Constitution, the problem of poverty in Indonesia is a fundamental problem that needs to be resolved.

The magnitude of the impact of poverty in the community caused by several factors, the authors are keen to discuss the causes of high poor households in rural areas with emphasis on the discussion of the characteristics of household poverty to determine the cause of the dominant, so that it can also solutions right to suppress or reduce the level of poverty in West Sumatera especially in rural



areas. Based on the background and objectives, then this discussion will be into a thesis entitled:

## **"CHARACTERISTICS OF POVERTY HOUSEHOLD**

**(Case Study : West Sumatera, period from 1994 to 2013) ”**

### **.2 Research Problem**

The differences in conditions between one area and another area is a thing that should be accepted. However, different conditions is not meant to be equal in efforts and measures for its alleviation. Although the difference is there then the first step that must be done to reduce the poor population is quickly identify the characteristics of the poor population. It is based on the idea that it is actually a poor population. The problem of poverty essentially stems from factors that affect poverty in the suburbs, i.e. originating from poor households i.e. Income per capita, level of education, and the rate of mortality. Each of these factors are mutually interaction and eventually formed the circle of poverty. Therefore, with limited factor belonging to poor households to be responsive and does not have access in any motion development.

Due to the number of residents of Indonesia , but you can't achieve a high state income. This may be due to a number of jobs, the unemployment rate is still a little high, high levels of corruption, and so on. Indonesia actually has abundant natural resources, but less able to manage and use it properly. Thus, the country of Indonesia in the future might be included in developed countries with high per capita income.

Human resources of educational level head poor households is very low. The average poor household heads education is finished Elementary School (Sumodiningrat, 1998; 30). Low levels of education result in poor households are not innovative and creative. Give effect to low productivity, which ultimately led to the low level of income received by the poor.

Other human resources that can affect the level of poverty is the level of maternal mortality. Health care rate of poor households is relatively low, as it is caused by malnutrition and a lack of healthy environments, where the heads of poor households often have severe pain. With so many sick day means more lost work days. These circumstances ultimately resulted in the level of productivity achieved will be low.

These factors arise resulting from the limitations of the agricultural sector in sufficient household income. For sufficient revenue in meeting the needs of his life then many poorer households make their living pattern of double that is sought outside of agriculture.

### **1.3 Research Question**

To answer the problem of poverty which will be discussed in this thesis, it is necessary to formulate some questions related to the major issues, as follows:

1. Factors that influence the level of household poverty in West Sumatera.
2. How much do these factors affect the level of poverty in West Sumatera and what is the most dominant factor as the cause.

#### **1.4 Research Objectives**

Based on the formulation of the problem that has been presented and the discussions that will be done, then the purpose of this study was to:

1. Find the main factor that determining the characteristics of poverty household.in West Sumatra.
2. Find out how the influence of characteristics of the household poverty affect the poverty level in West Sumatra.
3. Find out the solutions are a top priority in making policies to reduce poverty in the future in West Sumatera.

#### **1.5 Research Outcome**

The results of this study will be obtained based on the results of the discussion and is expected to provide the following benefits:

1. Theories and and approaches presented in this thesis in observing researchreviewed, expected to be the basis for consideration in the development of theory and broaden knowledge, especially in the discipline of economics.
2. Discussion of the results carried out in this thesis is expected to be taken intoconsideration for the local government or the relevant parties to make policy on poverty reduction in West Sumatera
3. The information presented in this thesis is expected to contribute for further research.



## **1.6 Organization of Thesis**

Writing research results in this thesis are presented systematically grouped into 6 (six) chapters, as follows:

Chapter I Introduction.

This chapter presents the background that describes the problem, the causes and effects of poverty, so that serve as the rationale behind this research. Then in the next sub-chapter also explained about the problem formulation is used as a guide to the problems that need to be addressed in the discussion. Further in this chapter also explained about the purpose and benefits of the research to be achieved. Composition writing also presented at the end of chapter 1 of this.

Chapter II. The theoretical framework and literature review.

The literature review was written in this chapter that contains the basic theories, concepts and characteristics of implicit factors of household poverty. Theories obtained will be the basis for making conclusions discussed in accordance with the title.

Chapter III. Research Methodology.

In this chapter described the research methods and operational definitions of research variables, types and data sources, as well as methods of data collection and data analysis methods.

Chapter IV. Poverty Characteristics of Households in West Sumatera.

The description of the characteristics of household poverty described quantitatively and qualitatively that is the subject of this study.

#### Chapter V. Empirical Results and Analysis

This chapter further describes the results and discussion description of the object of research, data analysis and discussion.

#### Chapter VI. Conclusions and Recommendations

This chapter is a concluding chapter that presents the results of research based on the discussion and analysis conducted in Chapter V are grouped in two (2) sub-chapters are conclusions and recommendations.

## CHAPTER II

### THEORETICAL FRAMEWORK AND LITERATURE REVIEWS

#### 2.1 Theoretical Framework

##### 2.1.1 The Concept Of Poverty

The notion of poverty is not an easy thing. According to the BKKBN 2001 poverty as economic symptoms will differ with the symptoms of poverty as a social (non-economic). *Poverty as a symptom of the economy* is a symptom that occurs around the poor neighborhoods are usually associated with the problem of lack of income. On the contrary as a *social phenomenon* is the culture of poverty is more within the poor population itself as a way of life, behavior and so on.

The definition of poverty is found in many different economic literature and presented by experts and institutions that had the attention to the problem of poverty, the definition developed by the Government of a country depends on

Poverty according to economic concepts (*BPS*) is the lack of income to meet their basic needs to a minimum. However, up to this point is disputed or not, he explained how the amount of income that can meet the needs of the subject matter. In its development is not just the amount of income that is debated but also the type of goods that belong to the category of basic commodities. Income is one of the indicators for measuring the level of well-being of the community. The changes will affect spending and income will also affect the pattern of expenditure. In developing countries where incomes are relatively low levels of expenditure for food is the biggest part of household spending, otherwise the country forward whereby the level of welfare of society better.



Although poverty according to the concept of adequacy of measurable economic income, poverty can also be identified from the traits inherent in the poor population. These characteristics among others are characterized by the attitude and behaviour of the population receiving State as if it can not be changed, low willingness to go forward, the low quality of human resources, low productivity and limited opportunities to participate in development.

Characteristics of the above mentioned is indeed undeniable there was poor, but behind it there is a fundamental question of why the poor households have such traits. Whether the trait is caused by an environment that is not conducive or retarded as a result of the poor

From the arguments above, it is clear that poverty could not be released from the concept of income and needs. In this case the estimated income should enter basic necessities or minimum basic needs that allow someone to be worth living. When a person or family's income would not be able to achieve the minimum requirement, then the person or family can be said to be poor.

The concept of poverty is based on the estimated income to meet basic minimum needs is a concept that is easy to understand. But the selection of goods and services will be included in the basic needs of the components is difficult once determined precisely, due to the composition of the food will be influenced by the background, customs, culture and social conditions of the communities concerned. For example, the composition of the food in the West Sumatra Province is higher compared to the existing Provinces in Java and Sulawesi. Furthermore, poor households are generally more rugged work compared with

those in high income brackets. This means that their greater physical activity, so need more amount of calories. Thus it is clear that it is not easy to define the basic needs of the population in an area.

Then someone said to be *poor in absolute terms* (Todaro: 2000: 194), if the level of incomes was below the line of poverty or some of its revenue is not enough to meet the minimum necessities of life, such as food, clothing, health care, housing and education is needed to be able to live and work. The concept is intended to determine the minimum level of income sufficient to meet the physical needs of food, clothing, housing to ensure its survival (Todaro, 1997; 194)

In addition to absolute poverty, there is also the concept of relative poverty and cultural poverty (Sumodiningrat, 1997; 27). *Cultural Poverty* due to an attitude of understanding, living habits and culture of the person or people who feel inadequate and does not lack. In General, this is not an easy group to be invited to participate in the development of appropriate and unwilling to attempt to fix the level of his life despite the efforts of outsiders to help. With absolute sizes they can be said to be poor, then poverty alleviation efforts for these groups need special handling.

While *relative poverty* is the income of a person who already is above the poverty line, but still relatively low compared to people's income, then the person or the family were still in a State of poor (Arsyad, 1997; 221). Relative poverty is closely related to the development problem of structural nature, namely the Government's development policy led to inequality. The concept of poverty here will not disappear as long as the inequality of income distribution is found.

The explanation that has been said above, it is clear that the concept of poverty is not only one. But the concept of poverty is widely used or who got attention in countries that are developing countries like Indonesia.

Based on some of the concepts above it can be concluded that poverty is a situation of deficient and replete with the inability of a person that can be caused by low income as a result of the limited productive asset, low levels of education, health and the low accessibility of institutional services.

### 2.1.2 Measures Of Poverty

The study about poverty term often appears poor, rural poverty and urban poverty. The third term is often used in a sense that it means the population suffering from poverty. To be able to distinguish the notions of poor households with no poor households typically used line delimiters are referred to as *the poverty line*. Residents who live below the poverty line this is called with the poor population.

*The poverty line* in Indonesia is the minimum amount of the consumption expenditures necessary to satisfy basic needs indicated in the rupiah/capita/month.

Basic needs can be divided into two groups, namely the basic necessities needed to sustain his life and once other needs are higher. Basic human needs are the top 3 groups (Arsyad, 1997; 270). **First**, the physical needs of the primary nutritional needs, housing and health, **Second**, the cultural needs of education, leisure and recreation and tranquility of life, **the third**, the need for excess revenue to be able to achieve the higher requirements.



Next to know poverty line has many size and limitations as well as the standards used by experts and institutions related to the problem of poverty. Theoretically the poverty line can be computed by using three (3) approaches namely production approach, income approach and expenditure approach (*Sumodiningrat: 1997; 27*). The poverty line is determined by **production approach** in measuring poverty is a poverty line based on the calculation of the level of production generated by society (production per capita), for example, per-capita grain production. In this approach the poverty line is determined solely based on a particular production level to the fulfillment of the necessities of life. This approach is rarely used because it had its shortcomings, namely lack of describing the real conditions of a community or household.

Further calculation of the poverty line by using **the income approach**. The use of the approach in measuring income poverty levels is carried out on the basis of per-capita income received by society (household) in fulfilling the minimum basic necessities. By using the income approach has disadvantages which are not easily collected in field and the difficulty in collecting and recording, because the value of production of the community or household not recorded properly. Calculation of income approach in determining the poverty line is the most good. To overcome the difficulty of collecting income data, the poverty line is determined with the approach to spending.

The poverty line in Indonesia, according to the Central Bureau of statistics using the **approach of expenses (expenditures approach)** is a poverty line is expressed as the amount of rupiah were issued or are spent to meet the needs of consumption equivalent to 2,100 calories per capita per day plus the fulfillment of

the minimum basic necessities such as clothing, housing, health, education, transport and fuel (Sumodiningrat: 1998,28). The magnitude of the per-capita spending is defined as the poverty line to distinguish between rural and urban areas

According to the *BPS* for spending on groceries, staple foods include housing (lighting, fuel and clean water), clothing, durable goods, and services are not fixated on one type of food like rice as a benchmark. Thus the value of money of the amount of calories is calculated based on the ratio of food consumption to total household consumption so obtained the minimum total consumption is regarded as the poverty line. Criteria this has been established since 1976 to now and continue to experience increased along with rising prices of goods.

In addition to the estimated poverty line nationwide, have been implemented as well as some estimates regarding the international poverty line in measuring the level of poverty in Indonesia by some scholars (*Esmara, 1986*)

According to *Sayogyo (1977; 67)* to rural and urban areas respectively equal to 20 Kg and 30 Kg of rice per capita income in rupiah value average individuals per month. The characteristics of the poverty line are as follows:

- (a) Specifications of three poverty line which includes the conception of the value of the threshold of sufficiency of food
- (b) Household spending level Relates to the size of the adequacy of food (calories and proteins)

The attributes of the first, the poverty line is expressed in Usd/month but in the form of exchange rate equivalent rice (kg/person/month) in order to be mutually comparable exchange rates between regions and between the time corresponding to the price of local rice. *Sayogno: 1977; 67* classifies the poor population into three; First, the classification of the poor, two, once and three poor classification, the classification of the good to the poor rural areas as well as to urban areas. Classifying Basic can be seen in table 2.1 below:

**Table 2.1**

**Classification according to the exchange rate of rice per person per year In Rural and Urban areas**

Classification	Rice/Exchange Rates	People/Year
	Urban	Rural
(1)	(2)	(3)
Poor	480 Kg	320 Kg
Poor Once	360 Kg	240 Kg
Poorest	270 Kg	180 Kg

**Source: Sajogyo (1977)**

Furthermore poverty is not only seen as an individual phenomenon, but as a phenomenon of the family. The reason, among others, is the notion that poverty is in fact a reflection of the economic situation of households. In addition to the intervention of the household is more effective than individual interventions. Thus



it can be said that poor households is the person or people who inhabit some or all of the physical building, living together and eating from one kitchen where an average staple them (household members) are not met. Limitations of poor households is lifted from absolute poverty approach.

### **2.1.3 The factors Causing Poverty**

Poverty is caused by many factors and are related to each other. Approaches that can be used to find out the factors of causes of poverty can be distinguished on the economic approach, human resources (HR) and socio-cultural approaches. More economic approach focuses on the poor population environment itself which can be seen on the low income, poor nutrition, the high death rate and a low level of education.

The poverty of the population can be seen from the vicious circle (*m. L Jhingan*, 1994: 42). In the *economic approach*, where poverty is viewed from three points of view, from the *angle of demand* which can be described as follows: as a result of the low level of incomes lead to low levels of demand. This in turn leads to the next level of savings and investment is low, either for investment or for investment education materials. Savings and investment rates that low back leads to low productivity and lack of capital.. From the *angle of supply* as a result of low productivity reflected in real incomes are low. Real incomes are low savings rates also means lower. The low savings rate leads to a low level of investment and capital less. Lack of capital in turn comes down to low productivity. The third concerns the vicious cycle of *underdevelopment of human resources*. The development of natural resources in a country depends on

the ability of productive human being. If the population is retarded and illiterate, rare will be the skills, knowledge and techniques of private activity, then the natural resources will remain dormant. underdevelop natural resources led to the underdevelopment of human beings.

Thus, the low production levels also caused by low income levels. In order to overcome the poverty of theory is to cut the vicious cycle of government intervention. For example Government giving subsidies or bear the costs of poor families.

Furthermore *human resources approach* to put more emphasis on the quality of human resources. For this approach to be poor residents stated that due to the backwardness and ignorance. Retardation caused by the population are not educated and to get the education is hampered due to the condition of poverty. As a result the population becomes not all-round year and retarded.

Meanwhile, the socio-cultural approach to more viewing of the poor such as analyzing how the life and behaviour of the poor population. Economic underdevelopment and poverty are the two terms are synonymous. A country is said to be poor because he is retarded. He is retarded because he was poor, and remains underdeveloped because it does not have the necessary resources to improve development

Of the three approaches that has been said, the economic approach to human resources approach and more used in analyzing the factors causing poverty. Based on this approach, then both factors cause poverty to be viewed is

the level of education, level of health, control of the adoption rate of land, technology, institutional Accessibility and alternative livelihoods.

These factors will in turn form a vicious cycle of poverty and interplay with each other (*Jhingan, 1994: 42*), because all of these factors have a reciprocal relationship. Thus the analysis of factors affecting poverty should be done thoroughly in order to be a clear understanding

To be able to explain the relationship of the various factors on the poverty level of a household in urban fringe of Padang city, the following will be discussed one by one the factors that affect poverty.

#### **A. Income Per Capita (Gdp Per Capita)**

GDP per capita or per capita income is one of the indicators that are used to describe the level of prosperity of society as a macro.

GDP per capita is the value of the result of the Division of the GDP with a population mid-year, in the sense that the higher number of residents will beget smaller quantities per capita GDP of these regions. The higher the GDPper capita of an area, the better the level of the economy of the area althoughthis measure has yet to include the income gap between the population factor.Although there are still limitations, this indicator is already quite sufficient to know the level of the economy of an area in a macro scope, at least as a reference monitor regional capabilities in producing products for domesticgoods and services.

As a concept of GDP per capita basis is the quotient between the nominal value ofGDP with a population of mid West Sumatra in the same year. West



Sumatra Province have roles that are quite important to the economy of the region and nationwide. The economy of West Sumatra has its share of 1.64 percent to the total national output (GDP total 33 provinces).

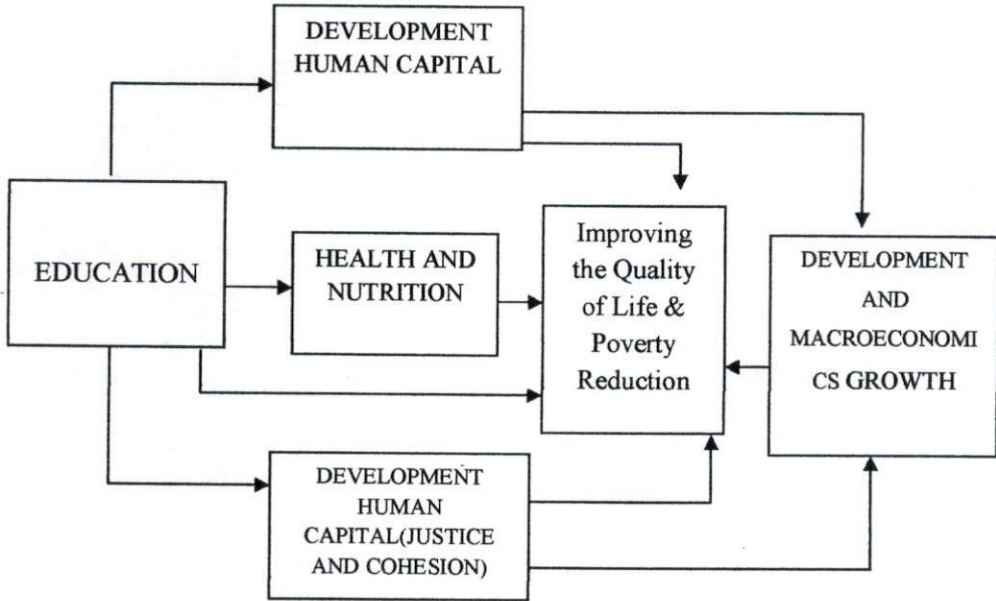
## **B. Level Of Education**

Education is the key to create, adopt and disseminate knowledge, but the spread of opportunities to gain access to these very educational, especially for uneven among the poor. Education (Djojohadikusumo, 1999; 64) is an effort to bring human beings towards adulthood. Through public education Gets a chance to build its capability and set the pattern of life and opens the opportunity to seek improvements and progress in the life of the community. Therefore education is the most strategic step in efforts to address the problem of poverty is closely related to the income ladder tumah (Todaro, 2000; 406). If so, low-income communities, it is difficult to get the same educational opportunities, with the consequence that education will tend to increase the income gap among the community. A rich individual who fare comparatively issued lower than the poor and earn larger profits from the school (Balitbang, 1999)

Education (Elfendri) is a very important variable affecting poverty. Better education will overcome poverty. The process of educational variables affect poverty can be seen in Figure 2.1 according to the picture, double-dimensional education. Economic education can be an instrument to reduce poverty and improve health and well-being. While the social education became a way to strengthen the cohesion of society and open horizons of democracy.

Figure 2.1

**Influence of educational Against Poverty Reduction**



Source *Elfindri*

From the picture, explains the importance of education, *the first* education can increase knowledge, abilities and skills, so he became more productive and can increase the revenue that ultimately improve the well-being, *Both*, with increased earnings and improvements to the welfare of the effect on increasing the degree of health and nutrition, *Third*, increasing the quality and standard of living, because education makes people more educated individuals, *the fourth*, pushing the process of social development through the strengthening of cohesion in the community, opening opportunities and better opportunities.

According to the research of *Amar* (2000) in West Sumatra concluded that education has no influence on the determination or whether a poor household, as

the Group's agricultural business is not absolutely require high skills and skill so that education has no influence on the production process.

From that has been said above, it can be concluded that education is a very important variable affecting poverty. Better education will overcome poverty.

### **C. The Rate of Mortality**

The high number of maternal deaths in some areas of the world reflects inequities in access to health services, and highlights the gap between rich and poor. Almost all maternal deaths (99%) occur in developing countries. More than half of these deaths occur in sub-Saharan Africa and almost one third occur in South Asia.

The maternal mortality ratio in developing countries in 2013 is 230 per 100 000 live births versus 16 per 100 000 live births in developed countries. There are large disparities between countries, with few countries having extremely high maternal mortality ratios around 1000 per 100 000 live births. There are also large disparities within countries, between women with high and low income and between women living in rural and urban areas.

The risk of maternal mortality is highest for adolescent girls under 15 years old and complications in pregnancy and childbirth are the leading cause of death among adolescent girls in developing countries.

Women in developing countries have on average many more pregnancies than women in developed countries, and their lifetime risk of death due to pregnancy is higher. A woman's lifetime risk of maternal death – the probability



that a 15 year old woman will eventually die from a maternal cause – is 1 in 3700 in developed countries, versus 1 in 160 in developing countries.

## **2.2 The Conceptual Framework**

The conceptual framework that is described in the poverty level of a household greatly determined by the level of income is received to meet the necessities of life such as food, clothing, housing, education, health and so on. High low a income earned by the poor household very influenced income level, education level, and the rate of mortality, expressed before.

As it has been known that a poor household has a limited source of income compared to household who are not poor. A limited income who in may by a poor household because in rural areas, work in the informal sector is generally the income earned is lower than in the formal sector earnings.

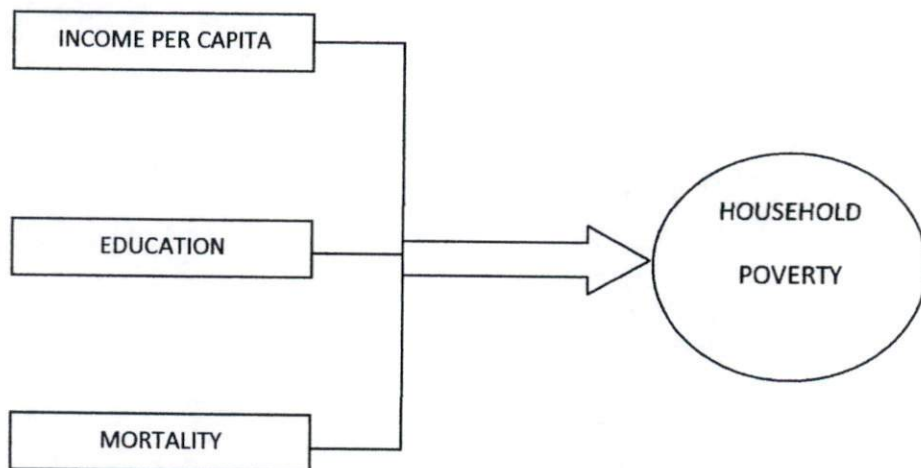
The second factor that determines the level of household poverty is education. With the development of modern industries led to the opening of opportunities to work, through education can be made efficient use of manpower. Higher education can do production more efficient, so that it will be able to increase the income received in society. rural. Thus the educational factors can also affect levels of household poverty. so the current population migration from enlarging countryside. The household comes from wealthy household, usually have a high educational level, considerable capital, the partnership is quite extensive and is not encumbered by an obligation to help the household (Economics), so they have greater opportunities to improve the economic status in the city (BPS; 1993), Otherwise the household comes from a poor household,

have low education levels, not enough capital but has a greater obligation to household finances. have a lot of difficulty in fixing the level of life and stuck in poverty.

In addition, a third factor is also very important is the level of health. With a State of good health and nutrition are enough can create high productivity, in contrast with the level of health and nutrition can lead to decreased productivity due to the large number of working days lost due to illness. Thus can affect the levels of household poverty.

**Figure: 2.2**

**The Framework To Find Out Factors That Affect Poverty In The Suburbs, Padang City**



**Source : Elfindri (1998)**

From the picture above to see that there are three variables (the independentvariable): variable X 1 represents the GDP per capita, the variable X 2

represents the educational level, the variable X 3 represent the rate of mortality, while the freevariable (dependent variable) is Y representing the poor household.

### **2.3 Literature Review**

The research of identification of the characteristics of poor households and the factors that affect poverty. The research that has been done, among others:

Yuzirwan (2005) the characteristics of poor households in Padang city before and after the economic crisis. The author discusses about the poverty profile is viewed from the characteristics of households categorized as poor, poor household Characteristics seen from socio-demographic characteristics (including the size of the number of members of the poor households, household head age, number of hours worked, the number of facilities). Employment characteristics, discusses the status of the main work of the head of household (the number of hours worked, the number of workers and the types of field enterprises) and characteristic residences such as floor area, type of the widest walls, roof type, the source of drinking water and sanitation fasikitas. The data used the data tape susenas 1996 before the crisis and after crisis 2003. From research obtained that level of decline poverty in rural areas padang city before 20.20% and 6.25% and crisis after the urban areas happens decrease from 5.50% to 5.16%. While the demographic shifts occurring characteristics of age of household heads from 30-49 being more than 50 years. Of the level of education there are differences may namely education family heads graduated elementary and Graduate Degree is not found, but once the crisis there is a head of household who finished S1 with a percentage of 12,5%. Policy in the framework of poverty reduction, where the



target group is the head reduction families aged 50 years and the livelihood of the agricultural sector.

Afandi (2010) identification of poor households in Padang Pariaman (case study of nagari malai V tribe) research aims to mengerathui characteristics of households in nagari malai V tribes of Padang Pariaman. This research method using foster and phobit regression analysis as well as qualitative peneltian. The results of penelitim showed that the characteristics of households large enough effect on the risk of being poor is a member of a large household, education of the household head is low, the head of the household, working hours of women heads of household who is less than 14 hours per week, the head of the household who work in the agricultural sector and unhealthy housing conditions (thatched roof, floor ground , does not have a source of clean water, not having a place to defecate, not electrified pln). The recommended strategy is to increase family planning programs. This can be a concern for tackling poverty in the program kabupaten Padang Pariaman, in particular the Nagari Malai V tribe.

Hidayat (2006) Analisis of influence factors of households against poverty in West Sumatra Province. The research test the influence factors of households consisting of household demographic variables (number of household members, sex and age of head of household), and socioeconomic variables (higher education, the field of business, the ownership of agricultural land and the location of the household residence) against the trend of occurrence of poverty in the province of West Sumatra. Analysis uses susenas data 2006. From the results of testing of residence poor households are concentrated in the countryside and most may influence caused by limitations of the facilities and infrastructure

supporting the economy and the lack of access of the community against the Government. While most small influence is the number of members of the poor households who rose from poverty because of the magnitude of the household members who managed to become labor input. Interesting findings from research that the tendency of female household heads lower than head of a household of men. In General a household research vulnerable to poverty are those who live in rural, low-educated, working as sharecroppers, heads of households with men who are young and have many children so that it becomes the main target of poverty reduction.

Surhayadi (2010) studied the relationship between economic growth and poverty reduction in Indonesia before and after AFC. Indonesia has experienced significantly slower poverty reduction during the post-AFC era compared the AFC era. Generally, there is no evidence that the growth elasticity of poverty, percentage point reduction in poverty rate due 1% has declined after AFC caused by lower level of economic.

Rusastra (2006) show that human resource development needs of the poor transition strengthening primary education through improved quality of their advanced education, affordability and availability of infrastructure and education for the residents of the impoverished territory.

Surhayadi (2009) also show understanding on the relationship between economic growth and poverty reduction indonesia by using more disaggregated sectors of growth and poverty. The location and sectoral components of growth do

matter for the impact of economic growth on poverty reduction. In fact agriculture growth is still one of the most important channels to reduce poverty.

Armstrong 2005 studied that the expansion has brought much-needed relief for many trapped in poverty, lasting progress in the battle against poverty and its manifestations requires accelerated economic growth and fundamental reform of the South African education system.

Suryahadi and Sumanto (2003) said it is well known that the Indonesian economic crisis has caused the country's poverty rate to increase very significantly. The findings of the present study indicate that, not only did the poverty rate increase significantly, but much of the increase was due to the increase in the chronic poor category (the poor who have expected consumption below the poverty line and will most likely stay poor in the future). As a result, the chronic poor—who made up only 20% of the total poor before the crisis—now make up 35% of the total poor.

Usman and Moeis (2013) said in his research group found a number of characteristics that are inherent in and effect on the poverty conditions in Sumatra and housing. Characteristics of education. Improvement in the level of education is expected to reduce the risk of a household falling into poverty. This research suggested that the drafting of the poverty reduction programme gave priority to the improvement of the quality of education, especially in urban areas. Rural diversification efforts in the field of business outside of the agricultural sector should be a priority.



Schwarze and Zeller (2010) also showed that poor households are already involved in a number of different activities. Using the Shannon equitability index to measure the degree of income diversity shows that poor households tend to have more income sources and a more evenly distribution of the income between these sources.

#### **2.4 Hypotesis**

Based on the study of theory and literature review, then compiled hypothesis:

1. There is a negative relationship between income per capita with the poverty level households.
2. There is a negative relationship between the level of education of the household poverty levels
3. There is negative relationship between the rate of mortality of with the household poverty level
4. There is a negative relationship poverty and between income per capita, level of education and health levels.

## CHAPTER III

### RESEARCH METHODS

#### 3.1 Types Of Data

This study uses quantitative data and secondary data based on estimates. Secondary data was chosen because the data is available in several sources online. Data consists of two types. There are primary data and secondary data. Primary data is the raw data that we use to test the working hypothesis first and then as evidence to support. In history, for example, primary sources include documents of the period or the people we study, objects, maps, and even clothing; in literature or philosophy, the main source of our main text usually we learn, and our data are the words on the page. In areas such as we rarely get to write a research paper without the use of primary sources (Booth et al: 2008).

Research report that uses secondary data to solve problems written research for scientific and professional audiences. Secondary data is data obtained from documents and literature issued by the agency or agencies.

The researchers read them to compete with their fields and use what they read to frame their own problems with the conclusions of other researchers disputing or questioning their methods. We can use their data to support our arguments, but only if we can not find the data in the main source ( Booth et al: 2008)

### 3.2 Sources Of Data

For secondary data collected in the form of documentation, reports and literature through offices or government agencies and related organizations, among others, the Office of the Province of Central Bureau of Statistics (BPS)

### 3.3 Research Metodology

#### 3.3.1 Previous Research Model

Darmarika ( 2011) has a model that finds show unemployment ,educational and health levelvariables influencing variables, poverty. This analysis was done with the annualdata from 2000 up to 2002.

$$Pov_t = \beta_1 edu + \beta_2 (y/cap)_t + \beta_3 Un_t + e$$

Where :

$Pov_t$  = Poverty in year t

$EDU_t$  = Education level in year t

$(Y/cap)_t$  = Income per capita in year t

$Un_t$  = Unemployment in year t

$e$  = error terms

#### 3.3.2 Research Model

This research is to testing what extent gdp per capita,educational and mortality levelvariables influencing variables, poverty. This analysis was done with the annualdata over 20 years from 1994 up to 2013. the Data used in this



research is secondary data obtained from The Central Bureau of Statistic (BPS). Specifically, the data used are as follows:

The dependent variable in the study was of poor households (P), while the independent variables are as follows: I represent income per capita, E represents the level of education, H variable representing the level of health:

#### **(1) Chance of Poor Households**

Poverty data used are sourced from The Central Bureau of Statistic (BPS) obtained through data the number of the poor population.. Poverty is measured by the number of poor people per district / town in West Sumatra

#### **(2) Income Per capita (GDP Per Capita)**

Per-capita income data obtained through the gross Regional domestic product per capita on the basis of Constant prices of 2000 according to the Kab/Kota (thousands of rupiah), 1994-2013

#### **(3) Level of Education (The Average Length Of The School)**

Data may be through the data from the Central Bureau of statistics, namely the average length of the school, because her education affects the type of work and income as well.

#### **(4) The Level of Health (Maternal Mortality Rate)**

Health data obtained from the Central Bureau of statistics is the maternal mortality during childbirth who became one of the causes of poverty

This analysis was compiled based on research methods with testing against a secondary data obtained from various data sources, journals, article, books, magazines, the internet and the study of scientific literature relating to the matter have been examined.

In this study the methods used OLS (Ordinary Least Square). The models can show the probability of a household are in poverty as a result of any such free variables that are thought to be factors that determine the characteristics of poverty. To manipulate data, use the latest version of program assistance.

$$Pov = \beta_0 + \beta_1 G + \beta_2 E + \beta_3 M + e$$

- Pov : The number of poor population  
 $\beta_0$  : Constanta regression  
 $\beta_1, \beta_2, \beta_3$  : Coefficient regression  
 G : GDP Per Capita (GDP Per Capita)  
 E : Education (The average of attendance)  
 M : Mortality (Maternal Mortality Rate)  
 e : Standard error

### 3.4 Testing Statistical Models

To see the validity of the model used and the accuracy of the estimation model, the miraculous statistical testing, among others:

#### 3.4.1 Test coefficient of determination ( $R^2$ )

This test is used to measure the relationship of the model. coefisien determinansi ( $R^2$ ) is a number that indicates the ability of the variance or the

spread of variable independent variables that explain the dependent variable or number that indicates how much the dependent variable is affected by the independent variables .

The magnitude of the coefficient of determination is between 0 and ( $0 < R < 1$ ), where the coefficient close to 1, then the model is said to be good because the closer the relationship between independent variables and the dependent variable.

### 3.4.2 Statistical T-Test

This test is done to test the significant level of independent variables on the dependent variable partially. Each individual independent variables (partial) affect the dependent variable if the  $T_{-test} > T_{-table}$  and vice versa, each individual independent variables (partial) does not affect the dependent variable if the  $T_{-test} < T_{-table}$ .

The criteria used in this study is testing a two-way and one-way, two-way by testing the significant level =  $\alpha$ , and the degrees of freedom (degree of freedom, df) = nk, where n indicates the number of observations and k indicates the number of parameters including the constant

Conclusion t-statistic testing



**Table 3.4.2**

**Statistical T-Test Criteria Table**

Hypotesis Type	Ho : Hipotesis Nol	HI : Hipotesis Alternatif	Criteria
One way direction	$\alpha \leq 0$	$\alpha >$	t-Stat > t-table
One way direction	$\alpha \geq 0$	$\alpha <$	t-Stat < t-table
Two way direction	$\alpha = 0$	$\alpha \neq$	-t-table < t-Stat < t- Table

### 3.4.3 F-Statistics Test

This test is used to test the significance of the effects of all independent variables on the dependent variable overall .hipotesa used are:

Ho = all independent variables together does not affect the dependent variable

H1 = all independent variables jointly affect the dependent variable..

a) If the value of F-test > F-table, then Ho is rejected; meaning that all the independent variables simultaneously affect the dependent variable.

b) If the value of F-test < F-table, then Ho is rejected; means that all independent variables together does not affect the dependent variable.

### 3.5 Classical Assumptions

Some problems will arise when a regression analysis conducted to estimate a model with some data. To overcome these problems, it better to test by using classical assumptions of OLS models, so the model is feasible for use. There are several assumptions that must be met in order to qualify the model created from the deviation, namely the assumption of normality, multicollinearity, and heteroscedasticity. In the deviation occurs on classical assumptions, the statistical test (t-test statistic and f-test statistic) were conducted becomes statistically invalid and will mess up the conclusions reached.

#### 3.5.1 Normality Test

Normality test is done if the sample used is less than 30. This test is useful to look at the error term is normally distributed. This test is called Jarque-Bell Test. Testing is done by looking at the Jarque-Bell probability Test.

$H_0$  : normally distributed error term

$H_1$  : not normally distributed error term

Test criteria:

Probability (P-Value) < signif

If you accept  $H_0$  then the equation does not have a normally distributed error term and otherwise, if the reject  $H_0$  (accept  $H_1$ ) then the equation has a normally distributed error term

### 3.5.2 Multicorrelation Problems Testing

Multikolinear showed symptoms of a linear relationship between the definite atau explanatory variables relationship (explanatory variables) in the model regression. indicated by several factors, but the most support in the model explaining the existence multikolinear ie when the value of  $R^2$  from the resgresi very high but most of the explanatory variables are not explain the significant relationship to variable described, through comparison between the T-test and F-test with a T-table and the F-table.

As for how to detect the presence of multikolinear in the model are as follows:

- a) If the correlation between two independent variables is higher than the correlation of one or both of the independent variables with the dependent variable
- b) If the correlation between two independent variables exceeds 0.8 then multicollinearity problem
- c) If we find the results of the OLS regression estimation with a large coefficient  $R^2$  (eg about 0.99) and F-statistics are significant but just several independent variables that significantly affect the dependent variable and regression coefficients sign opposite to the basic theory.

### 3.5.3 Autocorrelation Test

Autocorrelation test aims to test whether the linear regression model there is a correlation between the error in period  $t$  with confounding error in period  $t-1$



(previous). Good regression model is regression that is free of autocorrelation. To determine whether the regression model containing autocorrelation or not, in this case the approach used Durbin Watson.

According to Santosa (2000), autocorrelation detection has criteria as follows:

- a. If  $dU < DW < (4-dU)$ , then there is no autocorrelation
- b. If  $dL < DW < dU$  or  $(4-dU) < DW < (4-dL)$ , then it can't be concluded
- c. If  $DW < dL$  or  $DW > (4-dL)$ , then the autocorrelation

#### **3.5.4 Heterocedasticity test**

Heterocedasticity is a basic assumption of the condition is not fulfilled 2SLS estimation methods, namely homocedasticity which requires that deployment of the variants is the same. Test homocedasticity stated values dependent variables vary in the same unit. Cases where the entire interference factors do not have the same variant or variants not constant (heterocedasticity). To detect the presence of heterocedasticity problem then *White Heterocedasticity Test*.

## CHAPTER 4

### OVERVIEW OF HOUSEHOLD POVERTY

#### 4.1 An Overview Of West Sumatra

##### 4.1.1 Geography

West Sumatra is the western part of the territory of Indonesia located in the West of the island of Sumatra that thousands of West Sumatra Padang. city is traversed by the equator which is located between  $3^{\circ} 50' \text{ LS} - 1^{\circ} 20' \text{ N}$   $98^{\circ} 10' - 103^{\circ} 10' \text{ E}$ . An area of 42.297.30 km<sup>2</sup> area of West Sumatra, which has adverse natural conditions of hills, valleys, mountains and beaches. True to its name, the province occupies along the West coast of Sumatra island and the central part of the beach like a detachable Mentawai Islands. From North to South, with an area of 42.297.30 km<sup>2</sup> it borders four provinces, namely North Sumatera, Riau, Jambi, Bengkulu and.

West Sumatra has a population of as many as 4.846.909 and Minangkabau ethnic majority who are all Muslim. The province is made up of 12 districts and 7 cities and 176 subdistrict with parishes after the town in the entire County. As for the 12 district and seven cities including, Agam, Dharmasraya, Mentawai Islands, Lima Puluh Kota District, Padang Pariaman, Pasaman, West Pasaman, Sijunjung District, Solok, South Solok District, Tanah Datar District, Bukittinggi, Padang city, city of Padangpanjang, Pariaman, Payakumbuh, Solok, Sawahlunto.

#### 4.1.2 Demographics

Based on the Census population by 2013, the number of the population of West Sumatra reached 4.957.703 inhabitants which 49,61% are its inhabitants by gender male, with a density of population of 114 inhabitants/km<sup>2</sup>. District/city which has a population of most is the city of Padang, which reached 833.562 inhabitants and the lowest in the city of Padang Panjang IE only 47.008 inhabitants. While the kabupaten/kota level the highest density is the city of Bukittinggi, i.e. 4.410 inhabitants/km<sup>2</sup>, and the lowest was in Kep.Mentawai i.e. only 12,67 people/km<sup>2</sup>. The majority society ethnic Minangkabau, West Sumatra are entirely embraced Islam. 4.1.3 the poverty of West Sumatra (County/City)

The problem of poverty is one of the causes of the problems that emerged at the center of community life that would interfere with the economy, because the definition of poverty is the weakness of resources faced by the community in meeting the needs of the economy.

Living in poverty not only live in lack of money and income levels are low, but, too many other things that affect poverty such as health, education levels are low, the behavior of unjust laws, vulnerability to criminal, helplessness in deciding its own path in life (Suryati, 2005)

The problem of poverty is an issue that very strategy in West Sumatra and issues that are a priority to be resolved. The number of poor population of West Sumatra in 2013 is 4.957.703 inhabitants (8.05%) down from year 2012 is 4.904.460 inhabitants (8.99%) from 2012 there are poor 39.97% poorer population work in the agricultural sector, 37.75% work in agriculture sector. the



following is a list of the tables of the poor population of data in West Sumatra from 2004 to 2013.

BPS measure poverty using the concept of the ability to meet the needs of basic living, with this approach, poverty is seen as the inability of the economy to meet the basic needs of food and not mkan measured from the side expenses (BPS) 2008. To get the measure of poverty used a statistical function that describes a comparison of indicators of poverty by household poverty line used in an aggregate figure for the population

#### **4.1.3 The Economy**

##### **A. The Structure Of The Economy Of West Sumatra**

The value of GDP in West Sumatra on the basis of constant prices 2000 in 2013 is 41.192,86 billion rupiah and in 2012 be 43.911 .92 billion rupiah. According to the applicable price, versus GDP West Sumatra increased 7% from 98.957,23 billion rupiah in the year 2012 be 110.103,93 billion rupiah in the year 2012.

The economic structure of West Sumatra in 2013 dilihat from year to year is still supported by three main point is sector of the agricultural sector, trade, hotels and restaurants as well as the services sector. The third sector of the economy are connecting West Sumatra over 57,91%. The agricultural sector as the largest contributor to 23%, a slight decrease compared to the previous year which amounted to 23,66%. The next trade, hotels and restaurants contributed 18.45% increases dibandingkan than sebelumnya sebesar 18.02% while the service sector

with contributions amounting to 16.45% increase the previous year that reaches 16,26%

Gross Regional domestic product (GDP) has increased compared to year 2012. In 2012 the GDP of West Sumatra is 20,18 million dollars increased to 22,21 million dollars by 2013.

Economic growth increased experienced in 2013 compared in 2011. In 2011, economic growth in West Sumatra is 6.25% increase be 6.35% in 2013.

## **B. The Gini Index Of West Sumatra**

Gini index (gini ratio) is a measure of equity or inequality of distribution of expenses. The value of the gini ratio ranges between 0 and 1 with low inequality among other classifications (e.g.  $< 0.3$ ), the discrepancy being ( $0.3 \leq G \leq 0.5$ ) and high inequality ( $G \geq 0.5$ ).

2013 national gini index describes the same inequality compared to the previous year. This is apparent from the gini index in the same nationwide while some to the Sumatra island province experienced the rise and decline of five provinces, namely proportional increase while five more suffered a decline. Among the provinces in Sumatra which has the highest gini index is the South Sumatra and Riau Province with index of 0.40%, while the lowest was the province of Bangka Belitung i.e. 0,29.

Meanwhile, West Sumatra has a gini index of 0.36% which means that the level of inequality of distribution of expenditure in West Sumatra is in the category of medium (BPS, 2013).

## 4.2 An Overview Of Poor Population

West Sumatra Provincial Government makes the problem of poverty as their focus to be completed. Poverty among others, ensuring the protection and fulfillment of the basic rights of the population and poor households, accelerating a decline in population and poor households, increasing community participation and ensure the consistency, coordination, integration, synchronization in reducing poverty and improving the living conditions of the poor. Poverty reduction implemented in the form of counseling and social assistance, social services, providing access to job and business opportunities, provision of basic health care services, providing access to basic education services, access services and residential housing services and / or providing access to training, venture capital and marketing results business. Here is a table, number and percentage of poor people in the province of West Sumatra.

The proportion of poor people is obtained by dividing the number of poor people in the total population. Expressed in numbers. The number of poor people in West Sumatra during the period 1994 to 2013 has decreased in relative terms.

In 2004 the population of poor people in West Sumatra are as many as 472 400 people rose to 482 800 in 2005. In 2006 the figure remained at 482 800 people. Then in 2007 only rose to be 529200 people. In 2008 the number of poor people in West Sumatra also decreased to 473 700 people. Then in 2009 the number of poor people in West Sumatra recorded 426 110 people or decreased by 2.57 percent. In 2010 the number of poor people into 458 200 people, down by 4.7 percent. Furthermore, in 2011 the number of poor in West Sumatra penduduk



decreased by 6.6 percent to 441 800 people and in 2012 to 401 520, or a decrease of 5.2 percent. In 2013 the number of poor in West Sumatra penduduk decreased by 7.6 percent to 384 080 the cause of the decline in the poverty rate in West Sumatra in the year 2012 to the year 2013 can not be separated from their poverty programs such as the National Community Empowerment (PNPM), Jamkesmas, Raskin, Direct Cash assistance, and school Operational Costs

**TABLE 4.2**

**THE NUMBER OF POOR POPULATION IN WEST SUMATERA**

**1994-2013**

YEAR	POOR POPULATION
1994	238518
1995	255461
1996	271066
1997	305652
1998	463722
1999	518362
2000	563829
2001	643300
2002	496400
2003	501100
2004	472400
2005	482800
2006	578700
2007	529200
2008	473700
2009	426110
2010	458200
2011	441800
2012	401520
2013	384080

**SOURCE : BPS (West Sumatera 2004-2013)**

### **4.3 An Overview Of GDP Per Capita**

Regional per capita income or GDP per capita is often used as one indicator of the level of progress or the welfare of a region. With the development of economy of course have an impact on the level of welfare of the population. GDP per capita is obtained by means of the value of regional gross domestic product divided by the population.

Per capita income provides an overview of the growth rate of public welfare in different countries and also to describe the changes in people's welfare level difference pattern that has been going on between the various countries (Lincoln Arsyad, 1999). The higher a person's income level, the higher the person's ability to pay various levies are set by the government (Thamrin, 2000). This means also the higher the GDP per capita of more prosperous residents of a region. In other words the number of poor people would be reduced.



**TABLE 4.3****GDP PER CAPITA IN WEST SUMATERA 1994-2013**

YEAR	GDP PER CAPITA
1994	16027052
1995	16475855
1996	17609545
1997	17998700
1998	17458575
1999	17577036
2000	22889614
2001	23727373
2002	24840187
2003	26146781
2004	27578136
2005	29159480
2006	30949945
2007	30949945
2008	35176632
2009	36683238
2010	38862142
2011	41293349
2012	43925820
2013	46640235

**SOURCE : BPS (West Sumatera 1994-2013)**

From the above data, annual GDP per capita has increased quite large. In the figure is increasing every year. In 2004 GDP per capita population of West Sumatra reached 6.08 million dollars then rose by 6.38 million in 2005 or an increase of 8.4 percent. In 2006 also increased by 9.08 percent or 6.71 million sebsar. then in 2007 the GDP per capita of West Sumatra be 6.62 million an increase of 11.5 percent. In 2008 GDP per capita of West Sumatra at 7.41 million increased by 20.1 percent. In 2009 GDP per capita of West Sumatra at 7.64 million increased by 14.0 percent. In 2010 increased to 7.98 million with an increase of 12.45 percent. Then in 2011, GDP per capita in West Sumatra stood at 8.37 million increased 21.5 percent sebesr. Later in the year 2012 amounted to 8.78 million increased by 16.06 percent. And by 2013 GDP per capita of West Sumatra to 9.2 million increased by 16.7 percent.

#### **4.4 An Overview Of Education (The Average Duration Of Schooling)**

Education is important in the development of a society and the main objectives in development. Even the progress of an individual and the community has been reached and is one of the goals of national development. This Law – Basic Law (CONSTITUTION) 1945 article 31 paragraph (1) States that every citizen has the right to obtain education. This has been strengthened again in the preamble of 1945 on the fourth that alenia to form a Government of Indonesia which protects all the Nations of Indonesia and the rest spilled the blood of Indonesia and to advance the general welfare and the intellectual life of the nation. Indonesia is also committed against the achievement of the Millennium Development Goals (MDGs) through the second purpose that is achieving basic education for all

The average of the old school in West Sumatra Province from year to year has increased enough that means even is ranked ninth when compared to other provinces in Indonesia. But in fact the province of West Sumatra are still lags from other provinsi are suppose neighbor province of North Sumatra and Riau, North Sumatra Province, where it was ranked eight and Riau Province was ranked three of the provinces in indonesia. Report on the MDGs (UNDP, Bappenas 2010) revealed that the economic factor in the form of high poverty levels

It is one of the important factors in the causes of dropouts. Equalization of education also has been hampered by a factor of residence. Education and health services are not yet fully reach all layers of society. The second cause, the existence of the unit new average school districts, so that access to it is relatively far from the settlement and cost of transport. In addition to the cost of education, poverty level and place of residence, the burden of dependency also affects the equitable education. Request or desire a family to get a number of children is determined by the preferences of the family itself over a number of children who are considered can continue to survive.

Duration of school average of West Sumatera population is 7.81 years. This means that the average old school residents West Sumatra finished primary school or have dropped out of school in grade 2 junior high school. This means that the nine-year compulsory education program have not done well in West Sumatra. If observed between areas of kabupaten/kota, the quality of education is also still belongs to low because 11 of the 19 district/city has old school average below average province of West Sumatra. This may be due to educational facilities and infrastructure as well as incomes are low making it difficult to continuing



education to a higher level. Based on the description that has been explained so you can deduce the problem of the extent of the influence of level of poverty, the burden of dependency and shelter against the old school in the province of West Sumatra.

**TABLE 4.4****THE AVERAGE DURATION OF SCHOOLING IN  
WEST SUMATERA 1994-2013**

YEAR	THE AVERAGE DURATION OF SCHOOLING
1994	6,9
1995	6,9
1996	6,9
1997	7,4
1998	7,4
1999	7,4
2000	7,6
2001	7,8
2002	8
2003	8
2004	8
2005	8
2006	8
2007	8
2008	8,26
2009	8,45
2010	8,48
2011	8,57
2012	8,6
2013	8,63

**SOURCE : BPS (West Sumatera 1994-2013)**

#### **4.5 An Overview Of Mortality (Maternal Mortality Rate)**

Maternal Mortality Rate (MMR) in Indonesia is still very high compared to other ASEAN countries, namely 307 / 100,000 births. Provincial contributor to maternal deaths are most Papua province 730 / 100,000 live births, West Nusa Tenggara (NTB) 370 / 100,000 live births, Maluku 340 / 100,000 births and East Nusa Tenggara (NTT) 330 / 100,000 live births. High maternal mortality rate shows that the level of health in Indonesia is still not good.

Maternal Mortality Rate (MMR) is one indicator of the degree kesehatan. Angka maternal mortality is also one of the targets set out in the millennium development goals, namely the Millennium Development Goals 5 of improving maternal health where the targets to be achieved by 2015 is to reduce the risk  $\frac{3}{4}$  the number of maternal deaths.

From the results of the survey conducted turns the achievement of AKI has shown decline. IDHS 2002 MMR in Indonesia amounted to 307 / 100,000 live births, while in 2008, based on the Demographic and Health Survey, MMR in Indonesia amounted to 228 / 100,000 Birth Hidup. Data achievement of MMR in the province of West Sumatra has been showing accelerated decline.

Based on the survey Andalas University Faculty of Medicine in 2008, MMR in West Sumatra by 143 / 100.000 live births. In 2012, MMR can not be determined because the MMR is authorized to issue the Central Bureau of Statistics. However dilihat of events the number of deaths, the number of maternal deaths in Provisnsi West Sumatra has decreased from 122 in 2004 to 101 in 2013



**TABLE 4.5****THE MATERNAL MORTALITY RATE IN WEST SUMATERA****1994-2013**

YEAR	THE MATERNAL MORTALITY RATE
1994	93
1995	65
1996	32
1997	80
1998	12
1999	11
2000	74
2001	111
2002	120
2003	110
2004	294
2005	240
2006	217
2007	201
2008	143
2009	118
2010	70
2011	122
2012	101
2013	73

**SOURCE : BPS (West Sumatera 1994-2013)**

The direct causes of maternal deaths occur in general about childbirth and 90% because of complications. The direct causes of maternal mortality by 2001 Survey are: haemorrhage (28%), eclampsia (24%), infection (11%), puerperal complications (11%), abortion (5%), obstetric trauma (5%), obstetric embolism (5%), obstructed labor / loss (5%) and others (11%).<sup>2</sup> The immediate cause is exacerbated by the health and nutritional status of the mother is not good, and the presence of risk factors in the mother's pregnancy.

Indirect causes include the low level of women's education, lack of knowledge of reproductive health, low socioeconomic status, position and role of mothers are less favorable in the family, as well as the lack of availability of health services and family planning (KB).

Household Health Survey (Survey) in 2001 showed that 34% of pregnant women suffer from chronic energy malnutrition, while 40% suffer from iron deficiency anemia (AGB). 2002-2003 IDHS shows that 22.4% of women are still in a state of "four too" ie 4.1% of pregnancies occur in women younger than 18 years (too young), 3.8% occur in women over the age of 34 years ( too old), 5.2% of births occur at intervals of less than two years (too often) and 9.3% of pregnant women have more parity than 3 (too much).

The fundamental cause of maternal death is the socio-economic and demographic factors, particularly poverty, low levels of education and ignorance about sexual development and reproductive processes, culture, gender bias conditions in society and the family and the location of residence.

## CHAPTER V

### EMPERICAL RESULTS AND ANALYSIS

#### 5.1 Empirical Result

This study aims to examine and analyze the poverty in West Sumatera and also finding the main variables that affect the number of poor people as well as to measure and analyze the impact of these variables. In keeping with that objectives then to prove the hypothesis that has been given in the previous section used multiple linear regression analysis by the method of ordinary least squares (OLS). Data used in this research is secondary data from 1994 up to 2013. For the data, author uses poor people (POOR) as dependent variable, GDP Per capita (I) Education (E), Health (H), as independent variables.

In theregression (Table 5.1) one of them are not significant when viewed from the value of the probability that entirely exceed. There is only two significant variable; education and health. So, the probability value is the highest one 0.1331 shows the regression model used less good.

Therefore the objectives of this study is to measure and analyze whether Gdp per capita, education and health have a big influence on poverty in West Sumatra.

#### 5.2 Classical Assumption Test

##### 5.2.1 Normality test

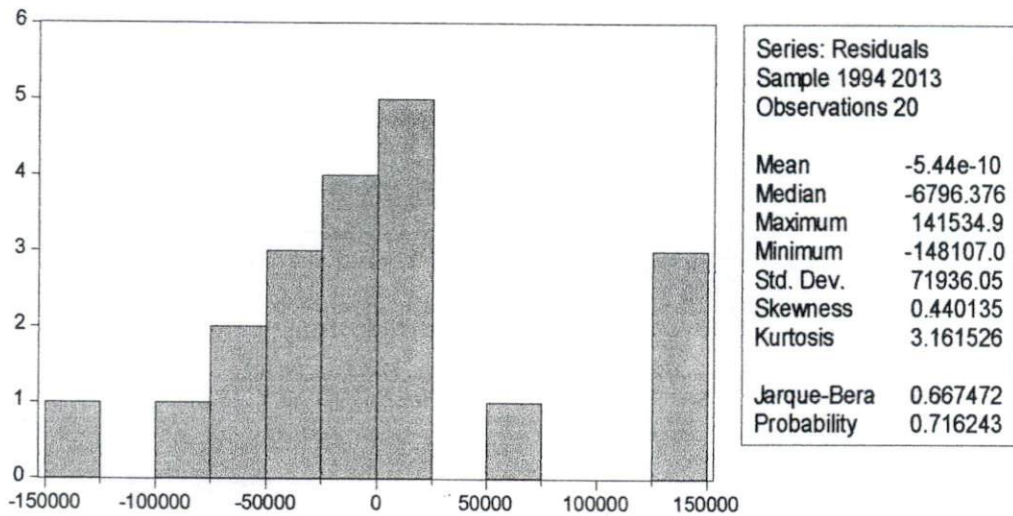
Normality test aims to test whether the error term is normally distributed where this test is called test Jarque-Bera test, whereby if the probability value Jarque\_Bera on larger models of the real level ( $\alpha = 5\%$ ) used it was concluded



that the model equations have distributed error term normal, and otherwise if the probability Jarque\_Bera smaller than the significance level used ( $\alpha = 5\%$ ) then the equation has the error term that is not normally distributed.

**FIGURE 5.2.1**

**Normality Test**



**Source : Processed by author**

In Figure 8 shows that the value of probability 0.70 is greater than  $\alpha = 5\%$ , so it can be said that in the equation OLS model does not have the problem of normality or a normally distributed error term.

**5.2.2 Multicollinearity**

To test the multicollinearity, the writer uses correlation matrix test. In this test, the writer detects multicollinearity by comparing the correlation among the independent variables. To detect the Multicollinearity, we can use the correlation ( $r$ ) method as the best one. The correlation is  $r < 0.8$ , we suspect no multicollinearity, and there will be multicollinearity if  $r > 0.8$ . With the help of

Eviews computer program, the writer can search the value of each r and the result is shown on table 5.2 below

**TABLE 5.2**

**Correlation Matrix Multicollinearity Result**

	POOR	GDP	MORTALITY	EDUCATION
POOR	1.000000	0.205667	0.336637	0.440414
GDP	0.205667	1.000000	0.283502	0.439736
MORTALITY	0.336637	0.283502	1.000000	0.376065
EDUCATION	0.440414	0.439736	0.376065	1.000000

**Source : Processed by author**

From the table above, it can be concluded that the values of the correlation among the independent variables are relatively high. According to the result of the data above,  $r < 0.8$ , it means that there is no multicollinearity on the model.

**5.2.3 Autocorrelation**

Criteria of autocorrelation testing with  $k = 4$ ;  $n = 10$  and  $\alpha = 5\%$ , in Durbin-Watson Significance Table,  $DL = 0.85718$   $DU = 1.72773$  are shown on the figure 5.2.2 1 below:

$$\text{If } 1.727 < 1.521 < (4 - 1.727)$$

$$1.727 < 1.521 < 2,273 \text{ then there is no autocorrelation}$$

**5.2.4 Heterocedasticity**

In this research, to detect Heterocedasticity problem on regression equation we use white Heterocedasticity without cross term method. If the value of Chi-square is greater than 5%, indicate there is no Heterocedasticity on regression equation model.

TABLE 5.2.4

Heteroscedasticity (White Test)

Heteroskedasticity Test: White

F-statistic	1.872337	Prob. F(9,10)	0.1712
Obs*R-squared	12.55150	Prob. Chi-Square(9)	0.1840
Scaled explained SS	8.681723	Prob. Chi-Square(9)	0.4672

Source : Processed by author

Heteroscedasticity testing aimed to test whether in a multiple regression model residual variance occurs inequality of the observations to other observations or can also be said to test whether the regression models meet the assumption that the model variants have the same disorder (homoscedasticity).

Testing is done by using:

1. See patterns of residuals of the regression estimation results. if residual constant motion, then there is no heteroscedasticity. However, if the residual form a certain pattern, then it indicates heteroscedasticity. Base on table 5.2.4, we can assume that there is no heteroscedasticity the estimation results, where the residual does not form a pattern. In other words, the residuals tend constant.
2. To prove the assumption in the heteroscedasticity test first, then tested White Heteroscedasticity. If the result of the probability value Obs\*Rsquared is greater than the significance level used. The value of the probability Obs\*R-squared is equal to 12.55150, it is concluded that the model equation does not have a problem of heteroscedasticity



### **5.3 Statistical Result Analysis**

#### **5.3.1 Coefficient Determination Test ( $R^2$ )**

From the regression done by the writer, the value of coefficient of determination ( $R^2$ ) is 0.867450. This value shows a high measurement for the independent variables to explain their effect on the dependent variable in the model. It means that the variation of the dependent variable can be explained by the independent variables about 86 %, when the rest 14 % are explained by factors outside the model

#### **5.3.2 T-Test**

The t-test is used to test the correlation between the dependent variable and independent variables individually. From the regression result, it shows that the t-statistic of each independent variable is compared with the value of t-table. The way to find the critical t value is: T table = t  $\alpha$  df (n-k), where:  $\alpha$  is level of significance, degree of freedom (df) is 20, using 20 number of data and 4 number of parameters.

By using t-test analysis at definite degree of freedom, the significant correlation between dependent and independent variables can be determined.

From the regression result, the significance or insignificant from each computed t value of independent variables can be seen in table Tabel 5.3.1 below:

**Tabel 5.3.1**  
**The Comparison Value of t-statistic and t-table**

Variable	t- statistic	t-table ( 5%)	t-test	Hypothesis
GDP	3.543	1,745	one tail-negative	Significant
MORTALITY	0.313	1,745	one tail-positive	Not Significant
EDUCATION	4.038	1,745	one tail-positive	Significant

**Source : Processed by author**

From the estimation results, it can be seen that independent variable GDP per capita educational, health sector have negative and significantly relationship toward of poor people in Indonesia where t-test were -3.543, 0.313 , -4.038. It means GDP per capita educational, health, sector sectors as indicators that play an important role in influencing poor people in Indonesia in which value of t-test for GDP per capita educational, health sector are greater than value of t-table (1,745). In the next paragraphs will explain the effect of each variable.

- a. Value of t-test for Gdp per capita sector about 3.543 at degree of freedom (df) significant at 5% is 1,745. Thus,  $t\text{-test} < t\text{-table}$  ( $3.543 < 1,745$ ), it means can be concluded that  $H_0$  is accepted and  $H_a$  is rejected statistically. So, partially the economy sector has negative and not significant effect on percentage of poor people in West Sumatera. In other words, there is a negative relationship between independent and dependent variables.
- b. Value of t-test for education sector about 4.038 at degree of freedom (df) at significant at 5% is 1,745. Thus,  $t\text{-test} > t\text{-table}$  ( $4.038 > 1,745$ ), it means can be concluded that  $H_0$  is rejected and  $H_a$  is accepted statistically. So, partially the education sector has positive and significant effect on poor people in West Sumatera. In other words, there is a positive relationship between independent and dependent variables.

- c. Value of t-test for health sector about 0.313 at degree of freedom (df) at significant at 5% is 1,745. Thus,  $t\text{-test} > t_{\text{table}}$  ( $0.313 < 1,745$ ), it means can be concluded that  $H_0$  is rejected and  $H_a$  is accepted statistically. So, partially the health sector has positive and not significant effect on poor people in West Sumatera. In other words, there is a positive relationship between independent and dependent variables.

### 5.3.3 F-Test

F test is used to detect the correlation between dependent variable and all the independent variables (simultaneously). The using of F test is similar as the using for t test. Hypotheses are formulated as follows:

This decision will use parameter at 5% ( $\alpha = 5\%$ ) based on the following rules:

- 1) If  $F\text{-statistic} < F\text{-table}$

$H_0$  is accepted and  $H_a$  is rejected, (not significant) in other world, the independent variables simultaneously do not have any effect on the dependent variable.

- 2) If  $F\text{-statistic} > F\text{-table}$

$H_0$  is rejected and  $H_a$  is accepted, (significant) in other world, the independent variables simultaneously have effect on the dependent variable.

The F test is similar to the t test that comparing the value of the F-statistic and the F-table value. To find the F-table value, we must get the degree of freedom for numerator ( $k-1$ ) and the degree of freedom for denominator ( $n-k$ ). With the level of significance  $\alpha = 5\%$ , the degree of freedom for



numerator is 3= (4-1) and the degree of freedom for denominator is 16 = (20-4). It can be found that is 1,943

It is already known that F- statistic from the regression is 11.73898. We proceed to compare the F-statistic value and F-table value. From the comparison, it can be concluded that the F-statisticvalue is higher than the F-table value (F-statistic > F-table). It means that  $H_0$  is rejected and  $H_a$  is accepted (significant). The independent variables simultaneously have effect on dependent variable. In other words,Gdp per capita,education,maternal mortality ratesimultaneously have effect on thepoverty.

**Table 5.3.2**  
**The Comparison Value of F-statistic and F-table.**

<b>F-Statistic</b>	<b>A</b>	<b>F-Table</b>	<b>Result</b>
6.996637	5%	3,01	Significant

**Source:Processedby author**

## 5.4 Analysis Result

### 5.4.1 Regression Result

Based on the regression results, we obtain the following equation:

**Table 5.4.1**

#### Regression Result

Dependent Variable: POOR  
 Method: Least Squares  
 Date: 07/29/15 Time: 21:37  
 Sample: 1994 2013  
 Included observations: 20

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDP	-0.019615	0.005536	-3.543333	0.0027
MORTALITY	83.96763	268.2501	0.313020	0.7583
EDUCATION	-394434.3	97668.99	-4.038480	0.0010
C	-2118719.	615487.2	-3.442345	0.0033
R-squared	0.867450	Mean dependent var	445296.0	
Adjusted R-squared	0.486346	S.D. dependent var	109377.6	
S.E. of regression	78390.49	Akaike info criterion	25.55365	
Sum squared resid	9.83E+10	Schwarz criterion	25.75280	
Log likelihood	-251.5365	Hannan-Quinn criter.	25.59252	
F-statistic	6.996637	Durbin-Watson stat	1.521308	
Prob(F-statistic)	0.003208			

**Source : Processed by author**

Based on the result the regression models for the POVERTY (POOR), GDP PER CAPITA (GDP), MATERNAL MORTALITY RATE (MORTALITY), and THE AVERAGE LENGTH OF THE SCHOOL (EDUCATION),the write get the estimate quation of poor household,that is :

$$\text{Pov} = -5839997 + (-0.019615) \text{ GDP} + (-394434.3) \text{ EDU} + (83.96763) \text{ MORTALITY} \\
 \quad \quad \quad (-3.442345) \quad (-3.543333) \quad (-4.038480) \quad (0.313020)$$

**Table.5.4.2**

**Elasticity of Factor Determining Household Poverty**

Factor /Variable	Coefficient Regression	Elasticity
Log Gdp Per capita	-0.019615	-1,765
Log Education	-394434.3	-7,12
Log Mortality	83.96763	3,76

**Source : Processed by author**

Elasticity =  $\alpha$

$\alpha$  : Coefficient Regression

P : Factor/ variable

Q : the average of poverty ()

**5.5 Estimation Result**

**1.The Impact Of GDP Per Capita On The Number Of Poor People**

Based on the results of data analysis has been done on the impact of gdp per capitawhere the number of poor people have negative effect. Where any increase in the level of gdp per capitawill be followed by an increase in the number of poor people. Then from the partial test results turned out that has been done between the level of GDP the number of poor people have a significant effect because sig >0.05.

Regression coefficient gdp per capita is -1,765, it means increase in gdp per capita will lead to greater poverty. Where the gdp per capita level by 1% point



will lead to increased poverty 1,7%. Regression coefficient has positive value show that positive relationship between gdp per capita and poverty

## **2. The Impact Of Educational Level On The Number Of Poor People**

Based on the results of data analysis has been done on the impact of educational level where the number of poor people have negative effect. Where any increase in the level of education will be followed by a decrease in the number of poor people. Then from the partial test results turned out that has been done between the level of education the number of poor people have a significant effect because sig <0.05.

Regression coefficient Education is -7,12, it means increase in education will lead to decrease poverty. Where the education level increased by 1% point will lead to decrease poverty 7,12 % Regression coefficient has positive value show that positive relationship between education and negative .

## **3.The Impact Of Maternal Mortality Rate On The Number Of Poor People**

Based on the results of data analysis has been done on the impact of Maternal Mortality Rate where the number of poor people have negative effect. Where any increase in the level of Maternal Mortality Rate will be followed by a increase in the number of poor people. Then from the partial test results turned out that has been done between the level of education the number of poor people have a significant effect because sig <0.05.

Regression coefficient Maternal Mortality Rate is 3,76 it means increase in maternal mortality will lead to greater poverty. Where the maternal mortality level by 1% point will lead to increased poverty 3,76%. Regression coefficient has

positive value show that positive relationship between maternal mortality and poverty

### **5.6 Policy Implication**

From the three variable tested, there are only two sectors that are significantly to poverty in West Sumatera. Based on the analysis and discussion of the results of research estimates how either partially or simultaneous in educational, health, budget allocation significant and negative effect on the percentage of poor people in West Sumatera. An increase in the three of them affects the amount of reduction of West Sumatera 's poor. Therefore, a need for increase in the two budgets allocation in order to lead a reduction in poverty and the expected education, health, budget allocation policies more emphasis and directed at the poor because of the considerable influence of the health and education sector with the poor. So expect existing policies to further improve the education, health, budget allocation that is used for the needs of improving health services for the poor.

While the analysis and discussion of the results of research estimates show either partially or simultaneous economy, housing public facilities budget allocation significant and positive effect on the percentage of poor people in West Sumatera. There is no indication for reduction of of poor people which mean that government already giving priority to improve the facilities for poor.

Poverty reduction has been carried out through central government policy, but is still inadequate to reduce the poverty, need new breakthroughs through policies that focus on local government. Local governments create programs to empower the poor that are conditional in accordance with the characteristics of

each area. The Government of each area mapped poor areas with the types of jobs each family and provide a solution in accordance with the type of profession.

Central government policies are inadequate in alleviating poverty, need new breakthroughs through policies that focus on local government. When it is said that the government is spearheading the alleviate poverty have a point, but what will the local government? First clarify the vision and mission of local government in poverty alleviation through micro approach is to build local definitions, criteria and local indicators, because it can not generalize the poor rural or urban poor, the poor in services, farmers, fishermen, and so on. Thus, the mapping should be done accurately. livelihoods should be known for sure, including potential and obstacles faced. Therefore, the orientation of the local government work programs should be centered on poverty with micro approach.

The issue of poor people in West Sumatra is a problem that has been solved by the government tried systematically. Judging from the statistics have many programs that are realized for the alleviation of poverty. With regard to the increase allocation of health development, of course, the necessary policies for the fulfillment of the health infrastructure is feasible and appropriate service standards that have been set. Fulfillment of health facilities need to be studied further, because if in fulfillment of what health facilities are not offset by the increase in the number of people who every year increase. This will make a new problem that will add to the problems that have been there before.

Education as one of our important basic need besides other needs such as health. education still faced some obstacle occurred which low educational share



rate, low quality & relevancy and also low educational management in basic, middle & high school. The quality in West Sumatera Province is still no good and need to be incersed.Result from this research is in West Sumatera Province must be increased by allocating budget on scholarship and completing the facilities and infrastructure for education improve running of the education system.

## Chapter 6

### Conclusion and Recommendation

In this chapter will describe the conclusion of the results of the discussion and the results of the research is a description of the characteristics of poor households and the factors that affect poor households as well as alternative priority poverty reduction programs in an effort to poverty in West Sumatra.

#### 6.1 Conclusion

Based on the analysis of the characteristics of poor households in West Sumatra in previous chapters, some conclusions can be drawn as follows

1. The results of the regression test between gdp per capita to the level of poverty can be said to be a not significant and have a negative effect. Where the higher per capita income and high poverty levels have a significant effect. Thus the first hypothesis is not proven.
2. Based on the results of the regression test has been described shows that the level of education and poverty levels significantly and negative. Where with the level of education will be able to reduce the level of poverty, so the hypothesis is proven.
3. Based on the results of the regression test between the maternal mortality rate to the level of poverty, where the results of the above analysis it can be said that the higher the maternal mortality the higher levels of poverty, and significant. Thus the hypothesis is accepted.

4. Test results of the F-test based on the results of the estimation can be seen that simultaneously influence poverty in indonesia. This means that if there is a change in economy, educational, health, will lead to changes in the percentage poor people in West Sumatera.

5. Coefficient determination ( $R^2$ ) result is 0.867450 tells that the independent variables can explain 86 percent of the dependent variable (poor people), and the remaining 14 percent is explained by factors that are not incorporated into the models.

## 6.2 Suggestions

Poverty is a problem that is quite fundamental problem faced by the government of West Sumatra in economic growth. Based on results of the study on the characteristics of poor households and poverty reduction in West Sumatra that has been done, then the policy implications advice in an effort to overcome the poverty of West Sumatra are as follows:

1) In an effort to reduce the amount of poverty in West Sumatra, the government could make efforts by increasing human resources. The higher the quality of human resources, it will cause a reduction in poverty levels. the government could make efforts such as improved educational facilities, health care facilities and seek price stability, where all three aspects are an important component in reducing the number of poor people.

2) Education reflects the quality of human resources that will impact the chances of getting a job, in which the higher education will likely get more work baik. berdasarkan results of the study the average length of school in West



Sumatra is still very low at 8 years. With their higher education programs (school and college) in the form of activities giving scholarships to poor students, is expected to increase human resources so that household members will be able to break the chains kemiskinan. Disamping it with their education to higher education will also be able to delay the age of marriage.

3) For that we need relocation funds that benefit the poor. Juga delivery services need improvement of accessibility and quality of health services, particularly maternal care. As well as the need to provide counseling and education to the community to improve public knowledge. Ultimately promoting family planning programs to reduce fertility and also health maternal care.

4) With the priority of some alternative poverty reduction programs in West Sumatra is expected to be an input or input for decision-makers in planning and program / development activities in the area so that the program is implemented will be targeted and could improve the welfare of poor people in West Sumatra

5) In this study only used data BPS and some variable characteristics of poor households, the expected presence of other studies on poverty in West Sumatra using data and methods berbeda. In other hand it with their priority poverty programs can proceed with the evaluation study of the existing poverty reduction programs in West Sumatera

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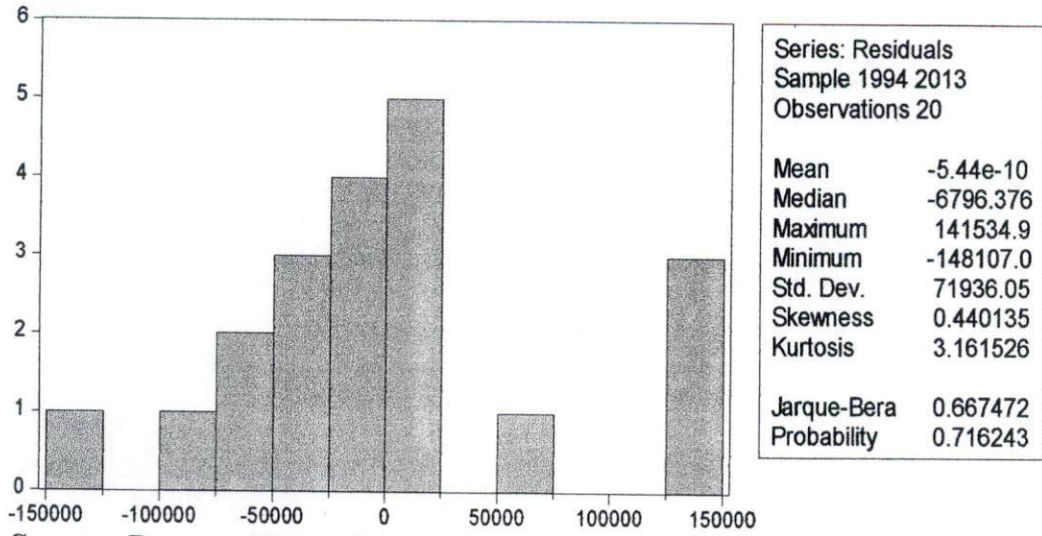


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# APPENDIX

**FIGURE 5.2.1**

**Normality Test**



**Source : Processed by author**



**TABLE 5.2**

**Correlation Matrix Multicollinearity Result**

	POOR	GDP	MORTALITY	EDUCATION
POOR	1.000000	0.205667	0.336637	0.440414
GDP	0.205667	1.000000	0.283502	0.439736
MORTALITY	0.336637	0.283502	1.000000	0.376065
EDUCATION	0.440414	0.439736	0.376065	1.000000

**Source : Processed by author**

**TABLE 5.2.4**

**Heterocedasticity (White Test)**

Heteroskedasticity Test: White

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F-statistic	1.872337	Prob. F(9,10)	0.1712
Obs*R-squared	12.55150	Prob. Chi-Square(9)	0.1840
Scaled explained SS	8.681723	Prob. Chi-Square(9)	0.4672

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**Source : Processed by author**

**Tabel 5.3.1**  
**The Comparison Value of t-statistic and t-table**

<b>Variable</b>	<b>t- statistic</b>	<b>t-table ( 5%)</b>	<b>t-test</b>	<b>Hypothesis</b>
GDP	3.543	1,745	one tail-negative	Significant
MORTALITY	0.313	1,745	one tail-positive	Not Significant
EDUCATION	4.038	1,745	one tail-positive	Significant

**Source : Processed by author**



**Table 5.3.2**  
**The Comparison Value of F-statistic and F-table.**

<b>F-Statistic</b>	<b>A</b>	<b>F-Table</b>	<b>Result</b>
6.996637	5%	3,01	Significant

**Source: Processed by author**

**Table 5.4.1****Regression Result**

Dependent Variable: POOR  
 Method: Least Squares  
 Date: 07/29/15 Time: 21:37  
 Sample: 1994 2013  
 Included observations: 20

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDP	-0.019615	0.005536	-3.543333	0.0027
MORTALITY	83.96763	268.2501	0.313020	0.7583
EDUCATION	-394434.3	97668.99	-4.038480	0.0010
C	-2118719.	615487.2	-3.442345	0.0033
R-squared	0.867450	Mean dependent var	445296.0	
Adjusted R-squared	0.486346	S.D. dependent var	109377.6	
S.E. of regression	78390.49	Akaike info criterion	25.55365	
Sum squared resid	9.83E+10	Schwarz criterion	25.75280	
Log likelihood	-251.5365	Hannan-Quinn criter.	25.59252	
F-statistic	6.996637	Durbin-Watson stat	1.521308	
Prob(F-statistic)	0.003208			

**Source : Processed by author**

**Table.5.4.2**

**Elasticity of Factor Determining Household Poverty**

Factor /Variable	Coefficient Regression	Elasticity
Log Gdp Per capita	-0.019615	-1,765
Log Education	-394434.3	-7,12
Log Mortality	83.96763	3,76

**Source : Processed by author**