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**THE INFLUENCE OF LEADING SECTORS ON POVERTY RATE IN THE DISTRICT  
PADANG LAWAS UTARA**

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**KEYWORDS:**

GDP, leading Sectors,  
Poverty Rate

**ABSTRACT**

Leading sectors are expected to be able to overcome the problem of poverty-level economic development. The purpose of this study is to find out which sectors are the leading sectors in North Padang Lawas Regency and to find out how the growth of these leading sectors influences the poverty rate in North Padang Lawas Regency. The type of data used in this study is secondary data obtained from the Central Bureau of Statistics of North Padang Lawas Regency and the Central Bureau of Statistics of North Sumatra Province. The results of this study are based on Location Quotient (LQ) and Growth Ratio Model (MRP) analysis, there are three leading sectors in North Padang Lawas Regency, namely agriculture, animal husbandry, and forestry; processing industry sector; as well as the construction sector. Based on the results of multiple linear regression analysis simultaneously leading sectors have a significant influence on the poverty rate in North Padang Lawas Regency. Partially, the agricultural, livestock, and forestry sectors have a positive and significant effect on the level of poverty. Partially, the manufacturing sector has a negative and significant effect on the poverty rate. Partially, the construction sector has a negative and insignificant effect on the poverty rate.

**INTRODUCTION**

The growth of a region or region is a condition that the government always wants to achieve to achieve good regional economic growth and continue to increase. The economic growth of a region is closely related to regional economic development. Economic development of a region is defined as a process of local government and community managing existing resources and forming a pattern of partnership between local government and private sector to create new jobs and stimulate the development of economic activities in the region (Arsyad, 2017).

Indonesia is a country with a decentralized system. The central government has the authority to hand over some of its power to the regions based on regional autonomy rights. Regional autonomy is the authority to regulate the interests of the community and its region.

Every regional economic development effort has the main objective to increase the number and type of job opportunities for regional communities. Regional development goals are very complex because of the close relationship between each development goal. Thus, it is necessary to establish a priority scale for development goals to be achieved. This priority scale is useful for determining the extent to which regional development goals of an economic, social, and political nature need to be achieved in the future.

To achieve that goal. Local governments and their communities must jointly take regional development initiatives. The main problem in regional development lies in emphasizing development policies based on the peculiarities of the region concerned (endogenous development) by using the potential of human resources, institutions, and physical resources locally (Arsyad, 2017). This orientation leads us to take initiatives from the region in the development process to create new employment opportunities and stimulate increased economic activity. Identifying potential economic sectors is part of the process of achieving success in

regional economic development.

In a local government system, economic growth is indicated by the increase in the production of goods and services measured through the Gross Regional Domestic Product (GDP) of a region or region. Identifying potential economic sectors in a region can also be done by analyzing GDP based on current prices and the basis of constant prices. Areas that have the potential to develop larger will experience more rapid development, then the development of the area will stimulate the development of other areas around it. Likewise, sectors that have the potential to grow bigger tend to be developed earlier.

The results of (Mutaali, 2023) analysis of Klassen Typology show that districts/cities in North Sumatra Province that are in the classification of fast-advancing and fast-growing areas are South Tapanuli Regency, Deli Serdang Regency, North Padang Lawas Regency, Pematangsiantar City, and Medan City.

**Table 1**  
**Gross Regional Domestic Product Growth Rate based on Constant Prices 2010 (percent) in North Padang Lawas 2019-2020**

Field of Effort	Year		
	2018	2019	2020
A. Agriculture, Forestry and Fisheries	5,38	5.76	3.38
B. Mining and Quarrying	6.92	7.22	-1.93
C. Processing Industry	5,84	3.87	1.64
D. Electricity and Gas Procurement	1.08	5.24	6.29
E. Water Procurement, Waste Management, Waste and Recycling	3.36	5.21	3.54
F. Construction	4.41.	5.89	-5.10
G. Wholesale and Retail Trade; Car and Motorcycle Repair	6.71	6.81	-0.58
H. Transportation and Warehousing	7.10	7.05	-0.73
I. Provision of Accommodation and Food & Drink	5.55	6.46	-0.97
J. Information and Communication	6.85	8.41	9.06
K. Financial Services and Insurance	3.02	1.97	1.51
L. Real Estate	8.83	5.08	3.78
M. Company Services	6.51	6.24	-0.73
N. Government Administration, Defense, and Compulsory Social Security	4.50	7.67	-0.59
O. Education Services	6.12	5.92	3.26
P. Health Services and Social Activities	7.83	4.03	2.04
Q. Other services	6.15	6.05	-0.40

Sum	5.58	5.61	1.14
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Sumber : BPS Kabupaten Padang Lawas Utara (2022)

It can be seen from Table 1 that based on GDP data for each sector in North Padang Lawas Regency from 2019 to 2020, GRDP experienced a decreased growth from 5.61% to 1.14%. Sectors that experienced an increase were the Water Procurement, Waste Management, and recycling sector from 5.24% to 6.29% and the Information and Communication Sector from 8.41% to 9.06%.

The problem of poverty is a multidimensional development challenge and is a part that always appears in people's lives in general (Suryawati, 2005). The Central Bureau of Statistics of North Padang Lawas Regency (2020) explained that the Indonesian state is still experiencing poverty problems. Poverty should be the main objective of solving the problems faced by Indonesia because poverty is a basic aspect of reference for successful economic development. The poverty severity index describes the spread of expenditure among the poor. The higher the index value, the higher the inequality among the poor. The poverty depth index is a measure of the average expenditure gap of each poor person against the poverty line, the higher the index value, the further the average expenditure of the population from the poverty line. The formula for finding the poverty depth index is:

$$P_{\alpha} = \frac{1}{N} \sum_{i=1}^q \left[ \frac{z - y_i}{z} \right]^{\alpha}$$

information

P = Poverty severity index

$\alpha$  = 5

z = Poverty line.

$y_i$  = Average monthly per capita expenditure of people below the poverty line ( $i=1, 2, 3, \dots, q$ ),  $y_i < z$

q = Many people are below the poverty line.

N = Population.

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**Table 2**  
**Tingkat Kemiskinan Padang Lawas Utara**

Year	Population (jiwa)	Number of Poor People (thousand inhabitants)	Poverty Line (Rupiah/Capita/Month)	Depth Index	Severity Index
2011	277423	24,03	229 621	1,35	0,35
2012	272713	23,72	252 290	1,18	0,32
2013	267771	25,01	243 213	1,62	0,22
2014	262895	23,86	246 951	1,26	0,34
2015	257807	27,67	256 219	1,23	0,27
2016	252589	27,88	278 290	1,46	0,43
2017	247286	27,98	291 036	1,54	0,32
2018	241881	26,82	321 076	1,41	0,37
2018	236290	26,06	342 885	1,18	0,24
2020	230685	26,79	380 379	1,20	0,22

Sumber : BPS Padang Lawas Utara

From Table 2 it can be seen that from 2011 to 2020 the number of poor people fluctuated. However, in 2017 the number of poor people showed the highest number. The poverty line figure shows an overall increase from 2011 to 2020. The depth index and poverty severity index of North Padang Lawas district from 2011 to 2020 are fluctuating. As of 2017, the depth index has increased and managed to fall in 2018 and 2019 and increase again in 2020. The severity index managed to fall in 2017 and increased in 2018 and again decreased in 2019 and 2020. This shows that in several years the level of inequality between poor people in North Padang Lawas Regency is also still fluctuating.

North Padang Lawas Regency is an area that has a superior sector. It is important to know whether the existence of the leading sector as a priority sector of the government to increase regional economic growth and be able to increase regional development and provide community welfare as seen from the poverty level in North Padang Lawas District. It is expected that the leading sector in North Padang Lawas District will be able to provide improvements to economic performance in North Padang Lawas District through poverty reduction in North Padang Lawas District, and not only move on creating value.

## RESEARCH METHODS

The type of research in this study is quantitative descriptive research where research uses an objective research approach including data collection and data analysis using statistical tests (Hermawan 2017).

### Research Variables

The research variables in this study are Gross Regional Domestic Product per sector based on constant prices in 2010 (Rupiah) North Padang Lawas Regency (2011-2020), Gross Regional Domestic Product per sector based on constant prices in 2010 (Rupiah) North Sumatra Province (2011-2020), Gross Regional Domestic Product Growth based on constant prices in 2010 leading sectors (Rp) North Padang Lawas Regency (2011-2020), poverty rate of North Padang Lawas Regency (Total Population) (2011-2020).

Seventeen sectors from 2013 to 2020 were made into 9 sectors by researchers with details: (1) Agricultural Sector; (2) Mining and Quarrying Sector; (3) Processing Industry Sector; (4) Procurement of electricity, gas + water; (5) Construction Sector; (6) Large Trade and Retail Sector + Food and Beverage Accommodation Provision Sector; (7) Transportation and Warehousing Sector + Information and Communication Sector; (8) Financial Sector + Real Estate Sector + Corporate Services Sector; (9) Government Adm. Sector + Education Service Sector + Health and Social Services Sector + Other Service Sector.

### Data Collection Techniques

In this study, the author uses secondary data, namely, research data obtained by researchers indirectly

through intermediary media by taking documents or written evidence in the form of data reports. The data used in this study is annual data. Data is obtained using documentation, namely data collection which is carried out with the category of classification of written data related to problems in research from various sources such as books and publications listed on the website. The data used in this study was sourced from the Central Statistics Agency (BPS) of North Padang Lawas Regency and North Sumatra Province as well as the official website of the Central Statistics Agency (BPS) of North Padang Lawas Regency and North Sumatra Province.

### Data Analysis

To answer the first problem, namely what sector is the leading sector in North Padang Lawas Regency, *Location Quotient (LQ)* analysis tools, Growth Ratio Model (MRP) analysis, and *Overlay* analysis are used. To answer the second problem, namely the relationship between the growth of leading sectors to the poverty rate in North Padang Lawas Regency using a multiple linear regression analysis tool using the SPSS program.

## RESULTS AND DISCUSSION

### Analisis Location Quotient

*Location Quotient (LQ)* analysis is an analytical tool used to identify what sectors have comparative advantages usually called base sectors. In this study, the LQ results obtained were obtained by comparing the role of a sector in North Padang Lawas Regency against a wider area, namely North Sumatra Province. There is also an LQ value that will be obtained and will have a range from zero to an infinite positive number.

**Table 3**  
**Rata-Rata Nilai LQ Kabuapten Padang Lawas Utara**

SECTOR	Rata-Rata LQ
A. Agriculture, Forestry, and Fisheries	1.77
B. Mining and Quarrying	0.25
C. Processing Industry	1.68
D. Electricity and Gas Procurement	0.92
E. Water Procurement, Waste Management, Waste and Recycling	0.44
F. Construction	1.19
G. Wholesale and Retail Trade; Car and Motorcycle Repair	0.59
H. Transportation and Warehousing	0.43
I. Provision of Accommodation and Food and Drink	0.39
J. Information and Communication	0.24
K. Financial Services and Insurance	0.25
L. Real Estate	0.84
M, N. Corporate Services	4.33
O. Government Administration, Defense, and Compulsory Social Security	0.01
P. Education Services	0.38
Q. Health Services and Social Activities	0.50
R, S, T, U. Other services	0.06

Source: Data Processed (2022)

The largest LQ value if sorted is given by sector (1) company services; (2) agriculture, animal husbandry, and forestry; (3) processing industry; (4) construction; (5) procurement of electricity and gas; (6)

real estate; (7) wholesale and retail trade, repair of cars and motorcycles; (8) health services and social activities; (9) water supply, waste management, waste, and recycling; (10) transportation and warehousing; (11) provision of food and beverage accommodation; (12) Education services; (13) mining and quarrying; (14) financial and insurance services; (15) information and communication; (16) other services; and (17) government administration, defense, and social security. Based on the results of the LQ above, it can be seen the order based on the contribution of each sector to the GRDP in North Padang Lawas Regency.

### Growth Ratio Model Analysis

Growth Ratio Model Analysis (MRP) was used to see the magnitude of the growth ratio between the study area, namely North Padang Lawas Regency, and the reference area, North Sumatra Province. There are two instruments in the Growth Ratio Model (MRP) analysis, namely RPr and RPs. RPr (Reference Area Growth Ratio) is a ratio between the growth of the economic sector in the reference area or North Sumatra Province to the aggregate economic growth in the reference area, namely North Sumatra Province. RPs (Study Area Growth Ratio) itself is the ratio between the growth of the economic sector in the study area or North Padang Lawas Regency to the aggregate economic growth table below.

**Table 4**  
**Koefisien MRP North Padang Lawas Regency**

Sector	RPr		Rps	
	Value	Notasi	Value	Notasi
A. Agriculture, Forestry, and Fisheries	1.02	+	1.16	+
B. Mining and Quarrying	1.77	+	0.74	-
C. Processing Industry	0.60	-	1.92	+
D. Electricity and Gas Procurement	1.06	+	0.92	-
E. Water Procurement, Waste Management, Waste and Recycling	1.23	+	1.03	+
F. Construction	1.18	+	1.51	+
G. Wholesale and Retail Trade; Car and Motorcycle Repair	1.10	+	1.25	+
H. Transportation and Warehousing	0.81	-	1.80	+
I. Provision of Accommodation and Food and Drink	1.05	+	0.95	-
J. Information and Communication	2.11	+	0.87	-
K. Financial Services and Insurance	1.23	+	1.35	+
L. Real Estate	1.42	+	1.37	+
M, N. Corporate Services	1.21	+	0.72	-
O. Government Administration, Defense, and Compulsory Social Security	1.03	+	1.12	+
P. Education Services	1.10	+	1.30	+
Q. Health Services and Social Activities	1.82	+	0.87	-

R, S, T, U. Other services	1.27	+	0.92	-
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Source: Data Processed (2022)

From the results of MRP analysis, the two indicators can be combined, namely the Reference Growth Ratio (RPr) and Study Growth Ratio (RPs) to see the economic sector in North Padang Lawas Regency that has the potential to be developed, in this analysis the classification is divided into four, namely as follows:

a. Klasifikasi 1

RPr value (+) and RPs value (+), which means that sectors in classification 1 have dominant growth both in North Sumatra Province and in North Padang Lawas Regency. The sectors included in classification 1 are (1) agriculture, animal husbandry and forestry; (2) water supply, waste management, waste and recycling; (3) construction; (4) wholesale and retail trade; repair of cars and motorcycles; (5) financial and insurance services; (6) real estate; (7) government administration, defense and compulsory social security; (10) Education services.

b. Klasifikasi 2

RPr value (+) and RPs value (-), which means sectors in classification 2 have prominent growth in North Sumatra Province but not prominent in North Padang Lawas Regency. Sectors included in classification 2 are (1) mining and quarrying; (2) procurement of electricity and gas (3) provision of accommodation and food and drink; (4) information and communication; (5) corporate services; (6) health services and social activities; (7) other services.

c. Klasifikasi 3

RPr value (-) and RPs value (+), which means sectors in classification 3 have growth that is not prominent in North Sumatra Province but prominent in North Padang Lawas Regency. Sectors included in classification 3 are: (1) processing industry; and (2) transportation and warehousing.

d. Klasifikasi 4

The RPr value (-) and RPs value (-), mean that sectors in classification 4 have growth that is not prominent in North Sumatra Province or North Padang Lawas Regency. Sectors included in Classification 4 None of the sectors are included in the classification.

### Analysis Overlay

*Overlay* analysis is generally an analysis that combines results from *Location Quotient* (LQ) analysis with Growth Ratio Model (MRP) analysis. In the *Overlay* analysis, the merger is intended to see what sectors are the leading sectors in Padang Lawas Uara Regency. In this context, the results of the *Location Quotient* (LQ) analysis to see the contribution of the economic sector in North Padang Lawas Regency and the results of the Growth Ratio Model (MRP) analysis are seen from the value of the Study Area Growth Ratio (RPs) to see from the growth of the economic sector in North Padang Lawas Regency where growth in the context of RPs is the growth of the economic sector obtained from the comparison results of districts North Padang Lawas with a wider area above it, namely North Sumatra Province.

**Table 5**  
**Overlay Analysis of North Padang Lawas Regency in 2011-2020**

Sector	LQ		Rps		Overlay
	Value	Notasi	Value	Notasi	Notasi
A. Agriculture, Forestry, and Fisheries	1.77	+	1.16	+	++
B. Mining and Quarrying	0.25	-	0.74	-	--
C. Processing Industry	1.68	+	1.92	+	++
D. Electricity and Gas Procurement	0.92	+	0.92	+	+-
E. Water Procurement, Waste Management, Waste and Recycling	0.44	-	1.03	+	+-
F. Construction	1.19	+	1.51	+	++
G. Wholesale and Retail Trade; Car and Motorcycle Repair	0.59	-	1.25	+	+-
H. Transportation and Warehousing	0.43	-	1.80	+	+-
I. Provision of Accommodation and Food and Drink	0.39	-	0.95	-	--
J. Information and Communication	0.24	-	0.87	-	--
K. Financial Services and Insurance	0.25	-	1.35	+	+-
L. Real Estate	0.84	-	1.37	+	+-
M, N. Corporate Services	4.33	+	0.72	+	+-
O. Government Administration, Defense, and Compulsory Social Security	0.01	-	1.12	+	+-
P. Education Services	0.38	-	1.30	+	+-
Q. Health Services and Social Activities	0.50	-	0.87	-	--
R, S, T, U. Other services	0.06	-	0.92	-	--

Source: Data Processed 2022

From Table 5, the results of the analysis of the Overlay of North Padang Lawas Regency from 2011 to 2020 can be classified into three classifications as follows:

- a. LQ (+) and RPS (+) values, this means that the sector is a leading sector in North Padang Lawas Regency, and its contribution and growth are worth (+) or  $>1$ . These sectors are sectors (1) agriculture, animal husbandry, and forestry; (2) processing industry; (3) construction.
- b. The value of LQ (+) and RPs (-), means that the sector in terms of its contribution to North Padang Lawas Regency is dominant, but the growth is still smaller than the growth of the same sector in North Sumatra Province. These sectors are (1) electricity and gas procurement; and (2) real estate.
- c. The value of LQ (-) and RPs (+), means that the sector's contribution in North Padang Lawas Regency is smaller than North Sumatra Province, but the sector growth in North Padang Lawas Regency is greater than that of North Sumatera Province. These sectors are (1) electricity and gas procurement; (2) water supply, waste management, waste and recycling; (3) wholesale and retail trade, repair of cars and motorcycles; (4) transportation and warehousing; (5) financial and insurance services; (6) real estate; (7) government administration, defense and compulsory social security; (8) educational services.
- d. The value of LQ (-) and RPs (-), means that in terms of contribution and growth in the condition of the economic sector in North Padang Lawas Regency is smaller than North Sumatra Province, this sector is not at all a leading sector and is not a sector that can develop in North Padang Lawas Regency. These sectors are (1) mining and quarrying; (2) provision of accommodation and food and drink; (3) information and communication; (4) health services and social activities; (5) other services.

### Shift Share Analysis

Shift Share analysis is used to see the process of economic growth of North Padang Lawas Regency associated with a higher area above it, namely North Sumatra Province. In the Shift Share analysis, the economic growth sectors of North Padang Lawas Regency are seen from the consequences influenced by Provincial Share ( $N_{ij}$ ), Proportional Shift Component ( $M_{ij}$ ), and Differential Share ( $C_{ij}$ ). There are two shift components, namely Proportional Shift Component ( $M_{ij}$ ) and Differential Share ( $C_{ij}$ ) which aim to separate the influence of growth both from within the region (internal) and from outside the area (extern).

**Table 6**  
**Analysis Shift Share North Padang Lawas Regency**

Sector	$N_{ij}$	$M_{ij}$	$C_{ij}$	$D_{ij}$
1. Agriculture, Forestry, and Fisheries	1354.91	855.747	211.621	2422.27
2. Mining and Quarrying	8.5244	9.39918	-3.865	14.0585
3. Processing Industry	538.03	197.408	288.758	1024.2
4. Electricity and Gas Procurement	6.50951	4.30935	3.52113	14.34
5. Water Procurement, Waste Management, Waste and Recycling	1.24997	0.94435	0.04787	2.24219
6. Construction	411.638	298.767	21.622	688.783
7. Wholesale and Retail Trade; Car and Motorcycle Repair	289.219	196.223	78.6634	564.106
8. Transportation and	54.0545	26.7905	34.0674	114.912

Warehousing				
9. Provision of Accommodation and Food and Drink	27.1994	17.5704	-1.533	43.2368
10. Information and Communication	17.324	22.6969	-4.645	35.3759
11. Financial Services and Insurance	18.9729	14.483	8.11146	41.5674
12. Real Estate	90.5857	79.8639	47.4805	217.93
13. Company Services	119.842	90.1532	-40.505	169.49
14. Government Administration, Defense, and Compulsory Social Security	1.46964	0.94416	0.18379	2.59759
15. Educational Services	21.2394	14.5429	6.84543	42.6278
16. Health Services and Social Activities	12.7531	14.3555	-2.9493	24.1592
17. Other Services	0.89241	0.70264	-0.0901	1.50491

Source: Data Processed

In Shift Share analysis, the shift component consists of Proportional Shift Share (Mij) and Differential Shift (Cij). These two components separate the elements of growth in North Padang Lawas Regency which are from outside North Padang Lawas Regency (extern) and within North Padang Lawas Regency (internal). According to Oppenheim (1980), Bendad-Alal (1953), Patton (1991), Field and McGregor (1993) in Joseph (1999) entitled "Analysis of Regional Economic Growth", proportional shift (Mij) and differential shift (Cij) components are more important than regional share components.

Based on Table 6, it is also seen that all sectors have a positive *Proportional Shift Share* (Mij) in North Padang Laws district from the quarter of 2011 to 2020, namely the agriculture, trend, and forestry sectors (211,621); mining and quarrying (9.39918); processing industry (197,408); electricity, and gas (4.30935); water supply, waste management, waste and recycling (0.94435), construction (298.767); wholesale and retail trade, car and motorcycle repair (196,223); transportation and warehousing (26.7905); provision of food and beverage accommodation (17.5704); information and communication (22.6969), financial services and insurance (14.483); real estate (79.8639); corporate services (90.1532); government administration, defense, and compulsory social security (0.94416); Education services (14.5429); health services and social activities (14.3555); and other services (0.70264). This means that these sectors are growing fast both in North Padang Lawas Regency and in North Sumatra Province.

The results of *Differential Shift* (Cij) in North Padang Lawas Regency from the quarter of 2011 to 2020 eleven sectors had positive values, namely, the agriculture, livestock and forestry sectors (211,621); processing industry (228,758); electricity and gas procurement (3.52113); water procurement, waste management, waste and recycling (0.04787); construction (21,622); wholesale

and retail trade, car and motorcycle repair (78.6634); transportation and warehousing (34,0674); financial and insurance services (8.11146); real estate (47.4805); government administration, defense and compulsory social security (6.84543); and Education services 6.84543). This means that these sectors are growing faster in North Padang Lawas Regency than the same sectors in North Sumatra Province. Six sectors have a negative *Differential Shift* (Cij) in North Padang Lawas Regency from the quarter of 2011 to 2020, namely the mining sector and the less potential in North Padang Lawas Regency from 2011 to 2020. excavation (-3,865); provision of food and drink accommodation (-1,533); information and communication (-4,645); corporate services (-40,505); health services and social activities (-2.9493); and other services (-0.0901). The six sectors based on the results of the Shift Share analysis *have slow growth in North Padang Lawas Regency when compared to the same sector at the North Sumatra Province level, therefore based on the results of the Shift Share analysis, these sectors are economic sectors.*

#### Kemiskinan di Kabupaten Padang Lawas Utara



**Figure 1**  
**Number of Poor People in North Padang Lawas Regency**  
**Year 2010-2020**

It can be seen from Figure 1 above, that the number of poor people in North Padang Lawas Regency from 2010 to 2020 tends to fluctuate. The highest was reached in 2017 at 27,980 and the lowest occurred in 2013 at 23,720.

#### The Influence of the Leading Sector on the Poverty Rate in North Padang Lawas District

$$Y1 = -26.176 + 6.762X_1 - 0.840X_2 - 0.005X_3 + e$$

f (X1, X2, X3)

T-sig. = (0,002; 0,001; 0,986)

R Square = 44,5%

F-Sig. = 0,001

Overall, (simultaneously) the independent variables of the leading sector (X1, X2, and X3) have a significant effect on the dependent variable of poverty level (Y1). Based on the above equation model, it can be explained as follows:

1. The coefficient in the Agriculture, Livestock and Forestry sector (X1) is 0.629

That is, if the variables of the agricultural, livestock, and forestry sectors increase by 1 unit, then the poverty rate in northern Padang Lawas Regency will increase by 0.629 units and vice versa assuming that the independent variable of the processing industry sector (X2) and the independent variable of the construction sector are considered constant. The independent variables of the agriculture, livestock, and forestry sectors (X1) have a significant influence ( $0.011 < 0.05$ ).

2. The processing industry sector coefficient (X2) is 0.057

That is, if the variable of the processing industry sector increases by 1 unit, the poverty rate in North Padang Lawas Regency will increase by 0.057 units and vice versa assuming that the independent variable of the agriculture, livestock, and forestry sector (X1) and the independent variable of the construction

sector (X3) are considered constant. Variabel independent of the processing industry sector has a significant influence ( $0.000 < 0.05$ ).

3. The coefficient of the construction sector (X3) is 0.159

That is, if the construction sector variable increases by 1 unit, the poverty rate in North Padang Lawas Regency will increase by 0.159 units and vice versa assuming that the independent variable of the agriculture, forestry, and livestock sector (X1) and the variable of the processing industry sector (X3) is considered constant. Construction sector variables have no significant influence ( $0.625 > 0.05$ ).

The results of the influence of independent variables in the agriculture, livestock, and forestry sectors (X1) have a significant and positive effect. This explains that the agriculture, livestock, forestry, and fisheries sectors are partially able to affect the poverty rate in North Padang Lawas District. This is in line with the results of research by Koko Firmansyah (2020) that the main sub-sector of the potential sector in Jambi Province (plantation sub-sector) has a positive and significant effect on the poverty rate in Jambi Province.

The result of the influence of the independent variable of the processing industry sector (X2) has a significant positive influence. This is also in line with the results of research by Amran, Vakie, and Een (2019) the leading sectors (agricultural sector, processing industry, and construction sector) have a significant effect on poverty in North Minahasa Regency.

The results of the influence of the construction variable (X3) had an insignificant positive influence on the poverty rate in North Padang Lawas District. This is in line with the results of Selly Trianita's research Oktavia Tarigan (2021), the financial sector has an insignificant negative effect on the poverty rate in Medan City.

## CONCLUSION

Based on the results of research on the influence of leading sectors on the poverty rate in North Padang Lawas Regency, several conclusions can be drawn, namely, the unclean sectors in North Padang Lawas Regency are: (1) agriculture, livestock, and forestry sectors; (2) processing industry; and (3) construction sector. Simultaneously agriculture, livestock, and forestry sector (1); processing industry sector (2); construction sector (3); has a significant effect on the poverty rate in North Padang Lawas Regency. Partially, the agriculture, livestock, and forestry sectors have a positive and significant effect on the poverty rate. The processing industry sector has a positive and significant effect on the poverty rate. Partially, the construction sector has a positive and insignificant effect on the poverty rate.

The leading sector in North Padang Lawas Regency must be considered again to help reduce the poverty rate in North Padang Lawas Regency by increasing the productivity of the leading sector in North Padang Lawas Regency. It should also be noted the allocation of production factors so that each sector can produce maximum production results where the production results will affect the per capita income of the community which will increase the ability of people's purchasing power and ultimately be able to reduce the poverty rate in North Padang Lawas Regency.

For further research, to go deeper, you can try using other indicators and other ways to find out the leading sectors in North Padang Lawas Regency and find out the relationship and influence of leading sectors on poverty rates in North Padang Lawas Regency because the leading sectors are expected to be able to overcome these two problems.

## BIBLIOGRAPHY

- Adisasmita, H. Rahardjo, (2005). *Pembangunan Ekonomi Perkotaan*, Yogyakarta : Graha Ilmu.  
 Badan Pusat Statistik Kab Padang Lawas Utara, (2002-2022). *Produk Domestik Regional Bruto Kab Padang Lawas Utara menurut Lapangan Usaha*, Padang Lawas Utara : BPS Kab Padang Lawas

Utara.

- Badan Pusat Statistik Kab Padang Lawas Utara, (2002-2022). Padang Lawas Utara dalam Angka tahun 2002, Padang Lawas Utara. BPS Kab Padang Lawas Utara.
- Badan Pusat Statistik Provinsi Sumatera Utara, (2002-2022). Produk Domestik Regional Bruto Kab Padang Lawas Utara menurut Lapangan Usaha, Padang Lawas Utara : BPS Provinsi Sumatera Utara.
- Basuki, Agus, Tri, (2016). Analisis Regresi dalam Penelitian Ekonomi dan Bisnis, Yogyakarta : PT. Rajagrafindo Persada.
- Budhijana, R. B. (2019). "Analisis Pengaruh Pertumbuhan Ekonomi, Indeks Pembangunan Manusia (IPM) dan Pengangguran terhadap Tingkat Kemiskinan di Indonesia tahun 2000-2017", *Jurnal Ekonomi, Manajemen dan Perbankan*, Volume 5, Nomor 1, hal 36-44, STIE Indonesia Banking School.
- Jumiyanti, Kalcum R. (2018). "Analisis Location Quotient dalam Penentuan Sektor Basis dan Non Basis di Kabupaten Gorontalo", *Gorontalo Development Review*, Volume 1, Nomor 1, Halaman 30, Universitas Gorontalo, Gorontalo.
- Sirojuzilam, (2015). Pembangunan Ekonomi Regional, Medan : USU Press
- Budhijana, R. B. (2019). "Analisis Pengaruh Pertumbuhan Ekonomi, Indeks Pembangunan Manusia (IPM) dan Pengangguran terhadap Tingkat Kemiskinan di Indonesia tahun 2000-2017", *Jurnal Ekonomi, Manajemen dan Perbankan*, Volume 5, Nomor 1, hal 36-44, STIE Indonesia Banking School.
- Maryanti, Sri. (2015). "Analisis Sektor Unggulan terhadap Kinerja Ekonomi dalam Menyerap Tenaga Kerja di Kota Pekanbaru", *Research Gate*, Volume 7, Nomor 1, Halaman 31-45, Universitas Lancang Kuning Pekanbaru, Pekanbaru.
- Munadjat, Bambang, (2015). "Pengaruh Sektor Unggulan dan Determinasi Faktor yang Mempengaruhi Pertumbuhan Ekonomi di Wilayah Pulau Sumbawa Tahun 2005-2013", *Media Ekonomi*, Volume 23 Nomor 2, hal 135-166, Universitas Trisakti, Jakarta.
- Setiawan, Doddy. (2019). Model Rasio Pertumbuhan (MRP), <https://slideplayer.info/slide/13010439/> (24 Januari 2021).
- Sukirno, Sadono, (2000). Makro Ekonomi Modern, Jakarta: PT Raj
- Yusuf, Maulana., (1999). "Model Rasio Pertumbuhan (MRP) sebagai Salah Satu Alternatif dalam Perencanaan Wilayah dan Kota", *Ekonomi dan Keuangan Indonesia*, Volume XLVII, Nomor. 2, hal 219-233, Bangka Belitung
- Gujarati, D., N. (2000). Basic Econometrics, Jakarta: PT Rajagrafindo Persada.



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