

Analysis of Poverty Levels in Regencies and Cities of North Sumatera Province

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ABSTRACT

The small number of poor people is greatly influenced by the poverty line, because the poor are the population that has an average monthly per capita expenditure below the poverty line. The poverty line is the rupiah value of the minimum expenditure needed by a person to meet their basic needs for a month, both food needs and non-food needs. This study aims to analyze poverty indicators in North Sumatera. The data used are the Percentage of the Poor Population, the Poverty Depth Index and the Poverty Severity Index for all Regencies and Cities in North Sumatra Province. The method used is the differential test data analysis method. The results of the study show that the Covid-19 Pandemic affects the number of Percentage of Poor People below the Poverty Line. Poverty Depth Index and Poverty Severity Index. However, from the results of the hypothesis test, it was concluded that there was no difference in the Poverty Depth Index and the Poverty Severity Index before and after the Covid-19 pandemic, due to policies carried out by the government to prevent extreme poverty from occurring.

Keywords: Population, Poverty, Government Policy.

INTRODUCTION

As a result of the previous Covid-19 pandemic, the poverty rate increased. Poverty is a situation that describes a lack of income to meet basic needs. Basic needs can be defined as goods and services needed by every person to live at a level that is considered to meet the minimum standard of living, which consists of clothing needs, food needs and shelter needs. Poverty is a fundamental problem, because poverty involves fulfilling the most basic needs in life and poverty is a global problem faced by many countries in the world (Yacoub, 2012). A condition where a person or group of people is unable to fulfill their basic rights to defend and live their lives. These basic rights include the fulfillment of needs for food, health, education, employment, housing, clean water, land, natural resources and the environment, a sense of security from treatment or acts of violence and the right to participate in social and political life (Bappenas, 2004). The government makes efforts to eradicate poverty by protecting poor families and community groups by meeting their needs and providing outreach and training to improve their businesses. The poverty profile is also one of the aspects that the government needs to take policies in dealing with poverty problems. In this way, efforts to empower poor communities can run effectively and on target. The following is data on the percentage of poor people in Indonesia for 2019-2022.

Table 1. Percentage and Number of Poor People in Indonesia 2019-2022

YEAR	2022	2021	2020	2019
Poor Population (%)	9.57	9.71	10.19	9.22
Poor Population (Individuals)	26.363.27	26.503.65	27.549.69	24.785.87

It can be seen that the percentage and number of poor people in Indonesia increased consecutively for 2 years during the pandemic and decreased the following year when the pandemic began to subside. The Indonesian economy entered a crisis in 2020 due to the Covid-19 pandemic, so the unemployment rate increased.

North Sumatra is one of the provinces with quite high poverty levels. From 2011 to 2022, the poverty level in North Sumatra fluctuated up and down in number and percentage. The results of the Socio-Economic Survey (Susenas) carried out in 2022 show that the poverty rate in North Sumatra has decreased by 0.07 points from 2021. The number of poor people in 2022 also decreased by 0.34 million people from 2021. District/ Cities in North Sumatra Province have also experienced ups and downs in the last four years from before the pandemic to after the Covid-19 pandemic. The following is a table of the number and percentage of poor people in North Sumatra Province according to Regency/City in 2019-2022.

Table 2. Number and Percentage of Poor Population in North Sumatra Province
According to District/City in 2019-2022

Regency/City	Number (Person)	Percentage (%)
Regency	2022	2022
Nias	23.23	16.00
Mandailing natal	40.98	8.92
Tapanuli Selatan	23.05	8.07
Tapanuli Tengah	47.07	11.71
Tapanuli utara	27.47	8.93
Toba Samosir	16.48	8.89
Labuhan Batu	43.27	8.26
Asahan	64.49	8.64
Simalungun	72.47	8.26

Dairi	22.53	7.88
Karo	35.93	8.17
Deli Serdang	85.28	3.62
Langkat	100.45	9.49
Nias Selatan	54.16	16.48
HumbangHasundutan	17.33	8.86
Pakpak Barat	4.52	8.66
Samosir	14.97	11.77
Serdang Berdagai	48.22	7.82
Batu Bara	49.39	11.53
Padang Lawas Utara	26.09	8.94
Padang Lawas	24.45	8.05
Labuhanbatu Selatan	29.38	8.09
Labuhanbatu Utara	33.91	9.09
Nias Utara	32.87	23.40
Nias Barat	20.42	24.75
City	2022	2022
Sibolga	10.05	11.47
Tanjungbalai	22.65	12.45
Pematang Siantar	20.53	7.88
Tebing Tinggi	16.34	9.59
Medan	187.74	8.07
Binjai	14.61	5.10
Padangsidempuan	16.03	6.89
Gunungsitoli	21.85	14.81

Poverty indicators, namely the Head Count Index, Poverty Gap Index, and Poverty Severity Index in North Sumatra Province for 2019-2022, also fluctuate. The data obtained shows that the poverty level in North Sumatra has decreased, which is different from the reality observed in the field. It can be seen from the number of people who do not have homes and live on the side of the road, under bridges, the number of beggars and buskers on the streets. With the background and data, it can be seen that North Sumatra Province still has poverty problems in all regions and cities, it is necessary to analyze the development of poverty rates in North Sumatra before and after the Covid-19 pandemic, as well as whether there are differences in poverty levels before and after the pandemic in North Sumatra.

Literature Review

2.1 Poverty

Poverty is the inability to meet one's minimum standard of living. Poverty is a global problem faced and is still a concern for people in the world. Poor countries are still faced with the problem of growth and unequal income distribution. Meanwhile, many developing countries are experiencing high economic growth, however, providing less benefits for people who are classified as poor. (Todaro & Smith, 2017).

2.2 Types of Poverty

Absolute Poverty

Absolute poverty can be said if someone has an income that is below the poverty line and is not enough to meet minimum living needs, namely food needs, clothing needs, health, education and shelter needs.

By calculation: $GK = GKM + GKNM$
where GK = Poverty Line

GKM = Food Poverty Line
GKNM = Non-Food Poverty Line

Relative Poverty

Relative poverty is poverty that occurs as a result of the influence of development policies that have not reached the entire community, causing inequality in income.

2.3 Causes of Poverty

Causes of poverty according to Todaro and Smith (2006)

1. The level of national income in developing countries is relatively low, and the rate of economic growth is relatively slow.
2. The per capita income of developing countries is also still low and growth is very, very slow, some are even experiencing stagnation.
3. Income distribution is very unequal or very unequal.
4. The majority of people in developing countries have to live under the pressure of absolute poverty.
5. Poor and very limited health facilities and services, malnutrition and many disease outbreaks mean that infant mortality rates in developing countries are higher than in developed countries.
6. Educational facilities in most developing countries and the content of the curriculum are still relatively inadequate and inadequate.

The causes of poverty according to Regnar Nurkse (Kuncoro, 2006) reveal that underdevelopment, market imperfections and lack of capital are the causes of low productivity so that the income received is also low.

2.4 Poverty Indicators

There are three poverty indicators according to the Central Statistics Agency (BPS).

1. Head Count Index, (HCI-P0), namely the percentage of the population who are below the poverty line. With the calculation formula:

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

Where :

$\alpha = 0$

z = poverty line

y_i = average monthly per capita expenditure of the population below the poverty line

($i=1,2,3,\dots,q$), $y_i < z$

q = the number of people who are below the poverty line

n = population

2. Poverty Gap Index, (Poverty Depth Index, P1), which is a measure of the average gap between the expenditure of each poor population and the poverty line. With the calculation formula:

$$P_{\alpha} = \frac{1}{n} \sum_{i=1}^q \left[\frac{z - y_i}{z} \right]^{\alpha} \quad (2)$$

Where :

$\alpha = 1$

z = poverty line

y_i = average monthly per capita expenditure of the population below the poverty line
($i=1,2,3,\dots,q$), $y_i < z$
 q = the number of people who are below the poverty line
 n = population

3. Poverty Severity Index, (Poverty Severity Index, P2) which provides an overview of the distribution of expenditure among the poor. With the calculation formula:

$$P_{\alpha} = \frac{1}{n} \sum_{i=1}^q \left[\frac{z - y_i}{z} \right]^{\alpha} \quad (3)$$

Where :

$\alpha = 2$

z = poverty line

y_i = average monthly per capita expenditure of the population below the poverty line
($i=1,2,3,\dots,q$), $y_i < z$
 q = the number of people who are below the poverty line
 n = population

2.5 Poverty Criteria

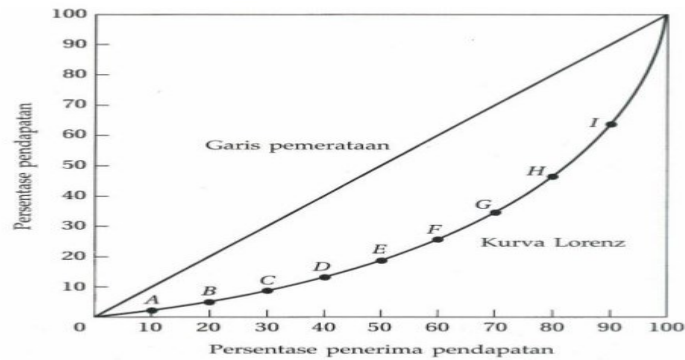
The Poverty Criteria from the Indonesian Central Statistics Agency are:

1. The floor area of a residential building is less than 8 m² per person.
2. The type of floor in the residence is made from bamboo/earth/cheap wood.
3. Types of residential walls made of bamboo/thatch/low quality wood/walls without plaster.
4. Do not have defecation facilities/share with other households.
5. Household lighting sources do not use electricity.
6. The source of drinking water comes from unprotected wells/springs/rivers/rainwater.
7. The fuel for daily cooking is firewood/charcoal/kerosene.
8. Only consume meat/milk/chicken once a week.
9. Only buy one new set of clothes a year.
10. Only able to eat once/twice a day.
11. Unable to pay for treatment at the health center/pharmacy.
12. The source of income for the head of the household is a farmer with a land area of 500m², farm laborer, fisherman, construction worker, plantation worker, or other work with income below Rp. 600,000,- per month.
13. The highest level of education for the head of the household is no school/not finished elementary school/finished elementary school.
14. Don't have savings/goods that are easy to sell for a minimum of IDR. 500,000,- such as credit/non-credit motorbikes, gold, livestock, silver, or other items that can be used as capital.

2.6 Measuring Poverty Inequality

Income inequality in society can be grouped into low, medium and high inequality. Sukirno (2008). Usually measured using the Gini Ratio. The Gini Ratio is an economic indicator that measures income inequality between people in a country. The Gini Ratio value ranges from 0 to 1. The Gini Ratio can be calculated using the Lorenz Curve.

Figure 1. The Lorenz Curve



RESEARCH METHOD

This research uses a descriptive analysis method by describing the data that has been collected into information (R Hafni, 2024), and analysis of different tests. The data used is poverty indicator data for all city districts in North Sumatra from 2019-2022.

RESULT

North Sumatra with 25 regencies and 8 cities, 325 sub-districts, and 5,456 sub-districts/villages, the capital is Medan with an area of 265 Km² and a population of 15,115,206 people. Development of Poverty Rates According to Poverty Indicators:

Development of Head Count Index Percentage

Table 3. Percentage and Number of Poor Population (Head Count Index) in Districts/Cities of North Sumatra Province Before and After the 2019-2022 Covid-19 Pandemic

Regency/City	Number (Person)				Percentage (%)			
	2019	2020	2021	2022	2019	2020	2021	2022
Regency								
Nias	22.10	23.12	24.33	23.23	15.94	16.60	16.82	16.00
Mandailing natal	40.63	41.31	43.24	40.98	9.11	8.18	9.49	8.92
Tapanuli Selatan	24.22	23.96	25.01	23.05	8.60	8.47	8.80	8.07
Tapanuli Tengah	46.99	47.19	49.95	47.07	12.53	12.38	12.67	11.71
Tapanuli utara	28.57	28.41	29.72	27.47	9.48	9.37	9.72	8.93
Toba Samosir	15.78	16.05	16.61	16.48	8.60	8.71	8.99	8.89
Labuhan Batu	41.52	42.17	45.03	43.27	8.84	8.44	8.74	8.26
Asahan	70.53	66.32	69.29	64.49	9.68	9.04	9.35	8.64
Simalungun	76.33	73.64	76.99	72.47	8.81	8.46	8.81	8.26
Dairi	21.86	22.93	23.72	22.53	7.70	8.04	8.31	7.88
Karo	34.08	36.57	38.01	35.93	8.23	8.70	8.79	8.17
Deli Serdang	84.94	86.26	92.52	85.28	3.89	3.88	4.01	3.62
Langkat	103.0	101.8	106.5	100.4	9.91	9.73	10.12	9.49
	8	7	9	5				
Nias Selatan	52.51	53.88	55.16	54.16	16.45	16.74	16.92	16.48
Humbang Hasundutan	16.60	17.92	18.71	17.33	8.75	9.36	9.65	8.86
Pakpak Barat	4.52	4.59	4.79	4.52	9.27	9.28	9.35	8.66
Samosir	15.79	15.80	16.08	14.97	12.52	12.48	12.68	11.77
Serdang Berdagai	48.69	49.18	51.16	48.22	7.90	7.79	8.30	7.82
Batu Bara	50.46	49.78	52.59	49.39	12.14	11.88	12.38	11.53
Padang Lawas Utara	26.06	26.79	28.37	26.09	9.60	9.70	9.92	8.94
Padang Lawas	23.17	23.87	25.78	24.45	8.28	8.37	8.69	8.05

Labuhanbatu Selatan	30.17	28.63	30.36	29.38	8.94	8.34	8.53	8.09
Labuhanbatu Utara	34.76	34.86	37.13	33.91	9.97	9.53	10.02	9.09
Nias Utara	34.42	34.74	35.84	32.87	24.99	25.07	25.66	23.40
Nias Barat	22.08	22.33	21.75	20.42	25.51	25.69	26.42	24.75
City	2019	2020	2021	2022	2019	2020	2021	2022
Sibolga	10.82	10.49	10.80	10.05	12.36	11.95	12.33	11.47
Tanjungbalai	24.54	23.54	24.10	22.65	14.04	13.33	13.40	12.45
Pematang Siantar	21.99	21.23	22.06	20.53	8.63	8.27	8.52	7.88
Tebing Tinggi	16.30	16.32	17.37	16.34	9.94	9.85	10.30	9.59
Medan	183.7	183.5	193.0	187.7	8.08	8.01	8.34	8.07
	9	4	3	4				
Binjai	15.61	15.91	16.46	14.61	5.66	5.71	5.81	5.10
Padangsidempuan	16.06	16.56	17.28	16.03	7.26	7.40	7.53	6.89
Gunungsitoli	23.06	23.54	24.02	21.85	16.23	16.41	16.45	14.81

From the data above, the decline in the percentage of poor people occurred because the Covid-19 pandemic that hit Indonesia has passed, so community activities have fully resumed.

For district areas, the highest number of poor people occurred in Langkat Regency, namely 103.08 thousand/person or 9.91 percent in 2019. There was a decrease in 2020 to 101.87 thousand/person or 9.73 percent. Then it increased again in 2021 to 106.59 thousand/person or 10.12 percent, and decreased after the Covid-19 pandemic passed to 100.45 thousand/person or 9.49 percent in 2022.

For urban areas, the highest number of poor people occurred in Medan City, namely 187.79 thousand/person or 8.08 in 2019. It experienced a decline in 2020 to 183.54 thousand/person or 8.01 percent, namely 4 .25 thousand/person. In 2021 there will be an increase due to the Covid-19 pandemic and the number of people urbanizing to 193.03 thousand/person or 8.34 percent, namely 9.49 thousand/person. Then it will decrease in 2022 after the Covid-19 pandemic has passed, namely to 187.74 thousand/person or 8.07 percent, namely 5.29 thousand/person.

Development of the Poverty Gap Index

Table 4. Poverty Gap Index for Districts/Cities in North Sumatra Province Before and After the 2019-2022 Pandemic

Regency/City	Poverty Depth Index (P1) According to Regency/City			
Regency	2022	2021	2020	2019
North Sumatra	1	1.52	1.51	1.37
Nias	2.53	2.21	1.91	2.53
Mandailing Natal	1.15	1.44	1.14	1.01
Tapanuli Selatan	0.91	1.53	0.87	0.87
Tapanuli Tengah	1.94	2.04	1.84	1.64
Tapanuli Utara	1.22	1.21	1.18	1.6
Toba Samosir	1.23	1.34	1	1.21
Labuhan Batu	0.69	1.32	0.98	0.87
Asahan	1.22	1.9	1.37	1.24
Simalungun	1.69	1.12	1.47	0.99
Dairi	0.65	1.24	1.09	0.96
Karo	1.13	1.23	1.39	0.88
Deli Serdang	0.62	0.56	0.55	0.47
Langkat	1.33	1.17	1.52	0.9
Nias Selatan	2.71	2.38	2.82	2.28
Humbang Hasundutan	1.4	1.25	1.29	0.96

Pakpak Bharat	1.37	1.05	1.38	0.92
Samosir	1.63	2.2	1.84	1.63
Serdang Bedagai	1.11	0.87	0.98	1.32
Batu Bara	1.34	1.99	1.61	1.63
Padang Lawas Utara	0.73	1.29	1.2	1.18
Padang Lawas	0.93	1.33	1.19	1.64
Labuhanbatu Selatan	1.04	1.22	0.99	1.12
Labuanbatu Utara	1.17	1.07	1.87	1.66
Nias Utara	4.54	4.24	4.12	4.38
Nias Barat	3.1	3.32	3.21	3.34
Sibolga	1.4	2.04	1.49	1.26
Tanjungbalai	1.81	1.72	1.69	1.69
Pematangsiantar	1	1.12	1.1	0.7
Tebing Tinggi	1.14	1.37	1.74	1.47
Medan	1.13	1.1	1.08	1.16
Binjai	0.49	0.59	0.59	0.27
Padangsidempuan	0.8	1.17	1.26	0.65
Gunungsitoli	2.24	2.66	1.74	2.59

From 2019 to 2022, the poverty depth index in North Sumatra Province experienced fluctuations up and down. This happened because the impact of the Covid-19 pandemic caused a reduction in labor supply, unemployment, reduced income, increased costs of doing business in every sector, reduced consumption due to shifts in consumer preferences for each item, people's resistance to disease, and the risk of changes in economic conditions. The social restrictions implemented by the government have also affected the entire community, especially people in the lower middle income group and daily workers. Community groups that were previously not considered poor ended up becoming poor because of these wide-scale restrictions.

Development of the Poverty Severity Index

Table 5. Poverty Severity Index for Districts/Cities of North Sumatra Province Before and After the 2019-2022 Covid-19 Pandemic

Regency/City	Poverty Severity Index (P2) According to Regency/City			
Regency	2022	2021	2020	2019
North Sumatra	0.34	0.38	0.39	0.31
Nias	0.6	0.43	0.32	0.59
Mandailing Natal	0.26	0.37	0.19	0.17
Tapanuli Selatan	0.14	0.4	0.16	0.18
Tapanuli Tengah	0.43	0.47	0.44	0.41
Tapanuli Utara	0.24	0.23	0.21	0.47
Toba Samosir	0.25	0.31	0.18	0.26
Labuhan Batu	0.11	0.29	0.18	0.15
Asahan	0.27	0.59	0.33	0.21
Simalungun	0.52	0.23	0.35	0.18
Dairi	0.08	0.28	0.2	0.22
Karo	0.27	0.29	0.38	0.14
Deli Serdang	0.2	0.13	0.16	0.11
Langkat	0.31	0.23	0.33	0.14
Nias Selatan	0.71	0.52	0.76	0.5
Humbang Hasundutan	0.33	0.26	0.3	0.21
Pakpak Bharat	0.38	0.2	0.38	0.12
Samosir	0.39	0.6	0.46	0.34

Serdang Bedagai	0.24	0.13	0.2	0.31
Batu Bara	0.27	0.51	0.37	0.34
Padang Lawas Utara	0.11	0.24	0.22	0.26
Padang Lawas	0.17	0.34	0.29	0.47
Labuhanbatu Selatan	0.26	0.26	0.2	0.23
Labuanbatu Utara	0.26	0.22	0.6	0.38
Nias Utara	1.31	1.1	0.97	1.14
Nias Barat	0.7	0.76	0.61	0.71
Sibolga	0.22	0.51	0.26	0.21
Tanjungbalai	0.42	0.32	0.32	0.28
Pematangsiantar	0.22	0.24	0.26	0.1
Tebing Tinggi	0.25	0.28	0.56	0.31
Medan	0.23	0.23	0.23	0.25
Binjai	0.08	0.09	0.11	0.02
Padangsidempuan	0.12	0.28	0.32	0.09
Gunungsitoli	0.55	0.68	0.3	0.54

The poverty severity index in North Sumatra Province fluctuates up and down from year to year. For the entire district, the highest poverty depth index was North Nias District, namely 1.14 percent in 2019. It experienced a decrease of 0.17 points to 0.97 percent in 2020. In 2021, the poverty depth index increased by 0.13 points to 1.1 percent. Then it increased by 0.21 points to 1.31 percent. For the entire city, the highest poverty depth index was in Gunungsitoli City, namely 2.59 percent in 2019. Then it decreased by 0.85 points to 1.74 percent in 2020. In 2021, the poverty depth index increased again. by 0.92 points to 2.66 percent. Then it decreased by 0.42 points to 2.24 percent.

DISCUSSION

Analysis of Differential Tests According to Poverty Indicators

Percentage of Poor Population (Head Count Index) Before and After the Covid-19 Pandemic

From the results of data processing, the Head Count Index in all districts and cities of North Sumatra Province before and after the Covid-19 Pandemic can be seen in the following table.

Table 6. Paired Sample T Test

Paired Samples Statistics		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before	10.8436	33	4.65350	.81007
	After	10.3194	33	4.45374	.77530

Paired Samples Test		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		T	df	Sig. (2-tailed)
Pair 1	Before	.52424	.47452	.08260	.35599	.69250	6.347	32	.000
	After								

Shows the average for all regencies/cities in North Sumatra Province with the Percentage of Poor Population indicator before and after the Covid-19 Pandemic. The average percentage of poor people before the Covid-19 pandemic was 10.8436 percent and the deviation in the percentage of poor people for all districts/cities in North Sumatra Province ranged from 4.65350 percent. Meanwhile, after the Covid-19 pandemic, the average percentage of poor people in North Sumatra Province for all districts/cities was 10.3194 percent, with a deviation of 4.45374 percent. From these results it can be concluded that the percentage of poor people in North Sumatra Province for all districts/cities is different before and after the Covid-19 pandemic has passed, because the Sig value is 0.000. Thus it can be stated that the Covid-19 Pandemic affected the Percentage of Poor Population for 33 Districts/Cities in North Sumatra Province before and during the Covid-19 Pandemic, the Percentage of Poor Population (Head Count Index) increased. The increase in the percentage of poor people that occurred before and during the Covid-19 pandemic was due to the large number of workers being laid off, the prices of basic commodities soaring due to high demand, and the large number of employees being laid off by companies. Meanwhile, after the Covid-19 pandemic passed, the percentage of poor people decreased, this was because economic activity had started to run as before.

Gap Index Before and After the Covid-19 Pandemic

Regency/City Poverty Gap Index in North Sumatra Province before and after the Covid-19 Pandemic, from the results of the following data processing.

Table 7. Paired Sample Statistical Test

Paired Samples Statistics		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before	1.4600	33	.75493	.13142
	After	1.5545	33	.82124	.14296

Paired Samples Test		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		T	df	Sig. (2-tailed)
Pair 1	Before	-.09455	.37146	.06466	Lower	Upper	-1.462	32	.153
	After								

Shows that the average Poverty Gap Index before the Covid-19 Pandemic was 1.4600 percent and the deviation was 0.75493 percent. Meanwhile, after the Covid-19 Pandemic, the average Poverty Depth Index was 1.5545 percent with a deviation of 0.82124 percent. From the results above, it can be seen that after the Covid-19 Pandemic, the Poverty Depth Index has increased for all regencies/cities in North Sumatra Province. The Poverty Gap Index statistical test results before and after the Covid-19 Pandemic revealed a Sig value of 0.153, above 5%. This means that the Poverty Gap Index before and after the Covid-19 Pandemic is the same or there is no significant difference. This is due to the many efforts made by the government to tackle poverty before, during and after the Covid-19 pandemic. In general, namely first, programs related to easing the burden on poor families related to social assistance or part of social protection programs. Second, empowerment programs, including empowerment of MSMEs, household businesses and micro businesses.

Poverty Severity Index Before and After the Covid-19 Pandemic

The difference in the Poverty Severity Index before and after the Covid-19 Pandemic can be seen from the results of the following research.

Table 8. Paired Sample Statistical Test

Paired Samples Statistics		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before	.3188	33	.18768	.03267
	After	.3448	33	.21083	.03670

Paired Samples Test		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		T	df	Sig. (2-tailed)
Pair 1	Before	-.02606	.09520	.01657	Lower	Upper	-1.573	32	.126
	After								

Based on the table above, it shows that the average Poverty Severity Index before the Covid-19 Pandemic was 0.3188 percent with a deviation of 0.18768 percent. Meanwhile, after the Covid-19 pandemic, the average Poverty Severity Index was 0.3448 percent with a deviation of 0.21083 percent. From the results above it can be seen that after the Covid-19 Pandemic the Poverty Severity Index has increased. The table above shows that the results of the Poverty Severity Index statistical test before and after the Covid-19 Pandemic, the Sig value was 0.126. greater than 0.05. This means that there is no significant difference in the Poverty Severity Index before and after the Covid-19 Pandemic in the 33 Regencies/Cities of North Sumatra Province. This is due to the efforts made by the government to overcome poverty in the era of adapting to the "New Normal" or new habits as a result of the Covid-19 pandemic. These efforts include funding Worker Cards, providing electricity subsidies for people who use 450 Watt electricity, creating a Family Hope Program (PKH), placing government funds in the banking sector as assistance for business actors.

Conclusion

In general, poverty conditions in North Sumatra for all districts/cities have increased after the Covid-19 pandemic. The Covid-19 pandemic has caused increasing levels of unemployment, poverty and economic inequality due to the spread of the virus. Then, followed by government policies with the aim of breaking the chain of spread of Covid-19 which has had a negative impact on people's economic activities. The development of poverty levels according to the Poverty Indicators, namely the Head Count Index, Poverty Gap Index and Poverty Severity Index after the Covid-19 Pandemic experienced a higher increase in Regency areas compared to City areas. However, there is no difference between the Poverty Gap Index and Poverty Severity Index indicators before and after the Covid-19 pandemic because of the policies or efforts made by the government to prevent extreme levels of poverty from occurring.

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