

## HIERARCHICAL ANALYSIS OF FOODSTUFFS AND HOUSING IN THE FORMATION OF THE FINAL CPI AFTER THE COVID PANDEMIC -19 EARLY 2019-2021 IN TERNATE CITY

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### ABSTRACT

*The review of the study on Edibles and Ownership of very expensive housing will be felt with the continuous high increase in general prices which results in the price of goods that are increasingly scarce in the market, these expensive all the imbalance of demand and supply does not become constant. The economy is currently spinning during the covid-19 pandemic, Social Limitations are the main cause while on the other hand, health is very important when hit by the covid-19 attack. All economic and health joints become sook (stagnant) in the sense that everyone needs rest. However, everyone also needs food, so everyone needs a job to earn income which leads to social welfare, food and board. The city of Ternate is Ternate is currently facing the challenges of high food staple prices and a strong demand for housing, which have made market conditions increasingly unstable. This situation necessitates balanced, measurable policies from all stakeholders in both the short and medium term to stabilize staple food prices. The city also grapples with complex issues such as high transportation costs and long distribution lines, all of which demand effective solutions to control prices and ensure market stability.*

**Keywords:** *CPI Inflation, Housing in Ternate City, Covid -19*

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### INTRODUCTION

The key word of development is Growth and Change. During more than 70 years of the Independence of the Republic, the growth and even changes in the level of economic welfare of the Indonesia people have not been carried out properly along with the age of independence that has passed (Arief, 2001). Although it has been mandated in the 1945 Constitution that Development is essentially to create a just and prosperous society. In fact, these expectations are difficult to pair with reality, which is why this is a problem. Problems like this have always been a disease that pervades every country in carrying out its development and it is difficult to find a solution. Macroeconomic problems like this are sometimes also experienced by developed countries, although they are more often experienced in third world countries or developing countries such as Indonesia. One of these macroeconomic diseases is known as "INFLATION" (Subekan & Azwar, 2017).

The city of Ternate is currently faced with the high price of food staples and the demand for places to live, it does not feel comfortable for the residents of the city of Ternate, therefore the conditions in the field (the market) certainly require a good balance and policies in the short and medium term that are measurable to stabilize the staple food ingredients in the market. Currently, the dependence is very complex in the city of Ternate, both in terms of price, high transportation costs. Long distribution lines. All of this needs a solution to control prices.

According to (Khalwaty, 2000) (Tajul, 2000), As an economic phenomenon, inflation that occurs in developing countries, is a very interesting object of study. Various approaches both national, regional and international, especially by the World Bank and the International Monetary Fund, constantly discuss inflation in various forums. Inflation in developing countries that are actively building and reaping foreign capital investment includes a large import of materials, for industries that cannot be produced domestically. Political rumors have also triggered rising inflation. Harun Hamrrolie (2010: 3) Not to mention the consumeritic pattern of people's lives, especially for consumer goods, as a result of economic openness and market globalization, making the country's economic performance increasingly severe due to inflation. The increase in prices of all goods and services in general in an area.

Indonesia itself has experienced quite severe inflation, even reaching 600% in the 60s. Inflation needs to be watched out for and controlled, because it has a fairly wide influence on various sectors of life, especially the country's economic sector, both macro and micro (Flint and Fish, 2004). Inflation has rebounded, even reaching double digits, when Indonesia's economy was shaken by a crisis that began with the rupiah exchange rate crisis in mid-1997. This makes inflation one of the main indicators in the framework of Indonesia's economic policy package to get the national economy out of recession (Susanti, 1993) (Hera, 2000) (Fadly et al., 2021), instability and uncertainty. If this condition continues to be left unchecked, it is feared that there will be a prolonged recession (Permatasari, 2020).

At that time, public optimism was awakened when Joko Widodo and Jusuf Kalla were elected to lead the government. This sense of optimism arises because the people believe that under the leadership of Joko Widodo and Jusuf Kalla, who are representatives of nationalist and religious groups, this country can get this country out of the abyss of destruction. This sense of optimism is even higher when the *Gotong Royong* Cabinet is announced with the composition of an economic team that is quite reliable and known internationally. In fact, the sense of optimism is fading, when the economic team is unable to do much, especially in solving the inflation problem. During 2018, the Central Statistics Agency (BPS) recorded that inflation in Indonesia was 4.05%. This inflation is lower than inflation throughout 2019 of 2.81%. The highest inflation in 2021 occurred in July at 4.21%, while the lowest was high inflation in August at 13.16% (BPS Ternate City, 2022) (Umar et al., 2022).

For the community, price stability is important, especially for people with fixed incomes. High inflation is the number one enemy of society, because it can eat away at people's purchasing power. For the business world, high inflation will make it very difficult to calculate business planning and will have a negative impact on economic activities in the long term. For many economists, there has been a kind of consensus that high inflation will have a bad impact on the long-term economic growth process. In fact, recent research proves that even a moderate inflation rate can have a negative impact on the growth process (Ghosh and Philips, 1998 in (Nasution, 2001)).

North Maluku Province is a new province resulting from the expansion of Maluku Province. One of the reasons for the expansion of this province by the Central Government is to be able to assist the government in overcoming the crisis as well as accelerating development in the Eastern Region of Indonesia. Unfortunately, this hope was answered by riots due to social conflicts with a religious background that was full of political nuances. Self-righteous attitudes and blind fanaticism have been manipulated and fueled by "provocateurs"

into a conflict between religious people. However, it must be admitted that these social conflicts are not entirely based on religion as a source of conflict. Factors such as political disputes, power struggles and interests, tribes and economic disparities are analyzed as the main foundation and shelter behind the Post-Covid-19 era.

By using religious issues, this conflict widened rapidly. For the people of North Maluku, the issue of religious beliefs is very easy to trigger open conflicts. This is due to the existence of an authoritarian understanding of the community's religion and can foster an attitude of lack of government optimism in Ternate City in February-December 2020 COVID-19 ultimately has an impact on the rate of economic growth in Ternate City. The most pronounced influence is on investment decisions by investors. COVID-19 has given rise to a situation of uncertainty that requires investors to reconsider their plans to invest in real assets such as establishing factories, hotels and tourism industries, and investments in financial assets such as buying stocks, bonds and foreign exchange. These investors took a cautious attitude and the worst thing was to cancel the decision to invest in Ternate City. This is because it is possible that the expected profit will turn into a loss or much smaller than what is expected, especially if the investment is made for a long period of time. Potential investors are forced to secure their investments, such as relocating them to other areas outside Ternate that are considered the safest and most profitable.

Covid-19 has become and created anxiety for entrepreneurs in Ternate City, both those who have not been around for too long or who have been building their businesses for decades. The peak was seen when entrepreneurs fled their businesses to other areas where the level of stability of the non-economic situation was relatively safe, such as Manado and other cities in Indonesia. In the end, there was a massive capital outflow. This is one of the triggers for the soaring prices of materials needed by the community or inflation, as long as the non-economic conditions are unstable. In 2018 Ternate City was given the trust by the central government as a city along with 7 other cities to monitor and calculate its own inflation. For this reason, inflation developments can only be seen in 2018, with 1996 being the base year or 2019 = 100.

Based on the background of the problems described above, the main problem in this study is formulated how the hierarchy of Contribution of the Foodstuff and Housing Group in shaping Post-Covid-19 CPI Inflation in Ternate City in 2019-2022 is formulated. The purpose of this study is to find out and analyze the development of food and housing groups as well as inflation in Ternate City before the covid-19 pandemic occurred in the general public. To find out and analyze the development of the food and housing group as well as inflation in Ternate City after the social covid pandemic.

## **METHOD**

The data utilized in this study is secondary, comprising a time series of monthly data observed from April 2020 to December 2021. This data is sourced from the Central Statistics Agency of Ternate City. Since the data is secondary, it was collected directly from records provided by the relevant agency, specifically the Central Statistics Agency of Ternate City. The variables in this study are operationally defined and measured as follows: Ternate City Inflation: Inflation based on the Consumer Price Index (CPI), measured using index numbers and percentages. Foodstuffs: A category of goods derived from the agriculture, plantation,

livestock, and fishery sectors, which constitute basic needs. This variable is measured using index numbers and percentages. Housing: A category encompassing the costs of housing, fuel, water, household supplies, and maintenance. This variable is measured using index numbers and percentages.

The analysis method used in this study is a descriptive study analysis. This analysis is used to see and describe general data related to the research area that wants to explain further regarding the distribution of data, especially those related to the development of inflation in Ternate City, during the observation period the calculation method uses the following formula According to, Mamrolie Harun, 2010.

$$LI_t = \frac{IHK_t - IHK_{t-1}}{IHK_{t-1}} \times 100\%$$

Where:

Lit = Inflation rate in the year or period t

IHK t = Consumer Price Index in the year or period t

IHK t-1 = Consumer Price Index in the year or period t-1

To calculate the Price Index on basic food commodities using the following formula:

$$IH = \frac{H_t}{H_{t_0}} \times 100\%$$

Desc:

THEM = Price Index In the Year in question

Ht = Price in the relevant year

Hto = Base year price

## RESULTS AND DISCUSSION

### A. Description of OVERVIEW of inflation in Ternate City

Ternate City in seeing the development of monthly prices occurs because the goods needed by the community, especially 9 staples (basic necessities), are imported goods imported from abroad. One of the factors that affects the high inflation rate is the depreciation of the rupiah exchange rate against the US dollar, as a result of the use of foreign exchange owned for the cost of importing these goods.

**Table 1. Inflation Development of Ternate City Broken Down by Month (%), 2018-2021**

Mounth (1)	2018 (2)	2019 (3)	2020 (4)	2021 (5)	2022 (6)
January	0,65	0,76	0,34	-0,71	2,52
February	0,36	0,24	1,00	0,64	2,55
March	0,61	0,03	-0,48	0,12	1,09
April	0,61	0,34	0,12	0,78	1,28
May	0,40	0,60	0,89	0,89	1,49
June	1,71	0,49	-0,34	-0,78	1,34
July	-1,17	0,13	-0,95	0,96	2,89
August	-0,28	0,43	0,53	-0,78	-
September	-0,01	-0,78	-0,74	-0,23	-
October	0,12	0,01	0,28	0,67	-
November	0,26	0,42	0,78	0,78	-

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<b>Mounth</b> <b>(1)</b>	<b>2018</b> <b>(2)</b>	<b>2019</b> <b>(3)</b>	<b>2020</b> <b>(4)</b>	<b>2021</b> <b>(5)</b>	<b>2022</b> <b>(6)</b>
December	0,79	0,14	0,70	1,87	-
Inflation per year	4,05	2,81	2,13	4,21	13,16

Source : BPS Ternate City 2022

The price components that cause high prices are largely caused by high demand due to the scarcity of goods and the distribution of these goods, which can be seen in 2018 inflation was very well maintained at 4.05 points, and in 2019 it was recorded at 2.81 per year and the highest in 2022 was recorded at 13.16 points. This is usually in high demand also in the fasting month triggered by the national scarcity and the recovery of covid-19 ahead of fasting and Eid al-Fitr.

**Table 2. Consumer Price Index per Month by Expenditure Group (2020=100) in Ternate City, 2020**

<b>Moonth</b>	<b>Food, beverages and tobacco</b>	<b>Clothing and footwear</b>	<b>Housing, clean water, electricity &amp; home fuel</b>
Year	2020	2020	2020
January/ <i>January</i>	100,00	100,02	100,22
February/ <i>February</i>	100,02	100,07	100,21
March/ <i>March</i>	100,01	100,09	100,34
April/ <i>April</i>	100,03	100,08	100,31
Mei/ <i>May</i>	100,08	100,09	100,35
June/ <i>June</i>	100,09	100,11	100,48
Juli/ <i>July</i>	100,07	100,13	100,53
August/ <i>August</i>	100,12	100,19	100,55
September/ <i>September</i>	100,14	100,19	100,56
October/ <i>October</i>	100,18	100,21	100,61
November/ <i>November</i>	100,12	100,18	100,68
December/ <i>December</i>	100,19	100,19	100,77
Total	1201,05	1201,55	1205,61
Average	100,087	100,129	100,467

Source: BPS Ternate City, 2020

The development of CPI data in 2020 is very low where the role from January to December 2020, for the Edibles component provides an average accumulated value of 100.87 and the average footwear material is 100.129 while housing, clean water, electricity and home fuel are on average as much as 100,467.

**Table 3. Consumer Price Index per Month by Expenditure Group (2021=100) in Ternate City, 2021.**

<b>Moonth</b>	<b>Food, beverages and tobacco</b>	<b>Clothing and footwear</b>	<b>Housing, clean water, electricity &amp; home fuel</b>
Year	2021	2021	2021
January/ <i>January</i>	100,01	100,12	100,37
February/ <i>February</i>	100,04	100,14	100,51
March/ <i>March</i>	100,08	100,17	100,54
April/ <i>April</i>	100,09	100,21	100,71
Mei/ <i>May</i>	100,12	100,24	100,75
June/ <i>June</i>	100,14	100,27	100,78
Juli/ <i>July</i>	100,17	100,35	100,83
August/ <i>August</i>	100,18	100,36	100,85
September/ <i>September</i>	100,22	100,22	100,86
October/ <i>October</i>	100,24	100,41	100,89
November/ <i>November</i>	100,26	100,43	100,88
December/ <i>December</i>	100,29	100,53	100,87

<b>Moon</b>	<b>Food, beverages and tobacco</b>	<b>Clothing and footwear</b>	<b>Housing, clean water, electricity &amp; home fuel</b>
Total	1201,84	1203,45	1208,84
Average	100,153	100,287	100,736

Source: BPS Ternate City, 2021

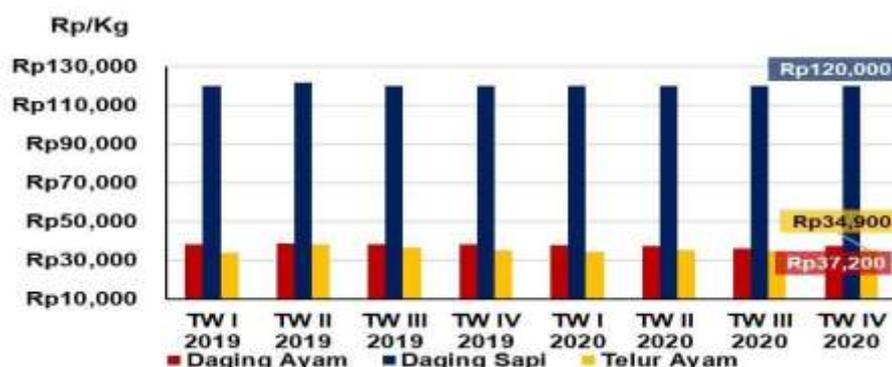
The development of CPI data in 2021 is very low where the role from January to December 2021, for the Edibles component provides an average accumulated value of 100.153 and the average footwear material is 100.287 while housing, clean water, electricity and home fuel are on average 100.736.

**Table 4. Consumer Price Index per Month by Expenditure Group (2021=100) in Ternate City, 2022**

<b>Moon</b>	<b>Food, beverages and tobacco</b>	<b>Clothing and footwear</b>	<b>Housing, clean water, electricity &amp; home fuel</b>
Year	2022	2022	2022
January/January	114,10	104,26	128,37
February/February	113,75	104,36	169,51
March/March	117,68	104,31	180,64
April/April	118,08	104,31	189,73
Mei/May	113,72	104,32	192,83
June/June	116,73	104,34	183,63
Juli/July	119,08	104,34	194,93
August/August	119,09	104,36	194,96
September/September	-	-	-
October/October	-	-	-
November/November	-	-	-
December/December	-	-	-
Total	932,23	834,6	1434,6
Average	116,528	104,325	179,325

Source: BPS Ternate City, 2022

The development of CPI data in 2022 is very low where the role from January to December 2022 for the Edibles component provides a total average value of 116,528. and footwear materials by an average of 104.325, while housing, clean water, electricity and home fuel were recorded at an average of 179.325 percent.



**Figure 1. Development of prices of chicken, beef, and chicken eggs**

The results of the analysis in graph 3 show the development of chicken meat prices, starting from the first quarter to the fourth quarter of Rp 40,000, - 50,000. beef increased from the first - fourth quarter by 110,000 - 120,000. and laying hens increased from the

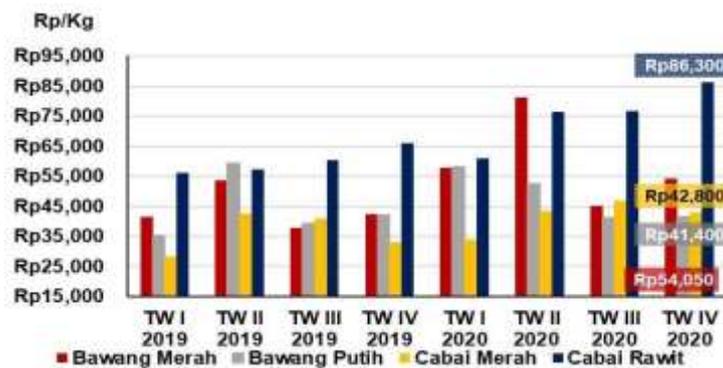
first - fourth quarter by 35,000. 45,000. with an average increase of 0.5 percent per year in the development of meat prices.



**Figure 2. Development of beef prices, chicken meat, chicken eggs and skipjack fish in 2022**

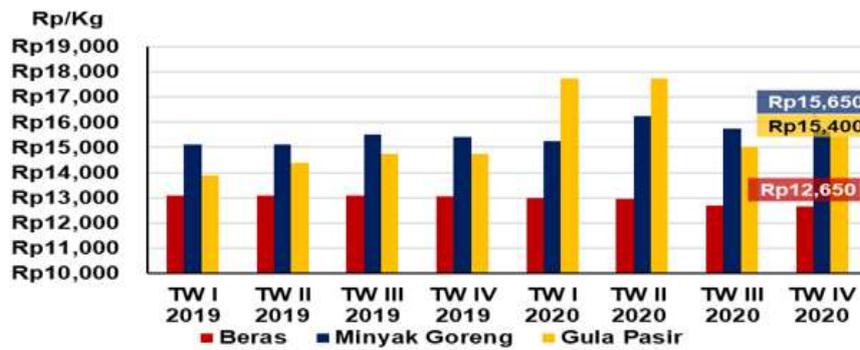
Source: BPS Ternate City Data in Processing, 2022

Based on the observation of the calculation results in the table. 04 shows that the increase in the price of beef gaggung from the average of the first quarter and the third quarter is Rp 110,000 - 120,000, during the observation period, then the price of chicken meat increases in the observation period of Rp 50,000 - 60,000. This is an average increase of 0.5 percent over three quarters. And the price of chicken eggs increased from Rp 40,000,- 60,000, or a difference in the quarter by 0.2 percent and the development of skipjack fish prices increased by 40,000. 50,000, per kilogram.



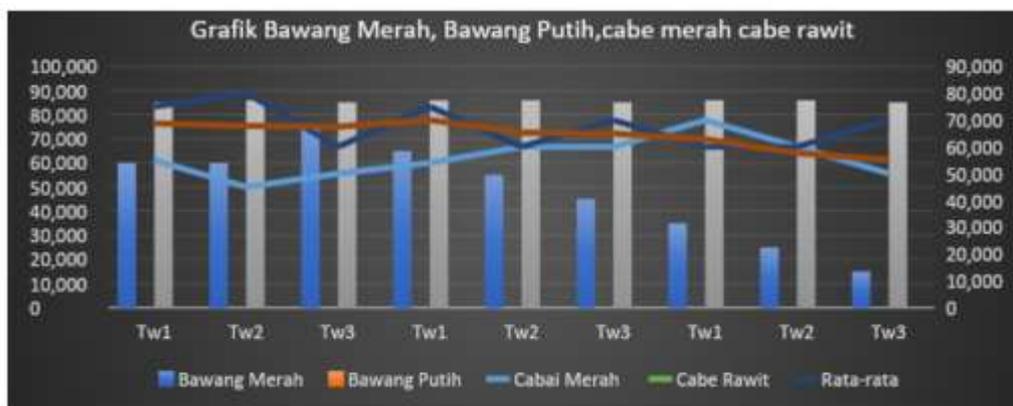
**Figure 3. Development of the price of spices**

Based on the observation of the calculation results in the table. 04 of 2020, shows that the increase in the price of shallots from the average of the first quarter and the third quarter is Rp 35,000 - 45,000, during the observation period, then the price of garlic increases in the observation period of Rp 65,000 - 75,000. This is an average increase of 0.5 percent over three quarters. And the price of Red Chili from Rp 45,000,- 50,000, or a difference in the quarter of 0.2 percent and the development of cayenne pepper prices increased by 55,000. 86,000, per kilogram.



**Figure 4. Price Development of Shallots, Garlic, Red Peppers and Cayenne Peppers 2021**

Based on the observation of the calculation results in the table. 05 of 2021, it shows an increase in the price of Shallots from the average of the first quarter and the third quarter of Rp 55,000 - 60,000, during the observation period, then the price of Garlic increased in the observation period of Rp 75,000 - 85,000. in an average increase of 0.5 percent for three quarters. And the price of Red Chili from Rp 55,000,- 60,000, or a difference of the quarter 0.2 percent and the development of the price of cayenne pepper increased by 65,000. 86,000, per kilogram.



**Graph 5. Development of rice, cooking oil, and sugar prices**

The results of the analysis in graph 5 show the development of rice prices, starting from the first quarter to the fourth quarter of Rp 14,000, - 16,000. Cooking oil increased from the first - fourth quarter by 16,000 - 17,000. and Sugar increased from the first - fourth quarter by 16,000. 18,000. with an average increase in the price of Rice, Cooking Oil, and Sugar by 0.5 percent per year during 2019-2020.



**Figure 6. Data on the development of rice, cooking oil and sugar prices in 2021**

Source: Data processed 2021

The results of the analysis in graph 6 show the development of rice prices, starting in the first quarter to the fourth quarter of Rp 16,000 - 18,000. Cooking oil increased from the first - fourth quarter by 16,000 - 10,500. and Sugar increased from the first - fourth quarter by 18,000. 18,500. with an average increase from the development of rice prices, 17.11 a.m. of cooking oil of 94.11 and sugar of 17.11 percent per year during 2021.

**B. Results of Hierarchical Group Analysis of Foodstuffs**

1. Foodstuffs, Beverages and Tobacco

In 2021 and 2022 In the data of Tables, 06 and 07

$$\frac{932,23 - 1201,84}{1201,84} \times 100 \% = - 0.2243$$

2. Components of Clothing and Footwear

$$\frac{834,6 - 1203,45}{1203,45} \times 100 \% = - 0.3064$$

3. Residential Components of Clean Water, Electricity and Home Fuel

$$\frac{1434,6 - 1208,84}{1208,84} \times 100 \% = 0.1867$$

According to (Dewi et al., 2018) (Cahyono et al., 2019), that the hierarchy of the index of staple components can be explained The results of the analysis above can be concluded from the three components of the analysis hierarchy which are the highest in the contribution of contributors to inflation, namely in the foodstuff component where from the results of the analysis on the sensitivity of the component value there is a shock in the value of the foodstuff component at the level of - 0.2243 percent. Then it is estimated by the components of footwear and footwear as large, -0.3064 percent in 2022 continues to experience shock. And in 2021/2022 where the housing component, clean water began to dry where the economic movement has begun to improve, so that the housing component grew positively by 0.1867 percent.

### C. Results of the Discussion Description

Inflation in North Maluku, represented by Inflation in Ternate City in the fourth quarter of 2021, was recorded at 2.69% (yoy), an increase compared to the third quarter of 2021 of 2.13% (yoy). The largest contributor to inflation throughout the fourth quarter of 2021 was the food, beverage, and tobacco group, which experienced inflation of 7.39% (yoy). Meanwhile, the transportation group experienced the lowest deflation at 2.89% (yoy). In terms of commodities, the highest contributor to inflation throughout the fourth quarter of 2021 was the personal care commodity at 5.11 percent.

#### Annual Inflation (yoy)

North Maluku's annual inflation was recorded at 2.13%. Based on its components, core inflation was recorded at 1.84% (yoy) in line with domestic demand, which has not fully recovered. For the administered prices disaggregated group, deflation was still recorded at 2.29% (yoy), in line with limited public mobility due to the Covid-19 pandemic. Meanwhile, inflation in the volatile food group was recorded at 6.54% (yoy) due to the hampered distribution of foodstuffs due to rainfall and high sea waves from December 2021 to January 2021. The Food, Beverage and Tobacco Group was the highest contributor to inflation with an inflation contribution of 2.46% (yoy), followed by the Personal Care and Other Services Group with a share of 0.25% (yoy), and the Household Equipment, Equipment and Routine Maintenance Group with a share of 0.11% (yoy).

**Table 4. Annual inflation (yoy) in the fourth quarter of 2019 – fourth quarter of 2020 in North Maluku Province**

Goods and Services Group	YOY inflation				YOY Inflation Contribution			
	2019 TW IV	2020 TW II	2020 TW III	2020 TW IV	2019 TW III	2020 TW II	2020 TW III	2020 TW IV
COMMON	2.24%	1.09%	0.76%	2.13%	-	1.09%	0.76%	2.13%
Food, Beverages, and Tobacco	4.87%	0.69%	2.92%	7.39%	-	0.23%	0.98%	2.46%
Clothing and Footwear	0.52%	1.33%	1.24%	1.14%	-	0.07%	0.07%	0.06%
Housing, Water, Electricity, and Home Fuel	0.46%	0.27%	0.09%	-0.15%	-	0.05%	0.02%	-
Ladder								
Fixtures, Equipment and Routine Maintenance	2.85%	1.89%	2.88%	2.09%	-	0.09%	0.14%	0.11%
Household								
Health	0.14%	2.72%	3.31%	3.75%	-	0.05%	0.06%	0.07%
	0.90%	1.60%	-7.56%		-	0.19%	-	-
Transportation				-5.81%			0.87%	0.68%
	-2.65%	-0.49%	-0.66%		-	-	-	-
Information, Communication, and Financial Services				-0.70%		0.03%	0.04%	0.04%
	-0.16%	-0.03%	-0.09%		-	0.00%	0.00%	-
Recreation, Sports, and Culture				-4.59%				0.05%

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Goods and Services Group	YOY inflation				YOY Inflation Contribution			
	2019 TW IV	2020 TW II	2020 TW III	2020 TW IV	2019 TW III	2020 TW II	2020 TW III	2020 TW IV
	0.23%	0.23%	-1.31%			0.01%	-	-
Education				-1.31%	-		0.03%	0.03%
Food and Beverage Provision/Restaurant	2.01%	1.28%	0.58%	0.03%	-	0.09%	0.04%	0.00%
Personal Care and Other Services	4.32%	5.06%	5.90%	3.67%	-	0.33%	0.39%	0.25%

Source : BPS North Maluku Province, processed

**Table 5. Annual inflation (yoy) in the fourth quarter of 2021 – fourth quarter of 2021 in North Maluku Province**

Goods and Services Group	YOY inflation				YOY Inflation Contribution			
	2020 TW IV	2021 TW I	2021 TW II	2021 TW III	2020 TW III	2021 TW II	2021 TW II	2021 TW III
COMMON	2.24%	1.09%	2.94%	2.69%	-	1.09%	0.76%	2.13%
Food, Beverages, and Tobacco	4.87%	0.69%	4.97%	4.65%	-	0.23%	0.98%	2.46%
Clothing and Footwear	0.52%	1.33%	1.53%	1.93%	-	0.07%	0.07%	0.06%
Housing, Water, Electricity, and Home Fuel Ladder	0.46%	0.27%	0.98%	0.75%	-	0.05%	0.02%	-0.03%
Fixtures, Equipment and Routine Maintenance Household	2.85%	1.89%	2.97%	2.65%	-	0.09%	0.14%	0.11%
Health	0.14%	2.72%	0.83%	0.23%	-	0.05%	0.06%	0.07%
Transportation	0.90%	1.60%	0.99%	0.85%	-	0.19%	0.87%	0.68%
Information, Communication, and Financial Services	-2.65%	-0.49%	-2.98%	-2.18%	-	0.03%	0.04%	0.04%
Recreation, Sports, and Culture	-0.16%	-0.03%	-0.16%	-0.19%	-	0.00%	0.00%	0.05%
Education	0.23%	0.23%	0,65%	0,95%	-	0.01%	-	-
Food and Beverage Provision/Restaurant	2.01%	1.28%	2,13%	2,89%	-	0.09%	0.04%	0.00%
Personal Care and Other Services	4.32%	5.06%	5.00%	5.11%	-	0.33%	0.39%	0.25%

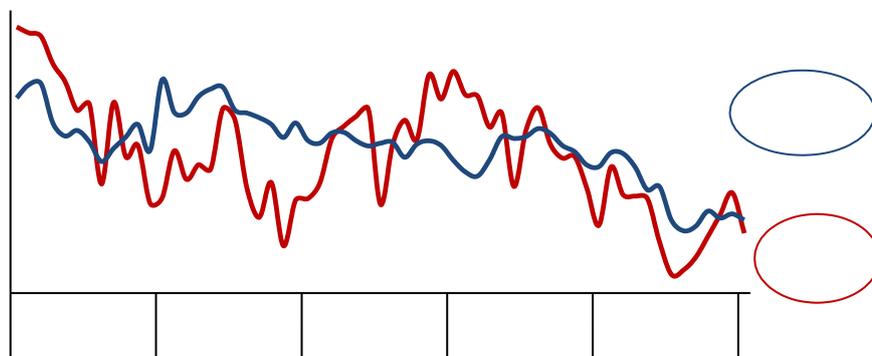
Source : BPS North Maluku 2021

The high inflation in the Food, Beverage and Tobacco group was driven by price increases in a number of foodstuff commodities such as eggplant, red chili, and cayenne pepper. Inflation in these commodities was caused by the hampered distribution of foodstuffs due to rainfall and high sea waves in December 2021. Meanwhile, in the Personal Care and Other Services Group, inflation occurred due to an increase in prices for a number of hygiene and sanitation supporting commodities such as tissues and toiletries which include soap, creambath, toothbrushes, and deodorants. This is understandable along

with the call to further improve personal hygiene, and immediately shower/clean the body after being outside the house. In addition, the gold jewelry commodity is also one of the drivers of inflation in the Personal Care and Other Services Group in line with the surge in world gold prices since the beginning of 2021 and continues until the end of the year. The increase in gold commodity prices can be understood because gold commodities are considered safe havens, namely investment assets with low risk when global economic conditions are seen as uncertain due to the Covid-19 pandemic.

### **General Conditions**

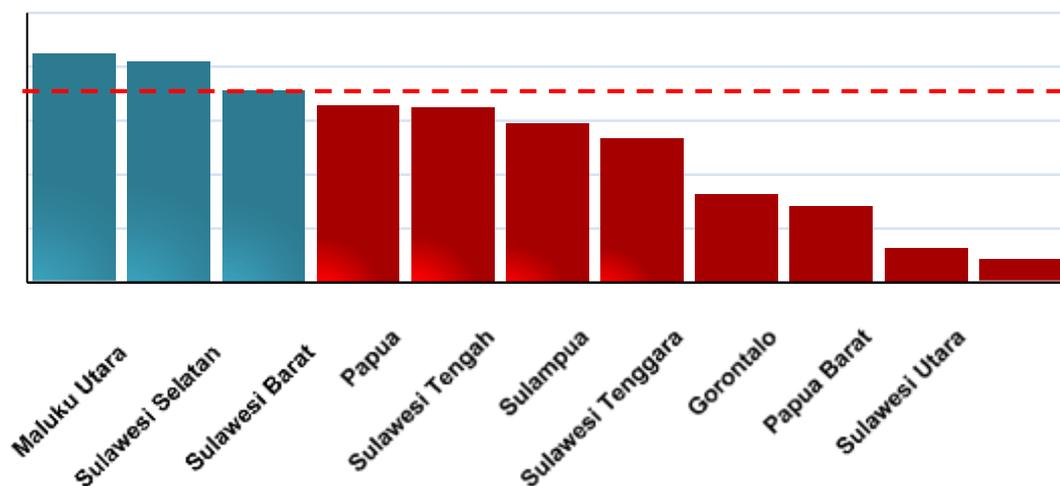
Inflation in North Maluku Province, represented by inflation in Ternate City in the fourth quarter of 2021, was recorded at 2.13% (yoy). Inflation growth in the fourth quarter of 2021 was recorded higher than the previous quarter. North Maluku inflation in the fourth quarter of 2021 was also recorded higher than national inflation of 1.68% (yoy), as shown in graph 3.1. Based on the graph, it can be seen that throughout the fourth quarter of 2021 inflation in North Maluku tends to increase every month. North Maluku inflation was recorded low and is still within the target range. Inflation in 2021 was recorded at 2.13% (yoy), a decrease compared to the realization in 2020, which was 2.24% (yoy). The low inflation is influenced by domestic demand that is not strong as a result of the Covid-19 pandemic.



**Figure 7. North Maluku's annual inflation rate (yoy) compared to the national in the fourth quarter of 2021**

Source : BPS North Maluku Province, processed

Inflation in North Maluku Province during the fourth quarter of 2021 was also recorded higher than the combined average inflation in the National region of 1.47% (yoy). In addition, North Maluku Province is the highest contributor with inflation of 2.13% (yoy), while Maluku Province is the province with the lowest inflation rate of 0.21% (yoy). In aggregate, all provinces experienced inflation and the average provincial inflation in the national area was recorded lower than Indonesia inflation and below the 2021 target range of  $3\pm 1\%$ .

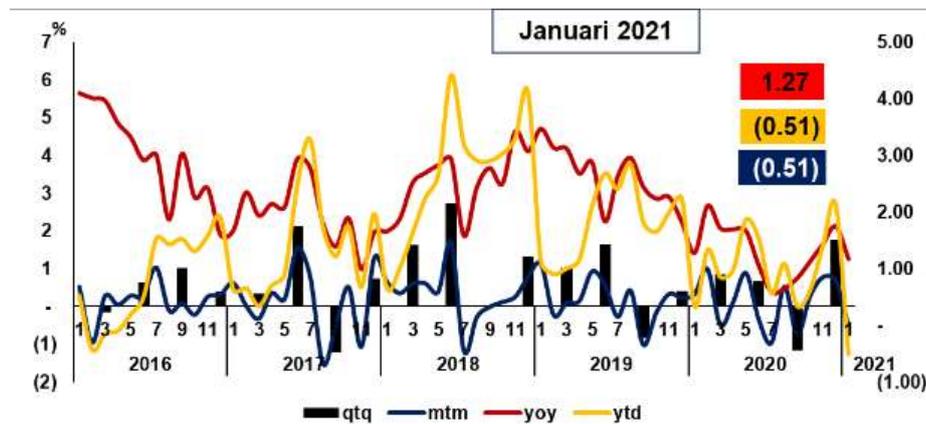


**Figure 8. Provincial inflation in the national region in the fourth quarter of 2021 (yoy)**  
 Source : BPS, processed

Throughout the fourth quarter of 2020, inflation occurred for three consecutive months, namely in October at 0.28% (mtm), in November at 0.78% (mtm), and in December at 0.70% (mtm). The occurrence of consistent inflation is due to price increases in several Volatile Food group commodities, amid limited food supply driven by suboptimal production during the pandemic and increased rainfall, thus affecting food production and distribution. In addition, inflation was caused by an increase in prices in the transportation group in the context of the celebration of the National Religious Holiday (HBKN) Christmas and New Year celebrations. Inflation in North Maluku Province is represented by inflation in Ternate City, which is the center of intra-provincial and inter-provincial trade traffic. Monitoring of the prices of strategic commodities that affect inflation is carried out through the PIHPS (National Strategic Food Price Information Center) website to project the direction of strategic commodity inflation in North Maluku. Based on the monitoring results, it can be seen that there has been a fairly volatile price development throughout 2020 to 2021. It appears that rice and onion commodities are the commodities with the most volatile prices, judging from the price changes between the fourth quarter of 2020 and the fourth quarter of 2021, where the change in the price of cayenne pepper is the highest up to 30.66% (yoy), followed by red chili at 30.09% (yoy), and shallots at 28.08% (yoy) as seen in the graph.

#### **Quarterly Inflation Development**

In January 2021, there was deflation of 0.51% (mtm), and until January 2021 inflation in North Maluku was recorded at 1.28% (ytd). This is in contrast to inflation that occurred in December 2021 which was recorded at 0.70%. The lowest deflationary contributor group came from the Transportation Group, which on a monthly basis decreased by 4.91% (mtm). The high price decline that occurred in this group is allegedly due to the trend of price normalization after the momentum of school holidays and ID, Christmas and New Year's holidays.



**Figure 9. Latest inflation developments in Ternate City**

Source : Data , processed

According to Azwar and Achamad, 2017, it can explain how the distribution of high demand cycle activities ahead of the national Eid is in line with the influence of people's purchasing power. Inflation in North Maluku in the first quarter of 2021 is estimated to be below the average range of the national inflation target of  $3 \pm 1$  percent. Annual inflation in the first quarter of 2021 is estimated to decrease compared to the fourth quarter of 2020 as a result of the influence of the annual cyclical where The peak of public consumption in North Maluku occurs in the second and fourth quarters of each year. However, there is optimism that people's purchasing power will begin to recover in line with the presence of the Covid-19 vaccine distribution plan in early 2021, which is expected to encourage an increase in commodity prices.

#### **D. Cross-Coordination of Inflation Control in North Maluku**

Throughout the first quarter of 2022, the Bank Indonesia Representative Office in North Maluku province together with the Provincial TPID and the Ternate City TPID have held a number of coordination meetings (Mansur et al., 2023), both virtually and through in-person meetings. TPID coordination continues to be carried out, especially to monitor the availability and adequacy of food commodity supply, especially strategic foodstuffs which are the basic needs of the people of North Maluku. Efforts are made to maintain supply stability through the exploration and signing of a Memorandum of Understanding related to the implementation of Inter-Regional Cooperation (KAD) between the Provinces of North Sulawesi, Gorontalo, and North Maluku. The purpose of the implementation of the KAD is to build cooperation between each province related to the fulfillment of strategic commodities that contribute to regional inflation. KAD will bridge the supply and demand needs of each province. Thus, each province can monitor commodities whose supply is often in short supply, or commodities whose production is relatively excessive compared to consumption within the province. Thus, the stability of the amount of supply can be more controlled so that fluctuations in the price of strategic food commodities become more controlled. A number of TPID activities in North Maluku throughout the fourth quarter of 2022 include: (1) Ternate City TPID Meeting on the third week of January 2022 with the topic of discussing North Maluku inflation and the follow-up of the previous TPID Meeting related to escorting inflation ahead of the 2021 Christmas and New Year 2022 HBKN. (2) The Ternate City TPID Meeting on the fourth week of December 2021

with the topic of discussing inflation control in North Maluku and inflation monitoring ahead of the turn of 2021 entering 2022. In addition, Bank Indonesia also plays an active role in inflation control activities for the Ternate City government (Finger & Abtuley, 2021).

## **CONCLUSION**

Based on the results of the research and discussion above, conclusions can be drawn, namely 1. From the results of the research with table analysis using the average method, information was obtained that during 2018 to 2022, the average inflation every month fluctuated significantly. From 2018 it was 4.05 percent and continued to increase in 2021 by 4.21 and higher in 2022 by 13.16 percent. The average CPI Consumer Price Index for the food and beverage group was 100.153 percent in 2021. And the clothing and footwear group averaged 100.287 percent in 2021 and the housing group for clean water, electricity and home fuel averaged 100.736 percent in 2021. And this CPI will continue to be seen in 2022 as high as the CPI figure which contributes to inflation for the food and beverage group of 116.52 percent, the clothing and footwear group, 104.33 percent, and the housing group, clean water, electricity, and home fuel by 179.32 percent.

From the results of the table analysis, it can be seen that the two commodity groups have different contributions to the percentage of inflation and price indices in Ternate City, there needs to be coordination across the trade sector, BI, and Bappeda, the Market Office. For this reason, it is recommended that the government or monetary authorities can implement various policies that are more effective and comprehensive, especially in overcoming the inflation problem, especially in Ternate City. In reducing the high inflation rate, the government also needs to make improvements in various other social problems, such as the post-Covid-19 situation and domestic security and other social problems. Especially for the people in Ternate City so that they can overcome it as quickly as possible.

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