

## Research Article

# The Impact of Social Protection Programs on Community Welfare in the Tomini Bay Area

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**Abstract.**

This research aims to analyze the impact of social protection programs on community welfare in the Tomini Bay area. The research used data from Statistics Indonesia (BPS) collected between 2018 and 2022. It employed the Fixed Effect Model (FEM) panel data. The results indicated that several social protection programs, such as Non-cash Food Assistance (Bantuan Pangan Non Tunai or BPNT) and Pension Funds, positively affected people's welfare in the Tomini Bay area. Meanwhile, the Family Hope Program (Program Keluarga Harapan or PKH) did not appear to have a sufficient impact on people in the area. Therefore, the critical focus for improving welfare in the Tomini Bay area is improving the quality and quantity of the BPNT Programs and Pension Funds.

**Keywords:** social protection, non-cash food assistance (BPNT) program, pension funds, hope for families (PKH) program, welfare

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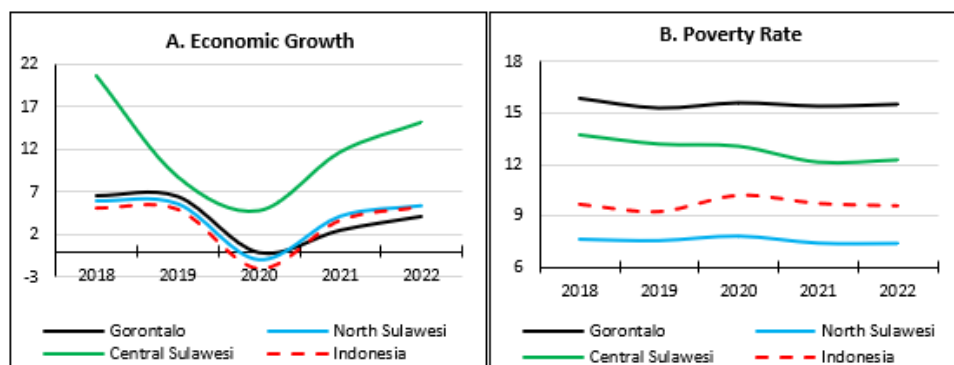
## 1. Introduction

Increasing community welfare seems to be the main issue for economic development in the Tomini Bay area, especially in the Gorontalo and Central Sulawesi Provinces. Based on the data below, the poverty rate in the two provinces has reached double digits and far above the national poverty rate. Thus, the problem of poverty still needs to be solved in realizing an inclusive economy in the two provinces. Local government has made multiple efforts to overcome it, for example, by issuing policies that focus on improving community welfare in the Tomini Bay area.

Figure 1 illustrates that the acceleration of economic growth had not been able to improve the standard of living in the Tomini Bay area. The facts above reflect the complexity of welfare problems faced by local communities, such as issues on education, health, and economic empowerment. Under these conditions, it is unsurprising that the welfare indicators, namely the Human Development Index of Gorontalo and Central Sulawesi are still far below the national level.

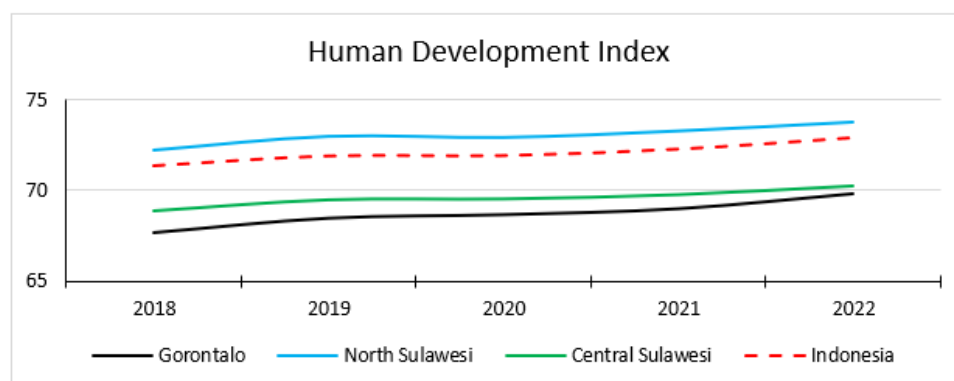
The urgency of improving community welfare in the Tomini Bay area aligns with the mandate of Presidential Regulation Number 5 of 2022 on Tomini Bay Interregional





Source: Statistic Indonesia (2023)

**Figure 1:** Economic growth and poverty rate in the Tomini Bay area.



Source: Statistic Indonesia (2023)

**Figure 2:** Human development index in the Tomini Bay area.

Zones. In this regulation, the area around Tomini Bay becomes a center and priority for marine growth in national development. The regulation encourages local governments to improve community welfare in quantity and quality by providing social protection programs.

Up to the present, the government has implemented many social protection programs to reduce poverty and improve community welfare. However, the success of this policy is still a matter of debate. Several studies, such as Banerjee and Duflo [1] and Hayashi et al., [2] state that poverty and welfare problems focus not on social protection programs, but on productivity and spatial conditions between regions. On the other hand, research by Karakara and Ortsin [3] claims that government intervention through social protection programs is essential in alleviating poverty. Therefore, due to the differences in the findings above, this research wants to verify whether social protection programs can effectively improve community welfare, especially in the Tomini Bay area.

## 2. Literature Review

Inclusive economic development has recently become the government's focus in every region. Today, the ultimate goal of development is not only based on high economic growth, but also on improving the community's quality of life. Therefore, the government is trying to grow economic activities that can expand job opportunities and increase per capita income at every level of society.

The discussion of inclusive development refers to efforts to improve community welfare. Research by Kotambunan et al., [4] states that prosperity is the ultimate target of economic development. This indicator refers to changes in the structure of society, both from a social and economic perspective, such as equal distribution of income and the elimination of absolute poverty. Related to this, Habibullah [5] also added that changes in people's consumption patterns indicate improving welfare.

Efforts to reduce poverty and increase welfare are manifested by various social protection programs. Several studies, Bakhshinyan et al., [6]; Kiendrebeogo et al., [7]; Lowder et al., [8]; and Mussa et al., [9], confirmed that social protection programs significantly reduced poverty rates. Other research by Karakara and Ortsin [3] even found that social protection programs in developing countries such as Asia, Africa, and Latin America could overcome the problems of extreme poverty and social inequality. Meanwhile, term Borga and D'Ambrosio [10] believed that the social protection schemes could be done through transfer systems, both cash and goods. These systems were useful to reduce poverty in the long term and help poor households overcome economic shocks in the short term.

Based on the explanation above, social protection is a concept to overcome poverty and welfare problems. The concept includes two dimensions, namely social assistance and social security. Social assistance is direct assistance to poor groups to increase community productivity. Meanwhile, social security is a series of public policies to minimize the impact of economic and social shocks, such as accidents, illness, old age, and death [11]. Social assistance is a social protection policy focusing on recovery from income shocks. Thus, social assistance includes economic empowerment, education, and health programs.

In Indonesia, there are three popular social assistance programs, namely the Family Hope Program (PKH), Non-cash Food Assistance (BPNT), and the Smart Indonesia Program (PIP). These three programs target poor communities to be more resilient in facing various shocks, including food, health, education, and economic crises. However,

previous results of social assistance programs are still mixed. For instance, several studies by Afkar [12]; Djameluddin [13]; and Pangaribowo [14] found that social assistance programs, such as Raskin, could improve the consumption patterns of poor people. In contrast, research by Mustofa et al., [15] found that the Raskin program had no impact on the proportion of household expenditure.

Finally, one of the social security programs that the government is also targeting is the pension fund program. This policy aims to maintain a decent standard of living for participants and their heirs by providing income after participants reach retirement age, experience disability, or die. This statement is supported by researchers like Nasution and Fuddin [16], who stated that pension fund programs could improve the welfare of individuals receiving pension funds and their families.

### 3. Research Method

This research used a quantitative approach with multiple linear regression analysis to draw conclusions and answer the research objectives. The research employed panel data from 2018 to 2022, which were collected from ten districts/cities in the Tomini Bay area: namely (i) Boalemo, (ii) Gorontalo, (iii) Pohuwato, (iv) Gorontalo City, (v) Poso, (vi) Parigi Moutong, (vii) Tojo Una-Una, (viii) North Bolaang Mongondow, (ix) East Bolaang Mongondow, and (x) Bitung City. The data in this research comes from official websites such as Statistics Indonesia (BPS) and Nasional Socioeconomic Survey (Sussenas).

The data were analyzed using multiple linear regression with the Ordinary Least Square (OLS) method. This method aims to estimate the effect of social protection programs on community welfare in the Tomini Bay area. The model built in this research is as follows.

$$IPM_{it} = \beta_0 + \beta_1 PKH_{it} + \beta_2 BPNT_{it} + \beta_3 Pensiun_{it} + \epsilon_{it}(1)$$

The Human Development Index (HDI) variable indicated community welfare. Meanwhile, the social protection programs were the Family Hope Program (PKH), Non-cash Food Assistance Program (BPNT), and Pension Fund Program.

## 4. Result and Discussion

Because this research employed panel data, which has space and time dimensions, it is necessary to carry out panel data tests [17, 18].

TABLE 1: Panel model tests.

TYPES OF TESTS	PROBABILITY	RESULT
Chow Test	0.00*	Fixed Effect
Hausman Test	0.09**	Fixed Effect

\*sign at 5%; \*\* sign at 10%

Based on Table 1 above, the best panel model for equation 1 is fixed effect. The Chow test, comparing fixed effects with common effects, found that the fixed effect model was the best choice. Finally, the Hausman test comparing fixed and random effects concluded that the fixed model was the best.

After obtaining the best panel model, Table 2 provides the estimation of equation 1 using the Ordinary Least Square (OLS) method. The table shows the relationship pattern between social protection programs and the level of community welfare in the Tomini Bay area. Table 2 shows that the BPNT and Pension variables have a significant and positive effect on the level of community welfare. In this research, when there was an increase in Non-cash Food Assistance (BPNT) and Pension Funds, the people's welfare level in the Tomini Bay area also increased. On the other hand, the Family Hope Program (PKH) did not seem to influence the welfare of the people in the area.

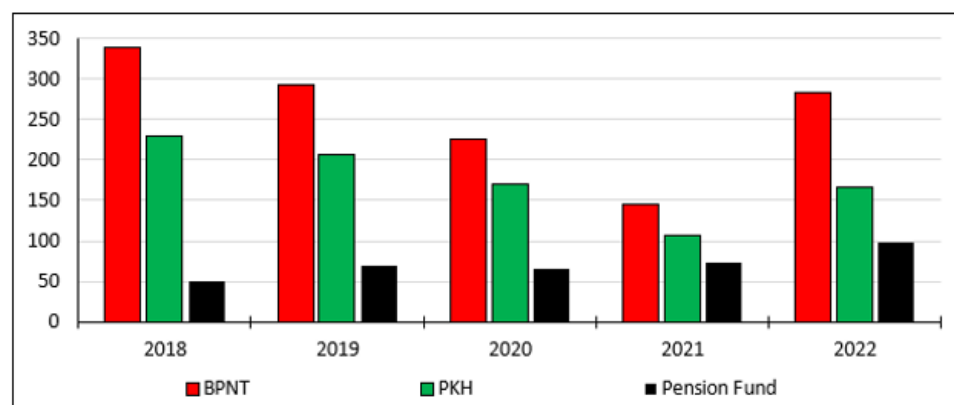
TABLE 2: Statistical results of the research model.

Variable	Coef.	Std. Err	t	P >  t
Constant	712702	6043	117	0.00
PKH	0.0001	0.0077	0.0225	0.98
BPNT	0.0073	0.0032	2.2733	0.03*
Pension Fund	35.9996	12.2404	2.9410	0.00*
R-squared				0.98
Prob (F-Statistic)				0.00
Durbin-Watson stat				1.44

\*sign at 5%

The findings of this research explain that social protection programs, especially Non-cash Food Assistance (BPNT) and Pension Funds, can improve people's welfare in the Tomini Bay area. Therefore, the government needs to increase Non-cash Food

Assistance (BPNT) in quantity and quality, as with Pension Funds, which will become beneficial in old age.



Source: Statistic Indonesia (2023)

**Figure 3:** Allocation of BPNT, PKH, and pension funds in the Tomini Bay.

Figure 3 describes that the Non-cash Food Assistance (BPNT) Program allocation is quite large compared to the allocation for PKH and Pension Funds. This fact indicates that social protection programs have greatly focused on providing Non-cash Food Assistance (BPNT). This program becomes the government's primary instrument for reducing poverty and improving the welfare of the people in the Tomini Bay area.

The results of this study are in line with previous research. For example, a study by Munandar [19] showed that implementing the BPNT program increased consumption expenditure among poor groups. These findings indicate that the BPNT program can improve the standard of living of low-income people. Similar results were documented by Sartiyah and Suriani [20], reported that the Social Food Assistance Program positively impacted community welfare. For people who did not have debt, the perceived benefits were even more significant. Sijinjak and Sihalohe [21] also emphasized that the Non-cash Food Assistance Program increased the food security of poor households. In short, the results of this research also supported the government's goals of promoting the Non-cash Food Assistance Program. This program not only aims to reduce poverty but also makes it easier for people to reach formal financial services, thereby accelerating financial inclusion programs.

On the other hand, these results differ from Sinaga et al., [22] and Laurentcia and Yusran [23] research. Both studies found that the Non-cash Food Assistance Program did not impact community welfare. This condition was caused by several factors, such as the implementation of the BPNT Program, which does not comply with the rules, errors in setting goals or targets, and various technical errors in the field.

Furthermore, even though the Pension Fund amount is relatively small in Figure 3, the program has positively improved people's welfare. Nasution and Fuddin [16] mentioned that the benefits of Pension Funds could be felt by two sides: workers and companies. From the workers' side, the Pension Fund will improve welfare and open new job opportunities for those who have reached retirement age. Meanwhile, from the company's side, the existence of a Pension Fund shows that the company can guarantee the welfare of its workers.

Finally, this research showed that the Family Hope Program could not improve people's welfare in the Tomini Bay area. This result confirms previous findings, such as Sinaga et al., [22], who found that the Family Hope Program (PKH) did not affect the level of community welfare in North Sumatra. Regarding his findings, Sinaga [22] said that using PKH funds that did not comply with the regulations was the reason why PKH funds could not improve community welfare [24].

## 5. Conclusion

Based on the estimation results, the government can improve the welfare of the people in the Tomini Bay area through intervention in social protection programs, such as the Non-cash Food Assistance Program and Pension Funds. Meanwhile, the Family Hope Program (PKH) has no impact on improving the welfare of the people in the area. Considering the large benefits obtained from the Non-cash Food Assistance Program and Pension Funds on the people's welfare, the government must increase the budget allocation for these two programs in the future, especially the BPNT program. Apart from that, monitoring program sustainability is also essential to evaluate government performance.

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