



The Effect of the Effectiveness of the Rice Food Assistance Program in Improving Community Welfare by the Bekasi Post Office

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ABSTRACT

The social assistance food program in Indonesia has undergone various changes, starting from the launch of the Beras Miskin (Raskin) program in 1998 to its transformation into the Beras Sejahtera (Rastra) program in 2018. This program aims to improve the welfare of low-income communities. The effectiveness of this program is evaluated based on its achievement of goals and its impact on the living standards of the community. This study aims to assess the effectiveness of the rice food assistance in improving the welfare of the community, distributed through the Bekasi Post Office. This study uses a quantitative method with a descriptive approach and simple linear regression. Data were obtained from a questionnaire survey of 100 respondents in 10 sub-districts in Bekasi. Validity and reliability tests of the questionnaire were conducted before the regression analysis to assess the relationship between the effectiveness of rice food assistance and community welfare. Simple linear regression analysis shows a significant effect between the effectiveness of the rice food assistance program and the improvement of community welfare. The ANOVA test resulted in an F-value of 5.804 with a significance level of 0.018 (<0.05), indicating that the regression model is valid for prediction. The correlation (R) of 0.236 and the coefficient of determination (R-square) of 0.56 indicate that 56% of the variation in community welfare is explained by the effectiveness of food assistance.

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INTRODUCTION

Effectiveness refers to the accurate achievement of objectives or the selection of the right goals from a series of alternatives or options, and determining the best choice from several others. Effectiveness can also be defined as a measure of success in achieving predetermined goals (Putri, 2019).

Welfare reflects the level of prosperity in a society. It signifies a higher standard of living than before. Feeling happy, not lacking within achievable limits, and feeling free from poverty and threats are signs of someone living in prosperity. The definition of welfare is not only related to material aspects and pleasure but also involves humanitarian and spiritual objectives (Srijani, 2020).

There are still poverty challenges faced by several countries around the world, including Indonesia. Poverty is a condition where individuals or groups in society are unable to meet their basic needs, either physically or economically. According to data released by the Central Statistics Agency (BPS) of Indonesia, in September 2017, the number of poor people in Indonesia reached 26.58 million, while in September 2019, the figure dropped to 24.79 million (Julianto, 2020).

The national socio-economic survey (SUSENAS) conducted by BPS in 2020 indicated that the proportion of monthly per capita expenditure for food in Indonesian society reached 46.05% or around IDR 603,236. This data serves as a basis for the government to reduce the expenditure burden of the people, especially those in poverty and vulnerable conditions, by providing social assistance (Bansos) in the form of food aid (BPS, 2020).

To address this issue, the Bekasi City government launched a rice food aid program aimed at providing assistance to needy families, with the hope of improving access to food and ultimately enhancing community welfare. This program is managed and distributed through post offices spread across various areas of Bekasi City.

METHOD

In this research, a cross-sectional approach was used with a quantitative method, and primary data sources were obtained from the Bekasi City post office during an internship and fieldwork. The data collection instrument used was a questionnaire, and for statistical data processing, SPSS version 25 was utilized along with a simple regression analysis technique to measure the effectiveness between the independent and dependent variables.

According to Musianto in (Waruwu, 2023), quantitative research is a study that involves measurements, calculations, formulas, and numerical data precision in planning, processing, hypothesis building, techniques, data analysis, and drawing conclusions. Cross-sectional research design studies risk and effects through observation, with the aim of collecting data simultaneously or at one point in time (Abduh et al., 2023).

Meanwhile, regression analysis is a statistical calculation to test the closeness of the relationship between variables. Simple regression analysis aims to see how one variable affects another. In regression analysis, the variable being influenced is called the independent variable, and the variable affected is called the dependent variable (Sarbaini et al., 2022).

This study used a Likert scale to measure respondents' perceptions of the variables studied. The use of this scale allows researchers to obtain quantitative data that can be further analyzed. The table below shows the scale used in this research,

Table 1. Questionnaire Responses and Scores (Likert Scale)

No	Code	Explanation	Score
1	SS	Strongly Agree	5
2	S	Agree	4
3	N	Neutral	3
4	TS	Disagree	2
5	STS	Strongly Disagree	1

The table below illustrates the population and sample data taken from each district in this study. The table lists the population size per district and the number of samples taken, with 10 people from each district. The total population involved in this study is 5,200 people, while the total sample size is 100 people. This data provides an overview of the sample distribution that is representative of the larger population,

Table 2. Population and Sample Size

District	Population	Selected Sample
Kayuringinjaya	1484	10
Bojong rawalumbu	1474	10
Jati makmur	1933	10
Jati raden	762	10
Jati ranggon	821	10
Jati rasa	1185	10
Jati sampurna	898	10
mustikajaya	1755	10
Sepanjang jaya	1241	10
pengasinan	1441	10
Total	12994	100

The research stages are conducted in a systematic and structured manner. Below is an overview of the research stages:

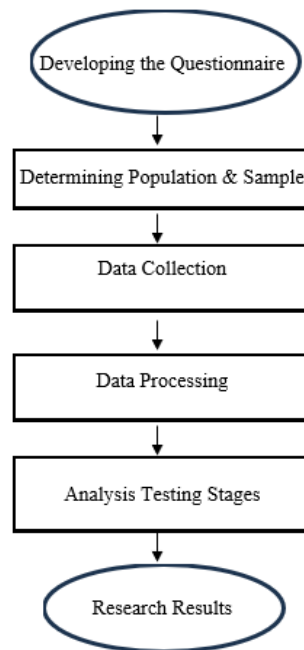


Figure 1. Research Stages

The survey instrument used will consist of a questionnaire. A questionnaire is a data collection technique involving forms with questions that respondents will fill out. This method is used to gather responses or answers that will be analyzed for specific objectives. Additionally, questionnaires are commonly used to assess products or ongoing service activities (Cahyo et al., 2019).

RESULTS AND DISCUSSION

Validity Test

The validity test using Pearson's product-moment is a commonly used method to evaluate the construct validity of a measuring instrument. This method involves calculating the correlation between the scores of each item in the instrument and the total score of the instrument itself. The validity test is based on comparing the calculated r value with the table r value. If the calculated r value is greater than the table r value, it is considered valid; if it is less, it is considered invalid. Alternatively, the significance (Sig.) value is checked. If the significance value is less than 0.05, it is considered valid, and if it is greater than 0.05, it is considered invalid. The following are the results of the validity test from the perspective of the effectiveness of rice food aid (X) and the improvement of community welfare (Y):

Table 3. Validity Test Results for the Effectiveness of Rice Food Aid (X)

No	Item Statement	R Calculated	R Table	Conclusion
1	X1	0,438	0,195	valid
2	X2	0,404	0,195	valid
3	X3	0,426	0,195	valid
4	X4	0,378	0,195	valid
5	X5	0,453	0,195	valid
6	X6	0,516	0,195	valid
7	X7	0,501	0,195	valid
8	X8	0,554	0,195	valid
9	X9	0,450	0,195	valid
10	X10	0,454	0,195	valid

Based on Tables 3 and 4, it can be seen that there are 100 respondents in this study. Referring to the r table with a 5% significance level, the r table value is 0.195. Since the calculated r values are greater than the r table value for each item, the conclusion is that the validity test for both the effectiveness of rice food aid (X) and the improvement of community welfare (Y) is valid.

Reliability Test

The reliability test is used to determine how consistently the measurement results can be replicated when measured multiple times on the same phenomenon using the same measuring tool. The following are the results of the reliability test for each variable:

Table 5. Reliability Test Results for the Effectiveness of Rice Food Aid (X)

Chronbach's Alpha	Total Items	Results
0,580	10	Reliable

Based on Table 5, the Cronbach's Alpha value for variable X is 0.580. A questionnaire is considered reliable if the Cronbach's Alpha value is greater than 0.6. Therefore, variable X is considered reliable.

Table 6. Reliability Test Results for the Improvement of Community Welfare (Y)

Chronbach's Alpha	Total Item	Results
0,372	8	Reliable

Based on Table 6, the Cronbach's Alpha value for variable Y is 0.372. A questionnaire is considered reliable if the Cronbach's Alpha value is greater than 0.6. Therefore, variable Y is considered unreliable.

Kolmogorov-Smirnov Normality Test

The Kolmogorov-Smirnov normality test is part of classical assumption testing. The purpose of the normality test is to determine whether the residual values are normally distributed. A good regression model has residual values that are normally distributed. The decision rule is as follows: if the significance value is greater than 0.05, the residuals are normally distributed; if the significance value is less than 0.05, the residuals are not normally distributed. The following are the results of the normality test:

Table 7. Kolmogorov-Smirnov Normality Test Results

Significance Value	Respondents	Results
0,075	100	Normally Distributed

Based on Table 7, the normality test result shows a significance value of 0.075, which is greater than 0.05. Therefore, it can be concluded that the residual values are normally distributed.

Linearity Test

The linearity test is used to determine the form of the relationship between the independent and dependent variables. The decision rule is as follows: if the significance value for deviation from linearity is greater than 0.05, there is a linear relationship between the independent and dependent variables; if the significance value is less than 0.05, there is no linear relationship. The following are the results of the linearity test:

Table 8. Linearity Test Results

Significance Value	F Value	Results
0,135	1,575	Linier

Based on Table 8, the linearity test result shows a significance value of 0.135, which is greater than 0.05. Therefore, it can be concluded that there is a linear relationship between variable X and variable Y.

Simple Linear Regression Analysis Test

The simple linear regression analysis technique aims to test the effect of one independent variable on a dependent variable. The requirements for the simple linear regression test are validity and reliability. The decision rule in simple linear regression testing can refer to two aspects: comparing the significance value with the probability value of 0.05. If the significance value is less than 0.05, it means variable X affects variable Y; if the significance value is greater than 0.05, it means variable X does not affect variable Y. The following are the results of the simple linear regression analysis:

Table 9. Simple Linear Regression Analysis Test Results

F Calculated	Significance Value	Correlation Value	Coefficients Determination	Influence Level
5,804	0,018	0,236	0,56	56%

Based on Table 9, the regression analysis output shows that the F value is 5.804 with a significance level of 0.018, which is less than 0.05. Thus, the regression model can be used to predict the impact of rice food aid effectiveness, meaning there is an effect of variable X on variable Y. The correlation value (R) is 0.236, and the coefficient of determination (R^2) is 0.56. This means that the effect of the independent variable on the dependent variable is 56%. This result indicates that while there is an effect, it is not maximal or high due to other factors influencing the improvement of community welfare.

CONCLUSION

From the results and discussion, it can be concluded that the rice food aid program implemented by the Bekasi Post Office is quite effective in meeting the food needs of the community. This is evidenced by the high level of respondent satisfaction regarding the quality and quantity of the aid provided. There are indications that the rice food aid has a positive contribution to the improvement of the welfare of the recipients. Respondents reported improvements in economic aspects, such as reduced spending on food needs, which has impacted the allocation of budgets for other needs supporting welfare. The simple linear regression analysis shows a significant relationship of 56% between the effectiveness of rice food aid and the improvement of community welfare. The more effective the food aid program, the greater the improvement in welfare experienced by the community. While respondents are generally satisfied with the rice food aid program, suggestions for future research include adding additional supporting indicators and employing a mixed-method research approach.

REFERENCES

- Abduh, M., Alawiyah, T., Apriansyah, G., Sirodj, R. A., & Afgani, M. W. (2023). Survey Design: Cross Sectional Dalam Penelitian Kualitatif. *Jurnal Pendidikan Sains dan Komputer*, 3(01), 31–39.
- Amanda, L., Yanuar, F., & Devianto, D. (2019). Uji validitas dan reliabilitas tingkat partisipasi politik masyarakat Kota Padang. *Jurnal Matematika UNAND*, 8(1), 179-188.
- Amin, N., Garancang, S., & Abunawas, K. (2023). Konsep Umum Populasi Dan Sample Dalam Penelitian.
- Dharma, A., Sekolah, N., Ilmu, T., Wiyatamandala, E., Puspita, S., Tinggi, S., & Wiyatamandala, I. E. (2022). Pelatihan Spss Pada Mahasiswa Tingkat Akhir Jurusan Akuntansi Dan Manajemen Sekolah Tinggi Ilmu Ekonomi Wiyatamandala (Vol. 1, Nomor 2).
- Janna, N. M., & Herianto, H. (2021). Konsep uji validitas dan reliabilitas dengan menggunakan SPSS. Julianto, P. (2020). Implementasi Program Bantuan Pangan Non Tunai (Bpnt) Di Kecamatan Sitinjau Laut Kabupaten Kerinci. Dalam *Qawwam : The Leader's Writing* (Vol. 1, Nomor 1).
- Nur Cahyo, K., & Riana, E. (2019). Perancangan Sistem Informasi Pengelolaan Kuesioner Pelatihan Pada PT Brainmatics Cipta Informatika. Dalam *Journal of Information System Research (JOSH)* (Vol. 1, Nomor 1).
- Putri, U. H., Kunci, K., Efektivitas, :, & Pendidikan, P. (2019). Efektivitas dan Efisiensi Pembiayaan Pendidikan.
- Rahayu, E., Hidayati Sinaga, T., Dewi, A. R., Dalimunthe, Y., Kurniawan, A., Teknik, F., Komputer, D., & Medan, U. (2021). Pada Perangkat Desa Sei Mencirim. 10(1).

- Rahmawati, A., Ardiansyah, M., Fakultas,), & Kunci, K. (2023). Komparasi Implementasi Penyaluran Program Sembako Di Kota Metro: Himpunan Bank Negara (Himbara) Vs Pt Pos. 3(1), 2023–2024. Sarbaini,
- Zukrianto, & Nazaruddin. (2022). Pengaruh Tingkat Kemiskinan Terhadap Pembangunan Rumah Layak Huni Di Provinsi Riau Menggunakan Metode Analisis Regresi Sederhana.
- Sari, R. M., Thoriq, A. M., & Adriansyah, A. (2022). Pengaruh Efektivitas Penyaluran Bantuan Pangan Non Tunai (BPNT) Terhadap Upaya Penanggulangan Masyarakat Prasejahtera di Desa Salem. Jurnal Maps (Manajemen Perbankan Syariah), 6(1), 70-76.
- Srijani, N. (2020). Peran Umkm (Usaha Mikro Kecil Menengah) Dalam Meningkatkan Kesejahteraan Masyarakat 1) 2).
- Sumartini, S., Harahap, K. S., & Sthevany, S. (2020). Kajian pengendalian mutu produk tuna loin precooked frozen menggunakan metode skala likert di perusahaan pembekuan tuna. Aurelia Journal, 2(1), 29-38.
- Syaputra, E. (2023). Implementasi Program Bantuan Pangan Non Tunai (BPNT) di Kecamatan Kuantan Tengah Kabupaten Kuantan Singingi.
- Ulfa, Rafika. (2021). variabel penelitian dalam penelitian pendidikan.
- Waruwu, Marinu. (2023). Pendekatan Penelitian Pendidikan: Metode Penelitian Kualitatif, Metode Penelitian Kuantitatif dan Metode Penelitian Kombinasi (Mixed Method).