

EVALUATION OF THE FERTILIZER DISTRIBUTION PROGRAM IN INCREASING FARMERS’ PRODUCTIVITY

Arief Rahman HAKIM^{1*}, Harry NENOBAIS², and Adi JAYA³

¹⁻³*Magister Administration Public Program, University of Prof. Dr. Moestopo (Beragama), Jakarta, Indonesia*
**aariefhakim95@gmail.com*

ABSTRACT

This study aims to assess the government's efforts in distributing subsidized nitrogen, phosphorus, and potassium fertilizers as part of a 2020 evaluation program to enhance agricultural productivity in Sambas Regency, West Kalimantan Province. A qualitative research method was employed, with data gathered through in-depth interviews, observation, documentation, and literature review. The evaluation revealed that while the fertilizer distribution program has been fairly effective, there are still areas for improvement. Key factors contributing to the program's success include collaboration among various stakeholders and positive public response, both of which are crucial for any government initiative. Public support, in particular, can significantly enhance program outcomes. However, challenges remain, such as the mismatch between fertilizer quotas and demand, delayed deliveries, and slow data collection. Additionally, ongoing efforts to raise awareness at the district level are needed. Government assistance programs like this must be implemented fairly and equitably to ensure success across the region.

Keywords: evaluation program, subsidies fertilizers, agriculture

INTRODUCTION

Agriculture holds a vital role in human civilization. As noted by the Greek philosopher Xenophon (425-355 BC), agriculture is the foundation of all culture—if it thrives, other aspects of culture will flourish, but if neglected, they will deteriorate (Saptana, Iqbal, M., Makky, A., 2018:3). In Indonesia, agriculture is central to national development, particularly because rice is the staple food for the majority of the population, making a stable supply of rice crucial for the country's food security (Amalina, E. N., & Rachmadi, 2019).

During the 2020 pandemic, agriculture proved to be the only sector that remained resilient and contributed positively to the national GDP. With 279 million Indonesians relying on agricultural products, the sector's ability to provide food, raw materials, employment, and foreign exchange is crucial for supporting broader economic activities (Syahroni, Munajat, 2022).

However, the government's fertilizer subsidy policy has sparked debate. On one hand, subsidies are essential for maintaining food security by ensuring consistent agricultural production through adequate fertilizer use Hartatik, W, Husnain, H (2015:2) On the other hand, the large subsidy budget has led the government to reduce funding, redirecting resources towards agricultural technology investments, which are seen as more beneficial for long-term productivity growth (Banks, 2020). Despite budget cuts, fertilizer subsidies remain necessary, as fertilizer plays a critical role in boosting agricultural production and is an integral part of the farming system (Darwis, V., & Supriyati, 2016:25); (Hasim Ashari, 2023).

In fact, there are still many problems that occur as long as fertilizer subsidies are implemented, such as fertilizer shortages, fertilizer smuggling abroad, price spikes above the HET, seepage of subsidized fertilizer into non-subsidized markets and between regions (Syahroni, Munajat, 2022).

The fertilizer subsidy policy faces several challenges, including unfair and poorly targeted distribution, market dualism, and subsidy costs that often outweigh the benefits (Adiraputra, P., 2020). According to Sari, L. R., & Fahmi (2018) stated that several causes of fertilizer prices being higher than the HET are weak supervision and the difference between fertilizer needs in the field and allocation.

Weak oversight and a mismatch between actual fertilizer needs and allocations in the field contribute to prices exceeding the set retail ceiling (HET). The presence of both subsidized and non-subsidized fertilizers in the market has led to issues such as mixing the two types, spreading rumors about shortages to drive up prices, and repackaging subsidized fertilizers as non-subsidized. These practices have limited many farmers' ability to fully benefit from the subsidies (Adiraputra, P., 2020).

Efforts to improve the subsidy program focus on balanced and organic fertilization tailored to specific local recommendations. Success in achieving balanced fertilization depends on ensuring farmers can access fertilizers at affordable prices (Jorgi, R. S., Gayatri, S., & Dalmiyatun, 209 C.E.). However, two critical indicators—quality and type—are often omitted due to the difficulty in measuring them accurately.

Fertilizer remains a key resource in increasing the production, quality, and competitiveness of agricultural outputs across various sectors, including food crops, horticulture, livestock, and fisheries (Darwis, V., & Supriyati, 2016:45). Since its inception in 1969, the fertilizer subsidy policy has aimed to boost productivity, improve national food production, and enhance farmers' welfare. The government continues to set the highest retail price (HET) for fertilizers, subsidizing the difference between production costs and HET. This policy's intermediate goal is to increase farmers' capacity to purchase fertilizers in appropriate quantities for specific local needs, ultimately enhancing agricultural productivity and improving farmers' livelihoods (Ministry of Agriculture). Distribution of subsidized fertilizer has been widespread across Indonesia, including in Sambas District, West Kalimantan.

The fertilizer subsidy policy is directed at achieving the intermediate goal, namely increasing the ability of farmers to purchase fertilizer in quantities in accordance with the recommended dose of balanced fertilizer for specific locations and the final goal, namely increasing agricultural productivity and production so that farmers in Indonesia can prosper (Ministry of Agriculture). Distribution of subsidized fertilizer is almost evenly distributed throughout Indonesia, including Sambas district which is located in West Kalimantan.

Quoted from the official rites of the West Kalimantan Provincial government, the Sambas Regency which is formed now is the result of the expansion of the district in 2000. Previously the Regency area since 1960, Sambas also includes Singkawang City and Bengkayang Regency, where the formation of Sambas Regency in 1960 was based on the former territory of the Sambas Sultanate. The economic structure of Sambas Regency is dominated by the agricultural sector, because most of the residents of Sambas Regency are farmers.

Table 1. Nitrogen, Fosfor, dan Calium (NPK) Fertilizer Distribution Report for Each District in Sambas Regency 2020 (in tonnes)

NO	DISTRICT	DISTRIBUTOR / VOLUME PENYALURAN NPK (TONS)			TOTAL
		PT. Guntur Alam Perkasa	CV. Tiara Utama Ratna	PT. Puncak Mandala Agung	
1	Selakau	-	-	968.60	968.60
2	East Selakau Timur	-	-	637.00	637.00
3	Pemangkat	-	-	407.50	407.50
4	Semparuk	-	-	1,036.65	1,036.65
5	Salatiga	-	-	913.00	913.00
6	Tebas	-	-	1,681.25	1,681.25
7	Tekarang	-	-	656.00	656.00
8	Sambas	-	435.35	-	435.35
9	Subah	-	819.00	-	819.00
10	Sebawi	-	256.00	-	256.00
11	Sajad	-	96.00	-	96.00
12	Jawai	-	-	946.45	946.45
13	South Jawai	-	432.00	-	432.00
14	Teluk Keramat	-	1,376.00	-	1,376.00
15	Galing	-	848.00	-	848.00
16	Tangaran	856.00	-	-	856.00
17	Sejangkung	-	520.00	-	520.00
18	Sajingan Besar	-	112.00	-	112.00
19	Paloh	1,712.00	-	-	1,712.00

NO	DISTRICT	DISTRIBUTOR / VOLUME PENYALURAN NPK (TONS)			TOTAL
		PT. Guntur Alam Perkasa	CV. Tiara Utama Ratna	PT. Puncak Mandala Agung	
	JUMLAH	2,568.00	4,894.35	7,246.45	14,708.80

Source: Departemen of Agriculture Sambas Regency, 2021.

The data shows that all sub-districts in Sambas Regency received an allocation of subsidized NPK fertilizer, with a total of 14,708.80 tons distributed in 2020. According to the Minister of Trade Regulation (Permendag No. 15/M-Dag/Per/4/2013 on the Procurement and Distribution of Subsidized Fertilizers), there are six key principles for distributing subsidized fertilizers in the agricultural sector: the correct type, quantity, price, location, timing, and quality. These principles are crucial for ensuring the successful procurement and distribution of subsidized fertilizers, aimed at improving farmers' welfare by meeting the government's target goals.

This study used Dunn theory (2012) to evaluate the NPK fertilizer subsidy distribution program in 2020, with the objective of enhancing farmers' productivity in Sambas Regency, West Kalimantan. Four key indicators were applied: Effectiveness, Efficiency, Adequacy, and Responsiveness. To assess the program's success, the Discrepancy Model was employed, comparing outcomes at the beginning and end of the program, or before and after its implementation, to determine its impact on increasing agricultural productivity.

This study is aimed for knowing and analysing the effort of government in distributing subsidy fertilizer NPK type in 2020 evaluation program in increase productivity farmers in Sambas Regency, West Kalimantan Province. Based on the description above using Dunn's (2012) theory, there are two questions asked in this research, namely: How is the Evaluation of the 2020 Fertilizer Subsidy Distribution Program in Increasing Farmer Productivity in Sambas Regency, West Kalimantan Province?

METHOD

The research employed a qualitative approach, aiming to describe and explain findings based on real-world observations. Data collected were analyzed and presented according to the facts discovered in the field. The tools used in this study included a camera, a recorder, and an in-depth interview guide (Creswell, 2018). Primary data were gathered through interviews with several key informants, such as officials from the Sambas Regency Agricultural Service, leaders of Farmers' Groups (Poktan/Gapoktan), Non-Governmental Organizations focused on agriculture, and prominent agricultural figures in Sambas District. Data collection methods involved in-depth interviews, observation, documentation, and literature review. The data analysis process was carried out in three stages: data reduction, data display, and conclusion verification. Triangulation techniques were also employed to enhance the validity of the findings (Neuman, 2006).

RESULTS AND DISCUSSION

The results of the discussion of the five aspects studied, it can be seen that the evaluation results of the subsidized fertilizer distribution program in Sambas Regency are in the quite good category. Even though every aspect has been fulfilled, the district government still has homework to improve this program in the future. This first finding also complements several previous studies such as those from (Chakim, 2019); and (Anisa, F & Adnan, 2021).

The program evaluation process is reviewed from five aspects, namely effectiveness, efficiency, adequacy, responsiveness and equity, which can be seen from the following explanation, namely: First, the effectiveness aspect can be assessed from the timeliness of achieving results/goals (Purnamasari, H., dan Ramdani, 2019). In achieving its goals, Sambas Regency has achieved its goals quite well. This program was implemented quite well because there were guidelines and supervision in achieving the goals. To be better, programs need to be designed effectively and sustainably (Frick, W. F., Kingston, T., Flanders, 2020). In practice, this program still faces obstacles which have become homework for the parties involved. Implementers can avoid similar obstacles in the future by examining existing problems through an evaluation (Shamgita, I. G. Y., Raditya, I. G. L. A., Putra, 2020). Second, the efficiency aspect, this aspect is usually measured by calculating the resources used to achieve the highest effectiveness (Fitriani, I. D., Zulkarnaen, W., Sadarman, B., Yuningsih, 2020).

The Sambas Regency Government has utilized human and technological resources. The human resources in question are implementers or workers who come from the local district. In utilizing technology, the Sambas Regency Government has used the E-RDCK system. By utilizing the two resources above, the Sambas Regency government has implemented efficiency aspects well. The implementation of the efficiency aspect is measured by carrying out activities without wasting time, energy and large costs (Feriyan, 2019). Third, the Sufficiency aspect, this relates to the level of effectiveness that satisfies needs (Sarah, M., dan Subadi, 2021). In this research, the aspect this is measured by the amount of subsidies provided which must be able to meet needs or demand. In Sambas Regency, availability can only meet 30% of demand. This is still far from sufficient. Demand is often greater than availability in the business world (Faiqoh, Wulandari, N., & Hidayah, 2021). Fourth, the responsiveness aspect. In Sambas Regency, all recipients of subsidized fertilizer gave a positive response like this can illustrate support for existing programs (Darmawan, D., dan Mardikaningsih, 2021). Fifth, the equity aspect, this aspect too continues to be carried out at the sub-district level. The element of justice is the key to the equality aspect. Government assistance programs must be carried out fairly and evenly (Andriani, 2021).

This research succeeded in identifying several supporting and inhibiting factors in the implementation of the subsidized fertilizer distribution program in Sambas Regency. Supporting factors for this program are support from other parties, good cooperation with all parties, and positive responses from the community (Adiraputra, P., 2020). This support and cooperation are indeed two crucial things in a government program (Wahid, U., dan Amalia, 2020). High community support can also maximize a program from the government (W.M.L., 2019). On the other hand, factors inhibiting the implementation of this program include subsidized fertilizer quotas that are not commensurate with demand, fertilizer arrival schedules that are sometimes late, and data collection still tends to be late. All existing obstacles describe obstacles from a technical and non-technical perspective. Technical barriers here relate to equipment such as facilities and infrastructure (Hardiana & Asmara, 2022). For non-technical people, this is not related to tools but human resources (Susanti, S., dan Standi, 2020). The supporting and inhibiting factors above are categorized as the second finding in this research. This second finding confirms several previous research results such as those from (Wijayanto, H., dan Lestari, 2022) and (Nomita, 2022).

The Sambas Regency Government has made many efforts to optimize the subsidized fertilizer distribution program. Efforts made by the Sambas Regency government include coordinating with various parties, forming a monitoring team, forming a verification and validation team for subsidized fertilizers, updating farmer data, and optimizing farmers' needs for subsidized fertilizer. The efforts made by the Sambas Regency Government above are the third finding in the research. These findings complement previous research such as from (Karmeli, E., Fitriyani, V., Warokah, 2020), (Misrah, M., Sudarmi, S., Rahim, 2020), and (Darapalgia, N.P.M.H., Aromatica, D., Putera, 2022). The efforts above illustrate that the Sambas Regency government wants to fulfill the welfare and needs of farmers. This is in line with the explanation from Skokova, Y., Pape, U., Krasnopolskaya (2018), that governments need to work together to pay attention to social needs. With subsidized fertilizer, it is hoped that the social needs of farmers will be increasingly met.

CONCLUSION

This research explains that the evaluation results of the subsidized fertilizer distribution program in Sambas Regency have run quite optimally, where every aspect has been fulfilled, but the Regency government still has homework to do to improve this program in the future. Evaluation of the annual fertilizer subsidy distribution program in increasing farmer productivity in Sambas Regency, West Kalimantan Province, can be seen in detail in the following aspects, namely: The effectiveness aspect can be assessed from the timeliness in achieving results/goals. In achieving its goals, Sambas Regency has achieved its goals quite well. This program was implemented quite well because there were guidelines and supervision in achieving the goals. Efficiency aspect, this aspect is usually measured by calculating the resources used to achieve the highest effectiveness. In utilizing technology, the Sambas Regency Government has used the E-RDCK system. By utilizing the two resources above, the Sambas Regency government has implemented efficiency aspects well. The implementation of the efficiency aspect is measured by carrying out activities without wasting time, energy and large costs. The Adequacy aspect, this relates to the level of effectiveness that satisfies needs. This aspect is measured by the amount of subsidies provided which must be able to meet needs or demands. In Sambas Regency, availability can only meet 30% of demand. This is still far from enough. Responsiveness aspect, in Sambas Regency, all recipients of subsidized fertilizer gave a positive response. They are greatly helped by the subsidized fertilizer distribution program. A response like this can illustrate support for existing programs. The equalization aspect, this aspect has also been implemented well by the Sambas Regency government. The district government has provided agent kiosks in each sub-district. Socialization regarding the provision of this program is also still being

carried out at the sub-district level. The element of justice is the key to the equality aspect. Government assistance programs must be carried out fairly and evenly.

REFERENCES

- Adiraputra, P., & D. S. (2020). The Effectiveness of Fertilizer Subsidy: How the Impact to the Production. *SOCA: Jurnal Sosial Ekonomi Pertanian*, 15(2), 345–356. <https://doi.org/https://doi.org/https://doi.org/10>.
- Amalina, E. N., & Rachmadi, A. (2019). Analysis of Acceptance of Smart Classroom Implementation Based on User Perspective at the Faculty of Agriculture. *Brawijaya University Using Information Technology*. <http://j-ptiik.ub.ac.id/Index.Php/J-Ptiik/Article/View/5183>
- Andriani, F. (2021). Pengaruh Iklan Dan Kualitas Pelayanan Terhadap Keputusan Pembelian Konsumen Tokopedia (Studi Kasus Pada Pengguna Tokopedia Di Jabodetabek). *Jurnal Inovatif Mahasiswa Manajemen*, 1(3), 266–278.
- Anisa, F & Adnan, F. (2021). Evaluasi program penyaluran pupuk bersubsidi melalui kartu tani di kecamatan padang sago, kabupaten padang pariaman. *Jurnal Ilmu Sosial Dan Pendidikan (Jisip)*, 5(4).
- Banks, A. . (2020). *Polices To Support Investment Requirements Of Indonesia's Food And Agriculture Development During 2020-2045*. In Asian Development Bank.
- Chakim, M. . (2019). Pengaruh Implementasi Kartu Tani Terhadap Efektivitas Penyaluran Pupuk Bersubsidi Di Kabupaten Kendal, Jawa Tengah. *Jurnal Pangan*, 28(3), 171–182.
- Creswell, W. J. & J. D. C. (2018). *Research Design Qualitative, Quantitative, and Mixed Methods Approach* (T. Oaks (ed.); 5th ed.). Sage Publications.
- Darapalgia, N.P.M.H., Aromatica, D., Putera, R. . (2022). Pengawasan Distribusi Pupuk Bersubsidi di Kota Padang. *Jurnal Administrasi Publik*, 3(2), 85–100.
- Darmawan, D., dan Mardikaningsih, R. (2021). . Studi Tentang Peran Kualitas Kehidupan Kerja, Kepemimpinan dan Persepsi Dukungan Organisasi Terhadap Komitmen Organisasi. *Jurnal Simko Economic*, 4(1), 89–98.
- Darwis, V., & Supriyati, N. (2016). Fertilizer Subsidies: Policy, Implementation and Optimization of Utilization. *Agricultural Policy Analysis*, 11(1), 45. <https://doi.org/https://Doi.Org/10.21082/Akp.V11n1.2013.45-60>
- Dunn, W. (2012). *Public Policy Analysis: An Introduction*. New Jersey: Prentice Hall In.
- Faiqoh, Wulandari , N., & Hidayah, N. (2021). Pembiasaan Sholat Dhuha Berjamaah terhadap Pendidikan Karakter di SDN 2 Setu Kulon. *Prosiding Dan Web Seminar Standarisasi Pendidikan Sekolah Dasar Menuju Era Human Society 5.0*.
- Feriyana, W. (2019). Pengaruh Pelatihan Terhadap Efisiensi Kerja Karyawan Pada Koperasi Setia Usaha Oku Timur. *Jurnal Neraca; Jurnal Pendidikan Dan Ilmu Ekonomi Akuntansi*, 3(2), 145–155.
- Fitriani, I. D., Zulkarnaen, W., Sadarman, B., Yuningsih, N. (2020). Evaluasi Kinerja Distribusi Logistik KPU Jawa Barat Sebagai Parameter Sukses Pilkada Serentak 2018. *Jurnal Ilmiah MEA (Manajemen, Ekonomi & Akuntansi)*, 4(2), 244–264.
- Frick, W. F., Kingston, T., Flanders, J. (2020). A review of the major threats and challenges to global bat conservation. *Annals of the New York Academy of Sciences*, 1, 5–25.
- Hartatik, W, Husnain, H., & L. W. (2015). The Role of Organic Fertilizer In Increasing Soil and Plant Productivity. Land Resources. *Junral Sumberdaya Lahan*, 9(2). <https://doi.org/https://dx.doi.org/10.2018/jsdl.v9i2.6600>.
- Hasim Ashari, et al. (2023). Study of Susidized Fertilizer Distribution System in Karawang Regency, West java, Indonesia. *Journal of Advanced Zoology (JAZINDIA)*, 4, 300–310.
- Jorgi, R. S., Gayatri, S., & Dalmyatun, T. (209 C.E.). The Relationship between Farmers' Level of Knowledge and the Effectiveness of Implementing the Farmer's Card Program in Semarang Regency. *Agraris: Journal of Agribusiness And Rural Development Research*, 5(2). <https://doi.org/https://Doi.Org/10.18196/Agr.5278>
- Karmeli, E., Fitryani, V., Warokah, E. (2020). Optimalisasi Pengawasan Pupuk Bersubsidi di Labuhan Badas Kabupaten Sumbawa. *Jurnal Ekonomi & Bisnis*, 8(3), 146–154.
- Misrah, M., Sudarmi, S., Rahim, S. (2020). Pengawasan Distribusi Pupuk Bersubsidi pada KP3 (Komisi Pengawasan Pupuk dan Pestisida) Kabupaten Pangkep. *Kajian Ilmiah Mahasiswa Administrasi Publik (KIMAP)*, 1(2), 530–545.
- Neuman, W. L. (2006). *Social Research Methods: Qualitative and Quantitative Approaches. Sixth Edition*. Boston: Pearson Education, Inc.
- Nomita, B. P. (2022). *Evaluasi Program Kartu Tani dalam Mengoptimalkan Distribusi Pupuk Bersubsidi Bagi Petani di Kabupaten Banyumas Provinsi Jawa Tengah*. Institut Pemerintahan Dalam Negeri.
- Purnamasari, H., dan Ramdani, R. (2019). Evaluasi Program Badan Usaha Milik Desa Oleh Dinas Pemberdayaan Masyarakat dan Desa di Kabupaten Karawang. *Jurnal Politikom Indonesia*, 4(2), 136–149.
- Saptana, Iqbal, M., Makky, A., & A.-R. (2018). Evaluation of Seven Revitalization Policies In Agricultural Development. *Bogor: Center for Socio-Economic and Agricultural Policy*, 11(2), 107–127.

- Sarah, M., dan Subadi, W. (2021). Evaluasi Kebijakan Pelaksanaan Pembangunan Infrastruktur Desa Masukau Kecamatan Murung Pudak Kabupaten Tabalong (Studi Kasus Pada Pembangunan Infrastruktur Cor Jalan Usaha Tani Rt 02). *Jurnal Administrasi Publik Dan Administrasi Bisnis (JAPB)*, 4(2), 972–984.
- Sari, L. R., & Fahmi, A. (2018). The Impact of Fertilizer Subsidies on Increasing the Income and Welfare of Farmers in Megaluh Jombang District in a Phenomenological Perspective (Case Study of Sudimoro Hamlet and Paritan Hamlet). *Economics and Business Development*, 2(2).
<https://doi.org/10.32764/Margin.V2i2.328>
- Shamgita, I. G. Y., Raditya, I. G. L. A., Putra, I. G. J. E. (2020). Analisis Dan Evaluasi Tata Kelola Teknologi Informasi USSI Software Menggunakan Framework COBIT 5 Pada PT. BPR Naga. *Jutisi: Jurnal Ilmiah Teknik Informatika Dan Sistem Informasi*, 9(1), 67–74.
- Skokova, Y., Pape, U., Krasnopolskaya, I. (2018). The non-profit sector in today’s Russia: Between confrontation and co-optation. *Europe-Asia Studies*, 70(4), 531–563.
- Susanti, S., dan Standi, K. (2020). Manajemen Produksi Program “Anak Indonesia” Di Tvri Jawa Barat. *Jurnal Ranah Komunikasi (JRK)*, 4(2), 133–141.
- Syahroni, Munajat, Y. S. (2022). Evaluation of Subsidized Fertilizer Distribution to Corn Farmers in Ogan Komering Ulu Regency. *AJARCDE (Asian Journal of Applied Research for Community Development and Empowerment)*, 6(2). <http://ajarcde-safe-network.org>
- W.M.L., H. (2019). Strategi pemerdayaan Masyarakat Dalam Mengubah Pemukiman KumuhMenjadi Destinasi Wisata. *Jurnal Ilmu Sosial Dan Ilmu Politik (JISIP)*, 8(3), 108–113.
- Wahid, U., dan Amalia, N. (2020). Tantangan Humas Pemerintah Daerah dalam Upaya Publikasi Inovasi Program Smart City. *Nyimak: Journal of Communication*, 4(1), 35–51.
- Wijayanto, H., dan Lestari, O. (2022). Implementasi Kebijakan Penyaluran Pupuk Bersubsidi Melalui Program Kartu Tani (Studi Kasus Pada Petani Nanas di Desa Siwarak Kecamatan Karangreja Kabupaten Purbalinga Jawa Tengah). *Journal of Political*, 2(3), 98–106.