

## **ANALYSIS OF SUBSIDIZED FERTILIZER DISTRIBUTION (Case Study on Rice Farmers in Kendari City)**

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### **ABSTRACT**

This study aims to determine the effectiveness of fertilizer delivered to farmers in Baruga Village, Kendari City, with a subsidy. To evaluate the point, the five principles (5T) are used: the appropriate place, the appropriate type, the appropriate quantity, the appropriate time, and the reasonable price. Information was gathered from 24 farmers who received government-subsidized fertilizer through a questionnaire. The sample size is determined by simple random sampling, 10% of the number of farmers receiving subsidized fertilizer, or 240 farms. The percentage of correct responses for each of the five principles was calculated to examine the data. In Kelurahan Baru, Kendari City, the effectiveness of subsidized fertilizer delivery was judged to be 67.50 percent. Baruga was chosen as the research site because it received the most subsidized fertilizers at the district/city level in Southeast Sulawesi.

**Keywords:** effectiveness; distribution; five correct principles.

### **INTRODUCTION**

Agriculture is a strategic sector in national development to achieve Indonesian food sovereignty. This emphasizes maintaining and increasing agricultural productivity with easily obtained inputs. One of the inputs in increasing agricultural production is fertilizer (Pamuncak et al. 2018). Given the importance of agriculture to fulfill basic needs, the government has maintained the fertilizer subsidy policy. Darwis & Supriyati (2013) said that the fertilizer subsidy program was designed to afford to purchase fertilizer in amounts consistent with the prescribed fertilizer dosage.

Rigi et al. (2019) subsidized fertilizers are government support to farmers to increase the quality of their agricultural goods. Since it was first established in the 1970s, the subsidized fertilizer policy has been continuously refined. One of them is the closed pattern policy since 2009. Implementing the Definitive Group Needs Plan marks the beginning of the quick pattern fertilizer subsidy (RDKK). In Permendagri Number 15/M-DAG/PER/4/2013, the RDKK is a calculation of the plan for the need for Subsidized Fertilizer compiled by Farmer Groups based on the area with recommendations for a balanced fertilization for specific locations.

The distribution of subsidized fertilizers starts with farmers' organizations who develop plans for fertilizers, which are then sent to authorized retailers. Next, the Distributor sends it to the Regency, then passed on to the Province and the Ministry in stages (IBRA 2011). In Permendagri Number 15/M-DAG/PER/4/2013, It has been underlined that while distributing subsidized fertilizers, six exact factors must be followed: kind, amount, price, placement, time, and quality. The purpose of principle 6 is correct: 1) Right Place: The place where the fertilizer is given 2) Right price: The price is according to HET or not for farmers 3) Right Amount: The amount of fertilizer follows the needs and area of the farmer's land (land under 2 hectares). ) 4) On-time: The time of fertilizer application according to the needs of farmers 1 (one) month before the harvest season. 5) Right Type: The type of fertilizer given according to the farmers' needs 6) Right Quality: The fertilizer given is appropriate or not for farmers (Jatmika B, 2021).

The subsidized fertilizer program launched by the government is aimed at small-scale farmers to fulfill the "Principles of 6 Right" in their plant cultivation business. The importance of using fertilizers (chemicals) for farmers has resulted in the emergence of various dynamics in their distribution and use. The use of subsidized fertilizers is also often misused, resulting in inappropriate targeting of users, even though subsidized fertilizers should only be intended for small farmers, especially in the food sub-sector (Agustian, Hermanto, Kariyasa, Friyatno, & Hidayat, 2017).

Government policies regarding the distribution of subsidized fertilizers have not run optimally and still have many weaknesses, including the lack of socialization about the subsidy program, the availability of fertilizers among farmers is still scarce, and the government's supervision is still weak in responding to fraud (Safitri et al., 2013). To avoid various scams committed by several parties in distributing and selling subsidized fertilizers. Based on the Regulation of the Minister of Agriculture of the Republic of Indonesia Number 47/Permentan/SR.310/11/2018, the government sets the maximum retail price for subsidized fertilizers for the agricultural sector for 2019 fiscal year.

Baruga Village, which has a crucial position as Kendari City's top rice producer, is one of the locations in the city that gets subsidized fertilizer. (BPS 2018). The Kendari City administration created the Amuhalo rice field region in Baruga Village, which covers 700 hectares, to suit the city's food demands, particularly rice (Abu, 2014). This rice field area is adequate to meet the rice needs in Kendari City. However, the facts on the ground show that the excellent land area has not increased rice productivity even though the government has provided subsidized fertilizer assistance. This is the discrepancy that becomes important to research. This study aims to determine the effectiveness of fertilizer delivered to farmers in Kendari City, with a subsidy

## MATERIALS AND METHODS

This research took place in Kendari City, the largest recipient of subsidized fertilizers at the Kendari City Regency level (BPS, 2018). The participants in this research were all rice farmers in Kendari City, with 240 persons. The sample size was determined by simple random sampling, with a sample size of 10% of the entire population, so that the respondents in this study were 24 farmers. The effectiveness of subsidized fertilizer is one of the factors studied in this study. The five principles (5T) relate to the exact location, type, quantity, price, and time

## RESULTS AND DISCUSSION

### Characteristics of Respondents

Rice farmers in Baruga Village who got subsidized fertilizers were the subjects of this research. Table 1 shows the characteristics of the respondents in this research based on the data gathered.

Table 1. Percentage of respondents by age, education, and land ownership

No	Characteristics of Respondents	Number of Respondents	Percentage (%)
1	Age		
	Productive (15 – 55 years old)	22	91,67
	Less productive (> 56 years)	2	8,33
	Amount	24	100
2	Level of education		
	Basic education	19	79,16
	Middle education	3	12,50
	Higher education	2	8,33
	Amount	24	100
3	Land Ownership		
	Medium (0.5 - 1 Ha)	9	37,50
	Large (1.00 - 2.00 Ha)	15	62,50
	Amount	24	100

Source: Primary data (2019)

Table 1 demonstrates that productive farmers aged 15 to 55 made up the majority of the respondents in this survey, accounting for 22 of them or 91.67 percent. This indicates that the farmers in Baruga Village are still in their prime. Sanjaya (2015) suggests that a productive age group can do tasks. A person is in the excellent physical condition and responsive to any changes or innovations in this age range. The same thing was also expressed by Waris et al. (2015) that farmers of productive

age have good physical abilities and mindsets in absorbing new information and applying it in real action. This statement means that productive age farmers are good potential in agriculture, and as much as 91.67% of this potential is in farmers in Baruga Village.

The data above also shows that the education of farmers in Baruga Village is at the primary level, which is as many as 19 respondents or equivalent to 79.16% of the total number of respondents. Adiyoga & Lukman (2017), one of the characteristics of respondents that influences farmer decision making in education. If analyzed further, Baruga Village farmers' low level of education is a threat that must be overcome. One solution is to follow what Saparyati (2008) explained that the low level of formal education could be overcome with support from informal education.

Other data shown in Table 1 are the characteristics of the respondents based on the area of land they own. According to Widya (2009), the land is one factor that influences the success of agricultural businesses, and almost all plant cultivation is still based on land resources. Field data shows that farmers in the fields in Baruga Village have a land area of between 1.00 - 2.00 Ha. As many as 15 farmers or equivalent to 62.50% of the total number of respondents are included in the category of having large land. This categorization refers to Prayitno & Arsyad (1987), which states that the area of agricultural land is classified into three categories, namely very narrow (between 0.25 – 0.49 ha), medium (between 0.50 – 1.00 ha), and broad (between 0.50 – 1.00 ha). (more than 1.00 ha). This means that rice paddy farmers in Baruga Village do not have land areas because the data shows that most farmers in Baruga Village have large land areas.

### The Effectiveness of Subsidized Fertilizer Distribution Based on the Right Principle

The Ministry of Home Affairs stipulates the Five Principles of Rights (5T) through Permendagri Number 15/M-DAG/PER/4/2013. According to the regulations, specific standards must be followed to procure and distribute subsidized fertilizers properly. The data can be seen in the following table.

Table 2. Effectiveness distribution

No	Effectiveness Indicator	Appropriate (%)	Less precise (%)	Total (%)
1	Precise Place	100,00	0,00	100,00
2	Type Accuracy	79,17	20,83	100,00
3	Price Accuracy	100,00	0,00	100,00
4	Quantity Accuracy	33,33	66,67	100,00
5	Punctuality	25,00	75,00	100,00
Average		67,50	32,50	100,00

Source: Primary data (2019)

The information in Table 2 is the result of processing field data. The first analysis is about the accuracy of the place. To determine the appropriateness of the area in the distribution of fertilizers, respondents in this study were asked questions about whether or not the allocation of subsidized fertilizers was appropriate. In this case, all respondents, namely as many as 24 farmers, answered that the percentage of subsidized fertilizers was following the proposed RDKK. This means that the accuracy of the place in the distribution is worth 100%. This finding follows the research of Arisandi et al. (2016), which states that location accuracy is one indicator to measure the effectiveness of fertilizer distribution. 100% of respondents in the study indicated that they received subsidized fertilizers at the correct location. In other words, it was easy to reach because it was close to the area of the managed agricultural land.

Next is the type accuracy analysis. The actual performance of subsidized fertilizers is measured by comparing the realization of subsidized fertilizer sales by type (urea, ZA, SP36, NPK, Organic) producers with government assignments/targets (PSO) to producers (Zulaiha et al. 2017). Farmers are the leading players in formulating fertilizer needs, offering different fertilizers for agricultural improvement. According to field data, urea fertilizers, ZA fertilizers, SP-36 fertilizers, NPK fertilizers, and Organic fertilizers are among the subsidized fertilizers that reach farmers. According to 19 respondents, or as many as 79.17%, farmers, the type of fertilizer allocated was appropriate and followed the Definitive Plan for Group Needs (RDKK). However, as many as 5 respondents or another 20.83% stated that the type of subsidized fertilizer allocated to farmers was still not appropriate. This is essential information that the government's various subsidized fertilizers have not met the desired fertilizer needs. More massive efforts are needed to avoid inaccuracies in the distribution of subsidized fertilizers.

The following correct principle is price accuracy. In general, the problem that farmers often complain about subsidized fertilizers is the price that far exceeds the HET set by the government. It is not affordable by farmers, is not available in sufficient quantities, and is not even available when needed (Rangkuti 2012). In the context of this research, the accuracy of pricing based on the Highest Retail Price (HET) for lowland is 100.00 percent. According to all of the respondents, the price of subsidized fertilizer at retail kiosks matched the government's HET (24 farmers). There was no response from respondents who noted that the cost of subsidized fertilizers did not fit the HET. This means that there is no problem distributing fertilizer based on its price.

The correctness of the number comes next. According to the findings of field data processing, up to 8 respondents (33.33 percent) agreed that the quantity received by farmers was commensurate with the government's allotment, according to the Definitive Plan. Meanwhile, according to the Definitive Plan, 16 respondents (66.67 percent) said farmers' amount was insufficient compared to the government's provision. This underlines that not all farmers in Kelurahan Baruga get the same quantity of subsidized fertilizer depending on the RDKK allotment. One of the challenges in the distribution is the quantity that has not attained 100 percent accuracy, which is crucial information as an assessment material. Many studies have reviewed the importance of fertilizer given to plants. One of them is the research result of Vidigal et al. (2002) that plant growth, in this case, shallots, can increase gradually with increasing amounts of K fertilizer.

The data in Table 2 also shows 6 respondents with a percentage accuracy (25.00%) stating that subsidized fertilizers are available when needed or when the planting season arrives. Meanwhile, 18 other respondents with a percentage of accuracy (75.00%) said that the timing of fertilizer availability was not accurate during the planting season. The timing is sometimes too late and sometimes too soon so that the fertilizer freezes. This data is a vital evaluation material regarding the distribution of subsidized fertilizers from the government, given that the timing of fertilizer application is one of the determinants of farmers' success, Budiyanto et al. 2017 that the treatment of giving organic fertilizer at the right time can affect soil fertility and the supply of nutrients for plants can be absorbed properly.

Overall, the success of subsidized fertilizer delivery to rice farmers can be observed from the precise principle, which shows that the average is 67.50 percent. The required percentage is 32.50 percent. This percentage is data that can be used as a reference so that the correct principle that has not reached 100% can be improved so that it contributes to increasing agricultural productivity in Kendari City.

## CONCLUSIONS AND SUGGESTIONS

The distribution of subsidized fertilizers to rice farmers in Baruga Village, Kendari City, is 67.50 percent based on the proper premise. This suggests that although this proportion is appropriate, efforts to improve the efficacy of subsidized fertilizer delivery must continue. Based on the findings of this study, the researcher recommends that relevant authorities or the agriculture service pay greater attention to the distribution process of subsidized fertilizer for farmers.

## REFERENCE

- Adiyoga W, Lukman L. 2017. Persepsi dan Adaptasi Petani Sayuran Terhadap Perubahan Iklim di Sulawesi Selatan (Vegetable Farmers' Perception on Adaptation to Climate Change in Lowland and Highland Areas of South Sulawesi). *J. Hort.* Vol. 27 No. 2, Desember 2017 : 279-296 . DOI: <http://dx.doi.org/10.21082/jhort.v27n2.2017.p279-296>
- Arisandi N W A, Sudarma I M, Rantau I K. 2016. Efektifitas Distribusi Subsidi Pupuk Organik dan Dampaknya terhadap Pendapatan Usahatani Padi Sawah di Subak Sungsang, Desa Tibubiu, Kabupaten Tabanan. *E-Jurnal Agribisnis dan Agrowisata*. Vol. 5. No.1. Januari 2016. ISSN: 2301-6523
- Badan Perencanaan Pembangunan Nasional.2011. *Kajian Strategis Kebijakan Subsidi Pertanian yang Efektif, Efisien dan Berkeadilan*. Jakarta.
- Badan Pusat Statistik. 2018. *Kecamatan Baruga Dalam Angka*
- Budiyanto A, Supriyadi T, Harieni S. 2017. Pengaruh Dosis dan Waktu Pemberian Pupuk Organik terhadap Pertumbuhan dan Hasil Tanaman Jagung Manis (*Zea mays Saccharata* Strut). *Agri-neca*. Volume 17 Nomor 1 Januari 2017.
- Darwis, V. dan A. R. Nurmanaf, 2004. Kebijakan Distribusi, Tingkat Harga, dan Penggunaan Pupuk di Tingkat Petani. *Forum Pengkajian Agro Ekonomi*. Volume 22, No 1, Juli 2004. Pusat

- Pengkajian dan Pengembangan Sosial Ekonomi Pertanian. Badan Pengkajian dan Pengembangan Pertanian. Bogor.
- Pamuncak R, Arifin B, Kasymir E. 2018. Peran Penggunaan Pupuk Pada Kinerja Produksi Tanaman Pangan Indonesia. *Jurnal Ilmu Agribisnis Volume 6. Nomor 3*
- Peraturan Menteri Perdagangan Republik Indonesia Nomor 15/M-DAG/ PER/4/2013.2013. *Tentang Pengadaan Dan Penyaluran Pupuk Bersubsidi Untuk Sektor Pertanian*. Jakarta.
- Prayitno H. Dan Lincoln Arsyad. 1987. *Petani Desa dan Kemiskinan*. Yogyakarta: BPFE
- Rigi N, Raesi S, Azhari R. 2019. Analisis Efektivitas Kebijakan Pupuk Bersubsidi Bagi Petani Padi Di Nagari Cupak Kecamatan Gunung Talang Kabupaten Solok. *JOSETA: Journal of Socio Economic on Tropical Agriculture Volume 1 Nomor 3: 75-83 Desember (2019)*
- Sanjaya R. 2015. *Faktor Yang mempengaruhi Adopsi Inovasi Petani*. Surabaya (ID): Angkasa Jaya.
- Saparyati DI. 2008. *Kajian Peran Pendidikan Terhadap Pembangunan Pertanian di Kabupaten Demak*. Tesis. Program Pascasarjana Magister Teknik Pembangunan Wilayah dan Kota. Universitas Diponegoro.
- Vidigal, S. M., P. R. G. Pereira, and D. D. Pacheco. 2002. Mineral Nutrition and Fertilization of Onion. *Informe. Agropecuario. 23(218):36-50*.
- Waris, Badriyah N. & Wahyuning DA. 2015. Pengaruh Tingkat Pendidikan, Usia dan Lama Beternak Terhadap Pengetahuan Manajemen Reproduksi Ternak Sapi Potong di Desa Kedungpring Kecamatan Balongpanggang Kabupaten Gresik. *Jurnal Ternak, 6(1): 3-8*.
- Widya Nasih. 2009. Membangun Kesuburan Tanah di Lahan Marginal. *Jurnal Ilmu Tanah dan Lingkungan, Vol. 9(2): 137-141*.
- Jatmika B, 2021. Hubungan Efektivitas Distribusi Pupuk Bersubsidi dengan Penggunaan Pupuk pada Padi Sawah (Kasus: Desa Medang Baru, Kecamatan Medang Deras, Kabupaten Batubara). Skripsi. Program Studi Agribisnis Fakultas Pertanian. Universitas Sumatera Utara.
- Rangkuti S. 2012. Efektivitas Pendistribusian Pupuk Bersubsidi di Kabupaten Deli Serdang Studi Kasus di Kecamatan Hamparan Perak. *Jurnal Administrasi Publik. Volume 3. Nomor 2*
- Safitri, M.A., Supriyono, B and Ribawanto, H. 2013. Distribusi Pupuk Subsidi kepada Petani Tebu dalam Perspektif Manajemen Publik. *Jurnal Administrasi Publik. 1(1): 102 – 109*
- Peraturan Menteri Pertanian RI RI No. 47/Permentan/SR. 310/11/2018 tentang alokasi dan harga eceran tertinggi pupuk bersubsidi sektor pertanian tahun anggaran 2019.
- Endro Gunawan, Sahat Pasaribu, 2020. Persepsi Petani dalam Implementasi Program Kartu Tani untuk Mendukung Distribusi Pupuk Bersubsidi. *Jurnal Ekonomi dan Pembangunan Vol 28, No. 2, 2020*
- Zulaiha AR, Nurmalina R, Sanim B. 2017. Kinerja Subsidi Pupuk di Indonesia. *Jurnal Aplikasi Manajemen dan Bisnis, Vol. 4 No. 2*. DOI: <http://dx.doi.org/10.17358/jabm.4.2.271> Tersedia online <http://journal.ipb.ac.id/index.php/jabm>