



Governance Challenges on Subsidized Fertilizer Distribution: Some Evidence to Support SDG 2 on Achieving Food Security in Kediri Regency

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ABSTRACT

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The distribution of subsidized fertilizer in Indonesia remains largely unfavourable to small farmers. The allocation of subsidized fertilizer has yet to meet the established Standard Operating Procedures (SOP). This can result in an uneven distribution of fertilizer quotas. This study examines the issues in the governance of subsidized fertilizer distribution that occur in Nglarangan Hamlet, Selosari Village, Kandat District, Kediri Regency. This research employs qualitative methods, including field observations, in-depth interviews with five key informants directly involved in the fertilizer distribution process, and literature reviews as supporting data. The results of this study indicate that the distribution of subsidized fertilizer does not yet meet the 6T principles (right type, right amount, right price, right place, right time, and right quality). Common issues include inaccuracies in data synchronization related to subsidized fertilizer allocation, limited choices of available subsidized fertilizers, and the distance between the kiosks for picking up subsidized fertilizer and the farmers' homes, as well as a lack of socialization regarding the fertilizer distribution mechanism through the i-Pubers system. These conditions cause delays in distribution and inequitable access for small farmers, which can impact agricultural productivity. These findings underscore the importance of more participatory and supportive policy interventions to achieve Sustainable Development Goals 2 on food security.

1. INTRODUCTION

The global food security crisis, exacerbated by climate change, conflict, and the pandemic, has left millions of people suffering from hunger and malnutrition. (Lerabeni, 2025) The agricultural sector plays a central role in achieving food security, particularly in the realization of the right to food. Indonesia is an agrarian country, where the majority of the population relies on the agricultural sector for its economic livelihood. (Saptaning Ruju Paminto et al., 2024) Rural households face significant daily agricultural risks that reduce their ability to meet their food and nutritional needs. (Nonvide et al., 2025) Kediri Regency has an area of 44,066 hectares of rice paddy agricultural land and 45,937 hectares of non-rice paddy agricultural land. (Kediri Regency Agriculture and Plantation Service, 2024) Kandat District has an area of 1,984 hectares of rice paddy agricultural land and 1,048 hectares of non-rice paddy agricultural land. (Kediri Regency Agriculture and Plantation Service, 2024) Selosari Village as one of the villages in Kandat District, received subsidized fertilizer assistance with a total land area of 166.85 hectares. The subsidized fertilizer assistance was allocated for four types of agricultural commodities, namely chili, corn, sugar cane, and rice (Ministry of Agriculture of the Republic of Indonesia, 2024b). Based on data provided by the Kediri Regency Agriculture and Plantation Service, fertilizer allocation Based on data provided by the Kediri Regency Agriculture and Plantation Service, the allocation of

subsidized urea fertilizer was 44,367 tons, a decrease of around 3,000 tons compared to 2022, which amounted to 47,367 tons. Furthermore, subsidized nitrogen, phosphorus, and potassium (NPK) fertilizers have also experienced a significant decline. In 2022, the allocation was 37,084 tons, but now it is down to 17,084 tons. (Kediri Regency Plantation and Agriculture Office, 2025) Nglarangan Hamlet, Selosari Village, Kediri Regency, received an allocation of subsidized urea fertilizer in 2024, receiving 88,647 tons, and subsidized nitrogen, phosphorus, and potassium (NPK) fertilizers, receiving 34,427 tons. (Ministry of Agriculture of the Republic of Indonesia, 2024a)

The government has established several regulations to maximize agricultural output in Indonesia. These regulations include Presidential Regulation No. 6 of 2025 concerning governance, principles, and the national legal framework. Minister of Agriculture Regulation No. 15 of 2025 addresses the technical implementation of administration and field execution. Minister of Trade Regulation No. 4 of 2023 focuses on the commercial management of subsidized fertilizers in the market, but with strict regulations to ensure targeted and efficient distribution. Kediri Regent Regulation (Perbup) No. 68 of 2015 regulates the need for, distribution of, and the highest retail price (HET) for subsidized fertilizers for the agricultural sector in Kediri Regency. The implementation of fertilizer subsidy policies in Indonesia has been comprehensive, starting from planning, setting the maximum retail price, the amount of the subsidy, and the fertilizer distribution system. These subsidies, which aim to increase agricultural productivity and support farmers, have evolved, reflecting changing policy priorities and economic conditions (Anderson et al., 2019). However, this policy has not been able to guarantee sufficient fertilizer availability. (Rozci & Rizkiyah, 2024).

The shortage of subsidized fertilizer has had a significant impact on crop yields and farmer incomes (Pratomo et al., 2024). Rusliyadi & Chen (2024) also stated that suboptimal harvests can lead to food insecurity, which in turn contributes to poverty, especially in rural areas. Rural communities are severely impacted by poverty and food insecurity. Unclear regulations regarding the criteria for farmers receiving subsidies lead to inaccurate targeting. Inaccurate data on farmers registered as subsidy recipients. The impact of agricultural subsidies on fertilizer application intensity varies among farmers with different operating scales and cropping structures, with smallholders and commercial crop growers experiencing more significant reductions in fertilizer application. (Wakaabu, 2023) Farmers' difficulty accessing subsidized fertilizer is due to a non-transparent distribution system. The distribution system has not fully implemented the 6T principle (right type, right quantity, right price, right place, right time, and right quality). Oversight of subsidized fertilizer distribution is still suboptimal, opening up opportunities for irregularities, such as misuse and hoarding. (Guna Setiawan et al., 2024) Furthermore, Radar Kediri reported that as of November 2024, the absorption rate of subsidized fertilizer in Kediri Regency had only reached around 50 percent. This indicates persistent disparities in access between sub-districts, influenced by cropping patterns, dry season conditions, and limited distribution of subsidized fertilizer at distribution kiosks. These conditions make it difficult for farmers to obtain subsidized fertilizer on time according to their needs. (Sidqi, 2024)

The question in this article is how the governance challenges in the distribution of subsidized fertilizer in Kediri Regency support the achievement of food security according to the SDG 2 target? The purpose of this article is to identify and analyze the challenges faced by farmers in the distribution of subsidized fertilizer in Kediri Regency and to

formulate effective policy recommendations to support the achievement of SDG 2 on food security.

Micro, Small, and Medium Enterprises (MSMEs) are a vital backbone of Indonesia's economy, contributing to over 60% of the national Gross Domestic Product (GDP) and absorbing more than 90% of the country's workforce (Kamar Dagang Indonesia, 2023). However, many MSMEs face significant challenges in the areas of marketing, branding, and digital adaptation, especially in the face of rapid technological development and increasingly digital consumer behavior (Hendrawan et al., 2024). One such enterprise is *Percetakan, Kaos, dan Sablon Kontras*, a family owned business in Madiun, East Java, specializing in custom printing, screen printing, and merchandise production. Despite its long-standing presence and quality products, the business continues to face stagnation due to poor promotional strategy, underdeveloped digital media presence, and lack of professionally designed visual branding assets.

In today's digital transformation era, platforms like Instagram, TikTok, and Facebook have become critical tools for consumer engagement and brand awareness, particularly for businesses in the creative industry (Kapoor et al., 2018). Studies show that MSMEs adopting content-based marketing and digital storytelling are more likely to capture consumer interest than those relying on traditional promotional approaches (Dwivedi et al., 2021). Yet, one of the main barriers faced by MSMEs is their limited capacity and digital literacy in managing these platforms effectively (Athia et al., 2023).

Moreover, visual communication plays a key role in branding. Well-designed graphics not only enhance brand perception but also foster consumer trust and emotional connection (Landa, 2019). As such, strengthening visual branding through tailored graphic design becomes a critical strategy in helping MSMEs become more competitive and visible in saturated markets. In response to these challenges, a community service initiative was conducted by a university team to design and implement strategic promotional media for *Percetakan, Kaos, dan Sablon Kontras*. This initiative did not merely offer a practical solution for short-term marketing needs but also focused on capacity building through design training and content creation workshops. The collaborative and participatory approach aimed to ensure that the business could sustain its promotional efforts independently in the future.

This paper documents the methods, outcomes, and implications of the community engagement program, offering a model for university-driven MSME empowerment that bridges academic knowledge with real-world application in the field of communication and design.

2. RESEARCH METHOD

The approach used in this research is a qualitative approach (Aspers & Corte, 2019), explaining that the focus of qualitative research is on the process and meaning of the informants. A qualitative approach means processing and collecting data through interviews, observation, and documentation.

This research will be conducted in Nglarangan Hamlet, Kandat District, Kediri Regency, East Java, with five farmers who regularly use subsidized fertilizers in their agricultural planting. We recruited these informants using purposive sampling (Turner, 2020).

This study used observation and interviews with farmers (Creswell, 2007). We collected data through in-depth interviews, direct observations on farms, and documentation to explore farmers' experiences and challenges in obtaining and utilizing subsidized fertilizer. To complement the interview and observation data, we also conducted a literature review, specifically government documents, statistical reports, and printed and online newspapers. After all data had been collected, we analyzed the data and then compared the analysis results with the interviews, literature review, and documentation. (Miles & Huberman, 1994)

3. RESULTS AND DISCUSSION

After conducting a series of direct field observations, our data identified various challenges faced by farmers receiving subsidized fertilizer. These findings emerged from interactions, observations, and interviews with several farmers in the research focus area. Although the fertilizer subsidy program was designed to help increase agricultural productivity and reduce farmers' financial burdens, in reality, several obstacles remain in the field that hinder its effective implementation.

1. Inaccurate data synchronization related to subsidized fertilizer allocation.

Difficulties in the data collection process arise when there are discrepancies between the submitted documents and the information on the completed forms. This includes differences in spelling of names, differences in the landowner's name listed on the SPPT (Land Registration Certificate) and the name on the KTP (National ID Card), and the large number of farmers using a rental system, which fails to submit documents for farmer card applications to meet the agreed-upon schedule with extension workers. This also occurred in Nglarangan hamlet, where data synchronization errors occurred. Inaccurate data synchronization related to subsidized fertilizer allocations occurred.

"There are many cases, sir. Yesterday, there was a farmer who happened to have the same name, but the other name wasn't registered. When they picked up the fertilizer, it turned out their NIKs were different. The village government made a mistake in inputting the data, so the person registered was the person with the same name, but they weren't registered for this year's planting season."
[Interview with Mr. Agus, a farmer receiving subsidized fertilizer]

2. The distance between the subsidized fertilizer collection kiosk and the farmer's house

The government continues to improve the management of subsidized fertilizer through the i-Pubers application, developed by the Ministry of Agriculture of the Republic of Indonesia in collaboration with PT Pupuk Indonesia Persero. Through the i-Pubers application, every transaction for subsidized fertilizer purchases is recorded directly, as the application is equipped with geo-tagging and timestamps, which facilitate recording and tracking transactions. This application also helps increase transparency and accuracy in determining subsidized fertilizer recipients and monitoring subsidized fertilizer stocks at the retail kiosk level. Recording in the i-Pubers application uses the Population Identification Number (NIK) or KTP owned by farmers. However, the government failed to assess the distance between subsidized fertilizer kiosks and farmers' homes. Before using i-Pubers, farmers in Nglarangan hamlet collected subsidized fertilizer from Mr. Johan's house, which is less than 1 kilometer away. However, since using i-Pubers, farmers in Nglarangan hamlet have had

to collect subsidized fertilizer from Galuhan hamlet, Kandat village, 6 kilometers away. This has significantly hampered fertilizer distribution to farmers.

"Distance is also a problem, sir. Previously, it was easy; we could pick it up at Mr. Johan's kiosk. Now, it's far, sir, we have to go to Galuhan hamlet first. We usually run out of fertilizer by the time we get there, because it's been flooded by farmers who live in Galuhan hamlet." [Mr. Karmuji, a Farmer receiving subsidized fertilizer]

3. Limited choice of subsidized fertilizers available

The total allocation of subsidized urea fertilizer in Nglarangan Hamlet in 2024 is 34,427 tons. This consists of four commodities: chilies (0 tons) (0%), corn (24,085 tons) (82%), rice (5,462 tons) (18%), and sugar cane (0 tons).

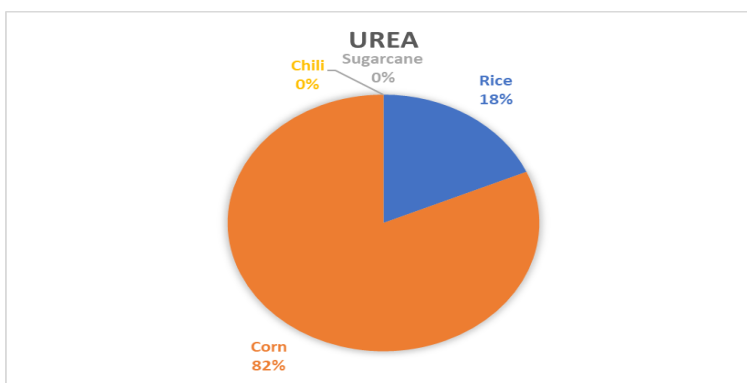


Figure 1. Allocation of Subsidized Urea Fertilizer for Nglarangan Hamlet in 2024

The total allocation of subsidized NPK fertilizer in Nglarangan Hamlet in 2024 is 88,647 tons. This consists of four commodities: chilies (0.56 tons (1%), corn (28,908 tons (31%), rice (4,959 tons (5%), and sugar cane (59.1 tons (63%).

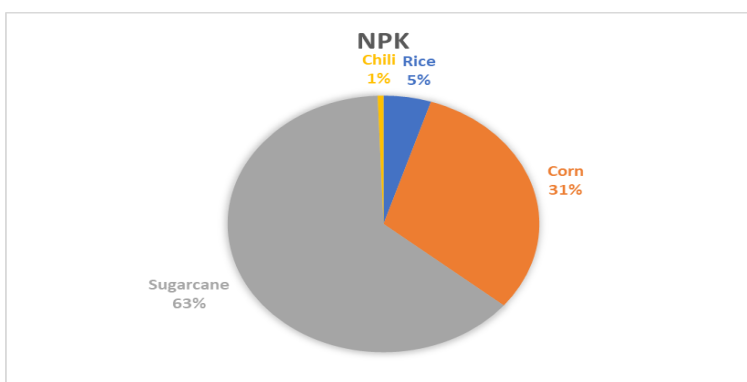


Figure 2. Allocation of Subsidized NPK Fertilizer for Nglarangan Hamlet in 2024

The Ministry of Agriculture (Kementan) issued a Ministerial Regulation concerning the Procedures for Approval of the Allocation and Highest Retail Price of Subsidized Fertilizers for the Agricultural Sector. The regulation reduces the number of subsidized fertilizers from five types: ZA, Urea, NPK, SP-36, and Petroganik organic fertilizer, to two types: Urea and NPK. However, interviews revealed that farmers still require subsidized ZA fertilizer. According to farmers, most of the land in Nglarangan hamlet is not suitable for the available subsidized fertilizers, namely Urea and NPK.

"If you use urea fertilizer on the land here, the plants become brittle, the leaves turn brown and dry. There's plenty of non-subsidized ZA fertilizer available. I don't know why subsidized ZA fertilizer was discontinued." [Mr. Budi, a farmer receiving subsidized fertilizer]

"Farmers are asking for the ZA fertilizer subsidy to be reinstated like before, because if they use urea, it becomes brittle easily and the leaves turn brown." [Mr. Muskam, a farmer receiving subsidized fertilizer]

4. Problems related to the SOP for taking subsidized fertilizer

The problem that occurs is that farmers do not take the allocation that corresponds to the data listed on i-Pubers, which is what causes other farmers not to receive their share of subsidized fertilizer.

"Farmers want to take a lot of subsidized fertilizer right away, so it doesn't match the planting season data set in i-Pubers. That's why other farmers, when they want to take subsidized fertilizer, the stock is already depleted. Because their quota is taken by fellow farmers." [Mr. Agus, a farmer receiving subsidized fertilizer]

"The information was slow, sir, so when we went there, we didn't get any fertilizer because it had already been taken by farmers who received the information sooner." [Mr. Muskam, a farmer receiving subsidized fertilizer]

Based on the findings in the field, which show various problems in the implementation of subsidized fertilizer distribution, the author feels the need to provide a number of policy recommendations as an improvement effort.

1. The village government cross-checks the data of subsidized fertilizer recipients by involving farmers who are members of farmer groups/youth organizations.

This program will increase transparency in village governments. This step aims to ensure that data on subsidized fertilizer recipients is more accurate and reflects real-world conditions. By involving farmer groups and youth organizations, village governments can identify truly active farmers eligible for subsidized fertilizer. This approach also prevents data errors, such as duplicate names or discrepancies in National Identification Numbers (NIK), and increases transparency in data collection.

2. The village government procured vehicles to distribute subsidized fertilizer to farmers.

This recommendation is intended to help farmers who experience difficulties obtaining subsidized fertilizer due to the distance from kiosks to their homes. With village government vehicles, subsidized fertilizer can be distributed directly to farmers' areas, eliminating additional transportation costs and allowing them to use the fertilizer immediately as needed during the planting season.

3. Conducting recruitment of agricultural experts to determine the suitability of community land for the types of subsidized fertilizer available.

The presence of agricultural experts will help provide farmers with guidance on the appropriate types of fertilizer for their soil conditions. This is crucial for more precise and

effective use of subsidized fertilizers, preventing crop damage and increasing yields for rural farmers.

4. The sub-district government must conduct intensive outreach to the village government regarding the fertilizer collection mechanism under existing regulations.

This outreach is necessary to ensure that village governments and farmers understand the correct procedures for collecting subsidized fertilizer, including the allocation of fertilizer per planting season and the mechanisms within the i-Pubers system. With a clear understanding, farmers will avoid exceeding their allotted fertilizer allowance, ensuring fair, orderly, and regulatory compliance with subsidized fertilizer distribution.

4. CONCLUSION

This study confirms that subsidized fertilizer governance has not favored smallholder farmers, particularly those in Nglarangan Hamlet, Selosari Village. Farmers complained about the distance from their homes to subsidized fertilizer kiosks, which they considered less than ideal. Fertilizer allocation data in the i-Pubers system is inaccurate and often does not reflect actual conditions on the ground. The lack of firmness from the organizers regarding SOPs regarding subsidized fertilizer collection makes it difficult for farmers to obtain subsidized fertilizer on time, resulting in delays in the planting process. Limited fertilizer choices result in less than optimal harvests due to differences in soil compatibility with available fertilizers. Several problems still occur among farmers. This results in reduced agricultural productivity, which can lead to a food crisis. Poverty among farmers will worsen, indicating the need for policy intervention to address these issues.

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