

Improving Understanding of the Definitive Group Needs Plan (RDKK) Through the Role of KKN in Cikole Village, Sumedang

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Abstract

Purpose: This community service aimed to improve farmer group (Gapoktan) understanding of the Definitive Group Needs Plan (RDKK) system in Cikole Village, Sumedang, to address poor distribution of subsidized fertilizers caused by gaps in knowledge and capacity. The goal was to empower Gapoktan so farmers could better access essential agricultural inputs.

Method: A qualitative case study with a participatory approach was used, involving field observations, interviews, and a socialization session led by KKN students and the local Agriculture and Food Security Unit. The intervention focused on clarifying Gapoktan's roles and responsibilities within the RDKK process.

Practical Applications: The activity successfully transferred knowledge about the RDKK system, enabling Gapoktan to take direct action in managing their fertilizer needs. Farmer groups shifted from passive recipients to active participants by updating and verifying member data in the e-RDKK system.

Conclusion: The KKN program significantly improved Gapoktan's understanding and sense of responsibility regarding the RDKK, correcting the misconception that registration was solely the task of extension workers. This change supports more accurate, fair, and efficient fertilizer distribution, strengthening local institutional capacity and food security.



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Introduction

Student Community Service (KKN) at Muhammadiyah University of Bandung is one form of implementation of the Tri Dharma of Higher Education, namely community service. This program is designed to apply the knowledge and insights gained by students during their studies to make a real contribution to solving community problems. The role of students as agents of change is crucial, especially in the complex context of rural development, where they can act as catalysts for knowledge transfer and empowerment (Astuti et al., 2025).

The agricultural sector plays a strategic role in maintaining the global economy, particularly in Indonesia, where it is the backbone of national food security (Hasibuan et al., 2024). To achieve national food security, fertilizer is a crucial input for increasing agricultural productivity and yields. Therefore, the government has prioritized fertilizer-related policies as a strategic issue to create a conducive climate for fertilizer availability in Indonesia. One such policy is the provision of fertilizer price subsidies to farmers. This subsidy aims to support farmers, plantation owners, livestock breeders, and fish farmers in meeting their fertilizer needs in accordance with the six principles of use: (appropriate quantity, type, time, place, quality, and price) (Siagian et al., 2023).

To increase the effectiveness of subsidized fertilizer distribution, fertilizer needs must be based on farmer needs, compiled in groups in the form of a Definitive Group Needs Plan (RDKK), which must be prepared simultaneously and in a timely manner (Tiyastuti, 2022). The Definitive Group Needs Plan (RDKK) is a planning document that plays a crucial role in ensuring the availability and distribution of targeted resources at the group or community level. Traditionally, the RDKK is often recognized as a key tool in the agricultural sector, serving as the basis for farmers to submit subsidized fertilizer applications to the government (Hasan, 2024). One way to encourage farmer groups to prepare the RDKK is through guidance from extension workers, technical officers, village branch heads/heads of regional technical implementation units (KCD)/heads of regional technical implementation units (KUPTD), and support from local village heads/sub-district heads.

Several reports indicate that the RDKK preparation process often encounters obstacles. If the RDKK is still carried out conventionally, this can lead to delays and even result in some farmers not being registered in the Ministry of Agriculture's e-RDKK data (Nurhalisa, 2021). Other problems include discrepancies between farmers' initial proposals and government-approved allocations, as well as administrative and technical obstacles that make things difficult for farmers, such as complicated bureaucracy in processing Farmer Cards and a lack of understanding of fertilizer redemption procedures at kiosks (Rozci, 2024).

Cikole is an administrative area located in Cimalaka District, Sumedang Regency, West Java Province. The geographical characteristics and socio-economic conditions of Cikole Village are heavily influenced by the agricultural sector. Data shows that more than half of the village's area, 53.8%, or 144.2 hectares of the total 267.9 hectares, is used for agricultural activities. Most of this land is dry land, covering 126 hectares allocated for gardens, while only 18.2 hectares are used for rice paddies (BKKBN, 2021). The community's economic dependence on the agricultural sector is evident from the population's occupational data, where the majority of Cikole Village residents work as farmers or farm laborers.

The need for subsidized fertilizer in accordance with the RDKK Program is crucial for the welfare of farmers in Cikole Village. However, observations in Cikole Village identified a significant gap in understanding regarding the RDKK. Several problematic data points were found in the RDKK, such as errors in long names and land area. This prevented some farmers from effectively utilizing their farmer cards to redeem subsidized fertilizer.

The problems in Cikole Village are not isolated phenomena, but rather a direct manifestation of broader systemic failures at the national level. Farmers and farmer groups (Gapoktan) in Cikole Village feel they lack full responsibility for updating data because the existing system is complex and does not guarantee that accurate data will result in appropriate allocations. This gap in understanding fosters a passive mindset among farmers, who are

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more inclined to wait for instructions from external parties, such as agricultural extension workers, to manage all RDKK matters (Gunawan & Pasaribu, 2020).

The Community Service Program by Students (KKN) of Muhammadiyah University of Bandung in Cikole Village requires proactive participation as catalysts and community supporters in strengthening the success of the Definitive Group Needs Plan (RDKK) Program. In its implementation, students collaborated with the Sumedang Regency Agriculture and Food Security Technical Implementation Unit (UPTD) to conduct outreach activities to provide Gapoktan (Farmer Group Associations) with a deeper understanding of the RDKK. Through systematic outreach, students hope to empower farmers to be more independent and understand fertilizer subsidy policies, as well as being able to optimize their use to improve welfare and agricultural productivity in Cikole Village.

Method

This research uses a qualitative approach with a case study method, using community service (KKN) activities to in-depth analyze the process and impact of the RDKK socialization. Although the main intervention activity occurred only once, its design was framed within a participatory action framework focused on changing participants' understanding and initiatives. This model emphasizes dialogue and collaboration, with KKN students and the Technical Implementation Unit (UPTD) acting as facilitators, encouraging active participation, rather than simply conveying information in a one-way manner.

The community service activity in Cikole Village, Cimalaka District, Sumedang Regency lasted for one month and three days, from August 6 to September 5, 2025. This community service activity was a strategic step for students to make a real contribution to supporting the progress and welfare of the village community. KKN 12 students from the University of Muhammadiyah Bandung collaborated with the UPTD Agriculture and Food Security in Sumedang Regency as expert resource persons, providing information validity and knowledge transfer.

During this period, Community Service Program (KKN) students from the University of Muhammadiyah Bandung conducted field observations and unstructured interviews with Gapoktan (Farmer Group Associations) and village officials to gain a comprehensive overview of the problems faced by farmers and their urgent needs.

As a follow-up, a systematic outreach guide was developed, involving the Agricultural and Food Security Technical Implementation Unit (UPTD) as resource persons. The proposed model aims not only to transfer knowledge but also to empower farmers to become active agents in planning and managing their needs, thereby increasing the effectiveness of the fertilizer subsidy program and promoting sustainable food security.

Result

Field observations and interviews with several representatives of Farmer Group Associations (Gapoktan) in Cikole Village revealed significant differences in understanding regarding the RDKK program. Data from the program indicate that the community still does not fully understand the technical aspects of RDKK utilization. In particular, there is a widespread misunderstanding among farmers, who feel that registration in the RDKK is the responsibility of Agricultural Extension Workers (FWI), not Gapoktan as a collective unit. This is the main reason why many farmers do not receive subsidized fertilizer, which is their entitlement. Consequently, farmers prefer to purchase fertilizer independently at a relatively higher price.

Historically, farmers have often been accustomed to a top-down development approach, where authorities, such as agricultural extension workers, are viewed as implementers or implementers of government policy. Consequently, when policy changes shift administrative

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responsibility and planning initiatives to farmer groups, farmers' mindsets do not immediately adapt. Farmers tend to wait for direction or implementation from external parties or agricultural extension workers (Simamarta et al., 2024).

This mismatch between farmers' expectations and their responsibilities directly impacts delays in the preparation of the RDKK. Farmer Groups (Gapoktan) have become passive, and existing RDKK data is inaccurate, with errors in names and inaccurate land area estimates. This situation results in some farmers not being recorded in the Ministry of Agriculture's E-RDKK data. The resulting inefficiencies not only harm farmers personally but also hamper the effectiveness of fertilizer subsidy programs at the village level di tingkat desa.

To address these issues, students from the Community Service Program (KKN) at Muhammadiyah University of Bandung conducted a community outreach program with the Sumedang Regency Agriculture and Food Security Technical Implementation Unit (UPTD). This activity aimed not only to transfer information but also to explain the roles of each party within the RDKK ecosystem. The primary focus was on the crucial role of the Farmer Group (Gapoktan) as the primary entity responsible for planning and submitting RDKK proposals, as well as acting as a liaison between farmers and the fertilizer distribution system. The outreach also provided an understanding of fertilizer exchange procedures at kiosks, including the use of the Tani Card.

Figure 1. RDKK Socialization Documentation



Source: Private Documentaiton, 2025.

This socialization activity was attended by 15 participants, including farmers and officials from Cikole Village, Sumedang Regency. This socialization activity had a significant impact on the understanding and behavior of the Gapoktan. The socialization activity had a tangible impact on the understanding of Gapoktan. The changes occurred not only limited to increased knowledge but also increased their motivation to take action. Previously, Gapoktan felt they had no responsibility, but now they recognize their important role as a liaison and feel motivated to actively update and review member data in the e-RDKK system. This increase in agency and awareness demonstrates that targeted interventions can trigger positive behavioral change.

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Table 1. Pre-Post Conditions

Understanding Aspects	Pre-Socialization Conditions (Misconceptions/Narratives)	Post-Socialization Conditions (New Understanding/Actions)
RDKK Person in Charge	Agricultural Extension Workers as External Parties	Gapoktan as a collective entity and the primary responsible party
Causes of Data Problems	Lack of Extension Intervention	The absence of Gapoktan initiatives to update internal data
The Role of Farmer Groups	Only a Passive Communication Platform	Responsible for formulating needs plans and ensuring farmers' rights are met
Concrete Steps	Waiting for Directions and Registration from Other Parties	Proactive in updating and reviewing member data in e-RDKK

Source: Author's Work, 2025.

Discussion

Socialization activities can be more clearly understood using the theory of knowledge transfer. This process is not simply the distribution of factual information (explicit knowledge), but also emphasizes transforming misconceptions (implicit knowledge) into correct and applicable understanding. Based on the results of the socialization provided by the Agricultural and Food Security Technical Implementation Unit (UPTD), agricultural extension workers do have a crucial role, but not as those responsible for registration. Their duties are more akin to mentors, facilitators, educators, and advisors, providing support to farmers in managing their agricultural businesses and finding solutions to the challenges they face. The socialization conducted by students from the Community Service Program (KKN) at Muhammadiyah University of Bandung and the UPTD of Agriculture and Food Security in Sumedang Regency successfully corrected Gapoktan's misconceptions about their role. Thus, knowledge about the RDKK (Regional Farmer Group) transformed from mere information to an empowerment tool.

This knowledge transfer is a fundamental prerequisite for community empowerment. In community empowerment, agricultural extension workers play a crucial role in increasing knowledge of the RDKK system (Rahmadani et al., 2023), enabling communities to optimally access, utilize, and develop local potential. According to Ife (1995:182), empowerment is essentially a process of providing resources, opportunities, and skills so that an organization can control its own future. Thus, community empowerment can increase individual capacity, strengthen social structures, and expand community participation in decision-making, thereby building sustainable independence.

In this context, knowledge of the RDKK (Regional Development Planning) is a "resource" that helps Gapoktan (Farmer Farmers Group) take control of their data management and gain better access to subsidized fertilizer. The increased enthusiasm and initiative of Gapoktan in updating data, as found in this study, is concrete evidence of this empowerment process. As an organization, Gapoktan is not merely a group of farmers, but an institution that plays a vital role in providing agricultural production and planning for the needs of its members.

Although the KKN socialization has been successful at the micro level by empowering Gapoktan, the sustainability of its positive impacts is still very vulnerable to larger systemic failures that are beyond their control (Ombudsman RI, 2021). This gap shows that empowerment at the community level cannot stand alone. These problems include: (1) Mismatch between the national fertilizer allocation set by the government and the proposed

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needs submitted by farmers, which often results in a significant gap. (2) Chronic technical and administrative obstacles in the Farmer Card system, such as complicated bureaucracy and cases where farmers' Population Identification Numbers (NIK) are not activated, which can prevent farmers from redeeming fertilizer even though they are registered in e-RDKK. (3) Potential distribution problems at the retail kiosk level, such as price spikes above the Highest Retail Price (HET) and fertilizer seepage into non-subsidized markets (Riki et. al., 2022).

The analysis shows that the outreach program conducted by the Muhammadiyah University of Bandung Community Service Program (KKN) has contributed to strengthening the institutional capacity of the Farmers' Group (Gapoktan). By providing accurate information, this outreach program supports Gapoktan in carrying out its intended function as a collaborative forum and provider of effective production facilities. In this context, the role of the KKN students is as a catalyst for change, facilitating internal learning processes and helping Gapoktan become more efficient.

Furthermore, through this outreach program, Gapoktan is encouraged to update and double-check member data to ensure accurate registration in the e-RDKK system. This step is crucial for addressing administrative issues and also supporting the more targeted distribution of subsidized fertilizer. Thus, the outreach program conducted by the Muhammadiyah University of Bandung Community Service Program students has significantly contributed to strengthening the institutional capacity of Gapoktan in Cikole Village and improving food security through more efficient management of fertilizer subsidies.

Conclusion

The outreach activities conducted by KKN Group 12 students from Muhammadiyah University of Bandung in collaboration with the UPTD Agriculture and Food Security (Technical Implementation Unit for Agriculture and Food Security) of Sumedang Regency in Cikole Village have demonstrated positive results in increasing the knowledge and role of Gapoktan (Farmer Groups) in the subsidized fertilizer distribution process. Gapoktan, which previously did not fully understand its role in the preparation of the RDKK (Farmers' Cooperative Development Plan), now increasingly recognizes the importance of its role as a bridge between farmers' needs and the fertilizer distribution system. By implementing a participatory knowledge transfer model, this activity has been able to address existing misunderstandings and build Gapoktan's independence to take concrete action to meet the needs of its members. Theoretically, the results of this study demonstrate that targeted interventions, responsive to specific community needs, and grounded in an academic framework can produce significant and qualitatively measurable impacts. This success also demonstrates that KKN has great potential as an agent of change capable of empowering communities from the grassroots level.

To ensure the sustainability and success of the subsidized fertilizer program, it is recommended that Gapoktan and farmers establish sustainable internal mechanisms, such as regular updates of e-RDKK data and a mentorship system among members. Meanwhile, KKN students should adopt an empowerment model based on knowledge transfer and institutional strengthening as a primary focus, and design sustainable programs so that the benefits extend beyond a one-time intervention and have a long-term impact on the community.

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