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THE CETAK SAWAH RAKYAT PROGRAM: EFFORTS TO INCREASE RICE PRODUCTION IN THE ARCHIPELAGIC REGION OF SALANG DISTRICT, SIMEULUE REGENCY

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Abstract

The Cetak Sawah Rakyat (CSR) program conceptually executed as a paddy field optimization initiative is a government strategy aimed at increasing rice production and strengthening food security by enhancing land productivity and cropping intensity. As an archipelagic region, Simeulue Regency possesses significant potential for rice field development; however, it faces various constraints, such as limited agricultural infrastructure and cultivation technology, which restrict optimal cropping frequency. This community service activity was conducted to enhance farmers' understanding and readiness regarding the implementation of the CSR Program in Simeulue Regency. Held at the Agricultural Extension Center (BPP) office in Salang District, the activity employed a participatory empowerment approach involving farmers, farmer groups, village governments, agricultural extension officers (PPL), and the Department of Agriculture of Simeulue Regency. The methods comprised preparatory stages, socialization and counseling, problem identification discussions, and the distribution of questionnaires to assess farmer group readiness. Of the 1,162 hectares of land proposed under the prospective farmer and land scheme (CPCL), 981.36 hectares met the technical and administrative requirements, with 31 farmer groups declared eligible for the program. This community service initiative successfully enhanced public understanding regarding their rights, obligations, and the importance of sustainable rice field management. The CSR program is expected to boost rice production by increasing annual harvest frequency, strengthen institutional capacity among farmers, increase community income, and support sustainable food security in archipelagic regions.

Keywords: Cetak sawah rakyat, rice production, food security, archipelagic region, cropping intensity.

INTRODUCTION

Food is a basic human need that must be adequately, safely, and sustainably available. Rice is a primary staple food consumed by 3.5 to 4 billion of the world's 8 billion population. Approximately 90% of global rice consumption and production occurs within the Asian region, including Indonesia, positioning rice as a strategic element in global food security (Dorairaj & Govender, 2023). In Indonesia, rice serves as the primary staple food, implying that paddy cultivation plays a pivotal role in maintaining national food security. Food security relates not only to availability but also encompasses accessibility, stability, and production sustainability across various regions, including archipelagic and remote areas. Stable rice production serves as a critical indicator for safeguarding national food security. As an agrarian nation, Indonesia faces significant challenges in maintaining productive wetland areas. The conversion of agricultural land into residential, plantation, or infrastructure areas has reduced the existing paddy field acreage. The national conversion rate of paddy fields, reaching 96,500 hectares annually, poses a severe threat to national food security. This substantial reduction in primary paddy fields inevitably leads to a decline in national rice production. Consequently, initiatives focused on expanding crop productivity and optimizing arable land through the Cetak Sawah Rakyat program represent vital government strategies for enhancing national rice production

(Mulyani et al., 2016; Mulyani, 2022). The Cetak Sawah Rakyat (CSR) program is an agricultural development initiative designed to optimize paddy field utilization through community participation. Beyond expanding the cropping index, this program fosters farmer empowerment by utilizing local resources, strengthening farmer group institutions, and maximizing regional agricultural potential. The success of this program is heavily influenced by land readiness, irrigation infrastructure support, technical assistance, and active community involvement in agricultural land management. Within the context of community service, the CSR program serves as an empowerment medium that enhances farmer capacity while strengthening regional food security (Rikardus, 2025).

Simeulue Regency is an archipelagic territory in Aceh Province that possesses substantial potential for developing the food agriculture sector, particularly paddy cultivation. However, the geographical conditions of an archipelagic region present various constraints to agricultural development, such as limited transportation access, inadequate agricultural infrastructure, limited cultivation technology, and sub-optimal productivity of community agricultural land. Salang District, as an archipelagic component of Simeulue Regency, exhibits extensive land potential for people's paddy development; however, a portion of this land has not been optimally utilized for continuous rice farming. Farmers in this archipelago generally manage their farms traditionally, constrained by minimal production inputs and agricultural technology, which often limits the annual cropping frequency to a single planting season (cropping intensity of 100%). Low rice productivity in archipelagic regions is driven not only by technical cultivation factors but also by restricted human resource capacity, weak access to agricultural extension, and deficient irrigation infrastructure. Consequently, local rice production remains insufficient to meet community food demands optimally, resulting in a high dependence on rice supplies from outside the island.

The implementation of the Cetak Sawah Rakyat program in Salang District offers a strategic solution to boost rice production by increasing the annual cropping index from a single harvest to two or three harvests per year. Through the revitalization of paddy field functions, paddy cultivation mentoring, and institutional strengthening of farmer groups, sustainable agricultural productivity can be achieved. This program constitutes an effort toward community empowerment based on local potential, aimed at improving farmer welfare and reinforcing food security within the archipelagic region (Azhar et al., 2025). Increasing rice production through the CSR program aligns with previous research indicating that harvested area, land productivity, and farmer capacity are critical determinants for enhancing national food production (Rahim et al., 2024). Furthermore, reinforcing food security policies demands collaboration among governments, communities, farmer groups, academics, and other stakeholders, which has proven effective in accelerating rice production across various regions. Therefore, university-led community service activities that accelerate the CSR program in Salang District must adopt a participatory approach, engaging the community as the primary subjects of agricultural development.

A socially and economically impactful CSR program generates employment, elevates farmer household incomes, and stimulates rural economic activity. In the short term, the program boosts rice production through land optimization, whereas in the long term, it mitigates dependency on external food supplies and fosters self-sufficiency in archipelagic regions. Given that archipelagic areas are highly vulnerable to food distribution disruptions, enhancing local food production becomes an urgent necessity (Elsion et al., 2020). Thus, community-based paddy field development stands as an adaptive strategy for addressing food security challenges in island regions. Based on these premises, the community service activity titled "Cetak Sawah Rakyat Sebagai Upaya Peningkatan Produksi Padi di Wilayah Kepulauan Kabupaten Simeulue – Kecamatan Salang" is imperative. This program is expected to optimize agricultural land utilization, strengthen farmer capacity, increase community harvest frequency, and support sustainable food security in the archipelagic region of Simeulue Regency. Additionally, this initiative is anticipated to serve as a model for agriculture-based community empowerment replicable in other archipelagic regions across Indonesia.

LITERATURE REVIEW

Food Security

Food security represents a strategic issue in national development, particularly within developing countries with elevated rice consumption levels such as Indonesia. According to the FAO, food security is achieved when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food to meet their dietary needs for an active and healthy life (Mottet et al., 2017). Furthermore, accelerating local food production serves as a critical strategy to counter global food crisis threats; regions exhibiting robust local food production capacities demonstrate greater resilience against supply chain disruptions and market price volatility (Zhang et al., 2021). Food security itself is shaped by an intersection of social, economic, environmental, and institutional community factors (Nosratabadi et al., 2020). Within archipelagic territories such as Simeulue Regency, local food

production holds a more critical strategic value due to supply distribution dependence on maritime transport. Consequently, optimizing paddy field development and accelerating rice production constitute essential steps toward fostering food self-sufficiency among island communities (Ngongo et al., 2021).

Cetak Sawah Rakyat Program

The Cetak Sawah Rakyat program is a governmental policy designed to optimize and expand paddy field acreage to enhance national food production, particularly rice. This program forms an integral part of agricultural development strategies aimed at mitigating paddy field shrinkage driven by land conversion and population growth (Ngongo et al., 2021). It contributes significantly to increasing rice yields, elevating farmer incomes, and stimulating local economic activities. Research conducted in West Sumatra demonstrates that agricultural land conversion significantly threatens the sustainability of regional food production and security (Umar & Arif, 2023). Initiatives focused on expanding and optimizing paddy field functions are regarded as strategic mechanisms for boosting rice production. Especially in regions retaining unexploited land potential, the Indonesian government continually promotes paddy field development to support national food self-sufficiency (Hatta et al., 2023).

Moreover, studies on the sustainability of Indonesian rice production indicate that primary challenges comprise biophysical conditions, land degradation, climate change, limited cultivation technologies, and fragile farmer institutions. Rice cultivation on marginal and swamp lands in Indonesia face recurrent risks of flooding, drought, and low adaptive capacity among farmers regarding climate variations. Hence, refining cultivation technologies, enhancing farmer capacities, and strengthening institutional frameworks represent vital determinants for sustaining national rice yields (Dhamira & Irham, 2020; Frimawaty et al., 2013). Consequently, the Cetak Sawah Rakyat program must be integrated with community empowerment frameworks, farmer group capacity building, environmental management, local government policy alignment, and multi-stakeholder collaboration, including higher education institutions (Florini & Pauli, 2018; Hikmawan et al., 2020).

METHOD

This community service activity was conducted to implement the Socialization of the Cetak Sawah Rakyat (CSR) Program for beneficiary farmers and farmer groups, aligned with the Decree of the Director General of Agricultural Infrastructure and Facilities regarding the Technical Guidelines for Technical Design (SID) for Paddy Field Programs for the 2026 Fiscal Year. The activity utilized a participatory empowerment approach, positioning farmers and farmer groups as the primary subjects to ensure their active involvement throughout the process. This initiative aimed to guarantee that beneficiaries thoroughly understand their rights and obligations within the program.

Location and Timeline

The community service activity took place at the Salang District Agricultural Extension Center (BPP) office, Simeulue Regency, on Monday, April 13, 2026. This location was selected because Salang District contains the highest concentration of targeted beneficiary groups, accounting for 9 out of the 31 farmer groups across Simeulue Regency.

Participants

Participants in this community service initiative included farmers and executive members of candidate beneficiary farmer groups, village heads, village secretaries, community leaders from the target areas, agricultural extension officers (PPL) mentoring the groups, and officers from the Department of Agriculture of Simeulue Regency responsible for the program.

Implementation Stages

The implementation of this community service project followed these distinct stages:

1. **Preparation Stage:** This phase involved: a) Coordinating with prospective participants via the Department of Agriculture of Simeulue Regency; b) Identifying existing paddy field potentials; c) Developing socialization materials focusing on land optimization; d) Preparing administrative and operational equipment; and e) Finalizing the execution schedule.
2. **Socialization and Counseling Stage:** Executed through direct face-to-face meetings with participants. Topics presented included: a) The scope and objectives of the Ministry of Agriculture's CSR Program in Simeulue Regency; b) Technical and administrative eligibility requirements; c) The urgency of land optimization for regional food security; and d) Strengthening farmer group institutions. The session employed lectures, presentations, and interactive discussions.

3. **Discussion and Problem Identification Stage:** Conducted via focus discussions to identify barriers to multi-cropping, assess water resource availability, formulate alternative solutions for infrastructure limitations, and elevate farmer participation.
4. **Questionnaire Distribution:** Questionnaires were administered to farmer group leaders to measure the readiness indices of farmers and their respective groups as prospective program beneficiaries.
5. **Closing.**

RESULTS AND DISCUSSION

Simeulue Regency is one of the districts in Aceh Province allocated the Cetak Sawah Rakyat program for the 2026 fiscal year. Out of the 1,162 hectares of land proposed via the CPCL scheme, 981.36 hectares satisfied the technical and administrative criteria, encompassing 31 out of 44 proposed farmer groups. These location evaluation metrics comply with the selection parameters stipulated in the Decree of the Director General of Agricultural Infrastructure and Facilities concerning Technical Guidelines for Technical Design (SID) for Paddy Fields for the 2026 Fiscal Year. Screening through this dual verification process represents a critical stage to ensure the initiative is executed in locations demonstrating high feasibility and success potential. The spatial allocation of the program site is illustrated in Figure 1.

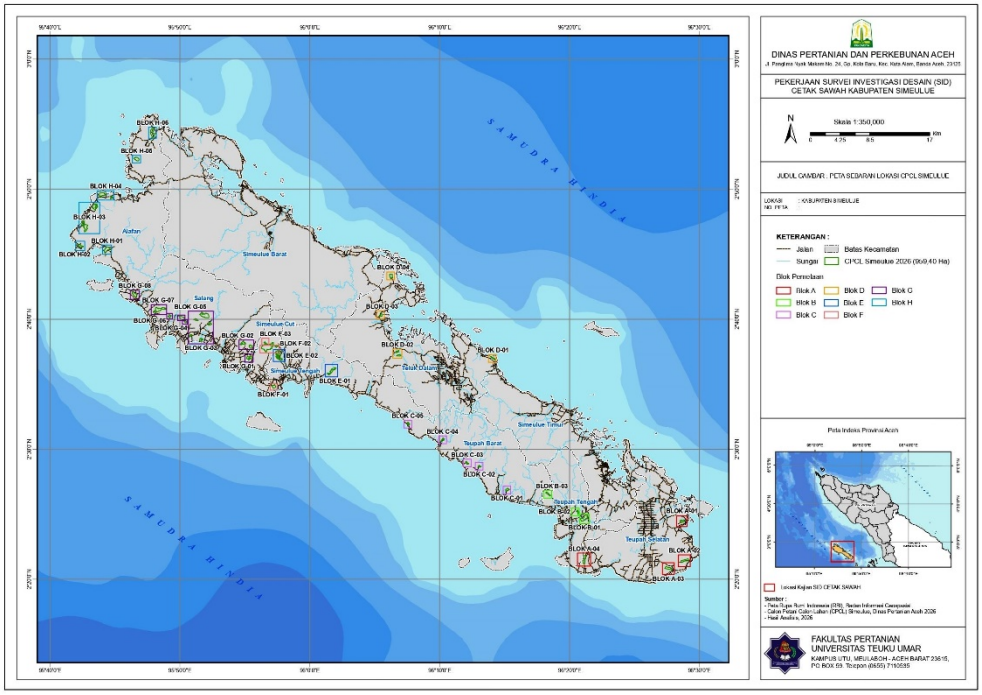

Figure 1. Map of the Cetak Sawah Rakyat Program Implementation Area in Simeulue Regency and Salang District.

Aligned with the technical directives, the program aims to establish optimal paddy fields by conducting prospective beneficiary and site surveys (CPCL), spatial data acquisition, field investigations, and compiling technical designs alongside Bill of Quantities (RAB). Site and beneficiary selection must align with technical provisions to secure effective, targeted, and sustainable program execution (Connor et al., 2021). These parameters encapsulate farmer readiness, institutional capacities, socio-economic profiles, and environmental-technical field suitability (Chang et al., 2024). The formalized criteria are detailed below. Locational and beneficiary criteria within the CSR program function as vital indicators to guarantee project success. These metrics ensure that the optimized land is highly viable across technical, social, economic, and environmental dimensions, and is managed by farmers demonstrating high commitment to continuous rice cultivation (Darnita et al., 2022). Proper targeting remains essential since agricultural development outcomes depend heavily on spatial and beneficiary precision; numerous agricultural initiatives have collapsed due to superficial land verification, deficient beneficiary capacities, and inadequate consideration of agroecosystem compatibility (Rumanti et al., 2018).

Criteria such as clear and clean land titles, allocation within Other Utilization Areas (APL), exclusion from forest zones or commercial concessions (HGU), and slope gradients below 8% constitute key factors for minimizing operational failure risks. Land suitability and secure land tenure are principal drivers of successful rice farming, directly impacting investment durability, management efficiency, and legal certainty for beneficiary farmers (Darnita et al., 2022). Beyond land physics, water resource availability dictates the success of expanding the cropping index. Optimized paddy fields must be backed by water sources capable of securing rice development for at least one cropping season annually, with potential for escalation to two or three crops through improved water management. Historically, various paddy development interventions failed to be fully utilized by farmers due to water supply deficiencies during dry periods (Rumanti et al., 2018). Hence, advancing cultivation technologies and fostering robust farmer group institutions are vital for maintaining rice production stability in archipelagic regions (Connor et al., 2021). Administrative validation via farmer commitment letters approved by village heads further strengthens community sense of ownership regarding long-term program sustainability (Chang et al., 2024). The documentation of the community service activities is presented in Figure 2.

Figure 2. Execution of Socialization and Participatory Discussions with Farmer Groups at the Salang District Agricultural Extension Center (BPP) Office.

CONCLUSION

The Cetak Sawah Rakyat (CSR) program in Simeulue Regency represents a strategic effort to expand rice yields through paddy field optimization, thereby reinforcing food security within archipelagic regions. This community service project successfully elevated the understanding of farmers and farmer groups regarding the objectives, technical criteria, rights, and obligations embedded in the program implementation.

The CSR program exhibits substantial potential to boost rice yields by escalating the cropping intensity (annual harvest frequency), maximizing marginal land utilization, reinforcing farmer institutional capacities, raising agricultural incomes, and decreasing external food reliance across archipelagic territories. Given the strategic importance of this initiative, synergetic collaboration among local governments, higher education institutions, agricultural extension agents, and farming communities must be continually enhanced. This integration is essential to ensure that program execution remains effective, target-precise, and sustainable in securing food self-sufficiency for archipelagic regions.

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