

EMPOWERMENT OF KAMPUNG UNGGUL BALITBANGTAN (KUB) CHICKEN FARMERS THROUGH THE OPTIMIZATION OF MANAGEMENT, SELF-MIXED FEED, FINANCIAL RECORDING, AND DIGITAL MARKETING IN TASIKMALAYA REGENCY

Nurul Frasiska *, Kusuma Agdhi Rahwana, Mohamad Fazar Fadilah

Universitas Perjuangan Tasikmalaya

Jl. Pembela Tanah Air No 177, Kahuripan, Tawang, Kota Tasikmalaya, Jawa Barat, Indonesia, 46115, Indonesia

Email: nurulfrasiska@unper.ac.id

Abstract

This community service program aims to enhance the capacity of the Singaparna Kampung Chicken Farmers Association (APAKSI) in the areas of production, business management, and marketing. The main problems faced by the partner group include dependence on commercial feed, unstructured financial recording, and limited market access and brand legality. The implementation method consists of five stages: socialization, training, technology application, mentoring, and evaluation. As of this progress report, five out of the eight planned visits have been completed. The outcomes achieved include improved understanding of KUB chicken husbandry, the ability to produce self-mixed feed using fermented rice bran, the application of simple financial recording practices, and the development of a draft brand logo to support product marketing. Early impacts indicate increased production efficiency, improved business management awareness, and stronger motivation among farmers to expand their market reach through e-commerce. With three remaining mentoring visits, the final targets of the program include brand registration through PDKI, well-organized financial records, and active digital marketing.

Keywords: Community Service, Digital Marketing, Financial Recording, KUB Chicken, Self-Mixed Feed

INTRODUCTION

Interest in native chicken continues to increase, leading to the growth of native chicken farmers, including those in the Tasikmalaya region. Data from the Central Bureau of Statistics show that the population of native chickens in Tasikmalaya Regency rose from 2,322,586 in 2022 to 2,422,586 in 2023 (1). This growing opportunity for native chicken commodities is further supported by genetic improvement efforts that have produced the superior Kampung Unggul Balitbangtan (KUB) strain. KUB chicken farming has great potential to support food security and improve farmers' welfare in Indonesia. KUB chickens are known for their better meat quality and higher market value compared to broilers, making them a preferred choice for farmers aiming to produce premium poultry products. Their weekly weight gain reaches 78–

113 grams (2). However, despite this potential, KUB chicken farmers still face various challenges that hinder their productivity and the quality of their production.

The Singaparna Native Chicken Farmers Association (APAKSI) is an organization that brings together native chicken farmers, particularly those raising KUB chickens. Located in Sukaherang Village, RT 01 RW 05, Singaparna District, Tasikmalaya Regency, the association consists of 10 farmers with flock capacities ranging from a minimum of 100 birds to a maximum of 2,000 KUB chickens.

APAKSI is considered a newly established productive community group, as it was formed on January 25, 2025. Within less than three months of operation, APAKSI has been able to supply up to 100 kg of native chicken meat per week and around 500 Day Old Chicks (DOCs) (5 boxes) per week. This group demonstrates strong potential, as the high market demand for native chickens—particularly in Tasikmalaya Regency and Tasikmalaya City—is gradually being met by local farmers. However, despite this potential, the group still faces several challenges that require support and solutions through this community service program.

The main problems faced by APAKSI farmers include limited access to information on optimal husbandry techniques, insufficient knowledge in efficient feed management, and poorly structured financial administration. In meeting market demand, APAKSI farmers are currently only able to reach consumers within a small local area. There is also no product diversification beyond native chicken carcasses and DOCs. The carcasses produced have relatively low weights, approximately 0.7–1 kg, which could be improved with better management practices. KUB chickens are capable of reaching body weights of 0.9–1 kg (3) with a feed conversion ratio (FCR) of 3.00–3.43 (4). This FCR is considerably high compared to broilers, which are already highly efficient in feed utilization. A high FCR directly increases feed costs, and currently, APAKSI farmers rely entirely on commercial feed, which contributes to high production expenses. Therefore, farmers need to be introduced to fermented feed technology, which allows low-quality feed ingredients to be converted into high-quality rations. A dietary protein level of 18% has been proven to be the optimal protein level for local poultry, including ducks and native chickens. Thus, incorporating fermented rice bran to improve nutrient composition can result in better production performance. If dietary nutrients fall below the optimal level (under 18%), poultry performance will not be optimal (5). Additionally, producing feed in pellet form can further enhance feed utilization efficiency (6). By producing their own feed, farmers can reduce dependence on commercial feed mills.

Product diversification is also necessary to expand market reach. Currently, APAKSI farmers produce DOCs and chicken carcasses, with processing practices that remain simple and limited. No Standard Operating Procedures (SOPs) are implemented to ensure quality and hygiene. Carcasses are processed only into basic boiled chicken products (*ayam ungkep*), and even this is done in minimal quantities based on demand. Developing proper packaging and registering a brand can help farmers expand their market reach to supermarkets or e-commerce platforms. In addition, poor financial management often prevents farmers from adequately covering operational costs or developing their businesses. Therefore, assisting farmers in financial bookkeeping becomes essential. The purpose of financial recording in livestock farming is to monitor cash flow, control expenses, and evaluate financial performance. Such records enable farmers to determine profit or loss, plan future investments, and ensure smooth operations and long-term sustainability of their farming enterprises (7).

This program aims to improve the efficiency of chicken management through the application of fermented feed technology and self-mixed rations. The activities also encourage product diversification, brand registration, and the expansion of market access through e-commerce platforms. In addition, financial recording training is provided to ensure that the farming enterprise becomes more structured and sustainable.

Farmers in the Singaparna Kampung Chicken Farmers Association (APAKSI) represent an economically productive community, and therefore the issues addressed in this community service program encompass production, business management, and marketing. Native chicken farmers still lack adequate knowledge regarding nutritional requirements and production performance evaluation, resulting in inefficient management practices. Financial recording is not well structured, causing production costs to frequently escalate. Furthermore, product management is not well organized due to the absence of product diversification and business legality, which restricts the farmers' market reach.

This KUB chicken management optimization program is expected to generate positive social and economic impacts for the wider community by improving farmers' welfare through education on proper feed nutrition, more efficient financial management, and product diversification. These efforts will reduce waste, increase income, and expand market access through more structured business legality. Moreover, the program has the potential to create new employment opportunities, enhance the production of high-quality local food products, and contribute to local economic growth, thereby creating sustainable benefits for the community.

IMPLEMENTATION METHOD

The community service activities were carried out over a period of five months with a total of eight scheduled visits. The implementation method was divided into five stages:

1. Socialization: introduction of the program and clarification of roles between the service team and the partner group.
2. Training: covering KUB chicken husbandry, self-mixed feed production using fermented rice bran, financial recording, and digital marketing through brand logo development. The feed formulation used in this community service program is presented in Table 1.

Tabel 1. Feed Ration Composition

BAHAN PAKAN (T0)	BASAL DIET							Cost (Rp)
	Composition (%)	ME	CProtein	Crude Fat	Crude Fiber	Ca	P	
Corn	20	664.79	1.23	1.09	0.58	0.00	0.05	940
Fat	2	172.00	0.00	2.00	0.00	0.00	0.00	300
Rice brand	25	674.50	2.39	1.12	4.02	0.01	0.24	875
Fish Meal	20	562.00	8.40	2.52	0.99	1.52	0.68	1100
Premix	3	0.00	0.00	0.00	0.00	0.00	0.00	450
Commercial Feed	30	1230.00	6.30	1.50	1.50	0.15	0.15	2600
TOTAL	100	3303.29	18.32	8.24	7.09	1.68	1.12	6,265

3. Technology Implementation: including rice bran fermentation, self-mixed feed formulation, simple bookkeeping systems, and product packaging design. Fermented rice bran was prepared by mixing rice bran with 30 ml of EM4 dissolved in 1 liter of water. The mixture was stirred thoroughly, placed in an airtight container, and fermented for 7 days.
4. Assistance and Evaluation: monitoring the consistency of technology adoption and evaluating training outcomes through pre-tests and post-tests, which assessed knowledge of husbandry practices, financial recording, and product marketing. The results were presented in comparative tables and illustrated in graphical form.
5. Sustainability: preparation for brand registration through intellectual property database, marketing through e-commerce platforms (Shopee and GoFood), and post-program monitoring.
6. Activity achievements can be seen from the calculation of feed costs for product sales or Income Over Feed Cost (IOFC) which is calculated using the formula:

$$\text{IOFC} = \text{Chicken Selling Price} - \text{Feed Cost}$$

RESULTS AND DISCUSSION

The implementation of the community service activities at the Singaparna Kampung Chicken Farmers Association (APAKSI) has progressed through five out of the eight planned visits. Each visit focused on stages of socialization, training, and the initial application of technology and business management practices. The results achieved thus far indicate significant improvements in the areas of production, business management, and marketing.

The first training session focused on the management practices of KUB chicken husbandry. The materials provided included housing management, sanitation, animal health, and feeding standards. The activities were conducted through lectures, discussions, and hands-on practice at the farmers' facilities. The outcomes of this session showed that farmers gained a better understanding of efficient KUB chicken management standards. The partners also became more aware of the importance of housing cleanliness and biosecurity as key factors in maintaining flock health.

The next visit focused on training in the production of self-mixed feed and the technology for producing fermented rice bran. Farmers were trained to formulate feed according to the ration composition presented in Table 1 and based on the nutritional requirements of KUB chickens. The community service team introduced the techniques for fermenting rice bran using EM4, preparing simple rations, and producing self-mixed feed.

The outcomes of this community service activity show that the partner group successfully produced self-mixed feed using locally available materials. Farmers also began to understand how to calculate nutritional content, including protein and metabolizable energy. Initial trials of the self-mixed feed indicated that the chickens accepted the alternative ration well. Farmers became aware that substituting commercial feed with locally formulated feed could significantly reduce production costs, lowering the use of commercial feed from 100% to 30%. The feed cost, which was previously Rp 8,000 per kilogram, decreased to approximately Rp 6,300. The calculation of Income Over Feed Cost (IOFC) before using self-mixed feed is as

follows:

- a. One KUB chicken requires 3,080 kg of feed during a 70-day rearing period. The feed used is commercial feed priced at Rp 400,000 per 50-kg sack, or approximately Rp 8,000/kg. Therefore, over 70 days, the feed consumption cost is:

$$3,080 \text{ kg} \times \text{Rp } 8,000/\text{kg} = \text{Rp } 24,640 \text{ per bird.}$$

The estimated body weight at day 70 is approximately 1 kg, which is sold at a price of Rp 35,000/kg.

$$\begin{aligned}\text{IOFC} &= \text{Chicken Selling Price} - \text{Feed Cost} \\ &= \text{Rp } 35,000 - \text{Rp } 24,640 \\ &= \text{Rp } 10,360\end{aligned}$$

- b. IOFC Calculation After Using Self-Mixed Feed:

The price of self-mixed feed is Rp 6,300 per kg, and it is provided to KUB chickens throughout the 70-day rearing period. Thus, during 70 days the feed cost is:

$$3,080 \text{ kg} \times \text{Rp } 6,300/\text{kg} = \text{Rp } 19,404 \text{ per bird.}$$

The estimated body weight at day 70 remains approximately 1 kg, which is sold at Rp 35,000/kg.

$$\begin{aligned}\text{IOFC} &= \text{Chicken Selling Price} - \text{Feed Cost} \\ &= \text{Rp } 35,000 - \text{Rp } 19,404 \\ &= \text{Rp } 15,596\end{aligned}$$

The next activity was training on financial bookkeeping for poultry farm management. The team introduced simple recording formats, including daily cash books, cash flow statements, production cost records, and profit–loss calculations. Participants were also trained to use a recording application, and farmers began implementing daily bookkeeping using the provided cash book. The partners developed an understanding of the importance of cash flow as the foundation for business evaluation, although some farmers still require continued assistance to ensure consistent recording.

To strengthen the marketing aspect, training was also conducted on brand logo creation and product identity development. The community service team assisted in designing a simple logo as the official identity of APAKSI's products and introduced concepts related to branding, packaging, and digital marketing strategies. A brand logo for KUB chicken products was produced and submitted for registration with PDKI. Farmers began to recognize the importance of brand legality in expanding market access. The partners also showed strong motivation to proceed with brand registration and to promote their products through GoFood and Instagram Ads. Preliminary evaluations indicate improvements in the partners' knowledge and skills.

- Production: Farmers are able to produce self-mixed feed and understand basic nutritional principles.

- Business Management: A financial recording system has begun to be implemented, although it is still simple.
- Marketing: A draft brand logo has been produced, and preparations for brand registration are underway.

The participation of the partners in each activity was very good, as demonstrated by the active involvement of members in both discussions and practical sessions. The results of the pre-test and post-test showed an average increase in understanding of 60–65%, as presented in Table 2.

Tabel 2. Training Questionnaire Results

Aspect Assessed	Before Training (Pre-test)	After Training (Post- test)	Improvement (%)
Knowledge of KUB Chickens (characteristics, advantages, management)	10 participants understood (38%)	23 participants understood (88%)	+50%
Husbandry Practices (housing, health management, disease prevention, biosecurity)	9 participants correct (35%)	22 participants correct (85%)	+50%
Feed Knowledge (types of feed ingredients, feeding frequency, simple ration formulation)	8 participants knowledgeable (31%)	21 participants knowledgeable (81%)	+50%
Ability to Produce Fermented Feed	5 participants able (19%)	19 participants able (73%)	+54%
Financial Recording in Farming	6 participants practiced (23%)	18 participants practiced (69%)	+46%
Marketing Strategies (direct selling, e- commerce, branding)	7 participants understood (27%)	20 participants understood (77%)	+50%
Overall Average Knowledge & Skills	27–30%	70–75%	+60–65%

CONCLUSION

The visible impact is an increase in knowledge, motivation, and self-confidence of partners in developing their businesses, both in terms of production, management, and market access.

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