

Empowering Chicken Farmers in Talok Village: Strategies for Food Security and Mitigating Environmental Health Impacts

¹* Erna Agustin Sukmandari, ²Rosmalia, ³Toto Sudibyo

Universitas Bhamada Slawi, Tegal, Indonesia^{1,2,3}

e-mai: erna2113@gmail.com^{1*}, rosmalia.aw@gmail.com², totoguanyu@gmail.com³

*Corresponding Author

Submitted: October 18, 2025; Revised: April 27, 2026; Accepted: April 27, 2026; Published: April 30, 2026

ABSTRAK

Kegiatan pengabdian masyarakat di Desa Talok bertujuan memberdayakan peternak ayam skala kecil guna mendukung ketahanan pangan lokal dan pencapaian Masterplan Bahan Gizi (MBG) Nasional. Metode yang digunakan adalah pendekatan partisipatif melalui identifikasi masalah, penyuluhan, pelatihan, demonstrasi, pendampingan, dan evaluasi bersama dengan melibatkan Golden Egg Farm (600 ekor) dan Amanah Farm (500 ekor) sebagai mitra. Hasil kegiatan menunjukkan peningkatan produktivitas telur dari 65% menjadi 72% pada Golden Egg Farm dan dari 60% menjadi 68% pada Amanah Farm dengan kontribusi total sekitar 23.160 butir/bulan (139 kg protein), efisiensi biaya pakan sebesar 15-17%, serta penurunan angka mortalitas 3-4%. Selain itu, limbah peternakan diolah menjadi ±45 kg kompos per bulan, sementara hasil pre-test dan post-test menunjukkan peningkatan pengetahuan rata-rata 33,1% pada aspek manajemen pemeliharaan, biosekuriti, pengelolaan limbah, pemasaran, dan ketahanan pangan. Dengan demikian, program ini terbukti efektif meningkatkan kapasitas peternak, menghasilkan model usaha ayam yang produktif dan ramah lingkungan, serta memberikan kontribusi nyata terhadap suplai protein hewani dalam mendukung SDGs, khususnya zero hunger dan good health and well-being.

Kata kunci: Pemberdayaan peternak ayam; Ketahanan pangan ; Biosekuriti unggas; Pengelolaan limbah peternakan; Pemasaran digital produk ternak

ABSTRACT

The community service activities in Talok Village aim to empower small-scale chicken farmers to support local food security and the achievement of the National Nutrition Master Plan (MBG). The method used is a participatory approach through problem identification, extension, training, demonstration, mentoring, and joint evaluation involving Golden Egg Farm (600 chickens) and Amanah Farm (500 chickens) as partners. The results of the activities showed an increase in egg productivity from 65% to 72% at Golden Egg Farm and from 60% to 68% at Amanah Farm, with a total contribution of around 23,160 eggs/month (139 kg of protein), feed cost efficiency of 15-17%, and a 3-4% reduction in mortality rates. In addition, farm waste was processed into ±45 kg of compost per month, while pre-test and post-test results showed an average knowledge increase of 33.1% in the areas of maintenance management, biosecurity, waste management, marketing, and food security. Thus, this programme has proven effective in enhancing farmers' capacity, producing a productive and environmentally friendly chicken farming model, and making a tangible contribution to the supply of animal protein in support of the SDGs, particularly zero hunger and good health and well-being.

Keywords: Empowerment of chicken farmers; Food security; Poultry biosecurity; Farm waste management; Digital marketing of livestock products



Copyright © 2026 The Author(s)

This is an open access article under the CC BY-SA license.

INTRODUCTION

Food security is a national strategic agenda that emphasises the availability of sufficient, nutritious, safe, and sustainable food for all levels of society. The implementation of the Makan Bergizi Gratis (MBG) programme and the increasing demand for animal protein highlight the importance of strengthening local food production systems. Animal protein, particularly from poultry, plays a critical role in improving nutritional status due to its high biological value and complete essential amino acid content, which are essential in preventing stunting, malnutrition, and decreased immunity. The poultry farming sub-sector contributes significantly to the national supply of animal protein, making the empowerment of small- and medium-scale farmers a key strategy in supporting national food security targets (Fatimah et al., 2024).

Talok Village possesses considerable potential for poultry development through existing small- and medium-scale enterprises such as UD Golden Egg Farm and UD Amanah Farm. However, despite this potential, current community service and development initiatives tend to focus primarily on increasing production output, while limited attention is given to integrated approaches that combine production efficiency, environmental sustainability, and community-based capacity building. This gap indicates that existing programmes have not yet fully addressed the need for a holistic empowerment model that simultaneously improves technical farming practices, economic resilience, and environmental management (Hasdar et al., 2025).

In addition, challenges faced by farmers in Talok Village include suboptimal feed management, limited knowledge of livestock health practices, fluctuating market prices, and inadequate waste management systems. Improper handling of solid and liquid poultry waste can lead to environmental pollution and public health risks. Previous studies have highlighted the importance of sustainable livestock management; however, the application of integrated, community-based solutions that transform waste into value-added products and enhance farmer knowledge remains limited, particularly at the village level (Hikmah & Pranata, 2023). This condition reflects a clear gap between theoretical approaches and practical implementation in community empowerment programmes.

Therefore, the novelty of this community service lies in the implementation of an integrated empowerment model that combines (1) technical training in efficient and productive poultry management, (2) innovation in environmentally friendly waste processing, and (3) strengthening institutional collaboration between universities, farmers, and local enterprises. This approach not only focuses on increasing production but also emphasises sustainable practices and community resilience, making it more applicable and impactful for rural communities.

Based on this, lecturers from Bhamada Slawi University collaborated with UD Golden Egg Farm and UD Amanah Farm to carry out community service activities entitled “Empowering Chicken Farmers in Talok Village: Strategies for Food Security and Mitigating Environmental Health Impacts.” This programme aims to enhance farmers’ capacity in managing productive,

efficient, and environmentally sustainable poultry farming; support the achievement of the MBG programme through increased availability of animal protein; develop innovative livestock waste management practices; and strengthen sustainable partnerships to build adaptive and resilient village-based farming systems.

METHOD

This community service activity utilised a participatory approach by actively involving chicken farmers in Talok Village in every stage of the activity. The main subjects involved in this programme were two chicken farming businesses, namely UD Golden Egg Farm and UD Amanah Farm, which became implementation partners. The methods used included the following stages:

1. Preparation and Problem Identification Stage

The initial stage involved coordination with the village government, livestock groups, and community leaders to obtain support and synchronise the programme. Subsequently, field surveys and in-depth interviews were conducted to identify the actual conditions of chicken farming businesses, including aspects of production, marketing, and potential environmental impacts. The findings were then analysed together with the farmers to determine priority issues, including feed management, chicken health, livestock waste management, and environmental sanitation.

2. Awareness and Education Stage

This stage follows the method described by Septinova et al. (2025), which emphasises a participatory approach through education and direct assistance to farmers. The main focus of this stage is to increase farmers' knowledge of the concept of local food security, particularly through efforts to improve the quality of chicken and egg production. In addition, this activity also includes education on biosecurity principles, poultry disease control strategies, and the use of natural ingredients such as herbs and probiotics as alternatives to synthetic antibiotics. The extension is complemented by the socialisation of livestock waste management so that it can be used as organic fertiliser or biogas, thereby reducing the potential for pollution and negative impacts on environmental health.

3. Training and Demonstration Stage

This stage follows the method of Abadi et al. (2024), which emphasises a capacity-building approach through integrated training covering both technical and managerial aspects. In an effort to improve farmers' technical skills, training was provided on making alternative feed based on local ingredients to reduce production costs and improve business efficiency. Furthermore, demonstrations of healthy and environmentally friendly chicken farming techniques were carried out, including cage sanitation practices, water management, and the separation of solid and liquid waste. Farmer partners also participated directly in the practice of processing chicken manure into compost or biofertiliser, thereby gaining practical experience in the management of economically valuable waste. In addition to technical training, this activity also included digital marketing training to expand the distribution reach of chicken and egg products and strengthen the competitiveness of farmers' businesses in local and online markets.

4. Assistance and Implementation Stage

This stage follows the method described by Furqani et al. (2025), which emphasises the importance of participatory assistance and continuous monitoring in community empowerment activities. During this implementation stage, the community service team provided intensive assistance to the farmer groups in applying the training outcomes directly to their respective farms. To strengthen networking and collaboration, a mentored group of farmers was formed to serve as a forum for sharing experiences, technical consultations, and collective problem solving. The entire process was supported by periodic monitoring and evaluation to assess the development of chicken productivity, livestock health levels, and the environmental conditions around the farms, so that the application of new technologies and practices could be measured in terms of their actual success.

5. Evaluation and Sustainability Phase

This final phase follows the method described by Hidayat et al. (2024), which emphasises a participatory evaluation approach and sustainable programme planning in community empowerment activities. In this final stage, a comprehensive evaluation is conducted involving all stakeholders to assess the effectiveness of the activities. The evaluation process includes an analysis of improvements in chicken productivity, livestock health, waste management effectiveness, and environmental cleanliness around the farm location. Based on the evaluation results, sustainability strategy recommendations are formulated, covering potential partnerships with the private sector, support from local governments, and opportunities for developing integrated farming models. Through this approach, the programme is expected to promote the realisation of Food Self-Sufficient Villages through the development of healthy, productive, efficient, and environmentally conscious chicken farming businesses.

Validation Test of Pre-Test and Post-Test Results

To assess the validity of the increase in participants' knowledge, a comparative analysis between pre-test and post-test scores was conducted using a paired sample test approach. Conceptually, the test can be expressed as follows:

$$t = \frac{\bar{d}}{s_d / \sqrt{n}}$$

\bar{d} = the mean difference between pre-test and post-test scores,

s_d = the standard deviation of the differences,

n = the number of respondents.

RESULT AND DISCUSSION

Strengthening community-based food security

The community service programme implemented in two small-scale chicken farming businesses, namely UD Golden Egg Farm (600 chickens) and UD Amanah Farm (500 chickens), showed measurable achievements in various success indicators. This activity focused on increasing productivity, efficiency, and sustainability of chicken farming businesses through a participatory approach, technical training, and continuous mentoring. A total of 600 chickens were directly mentored at UD Golden Egg Farm and 500 chickens at UD Amanah Farm. The relatively small scale of farming ($\leq 1,000$ chickens) offers advantages in implementing a simple

coop management model, while also facilitating replication among household farmers in surrounding villages. This aligns with the programme's objective of strengthening community-based food security (Sari & Masitah, 2024).

Table 1. Community Service Activities in Talok Village

No	Result Indicator	Golden Egg Farm	Amanah Farm	Impact
1	Number of chickens raised (heads)	600 heads	500 heads	Providing a small-scale coop management model ($\leq 1,000$ heads)
2.	Egg productivity before the programme	65% (± 390 eggs/day)	60% (± 300 eggs/day)	Became the initial benchmark for productivity on a small scale
3	Egg productivity after the program	72% (± 432 eggs/day)	68% (± 340 eggs/day)	A 5–10% increase can be replicated by other small-scale farmers
4	Feed cost efficiency	Save $\pm 15\%$ with local feed	Save $\pm 17\%$ with local feed	Encourage the use of alternative feeds based on local ingredients (corn, bran, herbal probiotics)
5	Chicken mortality rate	Decreased from 7% \rightarrow 4%	Decreased from 9% \rightarrow 5%	Increased awareness of biosecurity and coop sanitation
6	Livestock waste management	25 kg of compost/month	20 kg of compost/month	Potential for village organic fertilizer business from chicken manure
7	Sanitation & biosecurity	90% of cage sanitation standards achieved	85% of cage sanitation standards achieved	Examples of healthy cage implementation on a household scale
8	Digital marketing	Opening social media accounts for egg sales	Opening social media accounts for local distribution	Providing direct marketing models to consumers and small shops

No	Result Indicator	Golden Egg Farm	Amanah Farm	Impact
9	Involvement of assisted farmers	12 farmers actively involved	10 farmers actively involved	Establishment of new partner groups in other villages as replicas
10	Contribution of egg supply to the local market in Tegal	±12,960 eggs/month	±10,200 eggs/month	Becoming a joint supply base for the protein needs of MBG Tegal Regency

Egg productivity increased significantly after the programme. Daily production rates at UD Golden Egg Farm increased from 65% (390 eggs/day) to 72% (432 eggs/day), while at UD Amanah Farm they increased from 60% (300 eggs/day) to 68% (340 eggs/day). This 11–13% increase in productivity indicates that the implementation of alternative feed management based on local ingredients, improved biosecurity, and coop sanitation can have a positive impact on laying hen performance. Thus, post-programme egg productivity reached 12,960 eggs/month at UD Golden Egg Farm and 10,200 eggs/month at UD Amanah Farm, or a total contribution of approximately 23,160 eggs/month to the local market in Tegal Regency. When calculated based on the protein content of chicken eggs (~6 g/egg), this contribution is equivalent to 139 kg of protein per month, which can meet the daily protein requirements of approximately 93 people (Nuraini et al., 2024).



Figure 1. Community service team with layer farmers

Feed cost efficiency also saw significant improvement. Through the formulation of local feed based on corn, bran, and herbal probiotics, UD Golden Egg Farm recorded feed cost savings of around 15%, while UD Amanah Farm achieved 17%. These savings increased business margins while reducing dependence on commercial feed, which is often vulnerable to market price fluctuations. Livestock health was demonstrated by a decrease in chicken mortality rates. The mortality rate at UD Golden Egg Farm decreased from 7% to 4% (an absolute decrease of 18

chickens), while at UD Amanah Farm it decreased from 9% to 5% (an absolute decrease of 20 chickens). This decrease in mortality is closely correlated with increased compliance with biosecurity standards, which reached 90% at UD Golden Egg Farm and 85% at UD Amanah Farm. This fact confirms that education on coop sanitation, regular vaccination, and the implementation of simple biosecurity measures can significantly reduce the risk of poultry disease (Sandriya et al., 2023).

From an environmental perspective, livestock waste processing activities have produced 25 kg of compost per month at UD Golden Egg Farm and 20 kg per month at UD Amanah Farm, or a total of 45 kg per month (≈540 kg per year). This volume is relatively small at the initial stage, but it offers the potential for developing village-based organic fertiliser businesses that can support local agriculture while reducing environmental pollution caused by livestock waste. In addition to production and environmental aspects, marketing has also progressed through the use of digital media (Zulfikhar & Akbarrizki, 2024). Both partners have established social media accounts as a means of distributing eggs to household consumers, small shops, and local markets. This creates opportunities for market expansion, shortens the distribution chain, and enhances the competitiveness of local products (Dewi, 2022).

This activity also encouraged the active participation of assisted farmers, with 12 farmers involved in UD Golden Egg Farm and 10 in UD Amanah Farm. This number formed an initial network for the establishment of partner farmer groups in other villages. This network is expected to become a platform for replicating adaptive and sustainable small-scale chicken farming business models. The results of the activity show that integrated interventions through improved technical skills, production efficiency, biosecurity implementation, waste management, and marketing strengthening can have a real impact on small-scale chicken farming businesses (Haryaningtyas et al., 2025). Although still limited to two main partners, this programme has succeeded in presenting an empowerment model that can be replicated by other farmers to strengthen local food security, support the achievement of the national MBG programme, and contribute to sustainable development goals (SDGs), particularly in the aspects of zero hunger and good health and well-being (Pancani & Ningsih, 2025).

Table 2. Pre-Test and Post-Test Results of Community Service Activities

Item	Assessment	Pre-Test (%)	Post-Test (%)	Improvement (%)
Maintenance Management	Knowledge of cages and ventilation	52	82	30
	Understanding balanced feed management	55	84	29
	Techniques for providing drinking water and supplements	50	80	30
Health and Biosecurity	Introduction to major poultry diseases (ND, AI, CRD, etc.)	48	78	30
	Vaccination and disease prevention practices	45	80	35

Item	Assessment	Pre-Test (%)	Post-Test (%)	Improvement (%)
	Implementation of barn biosecurity (hygiene, human access, disinfection)	47	82	35
Waste & Environmental Management	Understanding the impact of livestock waste on environmental health	42	78	36
	Waste treatment techniques (composting, biogas, odor reduction)	40	76	36
Economics & Marketing	Understanding market pricing and distribution chains	50	81	31
	Collective marketing strategies (groups/partnerships)	46	82	36
Food Security & MBG	Contributions: Awareness of the importance of animal protein for the national MBG program	53	86	33
	The role of local farmers in maintaining egg supply in Tegal Regency	51	85	34
Average		48,2	81,2	33

The results of the pre-test and post-test evaluations in Table 2 show that the training and mentoring programme for chicken farmers had a significant impact on improving their knowledge and skills. The average knowledge score of farmers increased from 48.2% in the pre-test to 81.2% in the post-test, with an increase of 33%. These findings show that the intervention provided was able to improve the competence of farmers in various technical and non-technical aspects directly related to the sustainability of layer farming.

In terms of maintenance management, there has been an increase in understanding of housing, ventilation, balanced feed management, and drinking water and supplement administration techniques, with an average increase of around 30%. This indicates that farmers are beginning to recognise the importance of applying animal welfare and balanced nutrition principles to improve chicken productivity. Through better maintenance management, egg production levels are predicted to be more stable, while the risk of stress and reduced livestock performance can be minimised (Fitasari, 2023). The most notable improvements were seen in health and biosecurity. Farmers' knowledge of major poultry diseases increased by 30%, while vaccination practices and the implementation of biosecurity in coops increased by up to 35%. This improvement is crucial because livestock health is a determining factor in business sustainability. Stricter biosecurity measures, such as restricting outside access, routine disinfection, and coop sanitation, have implications for reducing mortality rates and preventing the spread of infectious diseases that often threaten smallholder poultry farms (Sasmita et al., 2025).

Waste and environmental management aspects have also seen a significant increase of 36%. Farmers are becoming more aware of the impact of waste on environmental health and are beginning to master techniques for processing waste into value-added products, such as compost, biogas, and odour reduction. This change reflects a shift in farmers' orientation from simply focusing on egg production to more sustainable, environmentally friendly businesses with the potential to provide additional economic value through product diversification (Hajar, 2025). From an economic and marketing perspective, farmers' knowledge of market prices, distribution chains, and collective marketing strategies has also increased significantly, with the highest increase reaching 36% in group-based or partnership marketing strategies. This indicates a new awareness that collective cooperation can strengthen the bargaining position of small farmers vis-à-vis middlemen and modern markets. Thus, business sustainability is not only supported by technical aspects, but also by stronger economic capabilities and marketing networks (Pratiwi et al., 2024).



Figure 2. Discussion on Suggestions for Improvement and Evaluation of Community Service Activities

The aspect of food security, farmers' awareness of the importance of eggs as a source of animal protein in supporting the national MBG programme increased by 33%. Similarly, understanding of the strategic role of local farmers in maintaining egg supply in Tegal Regency increased by 34%. This increase shows that farmers are beginning to view their business not only as an economic activity, but also as a real contribution to the provision of nutritious food for the community. Overall, the increase in knowledge and skills that occurred after the training shows the success of the programme in shaping a more professional, adaptive and sustainability-oriented mindset among farmers (Puspitasari et al, 2024). This strengthens the position of farmers as key actors in the poultry agribusiness system, as well as supporters of animal protein-based food security at the local and national levels.

Based on the data in Table 2, the average pre-test score of 48.2% increased to 81.2% in the post-test, with an average improvement of 33%. Descriptively, all indicators showed consistent improvement across each aspect, including maintenance management, health and biosecurity, waste management, economics and marketing, as well as food security. These results indicate that the interventions—comprising extension activities, training,

demonstrations, and mentoring—had a significant positive effect on improving the knowledge and skills of the farmers. Overall, the relatively high level of improvement ($\geq 30\%$) across all indicators suggests that the program demonstrated strong effectiveness.

Opportunities and Challenges

The implementation of chicken farmer empowerment activities in Talok Village has generally gone well, despite facing a number of technical and non-technical challenges. The main difficulty lies in adjusting the activity schedule to the farmers' operational hours, as most partners have busy routines in chicken maintenance and feed management. In addition, adapting to new technologies, such as feed formulations based on local ingredients and the use of digital media for marketing, requires time and repeated guidance to ensure consistent implementation. Another challenge faced is the limited sanitation facilities in the coops and inadequate waste processing facilities, meaning that the effectiveness of environmental management still needs to be improved.

From the perspective of goods production, such as organic fertiliser produced from chicken manure, the level of difficulty is quite high in the early stages because it requires a proper fermentation process and simple equipment such as compost drums and aerators. However, initial results show good potential, with an average production of 45 kg of compost per month. This product can be developed into a village organic fertiliser business unit, both for internal agricultural needs and for marketing to surrounding villages. The challenge ahead is how to maintain consistent compost quality and build an efficient distribution system (Hapsari et al., 2024).

Despite the obstacles, this activity opens up vast opportunities for development. First, there is the potential to strengthen the local economy through the development of an integrated livestock farming model, in which by-products (waste) are utilised as an additional source of income. Second, the digitalisation of marketing that has been initiated by both partners can be expanded into an integrated online marketing system based on the farming community, in order to shorten the distribution chain for egg products. Third, this activity has the potential to be replicated in other villages with similar characteristics through partnerships between universities and local governments, to form a network of Independent Farmer Villages oriented towards local food security.

In general, the level of difficulty in implementing the activities is moderate, because although there are obstacles to technology adoption and limited resources, the enthusiasm and participation of farmers is very high. With continued support in the form of advanced training, microfinance, and cross-sector collaboration, this programme has great potential for sustainability and to become a model for the development of productive, efficient, and environmentally friendly small-scale chicken farming in Tegal Regency and surrounding areas.

CONCLUSIONS

The community service programme in Talok Village successfully improved the capacity of small-scale chicken farmers, as reflected in increased egg productivity (11–13%), feed cost efficiency (up to 17%), reduced mortality rates (3–4%), and improved knowledge (33.1%). In addition, waste processing into compost (± 45 kg/month) demonstrates potential for environmental sustainability and additional economic value. Practically, this programme provides an applicable model of poultry farming through local feed utilisation, simple biosecurity

implementation, and waste management, supported by digital marketing to expand market access. For future development, it is recommended to expand the programme to more farmer groups, strengthen continuous mentoring, enhance collaboration with stakeholders, and conduct further evaluations to ensure sustainability and scalability. Overall, this model has strong potential to support local food security and environmental health improvement.

ACKNOWLEDGEMENTS

We would like to express our gratitude to DRTPM Kemenristek Dikti through the 2025 Community Service Grant programme (123/C3/DT.04.00/PM/2025) and to LPPM Universitas Bhamada Slawi for their support and facilitation, which enabled this community service activity to run smoothly.

REFERENCE

- Abadi, M., Asminaya, N. S., Auza, F. A., Biokimestri, A., Prasanjaya, P. N. K., Ilahude, M. C. P., & Alam, A. S. (2024). Bimbingan Teknis Formulasi Pakan Ayam Kampung Berbasis Pakan Lokal (Ampas Sagu) di Kelurahan Alolama Kecamatan Mandonga Kota Kendari. *Jurnal Pengabdian Masyarakat Ilmu Terapan (JPMIT)*, 6(2), 151–157.
- Dewi, S. P. (2022). Perubahan Distribusi Produk Hasil Peternakan terhadap Media Digital dalam Pemenuhan Kebutuhan Konsumen di Era Pandemi di Beberapa Wilayah di Indonesia. *Jurnal Manajemen dan Organisasi*, 13(3), 281–291.
- Fatimah, S., Rasyid, A., Anirwan, A., Qamal, Q., & Arwakon, H. O. (2024). Kebijakan Makan Bergizi Gratis di Indonesia Timur: Tantangan, Implementasi, dan Solusi untuk Ketahanan Pangan. *Journal of Governance and Policy Innovation*, 4(1), 14–21.
- Fitasari, E. (2023). Peningkatan produksi unggas melalui manajemen perkandangan, kesehatan ternak, dan manajemen penetasan yang baik. *Jurnal Difusi Ipteks Legowo*, 1(1), 28–39.
- Furqani, A., Kurniawati, D., Husada, L. M., & Kurdi, M. (2025). Pendampingan Pemasaran Hasil Ternak Ayam Petelur di Desa Bangkal, Sumenep untuk Meningkatkan Daya Saing Peternak. *Jurnal Abdimas Sosek (Jurnal Pengabdian dan Pemberdayaan Masyarakat)*, 5(1), 9–11.
- Hajar, H. (2025). Perubahan Pola Konsumsi Pakan Ternak dan Dampaknya terhadap Ketahanan Sosial-Ekonomi Peternak Tradisional. *Journal of Humanities, Social Sciences, and Education*, 1(6), 47–58.
- Hapsari, U., Nihayah, B., Sutiarso, L., Rahayu, E. S., Purwadi, D., & Saputra, W. (2024). Hilirisasi Teknologi Sistem Integrasi Tanaman Ternak Ikan (SITTI) Menggunakan Pendekatan Konsep Bio Economy, Green Economy, Circular Economy (BGC Economy). *Inovasi Jurnal Pengabdian Masyarakat*, 2(2), 301–312.
- Haryaningtyas, H., Lufiyanti, L., & Hanif, M. (2025). Edukasi Pemanfaatan Ampas Tahu dan Azolla sebagai Bahan Tambahan Makanan untuk Ternak Unggas Berkelanjutan di Kabupaten Madiun. *Jurnal Pengabdian Masyarakat dan Riset Pendidikan*, 3(4), 2755–2761.
- Hasdar, M., & Sukmandari, E. A. (2025). Extension on Layer Chicken Farming Management at UD. Golden Egg in Talok Village, Pangkah District, Tegal Regency: Penyuluhan Pengelolaan Peternakan Ayam Petelur di UD. Golden Egg di Desa Talok Kecamatan Pangkah Kabupaten Tegal. *Agricultural–Animal Science Innovation and Empowerment Journal*, 1(1), 25–32.

- Hidayat, T. P., Widawati, E., Sukwadi, R., Wahju, M. B., & Hutahaeen, H. A. (2024). Pendampingan Kelayakan dan Strategi Pengembangan Usaha Peternakan Ayam Petelur di Desa Cisolak Kabupaten Sumedang. *RESONA: Jurnal Ilmiah Pengabdian Masyarakat*, 8(2), 211–219.
- Hikmah, N., & Pranata, E. O. (2023). Cooperative Farming: Sebuah Strategi Menuju Ketahanan Pangan Berkelanjutan. *TheJournalish: Social and Government*, 4(5), 120–137.
- Nuraini, C., Helbawanti, O., Widyaningrum, B., Mutolib, A., & Pratama, R. M. (2024). Pemanfaatan Jagung pada Peternak Burung Puyuh Desa Mekarsari Kabupaten Ciamis untuk Mendukung Ketersediaan Pakan yang Kontinu. *IJECS: Indonesian Journal of Empowerment and Community Services*, 5(2), 86–96.
- Pancani, P. C. T., & Ningsih, N. (2025). A Comprehensive Study on MBG (Makan Bergizi Gratis) in the Prabowo–Gibran Cabinet: Evaluating the Psychological and Health Impacts of the Policy on Underserved Communities. *Jurnal Ilmu Psikologi dan Kesehatan (Sikontan)*, 3(4), 177–186.
- Pratiwi, C. R., Fathurohman, I., Prahardik, S. E., & Sholihah, N. A. (2024). Pendampingan UMKM Pembuatan Telur Asin di Desa Kalensari: Strategi Peningkatan Kualitas Produk dan Pemasaran Melalui Program PKM. *Jurnal Peradaban Masyarakat*, 4(2), 68–77.
- Puspitasari, H. H., Wati, I. R., & Agustina, F. (2024). Pemanfaatan Jagung sebagai Inovasi Ekonomi dalam Penguatan Perekonomian Masyarakat Mandiri. *IJECS: Indonesian Journal of Empowerment and Community Services*, 5(1), 73–78.
- Sandriya, A., Sujoko, H., Wibowo, S., Silitonga, L., Yuanita, I., & Aritonang, N. (2023). Tingkat Penerapan Biosekuriti pada Peternakan Ayam Broiler di Kota Palangka Raya. *Buletin Veteriner Udayana*, 15(5), 905–914.
- Sari, F., & Masitah, T. H. (2024). Model Pengembangan Kewirausahaan Agribisnis Berbasis Community-Based Management untuk Meningkatkan Ketahanan Pangan Lokal. *All Fields of Science Journal Liaison Academia and Society*, 4(4), 86–93.
- Sasmita, F., Latif, W. O. U., Tao, H., & Prianata, Y. L. O. (2025). Implementasi Biosekuriti dan Higiene Rumah Pemotongan Unggas Skala Kecil di Kota Kendari. *Jurnal Peternakan Lokal*, 7(1), 11–23.
- Septinova, D., Hartono, M., Adhianto, K., & Siswanto, S. (2025). Peningkatan Kapasitas Peternak di Desa Cugung, Lampung Selatan melalui Penyuluhan Manajemen Pemeliharaan, Reproduksi, Kesehatan, dan Biosekuriti. *Bubalus: Jurnal Pengabdian kepada Masyarakat*, 2(1), 51–57.
- Zulfikhar, R., & Akbarrizki, M. (2024). Strategi Komunikasi Pemasaran Indomaret dalam Pemasaran Telur Omega-3 Produk So Good Omega Egg dan Ox Omega melalui Media Sosial dan Aplikasi Klik. *Jurnal Penelitian Peternakan Terpadu*, 6(2), 126–140.