

SOCIO-ECONOMIC EMPOWERMENT THROUGH COMMUNITY-BASED SHEEP FARMING PROGRAMS IN ISLAMIC RURAL SOCIETIES

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Abstract

This study examines the socio-economic empowerment fostered by a community-based sheep farming program in Desa Gelarwangi, Kecamatan Cidaun, Kabupaten Cianjur, within an Islamic rural society. Utilizing a qualitative approach with a case study method, the research explored the program's impact on economic development, social cohesion, and environmental sustainability. The research reveals that 1) the program has increased income for participants and fostered stronger community ties, 2) challenges such as seasonal feed shortages, limited access to veterinary services, and the need for formal training hinder its full potential. 3) The integration of sheep farming with local agricultural practices, mainly using sheep manure as fertilizer, has contributed to environmental sustainability and food security. 4) The lack of formal financial services and market integration limits further economic scalability. The study concluded that with continued governmental support and targeted interventions, community-based sheep farming programs have significant potential for sustainable socio-economic development in rural Islamic contexts, serving as a model for similar initiatives. The research contributes to the broader discourse on rural development, Islamic economics, and community-based agriculture.

Keywords: *Community-based sheep farming, Islamic economics, rural development, socio-economic empowerment.*

Abstrak

Penelitian ini mengkaji pemberdayaan sosial-ekonomi yang dihasilkan oleh program peternakan domba berbasis komunitas di Desa Gelarwangi, Kecamatan Cidaun, Kabupaten Cianjur, dalam konteks masyarakat pedesaan Islam. Menggunakan pendekatan studi kasus kualitatif, penelitian ini mengeksplorasi dampak program terhadap pengembangan ekonomi, kohesis sosial, dan keberlanjutan lingkungan. Temuan menunjukkan bahwa 1) program ini telah meningkatkan pendapatan peserta dan memperkuat ikatan komunitas, 2) 3 tantangan seperti kekurangan pakan musiman, keterbatasan akses kelayanan kesehatan hewan, dan kebutuhan akan pelatihan formal menghambat potensi penuh program. 3) Integrasi peternakan domba dengan praktik pertanian lokal, terutama melalui penggunaan kotoran domba sebagai pupuk, telah berkontribusi pada keberlanjutan lingkungan dan ketahanan pangan. 4) Kurangnya layanan keuangan formal dan integrasi pasar membatasi peningkatan skala ekonomi lebih lanjut. Penelitian ini menyimpulkan bahwa dengan dukungan pemerintah yang berkelanjutan dan intervensi yang tepat, program peternakan domba berbasis komunitas memiliki potensi signifikan untuk pembangunan sosial-ekonomi berkelanjutan di pedesaan Islam, serta dapat menjadi model bagi inisiatif serupa. Penelitian ini berkontribusi pada diskursus yang lebih luas tentang pembangunan pedesaan, ekonomi Islam, dan pertanian berbasis komunitas.

Kata Kunci: *Ekonomi Islam, pemberdayaan sosial-ekonomi, pembangunan pedesaan, peternakan domba berbasis komunitas.*

A. Introduction

Rural communities across the globe, particularly in developing regions, have historically relied on agricultural and livestock-based economies for their livelihoods. In Islamic rural societies, religious teachings, such as those advocating for sustainable development and the ethical treatment of natural resources, are deeply interwoven with community welfare and economic justice. As economic disparities widen and rural populations face persistent socio-economic challenges, specific

community-driven programs in rural areas, particularly those focused on livestock farming, have garnered increasing attention for their success in fostering socio-economic empowerment¹. Sheep farming, a practice deeply rooted in the agrarian traditions of many Islamic communities, has emerged as a critical component of such initiatives. It provides not only a steady income source but also fosters social cohesion, skill enhancement, and resilience to external economic shocks.²

The development of community-based sheep farming programs aligns with global initiatives, such as those led by international organizations, to address rural poverty through localized and participatory models of economic engagement.³. These programs offer a dual advantage: on the one hand, they strengthen the economic independence of individual farmers and their households; on the other, they reinforce social structures by promoting collective action, mutual support, and shared responsibility. In Islamic rural societies, initiatives like community-based sheep farming resonate deeply with religious tenets such as zakat (charitable giving) and ta'awun (mutual assistance), highlighting the importance of equitable wealth distribution and communal solidarity.

Agricultural development, particularly livestock farming, is frequently employed in rural settings to reduce poverty and food insecurity, as it provides multiple income streams, food products, and employment opportunities—studies on livestock farming, such

¹Nizamuddin Khan and Ashish Kumar Parashari, “Integrated Crop-Livestock Farming System and Its Impact on Livelihood and Sustainability of Poor Farmers in Bulandshahr District, U.P.,” *International Journal For Multidisciplinary Research* 5, no. 6 (November 18, 2023), <https://doi.org/10.36948/ijfmr.2023.v05i06.9098>.

²Faris Rahmat Hidayat And Sri Nurhayati, “Peningkatan Kompetensi Peternak Domba Melalui Program Pelatihan Pengolahan Pakan Fermentasi (Silase,” *Comm-Edu (Community Education Journal)* 6, no. 2 (2023): 248–56.

³Alberto Stanislao Atzori et al., “Sustainability in the Sardinian Sheep Sector: A Systems Perspective, from Good Practices to Policy,” *Integrated Environmental Assessment and Management* 18, no. 5 (September 24, 2022): 1187–98, <https://doi.org/10.1002/ieam.4593>.

as those conducted by Sitepu et al.⁴, underscoring its critical role in rural livelihoods. Livestock farming contributes to household income and is a buffer against economic shocks. Sheep farming is widely regarded as a viable option in many rural settings due to its adaptability to various climates and relatively low resource requirements. However, its success hinges on community participation, government support, and effective management practices, all integral to enhancing rural economies.⁵

Within Islamic rural societies, the integration of community-based development programs is further enriched by the underlying principles of Islamic economics. Concepts such as waqf (charitable endowment) and zakat (almsgiving) align closely with socio-economic development initiatives that aim to reduce inequality and promote communal welfare.⁶ Community-based sheep farming programs thus align with these Islamic values, fostering economic development while ensuring social equity. Research has further demonstrated that incorporating religious principles in economic development initiatives can enhance program acceptance and sustainability in Islamic communities.⁷

The current state of research on community-based sheep farming programs reveals several gaps and emerging trends. While much of the existing literature focuses on the economic benefits of

⁴Sukma Aditya Sitepu et al., "Socialization of Goat and Sheep Reproduction Management in Bulu Cina Village, Indonesia," *Asian Journal of Community Services* 2, no. 11 (November 29, 2023): 975–82, <https://doi.org/10.55927/ajcs.v2i11.6911>.

⁵Maria Wurzinger et al., "Community-Based Livestock Breeding: Coordinated Action or Relational Process?," *Frontiers in Veterinary Science* 8 (May 24, 2021), <https://doi.org/10.3389/fvets.2021.613505>.

⁶Shaikh Hamzah Abdul Razak, "Zakat and Waqf as Instrument of Islamic Wealth in Poverty Alleviation and Redistribution," *International Journal of Sociology and Social Policy* 40, no. 3/4 (April 9, 2020): 249–66, <https://doi.org/10.1108/IJSSP-11-2018-0208>.

⁷Mohammad Hashim Kamali, "Islam and Sustainable Development," *Islam and Civilisational Renewal* 7, no. 1 (2016): 8–26, <https://doi.org/10.12816/0027165>.

livestock farming in rural communities⁸, there is a lack of in-depth analysis on how these programs contribute to broader socio-economic empowerment in Islamic rural societies. Previous studies have predominantly examined livestock farming through the lens of poverty alleviation and food security,⁹ with limited attention given to the role of Islamic values and principles in shaping the success of such programs. Moreover, social cohesion in community-based development initiatives has been recognized as a key factor in their success.¹⁰ Few studies have examined how these programs influence social structures and relationships within rural Islamic societies. As communal welfare is a cornerstone of Islamic rural life, understanding how sheep farming programs can strengthen social networks and contribute to social inclusion is critical for the sustainability of these initiatives.

The central objectives of this study are threefold. First, it examines the economic impacts of the sheep farming program, particularly its role in improving household income, economic diversification, and long-term financial stability for participants. Second, it analyzes the social dimensions of the program, with a focus on how it has contributed to strengthening community ties, fostering collaboration, and promoting social inclusion. Finally, the study identifies the key challenges and areas for improvement, particularly resource management, governmental support, and the sustainability of farming practices. This research contributes to the broader literature on rural development, Islamic economics, and

⁸Muhammad Irfan Said, "The Role of the Livestock Farming Industry in Supporting the Global Agricultural Industry," in *Agricultural Development in Asia - Potential Use of Nano-Materials and Nano-Technology* (IntechOpen, 2022), <https://doi.org/10.5772/intechopen.97868>.

⁹Khan and Parashari, "Integrated Crop-Livestock Farming System and Its Impact on Livelihood and Sustainability of Poor Farmers in Bulandshahr District, U.P."

¹⁰Adetayo Adetunji et al., "Like a Broom Tied Together? A Qualitative Exploration of Social Cohesion and Its Role in Community Capacity Strengthening to Support Integrated Health in Nigeria," ed. Sarah E. Brewer, *PLOS Global Public Health* 3, no. 10 (October 24, 2023): e0002508, <https://doi.org/10.1371/journal.pgph.0002508>.

sustainable agriculture by providing empirical insights into the effectiveness of community-based livestock programs. By examining the program in Desa Gelarwangi, this study highlights the socio-economic benefits of sheep farming and offers a framework for replicating similar initiatives in other Islamic rural contexts. The findings are intended to inform policymakers, development practitioners, and scholars interested in the intersection of religion, agriculture, and community-driven development.

B. Method

This research employed a qualitative approach with a case study method to explore the socio-economic empowerment fostered by the community-based sheep farming program in Desa Gelarwangi, Kecamatan Cidaun, and Kabupaten Cianjur. The case study method was selected for its ability to provide an in-depth investigation into the program's dynamics, focusing on participants' experiences and the broader impact on the local community.¹¹ This approach offered a comprehensive understanding of how sheep farming initiatives contributed to economic development and social cohesion, particularly within an Islamic rural society.

The study involved 10 purposively selected participants in the sheep farming program. These participants represented a cross-section of roles within the community, including five farmers, three village leaders, and two community members. By selecting participants with varying degrees of involvement in the program, the study gathered various perspectives on the program's economic and social impacts, ensuring a well-rounded analysis. Purposive sampling was used to ensure the inclusion of key individuals who could provide rich, relevant insights into the program's impacts on the community's economic and social dimensions. The selection of farmers, village leaders, and community members allowed for a comprehensive understanding of the program from multiple perspectives, including those directly engaged in farming, those

¹¹Muhammad Subhan Iswahyudi et al., *Buku Ajar Metodologi Penelitian* (PT. Sonpedia Publishing Indonesia, 2023).

involved in community leadership, and those impacted by or participated in the program but not directly involved in farming activities.

Data were collected through semi-structured interviews, document study, and field observations. The semi-structured interviews provided detailed insights from key informants, such as sheep farmers, local leaders, and market participants, focusing on the program's effects on economic conditions, social relationships, and the challenges faced by participants. In addition, field observations were carried out to document farm management practices, sheep health conditions, and community interactions, providing valuable contextual data to complement the qualitative interviews and discussions. Thematic analysis was used to analyze the data, enabling the identification of key patterns and recurring themes related to socio-economic empowerment and social cohesion. The analysis involved transcribing interviews, coding the data to identify significant themes, and grouping them into broader categories such as economic benefits, community participation, and program challenges. Data triangulation was applied to cross-verify information from different sources, ensuring consistency and reliability in the findings.

C. Results and Discussion

1. Economic Impact

The sheep farming program has demonstrably enhanced the economic well-being of most participants. For example, S (33), a farmer, stated that his income had improved following his involvement in the program, noting, "It has increased." This observation was corroborated by K (53), a trader who also reported a rise in income due to the program. The program's positive economic effects extended beyond direct financial gains and created ancillary business opportunities. K highlighted that the initiative had opened avenues for trade, the sale of sheep-related products, and services such as transportation and animal care.

Despite these reported gains, not all participants experienced economic improvements uniformly. Some, including S, indicated that while their income had increased, their day-to-day

expenditures remained unchanged. S commented, "No notable changes in spending," suggesting that the additional income was often reinvested into farming operations rather than leading to immediate enhancements in living standards.

Furthermore, despite the increased supply of sheep, market conditions have yet to show significant changes. S and K remarked that there had been "no notable difference" in local sheep prices, indicating that the program's economic effects have not yet thoroughly permeated the broader local market. This lag in market response points to the nascent stage of the program's impact on the village's economic ecosystem and suggests that further integration into local commerce is needed to realize its full potential.

Participants also highlighted significant gaps in access to formal financial services. While the program has facilitated income growth, farmers have limited access to credit, savings mechanisms, and investment opportunities. Many rely on personal capital or informal loans to finance their operations, which restricts the scalability of their businesses. Micro-finance options and subsidized loans could enhance economic outcomes by enabling farmers to expand their operations and engage in longer-term financial planning.

2. Community and Social Impact

The program has profoundly affected social dynamics within Desa Gelarwangi, fostering enhanced social cohesion and a sense of community solidarity. As R (57), a community leader, articulated, the program has "increased knowledge and improved the economy" and strengthened interpersonal relationships among villagers. This was particularly evident in the increased cooperation and mutual support observed among participants, which was a direct consequence of the program's communal structure.

Additionally, the initiative has played a pivotal role in reducing social isolation, especially among vulnerable groups such as the elderly and economically disadvantaged. R (34) emphasized that the program allowed these individuals to engage in meaningful work, helping them reintegrate into the community. This

inclusiveness has been critical in promoting social equity and providing marginalized groups a sense of purpose and belonging.

Despite these positive social outcomes, the program has not significantly altered traditional gender roles or disrupted the social hierarchy. While men and women participated in the program, no substantive shifts in gender relations were reported. Nevertheless, the initiative has laid a foundation for future leadership development among younger community members. As R suggested, the program could attract more youth by incorporating modern management techniques, such as digital tools for livestock management and marketing.

The program has also acted as a catalyst for further communal initiatives. Inspired by its success, participants have begun to explore other cooperative ventures, such as collaborative crop farming and shared market access strategies. This interest in additional community-driven development underscores the broader potential of the sheep farming program as a model for rural socio-economic revitalization.

3. Program Management and Sustainability

Participants generally gave positive feedback on the management of the sheep farming program, particularly regarding the involvement of local government authorities. D (55), the village head, underscored the government's critical role in providing financial assistance for sheep health maintenance, noting that "the government supports funding for sheep health maintenance." Governmental support, particularly in the form of veterinary services and financial aid, has maintained the program's operational stability.

However, participants also identified several areas where management practices could be improved. R highlighted that the quality of sheep breeding remains a significant concern, suggesting that "improving the quality of the livestock and the management team" could enhance program outcomes. Several participants echoed this sentiment, calling for more strategic oversight of breeding practices and resource allocation to optimize long-term sustainability.

Training and infrastructure were also identified as critical areas in need of improvement. D mentioned that formal training programs had yet to be provided to farmers at the time of the study, which participants saw as a limitation. Farmers strongly desired structured training in livestock care, breeding techniques, and business management. Providing such training could significantly increase the program's productivity and profitability by equipping participants with the necessary skills to maximize the benefits of sheep farming.

4. Challenges and Opportunities

The interviews revealed several key challenges that impede the full realization of the program's potential. Foremost among these was the difficulty securing adequate feed for the sheep, particularly during the dry season. S (33) stated, "There is difficulty with feed during the dry season," highlighting the seasonal vulnerabilities that threaten livestock productivity. Farmers are often forced to reduce their herd sizes without a consistent and reliable feed supply, which limits the program's scalability.

In addition to feed shortages, participants reported challenges in accessing veterinary care. The limited availability of professional veterinary services has left farmers reliant on ineffective traditional or informal methods of treating livestock illnesses. This lack of support has increased livestock's vulnerability to disease, threatening the program's sustainability.

Despite these challenges, Desa Gelarwangi's geographic and environmental conditions were considered favorable for sheep farming. R emphasized that the village's natural environment provides an ideal setting for sheep grazing, with its climate and terrain supporting extensive livestock farming. This has contributed to creating new employment opportunities within the community, with several participants noting that the program has "increased work opportunities." Participants also expressed optimism about the program's potential to stimulate further local economic development, provided the current challenges are addressed.

5. Environmental and Agricultural Impact

The program has contributed positively to the village's environmental sustainability by adopting eco-friendly farming practices. K (53) reported that sheep manure is now used as fertilizer for rice farming, stating, "It is used as fertilizer for rice." This practice has reduced the community's dependence on chemical fertilizers, promoting a more sustainable agricultural model. Furthermore, using natural fertilizers has improved crop yields and soil health, demonstrating the interconnected benefits of integrating sheep farming with traditional agricultural practices.

The program has also significantly improved local food security. R emphasized that the initiative has increased food availability in the village, particularly during economic or environmental hardship periods, noting that "it has been very helpful" in ensuring the community's resilience during difficult times. By providing a stable and locally sourced food supply, the program has reduced the village's dependence on external food imports, enhancing its long-term food security.

Additionally, integrating sheep farming with local agriculture has facilitated more sustainable resource management practices. Using sheep waste as a natural fertilizer, the community has created a closed-loop agricultural system that maximizes resource efficiency while minimizing waste. This model has improved local soil quality and diversified food sources, further reinforcing the village's food security and environmental resilience. The community-based sheep farming program in Desa Gelarwangi has had a transformative impact on the village's economic and social development while promoting environmental sustainability. The program has increased household incomes, strengthened community ties, and enhanced food security. However, challenges remain concerning livestock management, feed shortages, veterinary support, and the need for formal training and infrastructure improvements. With continued governmental support and targeted interventions in these areas, the program holds significant potential for sustainable rural development and long-term community empowerment. These findings underscore the potential of community-based livestock

farming initiatives to serve as a model for socio-economic advancement in rural Islamic societies.

D. Discussion

1. Economic Impact and Empowerment

The sheep farming program has demonstrably improved participants' economic well-being, a finding consistent with numerous studies on the role of livestock in poverty alleviation.¹² The increased income reported by participants, such as S and K, aligns with Alizai et al.¹³ The assertion that sheep farming can provide reliable financial returns in rural contexts due to its adaptability and relatively low input requirements is similar to that of research by Bhatti et al.¹⁴ Supports the notion that livestock farming can diversify income sources and mitigate financial risks for smallholder farmers, thereby contributing to economic stability in rural areas.

However, the economic benefits observed in this study were unevenly distributed, with some participants noting that income gains were largely reinvested into their farming operations rather than leading to immediate improvements in living standards. This finding resonates with Ellis (2000), who argued that rural development initiatives often take time to translate into noticeable household-level changes, especially when participants prioritize investment in productive assets over short-term consumption. Moreover, despite increased production, the lack of significant

¹²Gulnaz Hameed et al., "Tracing the Causality between Livestock and Poverty Alleviation in the Rural Economy of Gilgit Baltistan-Pakistan," ed. D. Chalil et al., *E3S Web of Conferences* 52 (August 27, 2018): 00019, <https://doi.org/10.1051/e3sconf/20185200019>.

¹³Dr. Abdullah Dostain, Dr. Shahida Habib Alizai, and Dr. Abdul Malik Kasi, "Evaluate The Livestock Role For Poverty Reduction In Selected Districts Of Balochistan Province," *Pakistan Journal of International Affairs* 5, no. 3 (December 25, 2022), <https://doi.org/10.52337/pjia.v5i3.732>.

¹⁴Muhammad Azher Bhatti et al., "Diversity of Sources of Income for Smallholder Farming Communities in Malawi: Importance for Improved Livelihood," *Sustainability* 13, no. 17 (August 26, 2021): 9599, <https://doi.org/10.3390/su13179599>.

shifts in local sheep prices suggests that the program's economic effects are still in their early stages and that further integration into local and regional markets is necessary for broader financial impact. Similar challenges related to market access and the commercialization of livestock farming have been documented in studies by Mbatha.¹⁵ And Sehar et al.¹⁶, emphasizing the importance of market development in ensuring sustainable economic outcomes.

A key limitation highlighted by participants was their restricted access to formal financial services, such as credit and savings mechanisms. This issue mirrors the findings of Hu et al.¹⁷, who emphasized that financial inclusion is critical for scaling rural agricultural enterprises. Without access to microfinance or subsidized loans, farmers cannot expand their operations or engage in long-term financial planning, thus limiting the potential for economic growth. As Kang and Zhao argued, addressing this gap would improve the scalability of sheep farming initiatives and support broader rural development goals.¹⁸ In their analysis of agricultural finance in developing countries.

2. Social Impact and Community Cohesion

¹⁵CN Mbatha, "Livestock Production and Marketing for Small Emerging Farmers in South Africa and Kenya: Comparative Lessons," *South African Journal of Agricultural Extension (SAJAE)* 49, no. 1 (April 19, 2021): 141–61, <https://doi.org/10.17159/2413-3221/2021/v49n1a10783>.

¹⁶Malika Sehar and Abayomi Samuel Oyekale, "Effect of Livestock Farmers' Access to Formal Markets on Marketing Inefficiency in Mpumalanga Province, South Africa," *African Journal of Science, Technology, Innovation and Development* 14, no. 1 (January 2, 2022): 225–33, <https://doi.org/10.1080/20421338.2020.1823610>.

¹⁷Yue Hu, Chang Liu, and Jiangang Peng, "Financial Inclusion and Agricultural Total Factor Productivity Growth in China," *Economic Modelling* 96 (March 2021): 68–82, <https://doi.org/10.1016/j.econmod.2020.12.021>.

¹⁸Jian Kang and Minjuan Zhao, "The Impact of Financial Development on Agricultural Enterprises in Central China Based on Vector Autoregressive Model," ed. Chin-Ling Chen, *Security and Communication Networks* 2022 (March 31, 2022): 1–16, <https://doi.org/10.1155/2022/5629202>.

The literature on community-based development well documents the positive social outcomes of the sheep farming program, particularly its role in strengthening community ties.¹⁹ Participants in this study, including R, reported increased cooperation and mutual support among villagers, reflecting the findings of Mahmudul et al.²⁰ On the alignment of Islamic values with communal welfare initiatives. The program's ability to reduce social isolation, particularly for vulnerable groups such as the elderly, further supports the notion that inclusive economic activities can foster social equity and cohesion. This is consistent with studies by Wibowo.²¹, who found that Islamic economic principles promote economic and social well-being when integrated into community development programs. As participants suggested, the potential for youth leadership development aligns with recent research advocating for incorporating digital tools and modern management techniques in agricultural programs to engage younger generations.²² This strategy modernizes traditional farming practices and ensures the long-term sustainability of rural agricultural systems by attracting younger participants.

The ripple effect of the sheep farming program in stimulating other communal initiatives, such as cooperative crop farming, further demonstrates its broader socio-economic

¹⁹Takele Mebratu, Wogene Markos, and Abyot Seifu, "Impact of Participation in Community-Based Sheep Breeding Practice on the Income of Household: A Case of Adiyu Woreda, Kaffa Zone, SNNPRS, Ethiopia," *International Journal of Scholarly Research in Engineering and Technology* 2, no. 2 (April 30, 2023): 001–018, <https://doi.org/10.56781/ijrsret.2023.2.2.0023>.

²⁰Alam Md. Mahmudul et al., "Waqf as a Tool for Rendering Social Welfare Services in the Social Entrepreneurship Context," *Global Journal Al Thaqafah* 8, no. 1 (2018): 87–98, <https://doi.org/10.7187/GJATSI2018-06>.

²¹Ari Wibowo, "Enhancing Economic Growth for the Achievement of Sustainable Development Goals through Digital Era Fundraising Schemes for Sustainable Community Development: A Policy Analysis from the Islamic Economic Perspective," *Proceeding of International Conference on Islamic Philanthropy* 1 (July 9, 2023): 26–37, <https://doi.org/10.24090/icip.v1i1.301>.

²²Dudi Setiadi et al., "Youth's Digital Literacy in the Context of Community Empowerment in an Emerging Society 5.0," *Society* 11, no. 1 (2023): 1–12.

potential. This mirrors the findings by Shahidullah²³, who argued that community-based programs often catalyze broader socio-economic development by fostering collaboration and shared resource management. Such initiatives have the potential to create sustainable livelihoods and enhance the overall resilience of rural communities.

3. Program Management and Sustainability

The study's findings indicate that the program's success is closely tied to the support provided by local government authorities, particularly in the form of financial assistance for sheep health maintenance. This finding is consistent with Rykovska.²⁴ Assertion that government intervention is crucial for sustaining agricultural development initiatives in rural areas. However, participants highlighted several areas for improvement, particularly about sheep breeding practices and providing formal training.

Martyniuk notes that the call for better oversight of breeding practices reflects the importance of maintaining livestock quality for long-term program sustainability.²⁵ Similarly, the absence of formal training programs limits participants' ability to fully capitalize on the economic opportunities presented by the sheep farming initiative. Qudsi and Nurhayati²⁶ Argued that capacity-building initiatives, such as technical training and business

²³A.K.M. Shahidullah and C. Emdad Haque, "Social Entrepreneurship by Community-Based Organizations: Innovations and Learning through Partnerships," in *Social Enterprise - Context-Dependent Dynamics In A Global Perspective* (InTech, 2016), <https://doi.org/10.5772/62469>.

²⁴Oksana Rykovska, "State Support for the Agricultural Sector in the Context of Inclusive Rural Development," *Ekonomika APK* 29, no. 3 (May 19, 2022): 62–72, <https://doi.org/10.32317/2221-1055.202203062>.

²⁵Elzbieta Martyniuk, "Policy Effects on the Sustainability of Animal Breeding," *Sustainability* 13, no. 14 (July 12, 2021): 7787, <https://doi.org/10.3390/su13147787>.

²⁶Nur Asiyah Qudsi and Sri Nurhayati, "Basic Financial Literacy Training Program as a Rural Communities Empowerment in the Digital Economy Era," *Aksara: Jurnal Ilmu Pendidikan Nonformal* 9, no. 2 (2023): 997–1008.

management education, are essential for maximizing the benefits of rural agricultural programs. Providing structured training in sheep care, breeding techniques, and financial management could significantly enhance the program's productivity and profitability, as supported by the broader literature on rural education and development²⁷.

4. Challenges and Opportunities

The challenges identified in this study, particularly feed shortages during the dry season and limited access to veterinary care, highlight the vulnerabilities faced by rural livestock farmers. These findings align with those of Eeswaran et al.²⁸, who identified similar issues in their analysis of livestock farming systems in developing countries. Seasonal feed shortages are a common constraint in extensive livestock systems, and without adequate solutions, they can significantly hinder productivity. Hidayat and Nurhayati²⁹ Recommended improving feed storage and supply systems and enhancing access to veterinary services to address these challenges.

Despite these obstacles, participants expressed optimism about the program's potential to stimulate local economic development, provided the necessary support structures are in place. Participants emphasized the village's favorable geographic conditions for sheep farming, which further supports the program's viability as a model for sustainable rural development. This finding is consistent with research by Yang et al.³⁰, who noted that geographic and environmental factors play a critical role in the success of livestock-based livelihoods.

²⁷Rasu Eeswaran et al., "Current and Future Challenges and Opportunities for Livestock Farming in West Africa: Perspectives from the Case of Senegal," *Agronomy* 12, no. 8 (July 31, 2022): 1818, <https://doi.org/10.3390/agronomy12081818>.

²⁸Eeswaran et al.

²⁹Hidayat And Nurhayati, "Peningkatan Kompetensi Peternak Domba Melalui Program Pelatihan Pengolahan Pakan Fermentasi (Silase)."

³⁰Jiamiao Yang et al., "Impact of Socio-Economic and Environmental Factors on Livestock Production in Kyrgyzstan," *Frontiers in Environmental Science* 10 (November 30, 2022), <https://doi.org/10.3389/fenvs.2022.1049187>.

5. Environmental and Agricultural Impact

The environmental benefits of the sheep farming program, particularly the use of sheep manure as fertilizer, underscore its contribution to sustainable agricultural practices. This finding aligns with studies by Carlos et al.³¹, who highlighted the role of livestock in promoting integrated farming systems that reduce reliance on chemical fertilizers and enhance soil health. The closed-loop agricultural system created by using sheep manure as fertilizer not only improves crop yields but also contributes to the long-term sustainability of the village's agricultural ecosystem. Furthermore, the program's positive impact on local food security supports the broader literature on the role of livestock in enhancing household food availability.³² By providing a stable and locally sourced food supply, the sheep farming initiative has reduced the community's dependence on external food imports, enhancing its resilience to economic and environmental shocks. This finding resonates with the work of Pawlak and Kołodziejczak,³³ who emphasized the importance of local food production in achieving long-term food security in rural areas.

E. Conclusions

This study evaluated the socio-economic impacts of a community-based sheep farming program in Desa Gelarwangi, revealing significant benefits for participants and the community. Economically, the program has increased household incomes and

³¹Filipe Selau Carlos et al., "Integrated Crop–Livestock Systems in Lowlands Increase the Availability of Nutrients to Irrigated Rice," *Land Degradation & Development* 31, no. 18 (December 26, 2020): 2962–72, <https://doi.org/10.1002/ldr.3653>.

³²Dolapo Enahoro et al., "Contributions of Livestock-Derived Foods to Nutrient Supply under Changing Demand in Low- and Middle-Income Countries," *Global Food Security* 19 (December 2018): 1–10, <https://doi.org/10.1016/j.gfs.2018.08.002>.

³³Karolina Pawlak and Małgorzata Kołodziejczak, "The Role of Agriculture in Ensuring Food Security in Developing Countries: Considerations in the Context of the Problem of Sustainable Food Production," *Sustainability* 12, no. 13 (July 7, 2020): 5488, <https://doi.org/10.3390/su12135488>.

created new business opportunities, though full market potential remains untapped due to stagnant sheep prices and limited financial services. The integration of sheep farming with local agriculture has bolstered food security and provided a pathway for long-term economic resilience. Socially, the program has strengthened community bonds and reduced social isolation, particularly among vulnerable groups. It has facilitated inclusivity and provided leadership opportunities, although traditional gender roles and social hierarchies remain unchanged. The program's ability to foster community-driven initiatives indicates its potential to inspire further socio-economic advancements. Environmental sustainability is a notable outcome of the program, with sheep manure being used as a natural fertilizer, improving soil quality and reducing reliance on chemical inputs. This eco-friendly approach has contributed to both agricultural productivity and long-term food security. However, challenges such as seasonal feed shortages, inadequate veterinary services, and the absence of formal training programs limit the program's scalability and effectiveness. Addressing these issues through enhanced infrastructure, government support, and improved resource access is crucial for the program's long-term success. The sheep farming program offers a viable model for sustainable rural development, combining economic empowerment, social inclusivity, and environmental stewardship. With targeted improvements, it holds tremendous potential for driving socio-economic transformation in rural Islamic communities. Policy recommendations for enhancing the program's impact include increasing government support for infrastructure development, improving access to financial services and markets, and expanding farmer capacity-building programs. Additionally, fostering gender inclusivity and promoting sustainable farming practices can enhance both social and environmental outcomes. These measures would help overcome current challenges and strengthen the program's long-term sustainability, making it a valuable model for other rural Islamic communities.

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