

JURNAL ONLINE PERTANIAN TROPIK



The Effect of Livestock Ownership and Educational Level on the Economic Welfare of Goat Farmers in Kedungbanteng District

Muhammad Alief Bhesara¹, Krismiwati Muatip*¹, Sri Mastuti¹

¹Program Studi Peternakan, Fakultas Peternakan, Universitas Jenderal Soedirman, Jawa Tengah 53122

*Corresponding Author: krismiwati.muatip@unsoed.ac.id

ARTICLE INFO

Article history:

Received: 12 December 2023 Revised: 10 July 2024 Accepted: 10 Agustus 2024 Available online: https://talenta.usu.ac.id/jpt

E-ISSN: <u>2356-4725</u> P-ISSN: <u>2655-7576</u>

How to cite:

Muhammad Alief Bhesara, Krismiwati Muatip, Sri Mastuti Journal Pertanian Tropik, 12(2), 11-20.



ABSTRACT

This study aims to examine the number of goats owned and the education levels of breeders in Kedungbanteng District, to assess their economic welfare, and to analyze the influence of livestock numbers and education on the welfare of goat farmers. Kedungbanteng District was selected using purposive sampling due to its relatively high poverty rate in Banyumas Regency. Villages were sampled randomly, representing 50% of the district's total villages: Beji, Karangnangka, Kedungbanteng, Dawuhan Kulon, Kebocoran, Dawuhan Wetan, and Melung.A total of 77 goat breeders were selected as respondents using the Slovin formula and random sampling. Data were analyzed through quantitative descriptive analysis, NTPRP, and multiple linear regression. The results showed that breeders owned an average of 5.67 goats, had an average of 7.27 years of formal education, and achieved an average welfare level of 1.49. Furthermore, the study found that both the number of livestock owned and the breeders' education levels significantly influenced their economic welfare.

Keywords: Goat breeders, number of livestock, level of education, economic welfare, NTPRP

ABSTRAK

Penelitian ini bertujuan untuk mengetahui jumlah kepemilikan kambing dan tingkat pendidikan peternak di Kecamatan Kedungbanteng, menilai tingkat kesejahteraan ekonomi mereka, serta menganalisis pengaruh jumlah ternak dan tingkat pendidikan terhadap kesejahteraan peternak kambing. Kecamatan Kedungbanteng dipilih menggunakan purposive sampling karena memiliki tingkat kemiskinan yang relatif tinggi di Kabupaten Banyumas. Desa-desa sampel dipilih secara acak, mewakili 50% dari total desa di kecamatan tersebut, yaitu Beji, Karangnangka, Kedungbanteng, Dawuhan Kulon, Kebocoran, Dawuhan Wetan, dan Melung. Sebanyak 77 peternak kambing menjadi responden penelitian ini, ditentukan menggunakan rumus Slovin dan pemilihan secara acak. Data dianalisis menggunakan analisis deskriptif kuantitatif, NTPRP, dan regresi linear berganda. Hasil penelitian menunjukkan bahwa rata-rata peternak memiliki 5,67 ekor kambing, memiliki tingkat pendidikan rata-rata 7,27 tahun, dan mencapai tingkat kesejahteraan sebesar 1,49. Selain itu, penelitian ini menemukan bahwa jumlah ternak yang dimiliki dan tingkat pendidikan peternak secara signifikan memengaruhi tingkat kesejahteraan ekonomi mereka.

Keywords: peternak kambing, jumlah ternak, *tingkat pendidikan*, *kesejahteraan ekonomi*, *NTPRP*

1. Introduction

Livestock farming is a sector that plays a significant role in economic development in Indonesia. This can be seen from the role of the livestock sector, which largely serves as an additional source of income for the community, especially in rural areas. According to Rendi (2022), goats are widely raised by rural communities due to their better adaptability compared to cattle and sheep.

Based on data from the Central Statistics Agency of Banyumas Regency (BPS Kabupaten Banyumas, 2019, 2021, 2022), the goat population in Kedungbanteng District was 2,796 heads in 2019, 2,840 heads in 2020, 2,850 heads in 2021, and 3,481 heads in 2022. Most goats owned by farmers in Kedungbanteng District are raised using traditional methods. Farmers have not yet managed their livestock businesses professionally, which results in relatively low income. Income from traditional goat farming in Kedungbanteng District has not contributed significantly to household income.

Welfare is closely related to the concept of community needs. Bawadi and Ratnasari (2023) stated that welfare encompasses social, material, and spiritual aspects of life, including safety, morality, and inner peace, which enable every citizen to fulfill physical, spiritual, and social needs for themselves, their households, and the community to the best of their ability. In this study, the level of welfare is viewed from the economic perspective of farmers. Farmers' purchasing power or household income in a smaller scope can be assessed through the Farmer Household Income Exchange Rate (NTPRP). This is supported by Tulong et al. (2019), who stated that NTPRP is a method to evaluate the purchasing power of farmers at the household level. NTPRP is calculated by dividing total household income by total household expenditure. The value of NTPRP reflects the condition of the farming household. NTPRP represents the relationship between total household income from various sources and total expenditures, including consumption and production costs. If NTPRP > 1, farmers can be considered prosperous; conversely, if NTPRP < 1, farmers are considered not prosperous (Yulian et al., 2016). The objectives of this study are to determine the number of goats owned and the education level of breeders, to assess the welfare of goat farmers, and to analyze the influence of livestock numbers and education level on the economic welfare of goat farmers in Kedungbanteng District.

2. Materials and Methods

This study employed a survey method targeting goat farmers in Kedungbanteng District. The district was selected intentionally through purposive sampling due to its relatively high poverty rate. Villages were chosen using random sampling, covering half of the total villages with goat farming in the district. Seven villages were included in the study: Beji, Karangnangka, Kedungbanteng, Dawuhan Kulon, Kebocoran, Dawuhan Wetan, and Melung.

A total of 77 farmers participated, with the sample size calculated using the Slovin formula and a 10% margin of error. Data collection focused on three main aspects: the number of goats owned, the farmers' education level, and their economic welfare. The latter was measured using the Farmer Household Income Exchange Rate (NTPRP), which reflects the relationship between household income and expenditure. According to Yulian, Hilmanto, and Hewanti (2016), NTPRP is calculated by dividing total household income by total household expenditure, including both livestock and non-livestock sources. Farmers are considered economically prosperous if NTPRP exceeds 1, and not prosperous if it is below 1.

The influence of livestock numbers and education level on economic welfare was analyzed using multiple linear regression. The study also applied three statistical tests: the Coefficient of Determination (R²) to assess the proportion of variance explained by the model, the F-Test to determine the simultaneous effect of independent variables, and the t-Test to examine the partial influence of each independent variable. This approach ensured a comprehensive analysis of how education and livestock ownership impact the economic well-being of goat farmers in Kedungbanteng District.

.3. Result and Discussion.

Characteristics of Goat Farmers

Respondents' Gender

A total of 77 goat farmers in Kedungbanteng District were selected as respondents for this study. Based on gender, 63 respondents were male, while 14 were female. Detailed information can be found in Table 1.

A total of 77 goat farmers in Kedungbanteng District were selected as respondents for this study. Based on gender, 63 respondents were male, while 14 were female. Detailed information can be seen in Table 1. Initial Chemical Properties of Alluvial Soil at Parit Demang Purnama 2, Pontianak City.

Table 1. Respondents' Gender

No	. Gender	Frequency (persons)	Percentage (%)
1	Male	63	81.82
2	Female	14	18.18
	Total	77	100.00

Source: Primary Data, 2023 (processed data).

Out of 77 goat farmers selected as respondents in Kedungbanteng District, the majority were male (81.82%), while females accounted for 18.18% of the sample. This distribution indicates that goat farming in the district is predominantly managed by men. Similar trends have been reported in rural livestock farming studies, where male farmers often play a central role in livestock management and decision-making (Rendi, 2022).

The higher proportion of male farmers is largely because men, on average, are heads of households and bear primary responsibility for supporting their families. Dikal and Dona (2023) note that goat farming requires significant physical strength to manage livestock effectively. Female farmers accounted for 18.18% of the respondents. Women are typically involved in livestock activities to assist their husbands, who may have other occupations such as farming, labor, trading, or office work. Housewives participating in goat farming aim to supplement family income.

Women often take care of goats because their children are independent, allowing them more free time to manage livestock, which generally does not require excessive physical effort. Utami et al. (2017) emphasize that women in rural areas can balance multiple roles effectively. Their contribution to goat farming significantly supports their husbands and enhances family welfare. The greater the involvement of women in goat farming, the higher the potential improvement in household well-being.

Respondents' Age

Age is an important factor influencing farmers' success, as it relates to physical capability and decision-making in livestock management. According to the Central Statistics Agency (BPS, 2023), the productive working age ranges from 15 to 64 years, during which individuals are considered physically capable and able to manage farming activities effectively. Individuals above 64 years are categorized as non-productive or elderly, as their physical strength and capacity to manage livestock decline.

The age distribution of the respondents is presented in Table 2.

Table 2. Classification of Farmers Based on Productive Age

No. Age (years) Category Frequency (persons) Percentage (%				
1	27–64	Productive	69	89.61
2	65–72	Elderly	8	10.39
	Total		77	100.00

Source: Primary Data, 2023 (processed data).

As shown in Table 2, the majority of respondents (89.61%) fall within the productive age range of 27–64 years. The average age of goat farmers in Kedungbanteng District is 49 years. Goat farming is particularly attractive to the productive age group because it does not require extensive physical labor or large capital. Harmoko et

al. (2021) argue that age plays a crucial role in livestock management, as farmers within the productive age range are expected to contribute both physically and mentally to increase farm productivity. The high number of productive-age farmers represents a key asset for the development of livestock enterprises.

According to Muatip et al. (2013), farmers of productive age possess both the physical strength and the cognitive agility necessary to develop farming activities in line with technological advancements, especially when supported by formal education.

Elderly farmers in Kedungbanteng District continue to engage in goat farming due to economic necessity, as well as to make productive use of their free time, despite declining physical capacity.

Respondents' Education Level

The education level of farmers refers to the formal education they have completed, measured in years of schooling. The formal education attainment of goat farmers in Kedungbanteng District is presented in Table 3

Table 3. Classification of Farmers Based on Education Level

No	. Education Level	Frequency (persons)	Percentage (%)
1	Did not complete primary school	14	18.18
2	Completed primary school	30	38.96
3	Did not complete junior high school	4	5.19
4	Completed junior high school	18	23.38
5	Did not complete senior high school	3	3.90
6	Completed senior high school	8	10.39
	Total	77	100.00

Source: Primary Data, 2023 (processed data).

As shown in Table 3, the majority of goat farmers in Kedungbanteng District have completed primary school (38.96%). Overall, the farmers' formal education is considered basic or low, as some have never attended school or did not complete primary education. The highest level of education attained by respondents is senior high school (10.39%).

The low education level among farmers in Kedungbanteng can be attributed to several factors, including family economic conditions, lack of parental encouragement, and a preference for working over studying during childhood. These factors may affect the farmers' ability to acquire new knowledge or adopt innovative farming practices. According to Muatip et al. (2020), the performance and managerial capacity in livestock farming are significantly influenced by the education level of the farmer.

Number of Family Dependents

The number of family dependents refers to the total number of family members for whom the head of the household is responsible. According to the Central Statistics Agency, family dependents can be categorized into three groups: small (1–3 persons), medium (4–6 persons), and large (>6 persons). The number of dependents may influence a farmer's motivation to manage livestock in order to meet the needs of household members.

The classification of respondents based on family dependents in Kedungbanteng District is presented in Table 4.

Table 4. Classification of Farmers by Number of Family Dependents

No. Nur	nber of Dependents (perso	ns) Frequency (persons) Percentage (%)
1	0	10	12.99
2	1–3	47	61.04
3	4–6	19	24.68
4	>7	1	1.30
	Total	77	100.00

Source: Primary Data, 2023 (processed data).

As shown in Table 4, the majority of respondents (61.04%) have a small number of dependents (1–3 persons). This may indicate that most farmers in Kedungbanteng District have implemented family planning programs (KB) encouraged by the government, enabling them to contribute more effectively to economic development. Ali et al. (2020) state that family planning policies can significantly support economic growth.

Meanwhile, 12.99% of respondents reported having no dependents. The number of dependents in a household affects family expenditure; larger families may face reduced financial allocation per child if household income is insufficient (Purwanto & Taftazani, 2018).

Farmer Household Income Exchange Rate (NTPRP)

The economic welfare of goat farmers in Kedungbanteng District in this study was measured using the Farmer Household Income Exchange Rate (NTPRP), which examines both the income and expenditures of the farmers. Income is derived from two sources: goat farming activities and non-livestock activities, while expenditures consist of household and business-related costs. The average income of goat farmers in Kedungbanteng District is presented in Table 6.

Table 6. Household Income of Goat Farmers

Description	Average Value (IDR)/Year
Income from Goat Farming	
- Goat Livestock	8,913,506.49
Income from Non-Livestock Activitie	S
- Entrepreneur	21,600,000.00
- Fish Farming	8,400,000.00
- Project Work	20,400,000.00
- Labor	14,800,000.00
- Trading	22,500,000.00
- Odd Jobs	10,400,000.00
- Farming	11,085,600.00
- Household Assistant (ART)	7,200,000.00
Average Non-Livestock Income	17,048,088.31
Total Income	25,961,594.80

Source: Primary Data, 2023 (processed data).

Table 6 indicates that the average income from goat farming in Kedungbanteng District is IDR 8,913,506.49 per year, equivalent to approximately IDR 742,792.27 per month. This figure is considerably lower than the Banyumas Regency Minimum Wage (UMK) of IDR 2,118,124.00 per month. The relatively low income is

mainly due to most farmers maintaining a small number of livestock, resulting in suboptimal revenue. On average, farmers in the district raise 5.67 Livestock Units (approximately 5 adult goats and 1 young goat). According to Tatipikalawan and Rajab (2014), one worker can manage up to 31 adult goats, suggesting that farmers still have the capacity to increase livestock numbers to boost farm income.

Income from non-livestock activities contributes significantly to household needs. As shown in Table 6, the highest income is derived from trading (IDR 22,500,000/year), while the lowest is from being a household assistant (ART) (IDR 7,200,000/year). These figures indicate that non-livestock income plays a crucial role in supporting the livelihood of goat farmers in Kedungbanteng District.

Household Expenditure of Goat Farmers

Household expenditures of goat farmers include two main types: household consumption and business-related expenditures, which cover both goat farming and non-livestock activities. Household consumption expenses consist of food and non-food expenditures.

Table 7. Average Household Expenditures of Goat Farmers

Description	Average Value (IDR)/Year
Household Expenditure	
Food	
- Rice	2,668,051.95
- Side dishes	1,547,844.16
- Eggs and milk	588,155.84
- Vegetables	699,428.57
- Spices	430,753.25
- Cooking oil	451,948.05
- Beverages	342,155.84
Total Food	6,728,337.66
Non-Food	
- Clothing	794,103.90
- Electricity	1,116,623.38
- Water	225,506.49
- Education	1,930,129.87
- Social activities	84,748.05
- Communication	428,197.40
- Transportation	743,532.47
- LPG Gas	700,675.32
- Health insurance (BPJS)	405,974.03
- Property tax (PBB)	105,974.03
Total Non-Food	6,535,464.94
Total Household Expenditure	13,263,984.60
Business Expenditure	
- Goat farming	1,504,285.71
- Non-livestock: Fish farming	6,000,000.00
- Non-livestock: Trading	13,400,000.00
- Non-livestock: Farming	3,100,000.00
Average Non-Livestock Business	7,500,000.00

Description	Average Value (IDR)/Year
Total Business Expenditure	9,004,285.71
Total Overall Expenditure	22,268,270.31

Source: Primary Data, 2023 (processed data).

Table 7 shows that among food expenditures, the largest portions are spent on rice (IDR 2,668,051.95/year) and side dishes (IDR 1,547,844.16/year). The higher proportion of food expenditure compared to non-food expenses indicates that households are still not fully prosperous, affecting both the quantity and quality of food consumed (Arida et al., 2015).

For non-food expenses, education **and** electricity dominate. Education accounts for the highest non-food expenditure (IDR 1,930,129.87/year), followed by electricity (IDR 1,116,623.38/year). This shows that farmers are aware of the importance of education and prioritize it for their children, considering it a long-term investment in human capital. Household facilities such as electricity are provided to support learning at home.

Regarding business expenditures, goat farming costs are lower than non-livestock business expenses, averaging IDR 1,504,285.71/year. This reflects that most farmers in Kedungbanteng still use traditional livestock management systems, relying on locally available forage and self-constructed goat pens, without incurring additional labor or production costs (Welerubun et al., 2022).

The highest business expenditures are found in non-livestock activities, with trading (IDR 13,400,000/year) and fish farming (IDR 6,000,000/year) requiring the most resources.

Farmers' Welfare Level

The welfare level of goat farmers in Kedungbanteng District in this study was measured using the Farmer Household Income Exchange Rate (NTPRP), which assesses farmers' purchasing power at the household level. NTPRP is calculated by dividing total household income by total household expenditure. This indicator provides insight into the economic capacity of rural farming households. The results are presented in Table 8.

Table 8. Classification of Farmers' Welfare Level

No. NTPRP Value Number of Respondents Percentage (%)				
1	<1	26	33.77	
2	>1	51	66.23	
	Total	77	100.00	

Source: Primary Data, 2023 (processed data).

The findings indicate that 33.77% of the farmers fall into the "not yet prosperous" category (NTPRP <1). Forming goat farming cooperatives or groups could strengthen capital and increase farmers' income. Meanwhile, 66.23% of the farmers are classified as prosperous, with NTPRP values exceeding 1. The average NTPRP of all respondents is 1.49, indicating that, on average, goat farmers in Kedungbanteng District are economically prosperous.

This result aligns with Sundari et al. (2012), who state that households with NTPRP <1 are considered not yet prosperous, while those with NTPRP >1 are considered prosperous.

Multiple Linear Regression Analysis

Multiple linear regression was employed to examine the influence **of** independent variables (Number of Livestock and Education Level) on the dependent variable (Economic Welfare of Goat Farmers). The regression results are presented in Table 9.

Table 9. Results of Multiple Linear Regression Analysis

Variable	Coefficient (Co)	SE	t Stat	P-value
Intercept	0.8516	0.2437	3.4940	0.0008
Number of Livestock (X ₁)	0.0837	0.0215	3.8957	0.0002
Education Level (X ₂)	0.0218	0.0360	0.6073	0.5455
R ²	0.2360			
Significance F	0.000047			

Source: Primary Data, 2023 (processed data).

The regression equation derived from the analysis is:

 $Y = 0.8516 + 0.0837X1 + 0.0218X2Y = 0.8516 + 0.0837X_1 + 0.0218X_2Y = 0.8516 + 0.0837X1 + 0.0218X2Y = 0.8516 + 0.0837X1 + 0.0218X1 + 0.0218X1 + 0.0837X1 + 0.0218X1 + 0.0837X1 + 0.0218X1 + 0.0837X1 + 0.0837X1 + 0.0218X1 + 0.0837X1 + 0.0218X1 + 0.0837X1 + 0.0218X1 + 0.0837X1 + 0.0218X1 + 0.0837X1 +$

The coefficient of determination (R²) is 0.2360 (23.60%), indicating that 23.60% of the variation in the dependent variable (economic welfare) can be explained by the independent variables (number of livestock and education level). The remaining 76.4% is influenced by other factors outside the study model. This suggests that there are additional independent variables affecting farmers' welfare in Kedungbanteng District.

F-Test

The F-test was conducted to determine whether the independent variables—number of livestock (X_1) and education level (X_2) —jointly have a significant effect on the dependent variable (economic welfare, Y). As shown in Table 9, the Significance F = 0.000047, indicating that collectively, the independent variables have a significant impact on economic welfare at the 99% confidence level $(P \le 0.01)$.

t-Test

The t-test evaluates the individual effect of each independent variable on the dependent variable. Based on Table 9:

- Number of Livestock (X_1): t = 3.8957, $P = 0.0002 \rightarrow \text{significant}$, meaning that the number of livestock significantly influences economic welfare.
- Education Level (X_2): t = 0.6073, $P = 0.5455 \rightarrow$ not significant, indicating that education level does not have a statistically significant effect on economic welfare in this study.

These results imply that increasing the number of livestock is likely to improve farmers' economic welfare, while the effect of education level alone may be limited without supporting factors.

T-Test Analysis

Impact of Livestock Quantity (X1)

The number of livestock (X1) significantly influences the economic welfare of goat farmers, with a confidence level of 99% (P<0.01). The regression coefficient of 0.0873 indicates that each additional unit of livestock contributes an increase of 0.0873 in the farmers' economic welfare. This finding supports the research by Putra et al. (2017), which confirmed that physical assets, such as livestock numbers, play an important role in improving farmers' welfare. Essentially, the more livestock a farmer maintains, the higher the potential income.

Impact of Farmer Education (X2)

The education level (X2) does not show a significant partial effect on the economic welfare of goat farmers in Kedungbanteng District. Most farmers in the area (38.96%) have only completed primary school, which limits their ability to adopt new innovations and acquire advanced knowledge for business development. As a result, they rely heavily on traditional practices and accumulated experience in livestock management. This aligns with Mastuti et al. (2021), who found that a farmer's formal education does not directly determine income from goat farming, as practical experience is the primary factor.

4. Conclusion

The average number of goats owned by farmers in Kedungbanteng District is 5.67 heads, while the average educational attainment of goat farmers in the same district is 7.27 years. The economic welfare of goat farmers in Kedungbanteng was measured using the NTPRP index, yielding an average value of 1.49. This indicates that goat farmers in Kedungbanteng fall into the "prosperous" category. The level of economic welfare among these farmers is influenced by the number of livestock they own.

Acknowledgments

The author would like to express sincere gratitude to the Dean of the Faculty of Animal Husbandry at Jenderal Soedirman University for granting permission to conduct this research.

References

- Ali, M., Junaidi, M., & Hafiz, A. (2020). Implementasi program desa keluarga berencana bagi kesejahteraan masyarakat: Studi kasus Geguntur Mataram. *Jurnal Ulul Albab*, 23(2), 95–99.
- Anda, M., & Wahdini, W. (2010). Sifat, komposisi mineral, dan kandungan berbagai unsur pada abu erupsi Merapi. Bogor: Balai Besar Penelitian dan Pengembangan Sumberdaya Lahan Pertanian.
- Arida, A., Sofyan, S., & Fadhiela, K. (2015). Analisis ketahanan pangan rumah tangga berdasarkan proporsi pengeluaran pangan dan konsumsi energi: Studi kasus pada rumah tangga petani peserta program desa mandiri pangan di Kecamatan Indrapuri Kabupaten Aceh Besar. *Jurnal Agrisep*, 16(1), 20–34.
- Astriani, F. I. F. (2017). *Pola usaha peternakan kambing di Kecamatan Pekat Kabupaten Dompu* (Doctoral dissertation, Universitas Islam Negeri Alauddin Makassar).
- Badan Pusat Statistik Indonesia. (2023, September 18). *Istilah Badan Pusat Statistik*. https://www.bps.go.id/istilah/index.html?Istilah_page=4
- Badan Pusat Statistika Kabupaten Banyumas. (2019). Banyaknya ternak besar menurut desa/kelurahan di Kecamatan Kedungbanteng 2019.
- Badan Pusat Statistika Kabupaten Banyumas. (2020). Banyaknya ternak besar menurut desa/kelurahan di Kecamatan Kedungbanteng 2020.
- Badan Pusat Statistika Kabupaten Banyumas. (2021). Banyaknya ternak besar menurut desa/kelurahan di Kecamatan Kedungbanteng 2021.
- Badan Pusat Statistika Kabupaten Banyumas. (2022). Banyaknya ternak besar menurut desa/kelurahan di Kecamatan Kedungbanteng 2022.
- Bawadi, Z., & Ratnasari, P. (2023). Efektivitas program bantuan langsung tunai (BLT) dana desa Kecamatan Pulau Malan Kabupaten Katingan. *Jurnal Administrasi Publik (JAP)*, 9(1), 71–82.
- Dagur, A. B. (2004). *Prospek dan strategi pembangunan Kabupaten Manggarai dalam prespektif masadepan*. Jakarta: Indomedia.
- Dikal, D. P., & Dona, A. (2023). Profil peternakan kambing di Nagari Palaluar Kecamatan Koto VII Kabupaten Sijunjung. *Jurnal Tropical Animal*, 1(1), 9–18.
- Eskatectona, A. D., Hidayat, N. N., & Mastuti, S. (2021). Analysis of supply chain and profit of goats livestock margin in the District of Banyumas. *ANGON: Journal of Animal Science and Technology*, 3(1), 115–123.
- Harmoko, H., Ibrahim, I., Kusrianty, N., & Marhayani, M. (2021). Gambaran struktur populasi ternak kambing di Kecamatan Galang Kabupaten Tolitoli. *Cendekia*.
- Hernanto, A., Muatip, K., & Haryoko, I. (2020). Prospek dan kendala pengembangan usaha ternak domba di Kecamatan Cilongok. *Journal of Animal Science and Technology*, 2(2), 177–187.
- Novianto, A. D., Wakhidati, Y. N., & Muatip, K. (2020). The relationship between the role of the group and the productivity of the goat farmers members group in Cilongok Banyumas. *Angon: Journal of Animal Science and Technology*, 2(3), 276–289.

- Paramandita, H., Muatip, K., & Purwaningsih, H. (2019). Hubungan karakteristik dengan sikap peternak terhadap usaha peternakan sapi perah di Kabupaten Wonosobo. *Journal of Animal Science and Technology*, 1(3), 219–226.
- Purwanto, A., & Taftazani, B. M. (2018). Pengaruh jumlah tanggungan terhadap tingkat kesejahteraan ekonomi keluarga pekerja K3L Universitas Padjadjaran. *Jurnal Pekerjaan Sosial*, 1(2), 33–43.
- Putra, R. A. R. S., Ariyadi, B., Kurniawati, N., & Haryadi, F. T. (2017). Pengaruh modal sosial terhadap tingkat kesejahteraan rumah tangga peternak: Studi kasus pada kelompok peternak ayam kampung Ngudi Mulyo, Gunungkidul. *Buletin Peternakan*, 41(3), 349–354.
- Rendi, D. (2022). Analisis kelayakan usaha peternak kambing Peranakan Etawa (PE) di Desa Tribudimakmur Kecamatan Kebun Tebu Kabupaten Lampung Barat (Skripsi, Politeknik Negeri Lampung).
- Sundari, H. A., & Utami, D. P. (2012). Kontribusi usahatani ubi jalar (Ipomoea batatas L.) terhadap pendapatan rumah tangga petani di Desa Ukirsari Kecamatan Grabag Kabupaten Purworejo. *Surya Agritama: Jurnal Ilmu Pertanian dan Peternakan*, 1(2), 34–45.
- Tatipikalawan, & Rajab. (2014). Analisis produktivitas tenaga kerja keluarga pada peternakan kambing Lakor di Pulau Lakor Kabupaten Maluku Barat Daya. *Jurnal Ilmu Ternak dan Tanaman*, 4(2), 59–63.
- Tulong, V. A., Ngangi, C. R., & Tangkere, E. G. (2019). Nilai tukar pendapatan rumah tangga petani padi di Desa Tolok Kecamatan Tompaso Kabupaten Minahasa. *Jurnal Agribisnis dan Pengembangan Pedesaan*, 1(1), 71–79.
- Utami, R. P., Lestari, E., & Wibowo, A. (2017). Hubungan peran wanita pedesaan terhadap kesejahteraan keluarga. *Agrista*, *5*(1), 101–111.
- Welerubun, I., Leunupun, E. G., & Litualy, J. W. (2023). Kajian analisis usaha ternak kambing Lakor di Pulau Lakor Kecamatan Lakor Kabupaten Maluku Barat Daya. *Jurnal Peternakan Sriwijaya*, 12(1), 22–29.
- Widyawati, R., Suyono, E., Hasanah, U., & Setiawan, W. (2022). Pengaruh penyaluran bantuan langsung tunai (BLT), persepsi status wilayah, dan standar hidup terhadap kesejahteraan masyarakat Desa Baseh, Kecamatan Kedungbanteng, Kabupaten Banyumas. *In Mid Year National Conference and Call for Paper*, *1*(1), 723–735.
- Yulian, R., Hilmanto, R., & Hewanti, S. (2016). Nilai tukar pendapatan rumah tangga petani agroforestri di Hutan Kemasyarakatan Bina Wana Jaya I Kesatuan Pengelolaan Hutan Lindung Batutegi Kabupaten Tanggamus. *Jurnal Sylva Lestari*, *4*, 39–50.