

The Business Plan: Al-Amin Living Lab and Industrial Park of Goat Farming

Hidayati Purnama Lubis¹, Purwo Siswoyo², Dewi Mahrani Rangky³, Tridia Kumala Dewi⁴

¹ Management Department, Universitas Pembangunan Panca Budi, Indonesia

² Animal Husbandary Department, Universitas Pembangunan Panca Budi, Indonesia

³ Economics Department, Universitas Pembangunan Panca Budi, Indonesia

⁴ Management Department, Universitas Pembangunan Panca Budi, Indonesia

Article Info

Article history:

Received Sep, 2024

Revised Sep, 2024

Accepted Sep, 2024

Keywords:

Business Plan

Goat Farming

Sampe Cita

Strategy

ABSTRACT

The goal of this research is to examine and assess the business plan for goat farming within the Al-Amin Living Lab and Industrial Park area, located in Kutalimbaru District, Sampe Cita Village. The specific target of this research is to find the factors that influence the development strategy of the goat farming business plan in the Al-Amin Living Lab and Industrial Park area in Kutalimbaru District, Sampe Cita Village. So that in making decisions to determine strategies that can create success in the goat farming business. This research uses a Quantitative Descriptive research approach, where this study is related to data that describes the factors and success strategies in building a goat farming business in the Al-Amin Living Lab and Industrial Park area in Kutalimbaru District, Sampe Cita Village. The data analysis used is SWOT analysis, a strategic planning method used to Evaluate Strengths, Weaknesses, Opportunities, and Threats that occur in projects or a business venture. The results of the study explain that the results of the analysis of non-financial aspects, namely market aspects, technical aspects, management aspects, legal aspects, and social aspects, the sheep fattening business is feasible to implement. The results of the analysis of financial aspects which include NPV, IRR, Net B/C, and payback period, this sheep-fattening business is feasible to implement.

This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Corresponding Author:

Name: Dewi Mahrani Rangky

Institution: Universitas Pembangunan Panca Budi, Indonesia

Email: dewimahrani@dosen.pancabudi.ac.id

1. INTRODUCTION

The livestock sector is a vital part of agriculture. Its development contributes significantly to agricultural progress by providing nutritious, competitive food products and generating employment opportunities within the livestock agricultural business. The livestock sector development

program is directed to be able to increase the livestock population, increase livestock production, produce superior products that can compete from within and outside the country (export commodities), improve the image of breeders, and create jobs, especially for the local community, all of which are aimed at increasing the income and welfare of breeders and society in general, the livestock

sector is a business that includes the raising of livestock and poultry to be developed or taken as a result [1].

One of the livestock animals that are usually managed by the community is goats. This single animal offers numerous advantages: goat meat is a nutrient-dense source of protein, containing high-quality protein, minimal saturated fat, and abundant iron. Goat milk provides substantial health benefits, closely resembling human milk in composition, which makes it easier to digest for individuals who have difficulty with cow's milk. Goatskin is economically valuable for

making items such as shoes, bags, and clothing, while goat manure serves as a useful organic fertilizer to improve soil fertility and promote plant growth.

According to the Directorate General of Animal Husbandry and Animal Health, the main areas for goat and sheep meat production in Indonesia are eight provinces: East Java, Central Java, West Java, Banten, Aceh, Lampung, North Sumatra, and East Nusa Tenggara. These areas collectively contribute 75.36% to the nation's production [2].

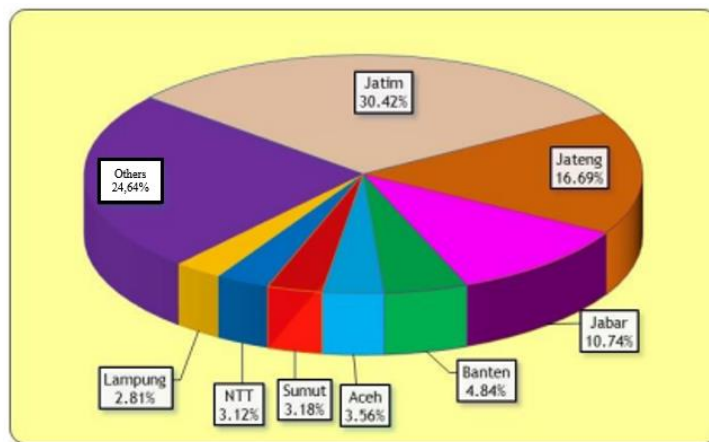


Figure 1. Contribution of Goat and Sheep Meat Production in Key Provinces in Indonesia from 2016 to 2020

Source: (Ministry of Agriculture, 2020)

Sampe Cita Village is situated in the Kutalimbaru Sub-district of Deli Serdang Regency, North Sumatra Province [3]. It is administratively located on the boundary between Medan City and Deli Serdang

Regency. The village has a population of approximately 2,888 people and is home to diverse cultural groups, including Batak, Karo, Javanese, and Mandailing, among others.

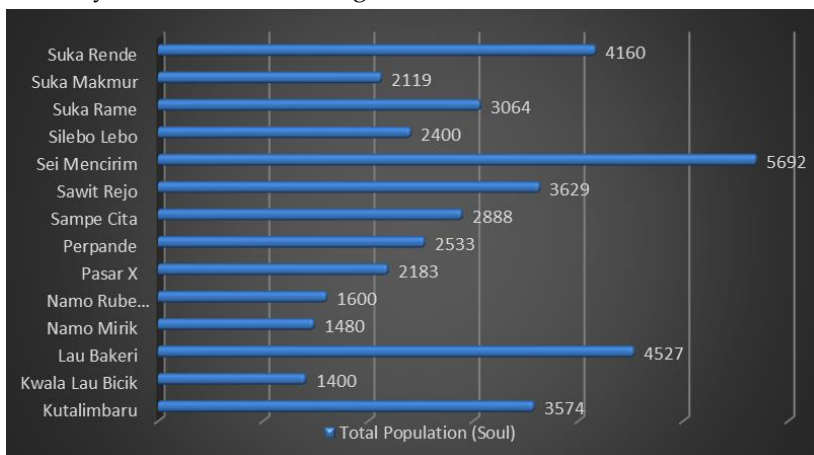


Figure 2. Population Development of Kutalimbaru Sub-district in 2022

Source: Data, Office of the Village Head in Kutalimbaru Sub-District

The information above is in line with the growth of the human population and the higher and more complex human activities [4], so it is expected that there will be demand for goat farming products such as meat, milk, skin, and so on that can be processed and have economic value [5].

In light of this, researchers analyzed the goat farming business plan for the Al-Amin Living Lab and Industrial Park located in Kutalimbaru District, Sampe Cita Village. This analysis is essential, as a successful enterprise requires meticulous planning.

A business plan is a detailed blueprint for a proposed business, detailing its objectives, target customers, competition, and production needs. It is not only aimed at entrepreneurs but also at potential investors or creditors who could offer financial backing [6]. Entrepreneurs frequently present their plans to investors seeking partial ownership and to lenders, such as banks, who might offer business loans [7].

The goal of formulating a strategic plan is to establish a competitive edge. Strategically, a company's success hinges on continuously building and enhancing its strengths to outpace competitors. Companies with a competitive edge can gain market share and attain operating profits that surpass the industry average [8].

Therefore, it is crucial to develop a business plan to guide the local community in launching a goat farming enterprise, aiming to enhance their economic standard and quality of life.

2. LITERATURE REVIEW

A business plan is a framework that describes every part of the business that will be done from start to finish. As well as by including various events that must be anticipated if unwanted things happen. So that a business plan is made concerning conditions that are considered realistic or feasible to implement [9].

Goats present a strong opportunity as an export commodity; however, Indonesia has struggled to consistently meet export demands due to a relatively small population

and the requirement for goats to have an average body weight between 50-60 kg per head. Despite this, goats have significant potential, with the ability to breed more than once and offer numerous advantages and benefits [10].

The benefits obtained by farmers will multiply and can economically increase the income and welfare of farmers. The quality and productivity of breeder resources are one of the first steps that can realize an increase in the goat population in Indonesia.

3. METHODS

This research was conducted in Al-Amin Living Lab and Industrial Park Glugur Rimbun, Sampe Cita Village, Kutalimbaru District, Deli Serdang Regency, North Sumatra Province.

The scope of this research is focused on the influencing factors and business plan development strategies in the goat farming zone within the Al-Amin Living Lab and Industrial Park in Kutalimbaru District, Sampe Cita Village.

The data analysis method uses a SWOT analysis tailored for the Al-Amin Living Lab and Industrial Park in Sampe Cita Village, employing a quantitative approach. SWOT analysis is a strategic planning method used to evaluate the Strengths, Weaknesses, Opportunities, and Threats that occur in a project or a business venture, or evaluate its own and competitors' product lines.

4. RESULTS AND DISCUSSION

Goat farming is the cultivation of goats for commercial purposes, either to produce meat, milk, skin, or other by-products.

Goats have significant development potential, as one sign of growth in the livestock sector is the rise in the population of existing livestock commodities [6]. Goats are an important component in smallholder farming because small-scale goat rearing can help people's economic subsistence by utilizing natural resources available [11]. This

potential can be used for livestock development, especially goat farming.

4.1 Advantages of Goat Farming

- a) Good Adaptability: Goats can live in a wide variety of environments, from high to low altitudes, and from tropical to semi-arid climates.
- b) High Productivity: Goats can produce meat (broiler goats), milk (dairy goats), and valuable fur or leather.
- c) Simple Feed: Goats can eat a wide variety of feed, including grass, leaves, and agricultural residues.
- d) Fast Growth: Some breeds of goats have a fast growth rate, resulting in shorter production cycles.
- e) Wide Market: Demand for goat meat, goat milk, and processed products tends to be high in many regions.

4.2 Challenges in Goat Farming

- a) Diseases: Infectious diseases such as anthrax, brucellosis, or intestinal worms can be a serious problem if not treated properly.

b) Extreme Weather: Weather that is too hot or too cold can affect the health of the goats.

c) Price Fluctuations: The selling price of goats and their derivative products can fluctuate based on the season and market demand.

The livestock sub-sector plays a strategic role in fulfilling food needs, particularly as a source of animal protein. As the population grows, the demand for animal-based foods, including meat, eggs, and milk, continues to rise [12] [13].

Goat farming shows great promise due to its potential for growth within agro-ecosystems. Goats exhibit better adaptability than other ruminants and are known for their ability to thrive in marginal conditions, making them a popular choice for domesticated livestock.

Developing a business plan for goats involves several key steps.

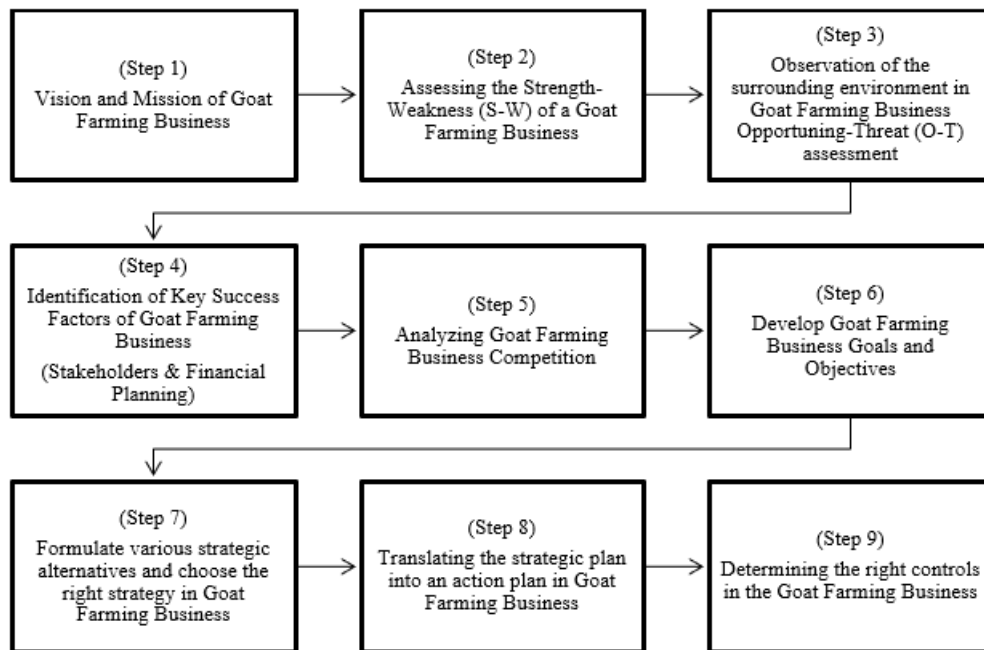


Figure 3. SWOT Analysis of Strategic Management of Goat Farming Business Planning
Source: [8]

Step 1. Vision and Mission of Goat Farming Business

Vision: The realization of sustainable, competitive, and quality goat farming

towards the availability of safe, healthy, and halal food.

Mission: 1. Increase the availability of quality food from livestock

2. Utilizing and optimizing science and technology that is environmentally friendly and provides added value for farmers and breeders, while supporting the improvement of the quality of plantation and livestock products and the development of energy sources.
3. Making Al-Amin Living Lab and Industrial Park capable of synergizing the agricultural industry with livestock industry technology.

Step 2. Assessing the Strengths and Weakness of the Goat Farming Business

- a. Establishing Goat Farms Based on Goat Breeding / Fattening Cultivation to Meet Local Goat Needs
- b. Maximize the Land Area for Goat Farm Development by the Target Market

Step 3. Observation of the surrounding environment in Goat Farming Business Opportuning-Threat (O-T) assessment

- a. Utilize business opportunities by cooperating or sharing with goat breeders in the area.
- b. Establish and build a sustainable goat farming business to meet the needs of local goats.

Step 4. Identify key success factors of the goat farming business (stakeholders & financial planning)

The main success factor of the Goat Farming Business is through Stakeholders. In his writing "Stakeholder Theory", [14] explains that an organization or issue/problem is influenced by all relevant stakeholders, therefore decision-making must provide benefits or not harm all influential stakeholders. To realize the creation of fair decisions for all stakeholders, the involvement of all parties (stakeholders) is very important. The involvement of stakeholders is based on the role and function and the size of the influence of each stakeholder [15]. Therefore, it is considered important to identify which stakeholders will

play a role and have an interest in the development plan of the Al-Amin Living Lab and Industrial Park area according to their level of influence and role.

Step 5. Analyzing Goat Farming Business Competition

The competitive analysis of a goat farming business involves several important factors that can affect the success of this venture. Here are some aspects to consider:

1. Market Analysis

Market Demand: The demand for goat meat, goat milk, and derivative products (such as goat cheese) in a particular region. Seasonal factors also come into play, such as increased demand during holidays or certain events.

Market Segments: Identify potential market segments such as restaurants, households, and food processing industries.

2. Competition and Competitors

Major Players: Identify who are the major players in the industry in your area. This includes large farmers, farmer cooperatives, and processing companies.

SWOT Analysis: Assess the strengths, weaknesses, opportunities, and threats of key competitors.

Competitor Strategies: Understand the strategies used by competitors such as husbandry methods, distribution, marketing, and pricing.

3. Production Factors

Production Costs: Includes the cost of feed, health care, labor, and facilities. Analyzing cost efficiency is key to staying competitive.

Technology and Innovation: Adopting the latest technology in animal husbandry such as the use of high-quality feed, reproductive technology, and livestock health management.

Economies of scale: The advantages of scale can reduce the cost per unit of production.

4. Regulations and Policies

Government Policies: Understand applicable regulations on animal husbandry, animal welfare, and product standards.

Subsidies and Support: Government subsidy or support programs that can help lower production costs or improve product quality.

5. Distribution and Marketing

Distribution Channels: Efficiency in the distribution system is crucial. Whether direct-to-consumer distribution, through traditional markets, or modern supply chains.

Branding and Promotion: Effective marketing strategies to build a strong brand and expand the market. This includes the use of social media, websites, and promotional events.

6. Sustainability and Ethical Practices

Sustainability: Sustainable and environmentally friendly farming practices are increasingly important. This includes waste management and efficient use of natural resources.

Animal Welfare: Good animal welfare standards can add value and differentiate it from competitors.

Step 6. Develop Goat Farming Business Goals and Objectives

The objectives of the Al-Amin Living Lab and Industrial Park are as follows:

1. Realizing animal food from livestock.
2. Improving animal health status and guaranteeing safe, healthy, and halal animal products.
3. Increase the added value and competitiveness of livestock products.
4. Improve service excellence

Setting goals is necessary to provide focus on the preparation of activities and allocation of organizational resources in the activities or operations of the organization each year for 5 (five) years. The main objectives of the Al-Amin Living Lab and Industrial Park are as follows:

1. Increased livestock population and production,
2. The establishment of a livestock area,
3. Control of strategic infectious animal diseases and zoonoses,
4. Improved quality and safety of safe, healthy, and halal food and animal products,

5. Increased added value and competitiveness of livestock products, and
6. Improved performance and service quality.

Step 7. Formulating Strategic Alternatives and Choosing the Right Strategy in Goat Farming Business

The following are alternative strategies that can be implemented for developing the goat farming business in the Al-Amin Living Lab and Industrial Park, Glugur Rimbun Village, Sampe Cita Subdistrict, Kutalimbaru District, Deli Serdang Regency:

1. Improve SOPs to maintain product quality. This strategy is based on the fact that the existing SOPs have not been running well.
2. Strengthening existing markets and working with smallholder farmers. The strategy of strengthening the market and working with small breeder partners is based on the existence of a market development strategy, namely a good relationship with goat farming partners or with small breeder partners.
3. Maximizing promotion on social media by providing special training to the workforce.
4. Developing fodder processing technology and artificial insemination. Developing animal feed processing technology and artificial insemination is obtained based on the strength factors already owned by the manager, namely the standardization of goat quality and sufficient capital from the income. One of the standardizations applied is the standardization of feed to be able to further develop the variety of animal feed so that the livestock products become quality livestock.

Step 8. Translating the Strategic Plan into an Action Plan in Goat Farming Business

Translating the strategic plan into an action plan is a crucial step to ensure that long-term goals can be achieved through concrete and measurable operational steps. These strategic plans include:

1. Strategic Plan: Increase Broiler Goat Population
2. Strategic Plan: Improve Goat Health and Productivity
3. Strategic Plan: Increase Sales and Market Reach
4. Strategic Plan: Operational Efficiency
5. Strategic Plan: Improved Team Skills and Knowledge

Step 9. Determining the Right Controls in the Goat Farming Business

Proper control and knowing the types of animal diseases is the goal to minimize the risk of losses due to death in goats and dangerous animal diseases to ensure safe and healthy livestock products.

Primary recognition of healthy livestock is a skill that needs to be understood and honed along the way. Frequent interaction with livestock can make it easier for farmers to see the condition of physiological changes, both in healthy and sick conditions [16]. The characteristics of healthy animals are fresh, lively, good hair and skin, bright eyes, clean groin, and moist nose mirror. On the other hand, sick animals tend to be limp, droopy eyes, dirty groin, and inactive. The best time to observe sick or healthy sheep or goats is during feeding or when the animals are eating. At that time, you will see the activity of the animals in a sick or healthy condition. Livestock Health and Risk Control Management Procedures:

1. Prevention of animal diseases

Carry out biosecurity activities in the form of spraying disinfectant liquid on all materials, livestock, and humans from the external environment before entering the production area. Especially for goats, a reconditioning, isolation, and animal quarantine program is carried out for 10 days as an effort to prevent the entry and spread of dangerous animal pests and diseases from outside.

2. Health Program

Carry out animal health monitoring activities, cage disinfection, deworming, and vitamin administration to all sheep and maintain the cleanliness of the environment, cages, and production

equipment to minimize the risk of livestock illness and death.

3. Disease identification and cure

Carry out isolation or separation activities, examination of the type of disease and its cause, and treatment for livestock that are indicated to be sick. Livestock that cannot produce well due to physical illness or disability after the healing process will be included in the culled livestock. For livestock that dies suddenly (before treatment) and livestock that are forcibly slaughtered, a simple examination, carcass dissection, and laboratory tests (if needed) are carried out to determine the cause of death and the disease suffered. Identification of diseases and livestock deaths are reported and followed up for improvements to the process and maintenance techniques.

4. Emergency action

Reporting activities when finding symptoms of zoonotic disease clusters in sick sheep to the government authorities for a follow-up examination and confirmation of the type of disease. Emergency action is carried out after confirmation of the type of disease and recommended actions from the government authorities to farmers.

The appropriate control in the goat farming business is disease prevention through:

1. Cage (Cleaning, washing, disinfection)
2. Nutrition (Full of quantity and full of nutrition)
3. Routine check-up (2 times a day)

Handling

1. Disease Recognition
2. Technique
3. Materials (equipment and medicine)
4. Contact a paramedic or veterinarian

Sheep Fattening Maintenance Management

The fattening in question is fattening that is not excessive but fattening as necessary according to the purpose of fattening. The purpose of the fattening program is to improve carcass quality by depositing fat as needed. If the animals used are immature,

then the program is like raising while fattening or improving carcass quality [17].

Sheep fattening is very popular with farmers as a commercial livestock business because it is considered more economical, relatively fast, low capital, and more practical. The selected feeders are thin and healthy feeder sheep with a large frame [18].

There are generally three categories of fattening: short-term (± 1 month), medium-term (± 2 months), and long-term (± 3 months) [17]. The longer the fattening time, the lower the body weight gain. Although body weight gain decreases, carcass percentage will increase along with the length of fattening.

Financial Feasibility Analysis

financial feasibility analysis is performed to assess the viability of a business. The assessment here is nothing but to provide recommendations on whether a business is worth doing or not, considering that future conditions are full of uncertainty. This financial feasibility analysis is based on the calculation of business planning cash flow investment criteria for the next 10 years from 2018 to 2028.

The results of the calculation of the financial feasibility criteria of the sheep-fattening business can be seen in Table.

Table 1. Criteria for the Feasibility of Sheep-Fattening Business

Financial Indicator Criteria	Value	Description
NPV	Rp. 1442.480.406	Feasible
Net B/C	2.32	Feasible
IRR	32%	Feasible
Payback Period	5 tahun	

5. CONCLUSION

The conclusions of this research discussion are as follows:

a) The results of the analysis of non-financial aspects, namely market aspects, technical aspects, management aspects, legal

aspects, and social aspects, sheep fattening business is feasible to implement.

b) The results of the analysis of the financial aspects that include NPV, IRR, Net B / C, payback period, and sheep fattening business are feasible to implement.

REFERENCES

- [1] R. G. H. Saputra, "Feasibility Analysis Of Laying Quail Farming Business (Case Study Ud New Daya Niaga)." Politeknik Negeri Jember, 2021.
- [2] Kementerian Pertanian, *Buku Outlook Komoditas Peternakan Kambing/Domba*. Pusat Data dan Sistem Informasi Pertanian Sekretariat Jenderal, 2020. [Online]. Available: https://satudata.pertanian.go.id/assets/docs/publikasi/Outlook_Komoditas_Peternakan_Kambing_Domba_Tahun_2020.pdf
- [3] D. M. Rangkuty, S. Sajar, A. Yazid, and T. Alfadhilla, "Analisis Peluang Usaha Berdasarkan Karakteristik Sosial Ekonomi Masyarakat Kecamatan Kutalimbaru Kabupaten Deli Serdang," in *Seminar Nasional Teknologi dan Multidisiplin Ilmu (SEMNASTEKMU)*, 2022, pp. 100–108.
- [4] Republik Indonesia, "Bandingkan dengan pengertian limbah berdasarkan Undang Undang No. 32 Tahun 2009 Tentang Perlindungan dan Pengelolaan Lingkungan Hidup. Pasal 1 ayat (20), yang menyatakan bahwa limbah adalah sisa suatu usaha dan kegiatan," 2009.
- [5] A. Sanny, H. Muharram Ritonga, and I. Febriani Putri, "Digital Marketing Strategy and Sales of Household Products in Pari Urban Village: A Case Study," *J. Community Res. Serv.*, vol. 7, no. 2, p. 246, 2023.
- [6] N. Ardian, M. M. Sari, E. D. Yanti, and S. Ramadhani, "The Role Of Financial Technology In Improving The Efficiency Of Financial Management For Msme Actors In Kwala Serapuh Village Langkat Regency," in *Proceeding International Seminar of Islamic Studies*, 2024, pp. 1623–1630.
- [7] I. M. Putra, *Business Model and Business Plan di Era 4.0*. Yogyakarta: Quadrant, 2021.
- [8] Hery, *Perencanaan Bisnis*. Jakarta: PT. Grasindo, 2018.
- [9] S. E. Syaiful Pakaya, *Manajemen Strategi*. CV Cahaya Arsh Publisher & Printing, 2000.
- [10] I. Fatimah, "Pengaruh Suplementasi Mineral Mikro Organik Terhadap Produksi Dan Kualitas Susu Kambing Perah Jawarandu," 2022.
- [11] Z. Zulfanita, "Kajian Analisis USAha Ternak Kambing Di Desa Lubangsampang Kecamatan Pituruh Kabupaten

- Purworejo," *Mediagro*, vol. 7, no. 2, p. 151818, 2011.
- [12] G. Siregar, "Analisis kelayakan dan strategi pengembangan usaha ternak sapi potong," *AGRIUM J. Ilmu Pertan.*, vol. 17, no. 3, 2012.
- [13] E. Nugroho *et al.*, "Kajian evaluasi manfaat dan kontribusi dana APBN dalam pembangunan peternakan di Jawa Timur," *J. Ilmu-Ilmu Peternak.*, vol. 20, no. 2, pp. 14–23, 2010.
- [14] D. Y. Wulandari, H. P. Lubis, R. Franita, and A. Amanda, "Analisis Peramalan Perencanaan Biaya Pengelolaan Peternakan Kambing Pe Dengan Metode Exponential Smoothing," *Nusant. J. Ilmu Pengetah. Sos.*, vol. 10, no. 4, pp. 1763–1772, 2023.
- [15] H. P. Lubis and Y. Miranti, "Analysis of Customs Contributions to North Sumatra Regional Economic Growth," in *The International Conference on Education, Social Sciences and Technology (ICESST)*, 2023, pp. 325–340.
- [16] M. M. Sari, H. M. Ritonga, and A. I. Faried, "Pembuatan Laporan Keuangan Kelompok Usaha Desa Kelambir Lima Kebun, Kabupaten Deli Serdang," *JUBDIMAS (Jurnal Pengabd. Masyarakat)*, vol. 2, no. 2, pp. 53–57, 2023.
- [17] A. Parakkasi, *Ilmu nutrisi dan makanan ternak ruminan*. Penerbit Universitas Indonesia, 1999.
- [18] H. M. Ritonga, "Potential And Strategy For Natural Tourism Development (Case Study Of Kwala Serapuh Village, Langkat)," *Pros. Univ. DHARMAWANGSA*, vol. 3, no. 1, pp. 804–811, 2023.