

ANALYSIS OF PROFITABILITY CATTLE LIVESTOCK BUSINESS IN TANJUNG PASIR VILLAGE, LABUHAN BATU UTARA DISTRICT

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Keywords:

Feasibility, Profits, Production, Livestock
Business.

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Abstract: Cattle farming is one of the livestock businesses that has a strategic role in meeting the ever-increasing food needs and improving the national economy. This research aims to analyze the profits and R/C of cattle farming businesses in the research area. This research was conducted in Tanjung Pasir Village, South Kualuh District, North Labuhan Batu Regency, from February to May 2023. The object of this research was people who carried out traditional cattle farming. The data analysis method used is quantitative, which is a data analysis method presented in the form of numbers processed based on mathematical calculations. The research results show that the cattle farming business in Tanjung Pasir Village, Kualuh Selatan District, is feasible to operate with an R/C of 3.09, meaning that each expenditure costs Rp. 1.00, then the farmer will receive Rp. 3.09 so that the farmer gets a profit of Rp. 3.09. The average number of cattle produced in Tanjung Pasir Village during one cycle/year is 15 head/cycle/year with a selling price/head of Rp. 10,000,000/head, so the average receipt is IDR—152,000,000/cycle/year.

INTRODUCTION

Cattle farming is one of the livestock businesses that has a strategic role in meeting the ever-increasing food needs and improving the national economy (Simamora et al., 2015). According to Astuti et al. (2010), the cattle business in Indonesia on people's livestock has a low capital structure. The average farmer's cattle ownership is around 2-4 head per farmer, so efficiency is difficult to achieve (Mandaka & Hotaganol, 2005). Increasing the efficiency of cattle farming is a very strategic step to support national food independence and increasing national income, as well as increasing the household income of farmers (Asmara et al., 2015).

Future utilization of natural resources can directly is linked to the balance between population and natural resources (Purba, et al., 2023). Natural resources become the most important element in determining economic growth (Faried, et al., 2023). The livestock

development strategy has good prospects in the future because the demand for ingredients derived from livestock will continue to increase along with the increase in population, income, and public awareness of consuming highly nutritious feed due to the increase in the average level of education of the population. One of these developments is development in the livestock sector, where one of the livestock businesses carried out by many rural communities is raising cattle.

Livestock business is also a livestock activity where breeders and their families raise livestock intending to obtain income from the sale of livestock. For breeders, cattle are a source of income, animal protein, and fertilizer producer. Another function is as a seed and savings investment. The contribution of cattle to income depends on the type of cattle raised and how they allocate available resources in each region.

RESEARCH METHODS

This research uses a descriptive quantitative approach that describes the variable conditions obtained by cattle farming business actors, relating to the overall data and field studies obtained. This type of research is descriptive, namely, researchers who describe the variable conditions obtained by cattle farming business actors. The material in this research is related to the overall data and field studies obtained in the form of production costs and income from cattle farming businesses so that farmers' income can be calculated and obtained.

The method used in this research was direct interviews with breeders using a questionnaire that had been made beforehand. The research location will purposively be considered as one of the areas with great potential to develop cattle farming.

The population in this study were all cattle breeders in Tanjung Pasir Village, South Kualuh District, North Labuhan Batu Regency, namely seven breeders. In this research, sampling was carried out by census or overall. The census method is also known as a complete enumeration method. All individuals in the population are investigated or interviewed as respondents (Wirartha, 2006).

RESULT AND DISCUSSION

Respondent Characteristics

1. Respondent's age

The age of respondents in the cattle farming business in Tanjung Pasir Village ranged from 61 years to 27 years with an average age of 40 years. So it was found that some of the respondents were still of productive working age in running their livestock business.

2. Education level

The respondent's education level is an average of a Bachelor's degree. With this level of education, you can gain insight and knowledge so that your cattle farming business can be maximized.

3. Business experience

The business experience of the respondents ranged from 12 years to 5 years with an average experience of 6 years.

Table 1. Respondent Characteristics

No	Description	Unit	Range		Average
			Lowest	Highest	
1.	Age	Year	27	61	40
2.	Education	Year	17	17	17
3.	Number of children	Person	0	5	3
4.	Experience	Year	5	12	6

Source: Primary Data (processed), 2023.

Calculation of Total Revenue

The cattle farming business in Tanjung Pasir Village in carrying out its business cannot be separated from the costs that must be incurred and calculated to produce a product. The costs in question include fixed costs and variable costs. Fixed costs are costs that do not affect changes in production volume. Increase community participation in management, so that provide economic benefits to local communities such as increased income, employment opportunities and business opportunities, in addition to added value from the economic side (Hasanah, et al., 2023). Economic activity is only one component or subsystem of life society as a system (Faried, et al., 2021).

Table 2. Analysis of Average Fixed Costs and Variable Costs

No.	Description	Business Value (Rp)	Percentage (%)
1	Fix Cost	16,274,836	1.13
	1.1 Depreciation Expenses		
	- Production Location	14,440,000	1.00
	- Equipment	1,834,836	0.13
	1.2 Tax costs	0	0
2	Variable Cost		
	2.1 Cost of Production Facilities		
	- Number of Cattle	608,000,000	42.18
	- Grass Feed	195,840,000	13.59
	- Concentrate Feed	551,424,000	38.25
	- Medicines	10,800,000	0.75
	- Fuel costs	7,621,200	0.53
	2.2 Labor costs	51,600,00	3.58
3	Total cost (1 + 2)	1,441,560,036	100.00

Source: Primary Data (processed), 2023.

Revenue and Business Income

Farming revenue is the product of the production obtained and the prevailing selling price, so revenue is determined by the production size and the selling price. The average number of cattle produced in Tanjung Pasir Village during one cycle/year is 15 head/cycle/year with a selling price/head of IDR. 10,000,000/head, so the average receipt is Rp.152,000,000/ cycle/ year.

Table 3. Average Calculation Total Revenue

No.	Responden	Total Production (kg/cycle/year)	Sale Price (Rp)	Total Revenue (TR) (Rp/cycle/year)
1	Supin	19	10,000,000	190,000,000
2	drh. Sudarija	36	10,000,000	360,000,000
3	Tuti Ardhani	5	10,000,000	50,000,000
4	Eka Saputri	10	10,000,000	100,000,000
5	Akli Barkah	6	10,000,000	60,000,000
Total		76	50,000,000	760,000,000
Avarage		15	10,000,000	152,000,000

Source: Primary Data (processed), 2023.

Table 3 shows the average production value (revenue) generated from businesses in this research area is Rp. 152,000,000,- per year. The total cost which is the result of the addition of fixed costs and variable costs is Rp. 1,441,560,036. From Table 4 it can be seen that the net income obtained from the reduction of total revenue minus total costs is 514,315,049

Table 4. Calculation of Total Revenue and Income

No.	Description	Business Value (Rp)
1	Fix Cost Avarage	8,137,418
2	Variable Cost Avarage	237,547,533
3	Total Cost (1 + 2)	245,684,951
4	Total Revenue	760,000,000
5	Net income (4 – 3)	514,315,049

Source: Primary Data (processed), 2023.

By looking at the assessment criteria that a business is profitable if the price level multiplied by the number of cattle produced exceeds all costs, it can be ascertained that the cattle farming business is worthy of development. Increasing technical efficiency is usually realized at the level of efforts to maximize profits. Practice using good products for environmental and durable enough to be used many times (Faried, et al., 2023). The collaboration above will play a role in realizing these factors drivers that can move the creative economy towards development creative economy to achieve the goals of national creative industries that want to reached (Sartika, et al., 2022).

Economic Analysis and Business Feasibility

Expanding the availability and diversity of employment is a central focus of regional development initiatives (Faried & Sembiring, 2020). After completing the production cost and income analysis, a feasibility analysis of the cattle farming business at the research location is shown in Table 5. Feasibility aims to avoid the risk of future losses, which are full of uncertainty. Some of these conditions can be predicted, and some are unpredictable. In this case, the feasibility function is to minimize undoubtedly

undesirable risks, whether these risks can be controlled or not.

1. Revenue Cost Ratio

The feasibility of cattle farming can be known using R/C. We know that R/C by dividing revenue by total costs. Based on the research results, the R/C is 3.09, meaning that each expenditure costs Rp. 1.00, then the farmer will receive Rp. 3.09 so that the farmer gets a profit of Rp. 3.09. The greater the R/C value will provide greater profits to farmers in their farming business.

Table 5. Average Feasibility Analysis

No.	Description	Unit	Business Value
1	Total Cost Avarage	Rupiah	245,684,951
2	Total Revenue Avarage	Rupiah	760,000,000
3	Net income (2 – 1)	Rupiah	514,315,049
4	Revenue Cost Ratio (2/1)		3.09

Source: Primary Data (processed), 2023.

Break Even Point (BEP)

At the rate of return on capital in our farming business, we know the term Break Event Point (BEP). The calculation is divided into two: BEP for production volume and BEP for production price. The value for BEP volume is 24.57. Meanwhile, for BEP, the production price is IDR 30,710,619.

Tabel 1. Analysis Break Event

No.	Analysis Method	Result
1	Average Total Cost	245,684,951
2	Average Selling Price	10,000,000
3	Total Average Production	8
4	Profit	51,315,049
5	Revenue Cost Ratio	3.09
6	Break Event Points - BEP Production Volume - BEP Production Price	24.57 30,710,619

Source: Primary Data (processed), 2023.

CONCLUSION

Based on the results of the research conducted, the conclusions are:

1. The average production number of cattle in Tanjung Pasir Village during one cycle/year is 15 head/cycle/year with a selling price/head of IDR. 10,000,000/head, so the average receipt is IDR. 152,000,000/cycle/year.
2. The feasibility of cattle farming can be calculated using R/C. R/C by dividing revenue by total costs. Based on the research results, the R/C is 3.09, meaning that each expenditure costs Rp. 1.00, then the farmer will receive Rp. 3.09 so that the farmer gets a profit of Rp. 3.09. The greater the R/C value will provide greater profits to farmers in their farming business.

REFERENCE

- Asmara, A., L.P. Yeti dan D. Lubis. 2015. Keragaan Produksi dan Efisiensi Usaha Peternakan Sapi Rakyat Indonesia. Bogor. P-ISNN: 1693-5853 E-ISNN: 2407-2524
- Astuti M., R. Widiati, dan Y.S Yustina. 2010. Efisiensi Produksi Usaha Sapi Rakyat (Studi Kasus pada Peternak Anggota Koperasi Usaha Peternakan dan Pemerahan Sapi Kaliurang, Sleman, Yogyakarta). *Jurnal Buletin Peternakan*, 34(1): 64-69
- Faried, A. I. et al., 2023. *Pengantar Ekonomi Pembangunan*. Medan(Sumatera Utara): Yayasan Kita Menulis.
- Faried, A. I. et al., 2021. *Sosiologi Ekonomi*. Medan(Sumatera Utara): Yayasan Kita Menulis.
- Faried, A. I. & Sembiring, R., 2020. Creative Economy Potential through Typical Ulos Fabric Small Industries to Promote the Economy of Lumban Suhi-Suhi Village, Toruan Samosir Regency. *International Journal of Management and Humanities (IJMH)*, 5(4).
- Faried, A. I., Sembiring, R. & Wardhani, N. S., 2023. WASTE MANAGEMENT BASED ON CIRCULARITY IN PAHLAWAN VILLAGE, TANJUNG TIRAM SUB-DISTRICT. *Proceeding International Seminar of Islamic Studies*, pp. 1262-1270.
- Hadiguna, R. A. 2015. “*Manajemen Rantai Pasok Agroindustri*.” Andalas University Press. Padang
- Hasanah, U., Faried, A. I. & Sembiring, R., 2023. *Pengembangan Wisata Pantai*

Kawasan Pesisir Timur Provinsi Sumatera Utara. Medan(Sumatera Utara): Tri Selaras Cendekia.

Marisa, J., and Sitepu, S. A. 2018. Increased Revenues in Beef Cattle Business in Hamlet I Kelambir V Village in Hamparan Perak Sub-District Deli Serdang Regency. *Journal of Saintech Transfer*, 1(1), 54-57.

Marisa, J., Sukma, S., and Sitepu, A. 2020. Model Kelembagaan Bisnis Ternak Sapi Potong Di Desa Klambir V, Kecamatan Hamparan Perak, Kabupaten Deli Serdang, Sumatera Utara. *Prosiding Webminar Nasional Series Sistem Pertanian Terpadu dalam Pemberdayaan Petani di Era New Normal*, 438-446.

Purba, B. et al., 2023. *Pengantar Ekonomi Sumber Daya Alam dan Lingkungan*. Medan(Sumatera Utara): Yayasan Kita Menulis.

Saptenno, M. J., dan Tjiptabudy, J. 2015. *Kelembagaan Pertanian Dan Perikanan Dalam Rangka Ketahanan Pangan*. Deepublish.

Sartika, S. H. et al., 2022. *Ekonomi Kreatif*. Medan(Sumatera Utara): Yayasan Kita Menulis.

Simamora, T., A.M. Fuah., A. Atabany dan Burhanuddin. 2015. Evaluasi Aspek Teknis Peternakan Sapi Rakyat di Kabupaten Karo Sumatera Utara. *Jurnal Ilmu Produksi dan Teknologi Hasil Pertanian*, 03(1): 52-58

Sitepu, S. A., Marisa, J., Putra, A., dan Asmaq, N. 2021. *Teknologi dalam Pembangunan Peternakan*. Tahta Media Group

Sitepu, S. A. 2022. METODE PENINGKATAN POPULASI TERNAK SAPI DI KECAMATAN MEDAN MARELAN. *Jurnal Badan Pengembangan Dan Penelitian*, 10(2), 41-44.