Determinants Influencing Beef Cattle Development Prospects in Kolaka Regency, Southeast Sulawesi, Indonesia

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Abstract. The beef cattle farming industry in Kolaka Regency shows strong potential for growth and development. This research aims to analyse the prospects and determining factors for the development of beef cattle. This study focuses on the Watubangga District, as it serves as the primary area for beef cattle development in the Kolaka Regency. Research variables included breeder characteristics and production cost inputs, involving 45 breeders as respondents. The data analysis methods used in this research were acceptance analysis and multiple linear regression analysis using the ordinary least squares (OLS) method. The research results show that the beef cattle business in Kolaka Regency has prospects or is profitable for development with an R/C ratio of 6.94. Variations in the number of workers and the amount of production capital are factors that have the potential to hinder the development of beef cattle farming businesses. Meanwhile, the number of livestock sales is a determining factor that can enhance the development of the beef cattle business in Kolaka Regency. Therefore, to enhance the prospects for the future development of the beef cattle business, support is needed from various sectors, particularly in terms of access to business funding sources.

Keywords: Beef Cattle, Prospects, Development, Determinants.

Abstrak. Usaha tenak sapi potong di Kabupaten Kolaka masih memiliki prospek yang cerah dalam pengembangannya. Tujuan penelitian ini adalah untuk menganalisis prospek dan faktor penentu pengembangan ternak sapi potong. Studi ini dipusatkan di Kecamatan Watubangga karena merupakan wilayah basis pengembangan sapi potong di Kabupaten Kolaka. Variabel penelitian meliputi karakteristik peternak dan input biaya produksi, dengan melibatkan 45 peternak sebagai responden. Metode analisis data yang digunakan dalam penelitian ini adalah analisis penerimaan dan analisis regresi linear berganda metode ordinary least square (OLS). Hasil penelitian menunjukkan bahwa usaha ternak sapi potong di Kabupaten Kolaka memiliki prospek atau menguntungkan untuk dikembangkan dengan nilai R/C ratio sebesar 6.94. Variabel jumlah tenaga kerja dan besarnya modal produksi, merupakan faktor yang berpotensi dapat menghambat pengembangan usaha ternak sapi potong di Kabupaten Kolaka. Oleh karena itu, untuk terus meningkatkan pengembangan usaha ternak sapi potong di Kabupaten Kolaka. Oleh karena itu, untuk terus meningkatkan prospek pengembangan usaha ternak sapi potong ke depan, diperlukan dukungan dari lintas sektor terutama dalam hal aksesbilitas sumber-sumber pendanaan usaha.

Kata Kunci: Sapi Potong, Prospek, Pengembangan, Determinan.

Introduction

The livestock subsector contributes to the national economy, absorbs significant labour, and can be relied upon to enhance economic growth. The agricultural census results show that 13.56 million households in Indonesia are involved in livestock farming. Furthermore, the availability of livestock products directly improves the community's nutritional status, particularly by fulfilling the requirements for calories and animal protein. Fulfilling the public's

consumption of calories and animal protein will enhance the quality of human resources (BPS, 2022a). From 2015 to 2021, the beef cattle population in Indonesia exhibited a tendency toward stagnation. Despite this stagnation, the population still increased from 15.42 million in 2015 to 17.44 million in 2020, reaching 18.05 million in 2021. Figure 1 shows the trends in beef cattle populations across different regions and islands.

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6,70	6,86	7.00	7.16	7.25	7,41	
3.08	3,18	3,24	3.46	3,38	3,42	3,56
2 20	2,45	2,60	2.20	2,55	2,67	2 79
2,50	2,15	2,29	2,45	2,87	3,01	3,18
0,51	0,53	0,55	0.46	0,51	0,54	0,55
0,34	0,36 2016	0,38 2017	0,27 2018	0,37 2019	0,40 2020	0,41 2021

Source: BPS, 2022a.

Figure 1. Beef Cattle Population in Indonesia, 2015-2021

The beef cattle population in Bali and Nusa Tenggara increased at the highest rate of 5.55% compared to the previous year. In Sulawesi, the population grew by 4.70%, while in Sumatra it increased by 3.94%. Other islands exhibit trends that are relatively stagnant but still show some growth. Based on provincial data, the beef cattle population in Indonesia was highest in East Java, with 4.94 million head in 2021, followed by Central Java with 1.86 million head, and South Sulawesi with 1.46 million head. In contrast, DKI Jakarta had the lowest beef cattle population, with only 1,805 head in 2021 (BPS, 2022a). As one of the beef cattle production centers in Southeast Sulawesi, Kolaka Regency has shown a steady increase in beef cattle population each year. In 2019, the population was 23,246 head, rising to 24,708 head in 2020, 26,138 head in 2021, and reaching 27,517 head in 2022 (BPS, 2020; BPS, 2021; BPS, 2022b; BPS, 2023). Among these, the Watubangga District contributes the most significantly to the beef cattle population. Watubangga District serves as a key area for beef cattle development in Kolaka Regency, with an average contribution of 33.11% of total population each year from 2019 to 2022.



Source: BPS Various Years (Processed, 2023)

Figure 2. Beef Cattle Population in Kolaka Regency, 2019-2022

During its development, the beef cattle population in Kolaka Regency tended to stagnate but continued to grow positively at an average rate of 0.06% per year (Figure 2). This condition indicated that the beef cattle business in Kolaka Regency still had bright prospects for development. Several factors influenced the performance of beef cattle development, including the socio-economic conditions of farmers, use of inputs, availability of forage (feed), operational costs, investment costs, and livestock maintenance management.

Research by Meriwijaya and Luth (2022) shows that the development of the livestock sector based on women's empowerment has excellent potential in Batang Regency. This is evidenced by adequate carrying capacity, with 63,610.99 hectares or 80% of the total area of Batang Regency used as agricultural land, indicating sufficient availability of feed ingredients from green grass. Furthermore, Meriwijaya and Luth (2022) revealed that the availability of human resources, specifically women of working age, reached 281,879 people. This is a strength factor for developing beef cattle in Batang Regency from the aspect of labour availability.

Astati et al. (2023) discovered that the family and community environment play a crucial role in beef cattle management in Kampili Village, Pallangga District, Gowa Regency. Similarly, research by Aziz et al. (2021) indicates that various factors, including farming experience, family size, production costs, milk prices, income, livestock ownership, and proximity to input markets, significantly impact the performance of smallholder dairy farming in Pagerageung District.

In Watubangga District, Kolaka Regency, most breeders manage their business using a semi-intensive maintenance system, characterized by grazing during the day and housing at night. Regarding livestock business costs, breeders at the research location purchase cattle breeds (bulls and dams) as investment costs and then resell mature and saleable livestock. In addition to investment costs, breeders also incur other input costs such as labour for searching for feed, medicine, and equipment. This research aims to analyze the prospects and determining factors for beef cattle development under these conditions. It is hypothesized that the number of workers, production capital, and livestock sales are significant determining factors in the development of beef cattle in Kolaka Regency.

Materials and Methods

This study was conducted in Watubangga District from May to July 2023. The research location was intentionally selected due to its status as the primary hub for beef cattle commodities in Kolaka Regency. Research variables include breeder characteristics and production cost inputs, involving 45 breeders as respondents. These respondents were livestock owners who operated their livestock businesses as a side job and were selected purposively, focusing on breeders who manage their livestock using a semi-intensive rearing system. To analyze the prospects for beef cattle development, an acceptance analysis approach was used, with equations referring to research results from Murti et al. (2021), Razak et al. (2021), Najihah et al. (2022), Hamzah et al. (2023), Mayulu et al. (2023), and Sengkey et al. (2023) as follows:

- TR/TC = Total Revenue (TR)/Total Cost (TC) (1)
- TR = P.Q(2)

$$TC = TVC + TFC$$
(3)

Information;

- P = Price of Beef Cattle (IDR/head)
- Q = Number of Cattle Sold (Head)
- TVC = Total Variable Cost (IDR)
- TFC = Total Fixed Cost (IDR)

Test criteria;

 If TR/TC > 1, the beef cattle business has prospects for development (profitable)

- If TR/TC < 1, the beef cattle business has no prospects for development (loss)
- If TR/TC = 1, the beef cattle business returns principal (break-even).

Meanwhile, multiple linear regression analysis was used to analyze the factors determining the development of beef cattle in Kolaka Regency. The parameters for determining equal development of beef cattle were estimated using the ordinary least squares (OLS) method, utilizing Microsoft Excel and SPSS version 25.0. This approach is based on the theoretical framework of Ghozali (2016), and the research findings of Aziz et al. (2021), Lutfiyah and Sunyigono (2022), and Astati et al. (2023), as follows:

$$Y = b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + e$$
 (4)

Information:

- Y = Beef Cattle Business Development (R/Cratio)
- X₁ = Number of Workers (HOK/Year)
- X₂ = Production Capital (IDR/Year)
- X₃ = Number of Livestock Sales (Head/Year)
- b = Estimation parameters
- e = Disruptive factors

In equation (4), the number of workers refers to the total time respondents spend on livestock rearing activities, expressed in units of Working Person Days (HOK) per year. Production capital encompasses all costs incurred by respondents for livestock rearing over one year, expressed in Rupiah per year. The number of livestock sales refers to the number of adult cattle sold during one year of rearing.

Classic Assumption Test, Model Feasibility, and Hypothesis Testing

Classical assumption testing, model feasibility, and hypothesis testing in this research refer to the framework outlined by Ghozali (2016). The classical assumptions include tests for normality, multicollinearity, and heteroscedasticity. The normality test checks whether the standardized residuals in the regression model are normally distributed. This can be done using a standard probability plot graphic analysis or the Kolmogorov-Smirnov (K-S) test. If the Asymp. Sig. (2-tailed) value is greater than 0.05, the data is normally distributed.

The multicollinearity test examines whether a linear relationship exists between the independent variables in a model, which can be detected by the variance inflation factor (VIF). If the VIF value is less than ten, multicollinearity is not present. The heteroscedasticity test checks for inequality in the variance of residuals across all observations of the regression model. This test can be performed using a scatterplot graphic approach or by analyzing the predicted (SRESID) values against the residual errors (ZPRED). If there is no clear pattern and the points are spread above and below zero on the y-axis, heteroscedasticity is not present.

The model's feasibility is measured using the coefficient of determination (R²) indicator value. The closer the R² value is to 1, the more accurate the resulting prediction model.

In this research, hypotheses were tested both simultaneously and partially. Simultaneous testing was conducted using the f-statistical test, which evaluates the ability of the independent variable (X) to explain the variability of the dependent variable (Y) simultaneously, as represented by the following equation:

$$f-count = \frac{SSR/(k-1)}{SSE/(n-k)}$$
(5)

Information;

SSR = Regression sum of squares

SSE = Sum of residual squares

- k = Number of parameters
- n = Number of observations

Test criteria:

If the significance value (sig.) of the of computed F statistics is less than or equal to α at 0,01, the independent variables (total workforce, production capital, and number of

livestock sales) collectively have a significant influence on the dependent variable (beef cattle development); however, if the significance value is greater than or equal to α at 0,01, these variables do not have a significant combined effect.

Meanwhile, partial hypothesis testing was conducted using the t-statistical test. This test evaluates the effect of each independent variable (X) on the dependent variable (Y) individually, assuming that the other independent variables remain constant, as represented by the following equation:

computed t statistics =
$$\frac{bi}{S(bi)}$$
 (6)

where,

bi = Estimated parameter coefficients

S(bi) = Standard deviation of estimated parameters

Test criteria:

If the significance value (sig.) of the computed t statistics is less than or equal to α at 0,01, it indicates that the independent variables (total workforce, production capital, and number of livestock sales) individually have a significant impact on the dependent variable (beef cattle development). Suppose the significance value (sig.) of the computed t statistics is greater than or equal to α 0,01, then the independent variables (number of workers, production capital, and number of cattle sales) partially do not significantly affect the dependent variable (beef cattle development).

Results and Discussion

Characteristics of Beef Cattle Breeders

Age, education, and experience are key characteristics of human resources (labour) among beef cattle breeders that reflect their quality and skills in managing livestock businesses. These characteristics can significantly influence the planning and decisionmaking processes in the livestock businesses they manage. The mindset and attitudes of breeders towards the development and optimization of livestock operations can provide insights into their behaviour. Age, in particular, is a component that can influence cognitive abilities and decision-making. The age of the farmer can significantly affect the success of the livestock business, as it impacts work productivity in livestock management. Younger breeders are typically more willing to take risks, accept new ideas, and make aggressive decisions. In Kolaka Regency, the majority of beef cattle breeders are considered unproductive, with an average age of 57 years. As shown in Table 1, most breeders are over 55 years old, accounting for 31 individuals or 69%. This demographic trend may negatively impact livestock management, as the average age of breeders continues to increase.

This research focuses on formal education levels attained by beef cattle breeders. Breeders' education has a significant impact on their cognitive processes and behaviours. Welleducated breeders tend to act more efficiently and think logically, considering various potential outcomes. Farmers with higher levels of formal education are typically quicker to adopt innovations and livestock technologies compared to those with lower education levels, who often find it more complex and timeconsuming to implement changes (Abdullah and Mustabi, 2020).

The research findings show that beef cattle breeders have completed formal education at levels ranging from elementary school (SD) to high school (SMA). As shown in Table 1, the majority of respondents, specifically 14 individuals (31%), only completed elementary school. This finding suggests that the average beef cattle breeder in Kolaka Regency has a relatively low level of education, with most not having completed junior high school. Such educational inadequacy can impede the business development process, as education is a critical factor in facilitating development (Mosher, 2007). This observation aligns with the findings of Mayulu et al. (2023) and Ibrahim et al. (2020), which reported that breeders in Kutai Kartanegara Regency and Toli-Toli Regency also exhibit low educational levels, averaging only elementary school education and not completing junior high school.

For a farmer, experience in livestock farming is an invaluable asset. The longer a breeder runs their business, the more experience they gain. The duration of time a breeder dedicates to livestock farming is indicative of their business acumen. This study found that beef cattle farming is often a hereditary occupation, with most farmers acquiring knowledge and

through practices experience the and behaviours of their parents. Table 1 provides an overview of the livestock business experience of each beef cattle farmer in Kolaka Regency. The research results indicate that the majority of breeders, specifically 32 individuals or 71%, have over 15 years of experience. This extensive experience suggests that these breeders have a high potential for success in their livestock businesses. This is corroborated by the findings of Suryaningsih et al. (2022), which reveal that breeders with 5-10 years of experience already possess sufficient expertise and skills in running a beef cattle farming business

Table 1. Characteristics of Beef Cattle Farmers in Kolaka Regency in 202
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No	Breeder Characteristics	Respondents (People)	Percentage (%)	Average
1	Age			
	< 18 Years	0	0	
	18-55 Years	14	31	57 Years
	>55 Years	31	69	
	Total	45	100	
2	Education			
	Didn't finish elementary school	9	20	Completed
	Completed Elementary School	14	31	Elementary
	Completed Junior High School	10	22	School
	Finished High School	12	27	301001
_	Total	45	100	
3	Breeding Experience			
	<5 Years	0	0	
	5-10 Years	13	29	15 Years
	>15 Years	32	71	
	Total	45	100	
4	Employment Status in Animal			
	Husbandry			
	The main job	8	18	Side job
	Side job	37	82	
	Total	45	100	
5	Number of Livestock Ownership			
	<3 Livestock Units	0	0	8 Inits
	3-5 Livestock Units	6	13	
	>5 Livestock Units	39	87	Cattle
	Total	45	100	

Source: Primary Data, 2023.

1 also reveals differences in Table employment status and number of livestock owned by each respondent. Study reveals that majority of respondents (82%) are employed in livestock farming, while only 18% are dedicated pure breeders. Regarding livestock ownership, findings show that most respondents (87%) own more than five beef cattle, with average of eight cattle/respondent. This condition likely influences farmers' income levels. Suherman et al. (2021) found a higher number of cattle owned is associated with increased income for farmer.

Prospects for Beef Cattle Business Development

This research examines the potential for developing a beef cattle business by analyzing the costs and revenues associated with the industry. This performance evaluation includes fixed costs, variable costs, total costs, revenue value, and the R/C ratio analysis. Production costs considered in this study represent the total expenditures incurred by beef cattle breeders over one year. As shown in Table 2, total fixed costs for beef cattle farmers in Kolaka Regency range from IDR 167,000 to IDR 455,000/year, with an average fixed cost of IDR 302,320/year. This research identifies that within fixed cost category, primary cost components include the depreciation of cages, feed bins, ropes, shovels, hoes, and sickles. Among these costs, depreciation of cages represents the most significant expense, totaling IDR 106,920/year.

In the variable cost category, expenditures range from IDR 6,652,857 to IDR 8,778,571/year, with an average variable cost of IDR 6,936,286

annually. This study reveals that within variable cost category, main components include labour costs and expenses for vaccines and medicines. Labour costs constitute the most significant component of variable costs, averaging IDR 6,786,286/year. Consequently, total production costs for beef cattle farming businesses in Kolaka Regency average IDR 7,238,606/year, with variable costs being the predominant cost group (Table 2). These findings are consistent with those of Bitu et al. (2021), Najihah et al. (2022), and Mayulu et al. (2023) indicate that variable costs are generally the most significant expense in beef cattle development across Indonesia.

In this study, labor costs are calculated based on the activities undertaken by farmers in raising livestock, including grazing, foraging, and providing food and water. The study shows that the average farmer manages between 4 and 11 livestock units (LU), with an average ownership of 7.58 LU. The research results indicate that the average number of labours required per livestock unit per year is 593.80 JKP/LU/year. This finding is based on Suherman et al. (2021), which categorizes the number of labours per livestock unit/year according to livestock ownership: less than 3 LU corresponds to 755 JKP/LU/year; 3-5 LU corresponds to 557 JKP/LU/year; and more than 5 LU corresponds to 569 JKP/LU/year. The value of one working day (HOK) is equivalent to 7 JKP (Suherman et al., 2021). Based on this information, an average of 84.84 HOK/year is calculated. This value is then multiplied by the daily labour rate of IDR 80,000 to determine an average annual labour cost of IDR 6,786,286/year.

Table 2. Performance of Bee	f Cattle Farming Business	Costs in Kolaka Regency in 202	23
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No	Beef Cattle Farming Business Performance	Lowest	Highest	Average
1	Total Fixed Costs (IDR/Year)	167,000	455,000	302,320
2	Total Variable Costs (IDR/Year)	6,652,857	8,778,571	6,936,286
3	Total Production Costs (IDR/Year)	6,846,857	9,118,821	7,238,606
4	Revenue (IDR/Year)	24,000,000	72,000,000	49,066,667
5	Business Income (IDR/Year)	14,881,179	65,072,143	41,828,061
6	R/C-Ratio	2.63	10.39	6.94

Source: Primary Data, 2023.

The income referenced in this research pertains to the average gross income from the beef cattle farming business. This income is calculated by multiplying the number of livestock sold by the price of livestock over one year of production. In this revenue analysis, the researchers established several assumptions: (1) the value of seeds as initial investment costs is ignored, (2) bulls and dams (breeding stock) are ready for production, (3) calving intervals occur once a year, and (4) calf sales constitute 80% of total calves. The research results indicate that beef cattle are sold for an average of IDR 10,000,000 per head, with an average herd size of 4.91 heads per year.

Table 2 indicates that the income from beef cattle farming businesses in Kolaka Regency ranges from IDR 24,000,000 to IDR 72,000,000 per year, with an average income of IDR 49,066,667 per year. The variation in income is attributed to differences in livestock ownership among farmers. This income level is comparable to those of beef cattle farming businesses in other regions of Indonesia. For instance, the average income in Minahasa Regency is IDR 49,383,345 per year (Sengkey et al., 2023); in Kutai Kartanegara Regency, it is IDR 62,672,973 per year (Mayulu et al., 2023); in Malang Regency, it is IDR 85,000,000 per year (Abdullah et al., 2022); and in North Bolaang Mongondow Regency, it is IDR 82,927,777 per year (Datuela et al., 2021).

The R/C-ratio analysis, which evaluates the balance between revenue and costs, is utilized in this research to assess the prospects for developing the beef cattle business.

Additionally, this analysis determines whether the costs incurred generate sufficient revenue to obtain a profit and evaluates the efficiency of cost use. Table 2 indicates that the beef cattle business in Kolaka Regency is both profitable for development and cost-efficient. This is evidenced by the R/C-ratio value, which is greater than 1 (R/C > 1), ranging from 2.63 to 10.39, with an average R/C-ratio of 6.94. This suggests that for every rupiah of costs incurred, the beef cattle business generates revenues of IDR 2.63 to IDR 10.39, with an average income of IDR 6.94. The findings of this study are consistent with those of Hanum et al. (2021), which reported that the beef cattle business in Langkat Regency has promising development prospects with an R/C ratio of 3.7. Similarly, the research conducted by Putri et al. (2019), Aji et al. (2021), and Bitu et al. (2021) also found that the beef cattle farming business is highly prospective. Additionally, the net present value method confirmed the financial viability of this business (Herawati et al., 2022; Utama, 2020; Muhammad and Yekti, 2019).

Determining Factors for Beef Cattle Business Development Prospects

Analyzing the factors that determine the development prospects of beef cattle farming in Kolaka Regency is the final objective of this research. Multiple linear regression analysis, utilizing the ordinary least squares (OLS) method, was employed to assess these factors. The analysis results indicate that the model used in this research is entirely free from violations of classical assumptions (Table 3 and Figure 3).

Model		Collined	arity Statistics	K-S (Kolomogrov-Smirnov)	
		Toler.	VIF	Asymp. Sig. (2-tailed)	
1	(Constant)				
	Total workforce	.534	1.874 (< 10)		
	Production Capital	.189	5.288 (< 10)	0.200 (>0.03)	
	Number of Livestock Sales	.173	5.784 (< 10)		

Table 3. Results of the Multicollinearity Test and Normality Test of the Development Prospect Model Beef Cattle Farming Business in Kolaka Regency in 2023

Source: SPSS Analysis Version 25.0



(Source: SPSS Analysis Version 25.0) Figure 3a. Average Probability Plot Graphic Analysis

Table 3 shows no signs of multicollinearity in the model, where each variable's variance inflation factor (VIF) value is smaller than 10. This indicates that the independent variables have a linear relationship with each other. The normality test results using the K-S (Kolmogorov-Smirnov) method also found that all data were normally distributed. This is indicated by the Asymp. Sig. (2-tailed) value being greater than 0.05 (0.200). This normality test can also be verified using a standard probability plot graphic analysis approach, as shown in Figure 3a.

Figure 3a illustrates that the dependent and regression standardized residual curves form a balanced bell-like image, with data distribution



points closely aligned around the line. This indicates that the data on the beef cattle business development model in Kolaka Regency are normally distributed. Meanwhile, Figure 3b presents the results of the heteroscedasticity test using a scatterplot graphic approach, plotting the predicted value of the dependent variable (SRESID) against the ZPRED residual error. The analysis shows no clear pattern or scattered points predominantly above or below zero on the y-axis, indicating that the data in the model do not exhibit heteroscedasticity. Furthermore, Table 4 provides the results of measuring the model's fit and testing the hypothese



(Source: SPSS Analysis Version 25.0)

Figure 3b. Scatterplot Graphic Analysis (SRESID) with Residual Error ZPRED

Coefficients ^{a)}							
Model		Unstandardized Coefficients		Stand. Coeff.	+	C: a	
		В	Std. Error	Beta	ι	Sig.	
1	(Constant)	2,744	,176		16,465	,000,	
	Total workforce	-,031	,001	-,125	-21,560	,000**	
	Production Capital	-4,1952E-9	,000	-,028	-2,895	,006**	
	Number of Livestock Sales	1,461	,016	,936	91,896	,000**	

Table 4. Determining Factors of Livestock Business Development Prospects Beef Cattle in Kolaka Regency in 2023

^{a)} Dependent Variable: Prospects for Beef Cattle Business Development;

R²: 0,999; Sig. F-count: 0,000

Information: ** = significant level 1% (α =0,01) (Source: SPSS analysis version 25.0)

Table 4 reveals that, on a partial basis, the number of workers, production capital, and number of livestock sales are determining factors of the development prospects for beef cattle farming in Kolaka Regency. Results from the t-statistical test indicate that the significance value for the number of workers is 0.000, which is less than α =0.01 and exhibits a negative sign similarly, the significance value for production capital is 0.006, which is below α = 0.01 and also has a negative sign. These findings suggest that an increase of one HOK (Working Person Day) or one rupiah in production capital may decrease the business prospects for beef cattle development in Kolaka Regency by 0.031 rupiah and 4.195 x 10⁻⁹ rupiah, respectively. Conversely, an increase of one head in livestock sales can enhance the business prospects by 1.461 rupiah. These results are consistent with the findings of Aziz et al. (2021), who observed that the total production cost variable significantly affects the development prospects of dairy farming in Tasikmalaya Regency Additionally, Warangkiran et al. (2021) and Gultom and Wahyuni (2022) identified variable costs as critical factors influencing the development or profitability of beef cattle farming in Minahasa Regency and Banyuasin Regency, respectively.

Conclusions

The research findings suggest that the beef cattle business in Kolaka Regency has promising

development potential, as indicated by an R/C ratio of 6.94, which signifies profitability. However, factors such as the number of workers and the amount of production capital may hinder the growth of the beef cattle industry. On the other hand, increasing livestock sales is a key factor that could significantly boost industry development in the region. To enhance future growth prospects, it is crucial to seek support from various sectors, particularly to improve access to business funding sources.

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