

# CRISIS IN THE REGENERATION OF LIVESTOCK WORKFORCE: ANALYSIS OF FACTORS AFFECTING YOUNG GENERATION'S INTEREST IN THE LIVESTOCK SECTOR

Taufik Dunialam Khaliq<sup>1,a</sup>, Irma Susanti S<sup>1</sup>, Ruth Dameria Haloho<sup>1</sup>, Adli Putra Ermanda<sup>1</sup>, Nita Adillah Pratiwi<sup>1</sup>, Marsudi<sup>1</sup>, Suriansyah<sup>1</sup>

<sup>1</sup>Departement of Animal Science, Faculty of Animal Science and Fisheries, Universitas Sulawesi Barat, Indonesia

<sup>a</sup>email: [taufik@unsulbar.ac.id](mailto:taufik@unsulbar.ac.id)

## Abstract

The purpose of this research is to analyze the factors affecting the interest of the young generation in the livestock sector. The research was conducted in the province of West Sulawesi, using a sample of 230 people selected through purposive sampling. Instrument testing used the Pearson product-moment and Cronbach's alpha. Data analysis used multiple linear regression, with variables consisting of independent variables: social factors (X1), economic factors (X2), government role (X3), demographics (X4), information access (X5), and technology support (X6), with the dependent variable being interest in working in the livestock sector (Y). The results of this study indicate that all independent variables (social factors, economic factors, government support, demographics, information access, and technology support) simultaneously affect the dependent variable, which is the interest of youth in working in the livestock sector. To some extent, government support does not significantly influence interest, while the variable with the greatest impact is the economic factor. The strength of the relationship between the independent variable and the dependent variable is evident in the correlation coefficient (R), which has a value of 0.871, indicating a very strong correlation. The magnitude of the influence of the independent variable on the dependent variable is reflected in the coefficient of determination (R<sup>2</sup>) value of 0.761, or 76.1%; in other words, there are other variables influencing the outcome outside the model, accounting for 23.9%.

**Keywords:** Factors Affecting The Interest, Livestock, Young Generation

## KRISIS REGENERASI TENAGA KERJA PETERNAKAN: ANALISIS FAKTOR-FAKTOR YANG MEMPENGARUHI MINAT GENERASI MUDA TERHADAP SEKTOR PETERNAKAN

### Abstrak

Penelitian ini bertujuan untuk menganalisis faktor-faktor yang memengaruhi minat generasi muda dalam bekerja di sektor peternakan. Penelitian dilaksanakan di Provinsi Sulawesi Barat dengan jumlah sampel 230 responden yang dipilih melalui teknik purposive sampling. Pengujian instrumen dilakukan menggunakan Pearson product-moment dan Cronbach's alpha. Analisis data menggunakan regresi linear berganda dengan variabel independen meliputi faktor sosial (X1), faktor ekonomi (X2), peran pemerintah (X3), demografi (X4), akses informasi (X5), dan dukungan teknologi (X6), sedangkan variabel dependen adalah minat bekerja di sektor peternakan (Y). Hasil penelitian menunjukkan bahwa seluruh variabel independen—faktor sosial, ekonomi, peran pemerintah, demografi, akses informasi, dan dukungan teknologi—secara simultan berpengaruh terhadap minat generasi muda bekerja di sektor peternakan. Secara parsial, peran pemerintah tidak memberikan pengaruh signifikan, sedangkan faktor dengan pengaruh terbesar adalah faktor ekonomi. Kekuatan hubungan antara variabel independen dan dependen ditunjukkan oleh nilai koefisien korelasi (R) sebesar 0.871 yang termasuk kategori sangat kuat. Besarnya pengaruh variabel independen terhadap variabel dependen tercermin pada nilai koefisien determinasi (R<sup>2</sup>) sebesar 0.761 atau 76.1%; dengan demikian, masih terdapat 23.9% pengaruh dari variabel lain di luar model penelitian ini.

**Kata kunci:** faktor yang memengaruhi minat, peternakan, generasi muda

## INTRODUCTION

The livestock sub-sector is a pillar of agricultural development and national food security; however, in recent years, this sector has faced a complex challenge in the form of declining interest among the younger

generation in directly engaging in livestock activities. This phenomenon is reflected in the decreasing number of young workers in the livestock sector, the increasing average age of farmers, and the resulting decline in the regeneration of smallholder livestock farming. BPS (2024) reports that the number of young

agricultural workers in West Sulawesi decreased from 593,321 in 2019 to 489,272 in 2023. Conversely, the number of workers aged 60 and above in 2019 was 984,158 people, which increased to 1,297,727 people in 2023. Similarly, the number of farming households in Indonesia decreased from 13.56 million in 2018 to 12.04 million in 2024, resulting in an 11.21% decrease in percentage terms.

The lack of interest among the younger generation in work in the livestock sector is related to various socio-economic factors that influence it. Runtu et al. (2025) state that several socio-economic factors, including education level, social status, income, and marketing implementation, form the basis of the community's interest in engaging in livestock farming. Other aspects, such as socio-cultural factors and social pressure on career choices, also play a role in shaping the low attractiveness of this sector, as reinforced by the research of (Šimpachová Pechrová et al., 2018), which suggests that the socio-cultural environment can influence performance and interest in making decisions to work in agricultural enterprises. As a result, the livestock sector is experiencing a shortage of productive labor, which directly impacts the decline in national production capacity. This is clearly reflected in the decline of livestock's contribution to the gross domestic product (GDP) over the recorded 5-year period, from 1.62% in 2019 to 1.55% in 2023.

West Sulawesi is a province that relies on agriculture as its main sector to increase regional income, contributing almost half of the total GRDP at 44.71%. However, the problem is that the average income of workers in this sector is only Rp 1,510,000 per month, which is still far below the provincial minimum wage of Rp 2,050,000 (BPS, 2025). This is caused by multiple factors, such as a low business scale, unstable market prices, inadequate technology utilization, and livestock farming, which remains a subsistence-based activity. Similarly, livestock workers in West Sulawesi have the lowest Farmer Exchange Rate Index (NTPT) in Indonesia, which has been further worsened by a 2.84% decrease from 2023 to 2024 (BPS, 2024). This means that the increase in production prices is relatively smaller compared to the increase in the prices of consumer goods. The income of livestock farmers has decreased, falling short of their expenditures. This phenomenon also affects the

livestock sector's contribution to agriculture in West Sulawesi, which initially accounted for 4.52% in 2019, decreasing to 4.32% in 2023. It is suspected that with still minimal income, the regeneration of farmers is experiencing a decline, evidenced by the decrease in the number of livestock households in West Sulawesi, which initially numbered 94,919 people in 2018, dropping to 84,100 people in 2024, resulting in a percentage decline of 11.39%.

Reviewing the facts described earlier, a comprehensive approach is needed to understand and identify the factors influencing the interest of the younger generation in the livestock sector. This approach must involve socio-economic aspects, technology, public policy, and infrastructure development to ensure the sustainability of the livestock sector as an integral part of national food security and inclusive economic growth in the future.

## **MATERIALS AND METHODS**

### **Research Location**

The research location is in the Province of West Sulawesi. Although the national workforce in the livestock sector has decreased, this region has experienced an 18.2% increase over the last five years, making it one of the factors that led to choosing West Sulawesi as the research location.

### **Research Sample**

In this case, the sample, comprising the research respondents, was selected using the purposive sampling method, specifically, students from the animal husbandry study program. This selection was based on the consideration of the suitability of the subject's characteristics to the research objectives, representing the group of young generation who have basic knowledge, academic experience, and exposure to the world of animal husbandry, as well as a deeper perspective on the challenges, opportunities, and career potential in this sector. The sample in this study consisted of 230 respondents selected using the purposive sampling method, specifically, students from animal science study programs. This selection was based on the relevance of the subjects to the research objectives, representing young people with academic knowledge and exposure to livestock science. The study comprised 230

students from three universities in West Sulawesi, specifically 120 students from Universitas Sulawesi Barat, 65 students from Universitas Al Asyariah Mandar, and 45 students from Universitas Muhammadiyah Mamuju.

**Data Collection Methods**

Data collection was obtained by distributing questionnaires as instruments. The questionnaire is divided into two parts: the first part contains questions related to the respondents' characteristics, and the second part contains questions related to the relationship between the dependent and independent

variables. For the second part, the answer can be provided using a Likert scale with values of 5 (strongly agree), 4 (agree), 3 (neutral), 2 (disagree), and 1 (strongly disagree). This primary data is then processed using multiple linear regression.

**Research Variables**

The following research variables were formulated to describe various social, economic, demographic, and technological factors that may affect young people's engagement in livestock-related work. The variables and their indicators are summarized in Table 1.

**Table 1.** Analysis of Research Variables on Factors Affecting Young People's Interest in Working in the Livestock Sector

Variables	Notation	Indicator
<b><u>Independent Variable</u></b>		
1 Social Factor	X1	Support from parents/family Influence of friends/environment Existence of farming communities/institutions Social Status
2 Economic Factors	X2	Availability of business capital Profit potential Business protection guarantee risks Market access
3 Government Role	X3	Training from the livestock service Financing programs and production facility assistance Infrastructure support Business insurance programs
4 Demographic	X4	Age Gender Education Family Income
5 Access to Information	X5	Internet Access Market Information Innovation information through extension services
6 Technological Support	X6	Digital marketing Adoption of biotechnology innovations Modern equipment and systems supporting efficiency
<b><u>Dependent Variable</u></b>		
7 Interest in Animal Husbandry	Y	Animal Husbandry Entrepreneurship Emotional interest in the world of animal husbandry Perception of the animal husbandry profession

**Source:** Primary Data from Research Results

**Note :** X<sub>1</sub> = Social Factor; X<sub>2</sub> = Economic Factor; X<sub>3</sub> = The Role of the Government;  
X<sub>4</sub> = Demography; X<sub>5</sub> = Access to Information; X<sub>6</sub> = Technology Support

### **Instrument Test**

#### **Validity**

According to Hedayati et al (2023), the validity test can be conducted using the Pearson Product-Moment correlation technique. The minimum threshold for declaring validity is a correlation coefficient value of greater than 0.3.

#### **Reliability**

Reliability testing is conducted to assess the quality of data, particularly in terms of the stability and consistency of the instrument in measuring a construct or variable (Izah et al, 2024). To determine the reliability of the instrument, the Cronbach's Alpha method is used. As a general guideline, an instrument is considered reliable if its Alpha Cronbach value is  $\geq 0.6$ .

### **Data Analysis**

#### **Classic Assumption Test**

The classical assumption test is conducted to ensure that the linear regression model used in the research meets the basic requirements (assumptions), thereby ensuring that the analysis results are valid, unbiased, and reliable (Nugraha, 2022). Classical assumptions consist of the data normality test, the multicollinearity test, the autocorrelation test, the heteroscedasticity test, and the linearity test.

### **Multiple Linear Regression**

The multiple linear regression mathematical model in this study is as follows:  

$$Y_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + e$$

Explanation: Y = Farmers' Interest in Working in the Livestock Sector;  $\beta_0$  = constant;  $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$  = partial regression coefficients for X1, X2, X3; X1 = Social Factor; X2 = Economic Factor; X3 = The Role of the Government; X4 = Demography; X5 = Access to Information; X6 = Technology Support; e = Error standar

## **RESULTS AND DISCUSSION**

### **Validity Test**

The results of instrument validation, as measured by the accuracy of the dependent variable (Y) and independent variable (X), are presented in Table 2.

Table 2 shows that the indicators of each variable: social factors (X1), economic factors (X2), demographics (X4), information access (X5), technological support (X6), and interest in working in the livestock sector (Y) are declared valid and accurate for the research. These results confirm that the instruments used were accurate.

**Table 2.** Results of Instrument Validity Test

No	Variable	R Count	R Table	Sig	Validity (Sig < 0,3)
1.	Social Factor	0,665	0,138	0,000	Valid
2.	Economic Factors	0,769	0,138	0,000	Valid
3.	Government Role	0,383	0,138	0,000	Valid
4.	Demographic	0,641	0,138	0,000	Valid
5.	Information Access	0,528	0,138	0,000	Valid
6.	Technological Support	0,660	0,138	0,000	Valid
7.	Interest in The Livestock Sector	0,611	0,138	0,000	Valid

Source: Primary Data from Research Results

**Table 3.** Results of Instrument Reliability Test

Cronbach's Alpha	Number of Variables	Reliability (CA $\geq 0,6$ )
0,870	7	Reliable

Source: Primary Data from Research Results

Table 3 shows that the Cronbach's Alpha value of 0.870 is greater than 0.6, indicating that this research instrument is consistent and stable when used repeatedly on the same object or phenomenon.

### **Classic Assumption Test**

The Normality Test, with a significance result of  $0.200 > 0.05$ , indicates that the data in this study are normally distributed.

### **Multicollinearity Test**

Results of the Variance Inflation Factor Test for  $(X_1)$  1.730,  $(X_2)$  2.238,  $(X_3)$  1.810,  $(X_4)$  1.728,  $(X_5)$  1.915, and  $(X_6)$  1.583. All VIF values of the X variables  $< 10$ , so it can be said that there is no multicollinearity, and the variation and data distance intervals are not too wide.

### **Autocorrelation Test**

Using the Durbin-Watson test. It can be seen that the Durbin-Watson value is 1.063, which indicates that there is no autocorrelation.

### **Heteroscedasticity Test**

Using the Glejser test, where the significance values of all independent variables using the Glejser test are  $< 0.05$ ; thus, it can be concluded that heteroscedasticity does not occur. It can be said that the residual variance (error) is constant for each value of  $(X_1)$  0.041,  $(X_2)$  0.048,  $(X_3)$  0.023,  $(X_4)$  0.006,  $(X_5)$ , and  $(X_6)$  0.030.

### **Linearity Test**

All independent variables,  $(X_1)$  0.134,  $(X_2)$  0.058,  $(X_3)$  0.220,  $(X_4)$  0.192,  $(X_5)$  0.401,  $(X_6)$  0.182, have significance  $> 0.05$ . This suggests a significant linear relationship between interest in farming (Y).

### **Multiple Linear Regression Test**

The results of the multiple linear regression analysis consisting of independent variables such as social factors  $(X_1)$ , economic factors  $(X_2)$ , government role  $(X_3)$ , demographics  $(X_4)$ , information access  $(X_5)$ , and technological support  $(X_6)$  with the dependent variable being interest in working in the livestock sector (Y), can be seen in Table 4.

The results of the multiple linear regression analysis (Table 4) can be used to estimate the function in the regression equation model as follows:  $Y = 4,180 + 0.219X_1 + 0.320X_2 + 0.016X_3 + 0.199X_4 + 0.132X_5 + 0.207X_6 + \delta$

From the results of the linear regression equation above, it can be interpreted that the regression coefficient for the constant is 4.180, indicating that if the independent variable (X) is set to a constant value of 0, the interest in working in the livestock sector will increase by 4.180 units.

Partial hypothesis testing, based on Table 4, shows that the independent variables, namely social factors  $(X_1)$ , economic factors  $(X_2)$ , demographics  $(X_4)$ , information access  $(X_5)$ , and technological support  $(X_6)$ , have significance values smaller than the 0.05 significance level, meaning they have an influence on the interest in livestock farming (Y),  $H_1$  is accepted. Meanwhile, the government role variable  $(X_3)$  does not influence the interest in working in the livestock sector (Y);  $H_0$  is accepted. The simultaneous hypothesis testing of influence can be seen in the significance value of F calculated in Table 4, with a value smaller than the significance level of 0.05, which means that collectively, the variables  $X_1, X_2, X_3, X_4, X_5,$  and  $X_6$  have an influence on the interest in working in the field of animal husbandry (Y).  $H_0$  is rejected, and  $H_1$  is accepted.

The strength of the relationship between social factors  $(X_1)$ , economic factors  $(X_2)$ , government role  $(X_3)$ , demographics  $(X_4)$ , information access  $(X_5)$ , and technological support  $(X_6)$  with the dependent variable, which is the interest in working in the livestock sector (Y), can be seen in the correlation coefficient (R) with a value of 0.871, indicating a very strong correlation (Kurniawan, 2016). States that the nature of the correlation determines its direction if the correlation value is between 0.71 and 0.90, it indicates a strong correlation. The extent of the influence of the independent variable on interest in working in the livestock sector is reflected in the coefficient of determination ( $R^2$ ) value of 0.761, or 76.1%, meaning that there are other variables influencing the outcome outside the model by 23.9%.

**Table 4.** Results of Multiple Linear Regression Analysis

Components	Coefficient	Sig.
Constant ( $\beta_0$ )	4.180	
Social Factors ( $\beta_1$ )	0.219	0.000**
Economic Factors ( $\beta_2$ )	0.320	0.000**\
Government Role ( $\beta_3$ )	0.016	0.113 <sup>ns</sup>
Demographics ( $\beta_4$ )	0.199	0.001**
Information Access ( $\beta_5$ )	0.132	0.001**
Technological Support ( $\beta_6$ )	0.207	0.000**
F Count	118.066	0.000**
R	0.872	
R <sup>2</sup>	0.761	

**Note:** \*\*Significance at 5% level; <sup>ns</sup> : non-significant

**DISCUSSION**

For the regeneration process of young people in the livestock sector of Sulawesi Barat to proceed as expected, a comprehensive approach is necessary that considers social, economic, government roles, demographic factors, information access, and technological support. Socially, it is necessary to change public perception of the livestock profession, which has been viewed negatively, through positive image campaigns, the involvement of inspiring young figures, and strengthening family and local community support. From an economic perspective, young people need a guarantee of business sustainability through easy access to capital, livestock incentives, business protection such as livestock insurance, and support for fair and transparent market access. The government plays a strategic role in facilitating affirmative policies, such as special programs for young farmer regeneration, easing permitting requirements, providing technical assistance, and fostering collaboration with the private sector and educational institutions.

Additionally, it is demographically important to map the potential of the younger generation in each region to design programs that are appropriate for local characteristics. Access to information also needs to be expanded through the provision of digital educational media, agribusiness information centers, and transparency of livestock business data so that young people have sufficient knowledge and motivation. Technological support is equally important, as the implementation of appropriate technologies,

such as livestock management applications, fermented feed, modern barns, and e-learning training, can improve the efficiency and attractiveness of livestock businesses. With this integrated approach, the regeneration of young farmers is not only possible but will also strengthen the sustainability of the livestock sector as a pillar of food security and the local economy in West Sulawesi.

**The Influence of Social Factors on Interest in Working in the Livestock Sector**

Social factors influence young people's interest in working in the livestock sector, including family support, social environment, the existence of livestock communities, and social status. These factors play a crucial role in shaping the perceptions, motivations, and career decisions of young people regarding the livestock farming industry. As many as 72% of respondents strongly agree that family is the primary factor influencing their interest in working in the livestock farming field. Family support, especially the role of parents, plays a significant role in shaping youth career choices. This is supported by the research of Abadi et al. (2024) on interest in raising Bali cattle, which states that family encouragement to run a cattle farming business can foster interest in entrepreneurship in Bali cattle, 52% of respondents have an interest in livestock farming because their parents work in agriculture or livestock farming, as mentioned by Girdziute et al. (2022) that having parents who work independently in agriculture

increases the likelihood that their children will want to work in the same field.

Social interactions and the surrounding environment also influence the attitudes and decisions of young people to pursue a career in the livestock sector. The tendency of respondents to adopt the behavior of their social group in the livestock sector as a potential venture. There are 66% of respondents agreed that the social environment influences interest. Mutolib et al. (2022) found that the social environment influences the interests of the younger generation, as they directly observe and monitor agricultural activities in their living environment. According to Amirullah & Rafsanjani (2022), the social environment is the location where human activities take place, playing a significant role in shaping a person's personality, including their interests. The presence of livestock farmer groups in the livestock industry in West Sulawesi provides a space for learning, sharing experiences, and building important networks. Involvement in this community can foster a sense of ownership towards the livestock profession and provide access to information, training, and business opportunities. As many as 44% of respondents agree that the community influences interest because it serves as a platform to change the traditional view that considers farming as a backward profession into a modern and professional career choice. This finding aligns with the research by Abadi et al. (2024), which suggests that community factors influence interest in raising Bali cattle.

As many as 71% of respondents disagreed that social status influenced their interest in farming because it is still viewed as a rough and less prestigious job compared to other formal sectors. In line with Withanage & Damayanthi (2019), who revealed that perceptions and social status act as barriers for young people to pursue careers in agriculture due to low social acceptance. Although Safita & Azizah (2024) state that social status is the factor with the highest significance, Szabo et al (2021) state that the younger generation is less interested in agriculture due to negative perceptions of low social status.

### **The Influence of Economic Factors on Interest in Working in the Livestock Sector**

Based on the study's results, 56% of respondents agreed that the availability of

business capital affects their interest in working in the livestock sector; the greater the capital available, the greater the opportunity to open a livestock business. Furthermore, 88% of respondents strongly agreed that businesses in the livestock sector require considerable capital, which is the main obstacle for young people to start a business. Hetharia & Kalami (2021) stated that livestock businesses require large capital, especially for the cost of feed and seeds. This large cost is difficult for farmers in general to fulfill, as they have limited capital (Supriyanto et al., 2020b). According to Makabori & Tapi (2019), the cause of youth reluctance to pursue a career in agriculture is due to the limited availability of capital, which renders agriculture unsustainable for the future.

Income potential is one of the indicators that influences youth interest (Runtu et al., 2025). Seventy-nine percent of respondents agreed that if livestock farming is viewed as a sector capable of providing competitive and sustainable income, then its attractiveness will increase in the eyes of young people. In this context, youth tend to consider rational aspects such as return on investment, break-even point, and long-term income stability. This is reinforced by the opinion of Sazila et al. (2018), who suggest that the majority of youth believe entrepreneurship in animal husbandry is an alternative to providing a profitable income.

The results showed that 78% of respondents agreed that in the livestock sector, one must understand the potential risks that must be faced. A high level of risk, such as livestock diseases, price fluctuations, and crop failure, is often an inhibiting factor for youth interest. When risks are considered under control or have a clear mitigation system, the tendency of youth to choose the livestock sector as a work option will increase. Elisia et al. (2024) stated that numerous risks must be considered in the livestock business, making it essential for farmers to learn risk management to minimize the negative impact on their business.

Ease of marketing livestock products is another important indicator. 88% of respondents strongly agree that access to a broad and stable market is necessary, including support for supply chains and efficient distribution infrastructure, as this will increase their confidence in the viability of livestock farming. Conversely, market limitations or dependence on middlemen can reduce interest

in participating in this sector. Rahmawati et al. (2024) emphasize that effective market strategies can enhance interest in livestock farming. This aligns with the research by Mursalat et al. (2023), which emphasizes the importance of reviewing market and consumer needs in developing effective business strategies.

### **The Influence of Government Role on Interest in Working in the Livestock Sector**

The research results indicate that the government's role has not significantly influenced the interest of youth in the livestock sector in West Sulawesi. In an effort to encourage the younger generation to engage in the livestock sector, the role of the government becomes a crucial aspect that should create a conducive environment, both in terms of knowledge, capital, and business protection. This is evident from the weak positive response to the indicators of government roles in this study. There are 42% of respondents who disagree that the training organized by technical agencies, such as the livestock department, is ideal enough to serve as a means to improve the competence and build the motivation of young people in farming. According to Pervez et al. (2024), various training methods and approaches can help young people grow into successful entrepreneurs. Devaux et al. (2018) added that developing training programs centered on agribusiness management is a phase that needs to be implemented. Structured and evaluation-based training can enhance basic livestock farming skills, thereby positively impacting interest in the livestock business (Elisia et al., 2024).

The government has several financing assistance programs, such as the People's Business Credit (KUR) in the livestock sector or productive grants. However, access to these programs is still considered limited, both due to the challenging administrative requirements that novice youths struggle to meet and the limited information reaching them. This is reflected in the responses of 64% of respondents, who agreed that financial assistance for livestock businesses remains weak. In fact, young farmers can be motivated to invest through subsidies or low-interest loans offered by the government (Vilaiphone et al., 2025). On the other hand, Arvianti et al. (2020) suggest that government policies should be

simplified by providing credit assistance and insurance through financial institutions to enhance the value of young farmers' businesses.

The results of the study indicate that 78% of respondents strongly agree that infrastructure has a significant impact on their interest in animal husbandry. Government support, such as the availability of roads and information networks, can create a business ecosystem that supports livestock productivity. However, in reality, many livestock centers in West Sulawesi still lack sufficient attention, resulting in logistical obstacles, marketing difficulties, and low business efficiency. This lack of infrastructure is one reason why young people are less inclined to pursue a career in the livestock sector. Unay (2019) echoed this sentiment, stating that the deterioration of infrastructure in rural areas is a factor that hinders the career plans of the younger generation. Meanwhile, improved transportation and rural infrastructure are necessary to facilitate the faster and more reliable movement of products in and out of rural areas (Pervez et al., 2024).

The majority of respondents agreed that insurance programs influence interest in animal husbandry, with 58% of respondents agreeing. Livestock business insurance programs, such as Cattle/Buffalo Livestock Business Insurance (AUTS/K), which was launched in one of the districts, Polewali Mandar, aim to reduce the risk of losses due to death or loss of livestock. Although conceptually very strategic, in practice, this program has not reached young people due to the limited scope of socialization and the complexity of the claim procedure. To make agribusiness more attractive to young people, the program needs to be adapted to their needs and preferences. Although conceptually very strategic, in practice, this program has not reached young people due to the limited scope of socialization and the complexity of the claim procedure. To make agribusiness attractive, according to Simpachova (2018), the government must create an agricultural business insurance scheme to cover inherent risks that are attractive, funded by high premiums.

### **The Influence of Demographic Factors on Interest in Working in the Livestock Sector**

Demographic factors are a significant variable in explaining the variation in youth

interest in livestock farming. Demographic characteristics, such as age, gender, education level, and family income, influence an individual's perspective, motivation, and readiness in choosing a job, including those in the livestock sector. Based on the research findings, respondents aged 21–23 years representing 58% of the total sample showed the highest level of agreement (67%) in expressing their willingness to pursue livestock farming businesses, indicating a stronger entrepreneurial inclination compared to younger respondents aged 18–20 years (23%) and older respondents aged 24 years and above (19%). This pattern suggests that individuals in their early twenties, who are typically in the final stage of higher education and preparing for career decisions, possess a greater awareness of business opportunities and economic independence in the livestock sector. Such findings are consistent with the argument of Girdziute et al. (2022), who noted that productive-age groups tend to exhibit higher motivation to engage in agriculture due to greater readiness, confidence, and exposure to innovation-oriented learning environments. This is because at this age, individuals begin to consider economic stability and opportunities for independent business ventures. They are also more mentally and skillfully prepared to manage livestock businesses. The research results also show that male respondents representing 87% (n = 200) of the total sample demonstrated a higher level of interest in livestock farming compared to female respondents (13%, n = 30). This gender imbalance suggests that males are more inclined toward livestock-related work, which is often perceived as physically demanding and has traditionally been dominated by men. This finding aligns with Girdziute et al. (2022), who reported that demographic characteristics such as gender and productive age strongly influence the likelihood of choosing a career in the agriculture and livestock sectors. This can be linked to the social perception that work in the livestock sector is identical to heavy physical activity. This is confirmed by the research of Girdziute et al. (2022) that demographic characteristics such as gender, specifically male, and productive age are more likely to choose the agricultural sector.

Education is the most influential aspect in interest in this study, with 78% of respondents agreeing with this. According to Putri et al.

(2022), education is the investment in human resources most closely related to the decision to choose a job. The results of this study are in line with Yohana et al. (2023), who state that the presence of educational institutions is a significant factor influencing the interest of youth to engage in the agricultural sector. Individuals with vocational or higher education levels relevant to fields such as animal husbandry or agriculture tend to have a greater interest in livestock farming because they possess technical knowledge, access to networks, and confidence in managing such enterprises. This supports the statement by Efu & Simamora (2021), that the development of interest and the enhancement of skills according to industry needs can be achieved through education that integrates theory and practice. As many as 9% of respondents disagreed with the influence of education on the formation of interest because interest in the field of animal husbandry is acquired before entering higher education. This is emphasized by Hidayat et al. (2019), the perception among the community that farming does not require education, because for them, whether educated or not, a farmer still uses the same methods in their cultivation.

### **The Influence of Access to Information on Interest in Working in the Livestock Sector**

In the digital era, access to information has become one of the main determinants in shaping the perceptions and career decisions of the younger generation, including choosing the field of livestock farming as a career path. Access to information not only influences knowledge but also shapes motivation, self-confidence, and the readiness of young people to take on roles as entrepreneurs in the livestock sector. As many as 56% of respondents agree that internet access can influence the choice of interest in working in the livestock sector. The ease of accessing the internet allows young people to obtain various information quickly and extensively, including information related to livestock farming. Through the internet, young people can learn about livestock management, market opportunities, success stories of young farmers, and global agribusiness trends. The internet also opens access to online training platforms, digital farmer communities, and smart agriculture applications. Isyanto et al. (2024) state that the

characteristics of millennial life, with easy access to information, can influence their interest in the agricultural sector. Nawawi et al. (2022) exemplify millennial activities on social media that contain content inviting young generations to contribute to the world of agriculture and educate agricultural practitioners in developing their businesses.

As many as 66% of respondents agree that the availability of market information is very important in shaping interest in entrepreneurship in the livestock sector. Information regarding livestock selling prices, consumer demand, harvest seasons, and distribution channels becomes a rational consideration in assessing the feasibility of the business. When young people have access to transparent and accurate market information, they can plan their businesses more thoroughly and reduce the risk of losses. This information also helps them see farming as an economically viable activity that can be conducted professionally. Rahmawati et al. (2024) in their research concluded that market access is a key element in increasing interest in farming.

### **The Influence of Technological Support on Interest in Working in the Livestock Sector**

Technological transformation has brought significant changes in various sectors, including livestock farming. The development of technology not only enhances the efficiency and productivity of businesses but also creates new appeal for the younger generation, who tend to be adaptive to innovation. According to the digital marketing indicator, 35% of respondents exhibited a moderate attitude towards the influence of digital marketing. The marketing of livestock products and livestock in West Sulawesi has not yet undergone modernization, largely due to the limited popularity of livestock products sold on digital platforms, as well as consumers' preference for direct transactions. In the research by Abdi et al. (2024), it was found that marketing does not influence interest in Bali cattle farming, as farmers sell their cattle out of necessity for living expenses, rather than as an investment.

The research results show that 43% of respondents agree that biotechnology progress indicators can attract the interest of the younger generation to participate in livestock farming. The application of biotechnology in West Sulawesi, such as artificial insemination,

fermentation feed processing technology, environmentally friendly livestock waste management, and genetic detection in superior livestock, is considered a symbol of progress and the professionalization of livestock farming. Engla et al. (2023) state that the application of biotechnology in the field of animal husbandry aims to drive productivity improvements in production technologies, such as artificial insemination and embryo transfer, as well as in genetic engineering, and to enhance the efficiency and quality of feed through the use of microbes.

A total of 76% of respondents strongly agree that the use of modern equipment and the implementation of mechanization in livestock farming can enhance the attractiveness of the livestock sector. The livestock sector in West Sulawesi generally still employs conventional equipment systems; thus, it urgently needs modernization for future development. Ease of work, time efficiency, and the opportunity to apply Internet of Things (IoT)-based technology are driving factors for the younger generation to view livestock farming as a sector worth pursuing professionally. Muttaqin et al. (2022) conducted research that led to the development of an IoT-based egg incubator capable of effectively controlling and monitoring temperature and humidity within the incubator until the eggs hatch. This equipment received positive feedback from users as a highly effective tool.

### **CONCLUSION**

The results of this study indicate that simultaneously, all independent variables, namely social factors, economic factors, government support, demographics, access to information, and technological support, have an impact on the dependent variable, which is the interest of youth in working in the livestock sector. To some extent, government support does not significantly influence interest, while the variable with the greatest impact is the economic factor.

The strength of the relationship between the independent variables and the dependent variable is evident in the correlation coefficient (R), which has a value of 0.871, indicating a very strong correlation. The extent of the influence of social factors, economic factors, government roles, demographics, access to

information, and technological support on the interest of youth to work in the livestock sector is reflected in the coefficient of determination (R<sup>2</sup>) value of 0.761 or 76.1%; in other words, there are other variables influencing outside the model by 23.9%.

## REFERENCE

- Abadi, M., Indi, A., & Firmanto, F. (2024). Pengaruh faktor sosial ekonomi terhadap minat masyarakat beternak sapi Bali di Kecamatan Napabalano Kabupaten Muna. *Jurnal Ilmu dan Teknologi Peternakan*, 12(1), 25–32. <https://doi.org/10.21776/ub.jepa.2024.008.02.12>
- Amirullah, A. H. T., & Rafsanjani, M. A. (2022). Pengaruh self efficacy dan lingkungan pendidikan terhadap minat melanjutkan study ke perguruan tinggi (Studi kasus siswa kelas 12 SMA Negeri 1 Cerme). *Buana Pendidikan*, 18(2), 259–269. <https://doi.org/10.36456/bp.vol18.no2.a5454>
- Arvianti, E. Y., Waluyati, L. R., & Darwanto, D. H. (2020). Behavior factors affecting the performance and interest of young farmer on the horticulture business in Malang, Indonesia. *Ecology, Environment and Conservation*, 26(4), 1531–1539.
- Badan Pusat Statistik. (2024). *Peternakan dalam angka 2024*. Badan Pusat Statistik.
- Badan Pusat Statistik. (2025). *Produk domestik regional bruto (PDRB) Sulawesi Barat 2024*. Badan Pusat Statistik.
- Devaux, A., Torero, M., Donovan, J., & Horton, D. (2018). Agricultural innovation and inclusive value-chain development: A review. *Journal of Agribusiness in Developing and Emerging Economies*, 8(1), 99–123. <https://doi.org/10.1108/JADEE-06-2017-0065>
- Efu, A., & Simamora, T. (2021). Karakteristik peternak dan dukungan penyuluhan dalam mendukung kemampuan manajerial beternak sapi potong di Desa Oepuah Utara. *Jurnal Agribisnis Lahan Kering*, 6(1), 22–26. <https://doi.org/10.32938/ag.v6i1.1229>
- Elisia, R., Meidita, F., Fevria, R., Maiyontoni, M., Komala, R., Kudususalam, M., & Annisa, A. (2024). Evaluasi kemampuan dasar beternak peserta pelatihan pembibitan dan pembesaran sapi. *Community Development Journal: Jurnal Pengabdian Masyarakat*, 5(6), 13072–13080. <https://doi.org/10.31004/cdj.v5i6.38255>
- Engla, M. Z. M., Viona, A., Ghiffari, M., & Atifah, Y. (2023). Review artikel: Pemanfaatan dan penerapan bioteknologi untuk meningkatkan hasil dan produktivitas dalam bidang peternakan. *Prosiding Seminar Nasional Biologi*, 3(2), 875–882. <https://doi.org/10.24036/prosemnasbio/vol3/792>
- Girdziute, L., Besuspariene, E., Nausediene, A., Novikova, A., Leppala, J., & Jakob, M. (2022). Youth's (un)willingness to work in agriculture sector. *Frontiers in Public Health*, 10, 937657. <https://doi.org/10.3389/fpubh.2022.937657>
- Hetharia, C., & Kalami, M. (2021). Analisis faktor yang mempengaruhi minat masyarakat Distrik Makbon Kabupaten Sorong dalam mengembangkan ternak sapi Bali. *Jurnal Jendela Ilmu*, 2(2), 48–53. <https://doi.org/10.34124/ji.v2i2.99>
- Hidayat, A. N., Saleh, K., & Saragih, F. H. (2019). Analisis faktor yang mempengaruhi minat dalam mengembangkan ternak sapi potong. *Jurnal Agrica*, 12(1), 41–49. <https://doi.org/10.31289/agrica.v12i1.2312>
- Isyanto, A. Y., Fatimah, A. T., & Amalia, L. N. (2024). Factors influencing agricultural vocational high school students' interest in working in the agricultural sector. *Agric*, 36(1), 131–140. <https://doi.org/10.24246/agric.2024.v36.i1.p131-140>
- Makabori, Y. Y., & Tapi, T. (2019). Generasi muda dan pekerjaan di sektor pertanian: Faktor persepsi dan minat (Studi kasus mahasiswa Politeknik Pembangunan Pertanian Manokwari). *Jurnal Triton*, 10(2), 1–20.

- Mutolib, A., Nuraini, C., & Ruslan, J. A. (2022). Bagaimana minat pemuda terhadap sektor pertanian?: Sebuah pendekatan multi kasus di Indonesia. *Suluh Pembangunan: Journal of Extension and Development*, 4(2), 126–134.
- Nawawi, F. A., Alfira, Z. N., & Anneja, A. S. (2022). Faktor penyebab ketidaktertarikan generasi muda pada sektor pertanian serta penanganannya. *Prosiding Seminar Nasional Ilmu Ilmu Sosial (SNIIS)*, 1, 585–593.
- Pervez, A. K. M., Kabir, M. S., Saha, A., Hossain, M. I., & Haque, M. A. (2024). Students' interest in agribusiness as a future career. *Agricultural and Resource Economics: International Scientific E-Journal*, 10(2), 271–289. <https://doi.org/10.51599/are.2024.10.02.11>
- Putri, F. A., Calista, P., Jannah, M., Eva, E., & Yani, A. (2022). Peran pendidikan dalam keputusan bekerja di sektor pertanian pada masa pandemi Covid-19. *Seminar Nasional Official Statistics*, 2022(1), 1177–1186. <https://doi.org/10.34123/semnasoffstat.v2022i1.1406>
- Rahmawati, Y., Purnomo, S. H., & Ferichani, M. (2024). Analisis minat peternak sapi potong di Kecamatan Sumberrejo Kabupaten Bojonegoro. *Jurnal Sains Agribisnis*, 4(2), 186–197. <https://doi.org/10.55678/jsa.v4i2.1600>
- Runtu, M. A. N., Hadini, H. A., & Abadi, M. (2025). Pengaruh faktor sosial ekonomi terhadap minat masyarakat dalam usaha ternak sapi Bali di Kecamatan Moramo Kabupaten Konawe Selatan: The influence of socio-economic factors on community interest in Balinese cattle farming in Moramo District, South Konawe Regency. *Jurnal Ilmiah Peternakan Halu Oleo*, 7(2), 201–208. <https://doi.org/10.56625/jipho.v7i2.179>
- Sazila, N., Abdullah, F. A., Khadri, N. A. M., Sidek, S., Abdullah, F. A., Mat, K., Ayob, M. A., & Rahman, M. M. (2018). The intention level among FELDA youth to re-migrate from city for livestock entrepreneurship: A preliminary study. *International Journal of Academic Research in Business and Social Sciences*, 8(6), 566–577. <https://doi.org/10.6007/IJARBS/v8-i6/4258>
- Šimpachová Pechrová, M., Šimpach, O., Medonos, T., Spěšná, D., & Delín, M. (2018). What are the motivation and barriers of young farmers to enter the sector? *AGRIS On-Line Papers in Economics and Informatics*, 10(4), 79–87.
- Supriyanto, S., Haryadini, A. F., & Nurdayati, N. (2020). Analisis faktor yang mempengaruhi minat peternak dalam mengembangkan ternak kambing. *Jurnal Pengembangan Penyuluhan Pertanian*, 17(32), 137–149.
- Vilaiphone, S., Kehavong, B., & Choumo, Y. (2025). Young labor shortages in the food and agriculture sector: Case study of livestock in Luang Prabang, Lao PDR. *Asian Administration and Management Review*, 1(8), 1–12. <https://doi.org/10.14456/aamr.2025.5>
- Yohana, L., Yusuf, A., & Dewi, Y. N. (2023). Factors influencing the interest of youth in working within the agricultural sector of Dusun Selatan Subdistrict of Barito Selatan Regency, Central Kalimantan. *Russian Journal of Agricultural and Socio-Economic Sciences*, 139(7), 131–140. <https://doi.org/10.18551/rjoas.2023-07.14>