Jurnal Ekonomi Teknologi & Bisnis (JETBIS)
Volume 2, Number 4 April 2023
p-ISSN 2964-903X; e-ISSN 2962-9330

THE INFLUENCE OF FOOD QUALITY IMPROVEMENT ASSISTANCE ON INCREASING THE WELFARE OF PEOPLE'S FARMERS

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KEYWORDS:
animal feed, beef cattle, institutional management, earring

ABSTRACT

Feed is a very important factor in the world of animal husbandry. Subang Regency is one of the beef cattle breeding centers in West Java and even in Indonesia and occupies the top 5 beef cattle populations in Indonesia. In Subang Regency, 1,500 families depend on beef cattle and other livestock businesses for their income, with an average of 3 to 4 livestock per family. but breeders in Subang Regency only focus on conventional livestock production processes and have not touched modern livestock. so that the level of welfare of farmers in Subang Regency is still not optimal. The biggest cost for livestock in Subang Regency is still the high price of concentrate and forage feed. This research aims to increase the knowledge of beef cattle breeders through counseling and coaching regarding the management of beef cattle in terms of improving the quality of feed so that it has added value. The research was carried out in Cibogo District, Subang Regency from July to November 2022 using the focus group discussion, training and monev methods. The results of this study are that the feed problem at the smallholder farmer level is the poor quality of the feed due to the lack of knowledge of breeders on how to process and store feed. Processing and storage are applied at the farmer level, namely storing forage fodder using the silage method and increasing knowledge of feed management. Breeders who are members of a group of beef cattle and are able to develop institutional management with standards for the production and management of feed in the group. There is a positive and significant influence between the provision of assistance in making feed on increasing the welfare of farmers.

INTRODUCTION

Community development is a series of continuous activities and is an effort to develop community capacity so that they are able to carry out productive businesses in their respective fields independently. Community development, especially the livestock community must be carried out from upstream to downstream. According to (Fathurohman, 2018) in the future, community development has a vision, namely creating a society that is advanced, efficient, and resilient, competitive, independent and sustainable and able to empower the people's economy.

Subang Regency has a population of 1,546,00 people which are divided into three regional characteristics, namely mountains, lowlands and beaches (Susandy & Prasetyo, 2016). The Ministry of Agriculture has determined that West Java, especially Subang Regency, is one of the regencies in West Java as a beef cattle commodity area which is also a center for beef cattle farming in West Java which is designed as a test in order to show the effectiveness of a program implementation,

knowing the impact of program implementation. and its economy. Subang Regency was chosen as a beef cattle commodity area because it has natural resources and facilities and infrastructure that support the development of beef cattle. Subang Regency is expected to be one of the agricultural areas for beef cattle commodities in Indonesia which can contribute to the supply of national fruit (Kementerian Pertanian, 2016).

In connection with the above, the Subang district government focuses the development of beef cattle on sectors that have high added value. It is hoped that having high added value can create sovereign, just and independent beef cattle breeders. One of the groups or mentors that was used as a pilot is located in Sumur Barang Village, Cibogo District, Subang Regency, West Java. This village has several livestock groups, but the largest is the Mandiri Jaya group which consists of more than 25 members (Politeknik Negeri Subang, 2015).

One of the most important factors in livestock business is feed management or animal feed management (Banhazi, 2012). However, there are still many breeders who do not understand good feed for livestock, especially beef cattle. There are still many breeders who provide forage directly to their livestock without processing it first so that a lot of forage is wasted, besides that there are many concentrate feed ingredients that have not been used even though they are still very abundant. Many breeders experience losses due to higher production costs, especially from feed compared to the selling price of livestock (Fathurohman et al., 2020). This is due to the farmer's lack of understanding of feed management and feed processing procedures. this is because 60% of beef cattle production is influenced by the feed factor and 20% by other factors (Fathurohman & Baharta, 2020), meaning that feed determines the success of a livestock business (Mahaputra & Kurniadhi, 2003). So this study aims to see how effective assistance to improve the quality of feed to increase the welfare of farmers.

This study aims to look at feed problems at the farmer and group level as well as increase farmer knowledge and the influence of mentoring to improve feed quality on increasing farmer welfare (Vernanda & Abdullah, 2018).

RESEARCH METHODS

Whatever method is used in this research is carried out in three stages, namely: Counseling, training and coaching mechanisms regarding feed management and forage processing procedures are simple and at a relatively affordable.

A. Accompaniment

The mentoring phase covers Focus Group Discussion (FGD) activities, training and mentoring, carried out by direct training methods with practice, namely by making silage and managing the storage of forage feed with raw elephant grass which is of poor quality or not feasible. In addition, feed management assistance is carried out.

B. Monitoring and evaluation stage (monev)

This is done by recording the productivity of animal feed and monitoring the development of the forage storage skills that have been given. Monitoring and evaluation is also carried out on group management in each group for uniformity. Distribution and filling out questionnaires.

C. Testing Stage

This study uses descriptive analysis using a survey. Collecting data with a questionnaire which is a list of questions given to breeders after implementation, Assistance. The variables used

as indicators are Assistance (X) and Welfare Improvement (Y). testing was carried out using the Linear Regression method.

Considering that data collection was carried out through the use of a questionnaire, the seriousness factor of the respondents in answering the questionnaire is very important, therefore it is necessary to carry out validity and reliability tests beforehand to ensure that the measuring instruments used in this study are valid and reliable.

Regression analysis is to measure whether there is assistance to increase welfare, with the analysis used multiple linear regression analysis using the SPSS application (Darlington. R.B, 2016), it can be formulated as follows:

$$Y = a + b1 \,.\, x1 + e$$

Where:

Y = Employee Performance
a = Constant Numbers
b1 = Counseling regression coefficient
x1 = Accompaniment
e = Error

A statistical T test was also carried out to show how far the influence of one explanatory variable individually explained the variation of the dependent variable. The t test statistical formula as follows is:

$$th = \frac{\beta 1}{SE\ (\beta 1)}$$

Where:

th = t value count
$\beta 1$ = regression coefficient
SE ($\beta 1$) = Standard error in the regression coefficients

Hypothesis testing steps

H0 : ts < 0 : shows that there is no effect between mentoring, and increasing the welfare of breeders.

H1 : ts > 0 : shows that there is an influence between mentoring, and increasing the welfare of breeders.

The decision criterion is:

a. If t count > t table, and sig < 0.05 then H0 is rejected and H1 is accepted;
b. If t count < t table, and sig > 0.05 then H0 is accepted and H1 is rejected;
c. Significant level = 5%;
d. Degrees of freedom (df) = n – 3.

RESULTS AND DISCUSSION

The research was carried out in Cibogo District, Subang Regency from July to November 2022. This activity went through 3 stages, namely the mentoring, monitoring and evaluation and testing stages

Research in Cibogo District has known indicators of increasing the ability of farmers to make feed with better quality feed and the ability of farmers to store silage feed. Farmers are also able to improve group management by recording all feed production transactions, both from raw materials and the amount needed. besides that there is a standard feed management in the group.

The results achieved in each stage of the research are:

1. FGD and counseling stages, recording problems that exist in farmers, increasing knowledge of livestock management and group management, especially management of feed production, there are standards for group management and the main thing is about increasing the value of the livestock business as an effort to develop the welfare of farmers. Farmers know and understand about efficient and efficient herd management.
2. The training and mentoring stage, increasing the knowledge and skills of breeders in making management of poor quality forage storage, increasing the skills of breeders in making feed using the silage method. The training phase ends with setting standards of good feed management within the group.

Figure 1. Feed Making Preparation

Monitoring and evaluation, carried out by researchers and the Center for Research and Community Service (P3M) Subang State Polytechnic. By the implementing team, the results of monitoring and evaluation obtained an increase in the knowledge and skills of breeders in storing forage feed, increasing administrative order and increasing the quality of feed.

Figure 2. The results of making silage feed

Even so, technically there were several obstacles that were found during the mentoring series and it is hoped that this will become an evaluation and improvement for future research. These constraints namely:

a. Changes to the schedule that had previously been agreed upon by the researcher and the community resulted in a delay and a combination of activities that had previously been planned.
b. Lack of enthusiasm for breeders to take part in a series of mentoring events, so that the material presented is not evenly distributed.

Testing Stage

a. Instrument Validity Test

Testing the validity of each item used item analysis, which correlated the score of each item with the total score which is the sum of the item scores. According to (Sugiyono, 2008) that an instrument is said to be valid if the correlation coefficient between the items/items is positive and the magnitude is 0.3 and above with the level of error or the correlation coefficient shows significance or is smaller than (alpha) 0.05. In this study the validity test using the following version of the SPSS program can be shown in Table 1, the results of the validity test of each item on each variable in the questionnaire.

Table 1. Validity Test Results

No	Variable	Variable Name	No Indicator	Coefficient Correlation	Information
1	Independed (X1)	Accompaniment	1	0,770	Valid
			2	0,552	Valid
			3	0,641	Valid
			4	0,671	Valid
			5	0,814	Valid
			6	0,689	Valid
			7	0,664	Valid
			8	0,649	Valid
			9	0,788	Valid
			10	0,693	Valid
			11	0,588	Valid
2	Dependen (Y)	Farmer Welfare Improvement	12	0,791	Valid
			13	0,701	Valid
			14	0,748	Valid
			15	0,697	Valid
			16	0,775	Valid
			17	0,724	Valid

b. Instrument Reliability Test

This reliability test is used to measure the internal consistency of the indicators of a construct which shows the degree to which each indicator indicates a general construct. In other words, how specific things help each other in explaining a general phenomenon (Sugiyono, 2008).

Testing the reliability test of the instrument in this study used the SPSS program. In this test carried out by means of one shot or measurement only once. A variable is said to be reliable if it gives a Cronbach Alpha value (α) > 0.6 (Umar, 2007). Exposure to the results of the reliability test on each variable used in this study can be seen in Table 2.

Table 2. Reliability Test Results for Each Variable Used in the Research

No	Variable	Variable Name	Koefisien Cronbach Alpha	Information
1	Independed (X)	Accompaniment	0,885	Reliable
2	Dependend (Y)	Employee Performance	0,829	Reliable

Table 2 shows that all variables used in the study have a Cronbach alpha correlation coefficient above 0.6. This means that all variables in this study are declared reliable, and the instrument can be continued to be used for all targeted respondents.

c. Results of Linear Regression Analysis

The data analysis method used is linear regression with the use of least squares equations in model estimation. Linear regression is used to determine the functional relationship between the dependent variable (Y) and the independent variable X. A linear regression model with one independent variable can be formulated as follows:

$$Y = a + b \quad X$$

Where:

Y = The dependent variable (tied) in this case is Employee Performance Improvement

a = Intercept, shows the value of Y when X = 0

b = The regression coefficient is the magnitude of the change in variable Y due to changes in each unit of variable X.

X = Independent variable 1 (free) in this case assistance.

The results obtained after the data were processed with the help of the SPSS program are presented in Table 3.

Table 3. Linear Regression Analysis Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.722	3.146		.547	.588
	Accompaniment	.221	.075	.383	2.952	.006

a. Dependent Variable: Welfare Improvement

The regression equation is Y = 1.722 + 0.221X

- A constant of 1.722; meaning that if the value of training is 0, then the value of increasing welfare is 1.722.
- Assistance variable regression coefficient of 0.221; meaning that for every increase in assistance by 1 unit, it will increase the welfare of breeders by 0.221 units, assuming the other independent variables have a fixed value.

Estimator Parameter Accuracy Test Results (T Test)

The t test in linear regression is used to determine whether there is an influence between the independent variables on the dependent variable. In this study using the SPSS program. The results of the t test obtained are presented in Table 4.

Table 4. T test results

Coefficients[a]

Model		t	Sig.	Decision
1	(Constant)	.547	.588	
	Accompaniment	2.952	.006	There is influence

a. Dependent Variable: Welfare Improvement (Y)

Testing the variable coefficient Assistance (b)

Test steps as follows:

1. Determine the null hypothesis and alternative hypothesis:
   Ho : b = 0 (Assistance has no effect on increasing the welfare of breeders)
   Ha : b ≠ 0 (Assistance has an effect on increasing the welfare of breeders).
2. Determine t_{count}
   Based on the table above obtained t_{count} as big 2,952

3. Determine t_{table} by using $\alpha = 0,05$
   Table t can be seen in the attachment on $\alpha = 0,05 : 2 = 0,025$ (2-tailed test) with degrees of freedom (df) n-k-1 or 36-3-1 = 32. With 2-sided testing the results obtained for t_{table} as big +2,037 / -2,037.
4. Test criteria
   a. Ho accepted whe $-t_{count} \geq -t_{table}$ or $t_{count} \leq t_{table}$
   b. Ho rejected when $-t_{count} < -t_{table}$ or $t_{count} > t_{table}$
5. Compare t_{count} with t_{table}
   Value $t_{count} > t_{table}$(2,952 > 2,037), then Ho is rejected
6. A picture of the effect of mentoring on improving the welfare of breeders can be seen in Figure 3.

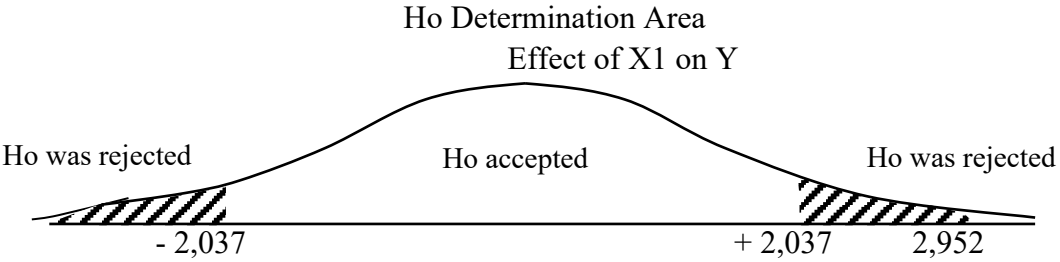

Figure 3. The effect of mentoring on increasing welfare

Discussion

The value of tcount > ttable (2.952 > 2.037), then Ho is rejected, meaning that mentoring has an effect on increasing the welfare of breeders. A positive t-value means that it has a positive effect, that is, if the assistance increases, the farmer's welfare will increase.

The mentoring variable is formed by three indicators, namely lectures, training and monitoring, showing that the farmer's perception is good so that it makes a significant contribution to the farmer's welfare, but to further improve the farmer's welfare even better, according to the breeder's assessment, attention needs to be paid in terms of program sustainability guarantees. funding and technology transfer.

The results of statistical data analysis prove that there is a positive and significant influence between mentoring on improving welfare as indicated by a significance value of 0.006 which means less than 0.05. This study found a positive and significant influence between mentoring on improving the welfare of farmers. This means that the better the assistance, the higher the farmer's welfare and vice versa, if the assistance is not carried out, it will lead to a decrease in the farmer's welfare.

Testing the variable coefficients of assistance to farmers answers one of the objectives of this study is to analyze the effect of assistance on increasing the welfare of farmers. In this case that there is a positive and significant influence between the provision of assistance to increase the welfare of breeders.

CONCLUSION

The conclusion of this study namely: 1). The problem with feed at the smallholder farmer level is the poor quality of the feed due to the lack of knowledge of breeders on how to process and store feed. 2). Processing and storage are applied at the farmer level, namely storing forage fodder using the silage method and increasing knowledge of feed management. Breeders who are members of a group of beef cattle and are able to develop institutional management with standards for the production and management of feed in the group. 3). There is a positive and significant influence

between the provision of assistance in making feed on increasing the welfare of farmers. Suggestions for future research are more emphasis on feed ingredients that are abundantly available around the breeder group. Apart from that, other methods of feed processing have also been developed, including the hay method.

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