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Analysis Strategy of Developing Livestock Business Based on Cattle in Merauke City

Dirwan Muchlis

Department of Animal Husbandry, Musamus University, Merauke, Indonesia.

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ABSTRACT

Breeders contribute 99% of the main supply of beef cattle in Merauke city, with a self-help system or assistance from the government in the form of a herd of livestock has been established. Various kinds of obstacles faced by people's farms, such as knowledge about mastery of technology, lack of information about the progress of livestock, production that is not optimal. The breeders have the hope that raising cattle can make an increase in welfare for their families. However, the fact that the goals have not been achieved is influenced by many factors. Therefore, the aim of this research is to develop an appropriate strategy for mapping business models conducted by community breeders in Merauke city. Strategies for developing smallholder breeder are carried out using Strengths, Opportunities, Weakness, and Threats (SWOT) analysis tools and analyzed descriptively. Data obtained from identifying the environment as many as 4 districts, expert hearings. This study uses 1 expert from government agencies, 1 academician and 4 breeders with predetermined criteria. The SWOT analysis results show that there were 11 internal factors and 15 external factors. Internal and external factors produce market strategies and production development, strategies are established through the development of forage, fermentation, fattening and livestock breeding businesses.
KEYWORDS: strategy, livestock, business, cattle

1. INTRODUCTION

Merauke city with abundant natural resource potential in the form of forage in the rainy season, making Merauke a beef cattle breeding area in eastern Indonesia based on the 2016 regulation of the Director General of Animal Husbandry and Animal Health 2016. The population of cattle in Merauke city has decreased from year to year since 2012 -2017 because of that the need for meat in the Papua region has not been fulfilled. The cattle population in Merauke city mostly comes from rural and suburban areas, up to 95% more. According to [10-12] that local beef supply comes from small-scale community breeders. The people's cattle breeders are currently workers for the development of a national scale livestock business. The government has basically provided infrastructure assistance in the form of slaughterhouses and artificial insemination (AI) programs in the form of all mandatory breeding for pregnant women (SIWAB) and policies to increase population by prohibiting slaughtering of productive female cattle. However, this has not been able to optimally increase the local cattle population. Determining the success of the national scale livestock business at this time depends on the people's livestock, most of the community livestock entrepreneurs only keep 2-4 cattle for the purpose of savings and side businesses. According to [5] in addition to family savings and livestock farming processes are used to fulfill family nutrition. In addition, beef cattle business is used as a side business by farmers and one of the factors is the very limited ability of livestock farming. If farmers are able to master technology, but most farmers do not apply to their farms, one of the examples is the processing of fecal waste, the use of feces can be processed into organic fertilizer which has the potential as a business branch. The formation of livestock groups is actually an effort to meet the needs of the population. The purpose of forming livestock groups is to form groups of breeding activities in a professional manner.

The livestock group business in Merauke city basically has its own business selling cattle to collectors or slaughterers and individuals. This shows that among the livestock group members basically has not gone well, this can happen because the (HR) of each group is different. Therefore a business model is needed in the form of business mapping for the steps in carrying out the strategy of developing livestock groups in the Merauke Regency in the hope that the planned objectives can be achieved such as increasing livestock population, meat production and improving livestock welfare.

Corresponding Author: Dirwan Muchlis, Department of Animal Husbandry, Musamus University, Merauke, Indonesia. Email: dirwan@unmus.ac.id

2. METHODOLOGY

This research was conducted in January to March 2019, the study was conducted in four districts, each district there is one group, and in each group will be identified internal and external factors. The site selection is done purposively by considering the potential of the location based on the large number of livestock and active groups. Development of business strategies that are applied in accordance with the potential possessed by each group. The development of a cattle group-based cattle breeding business strategy is needed, for the process of developing a beef cattle business group, internal and external indicators need to be identified which can be transformed into alternative strategies for the development of cattle groups in the Merauke city. SWOT analysis is used for business strategy development and AHP is used to get the priority value of the best strategy that will be applied to small-scale cattle breeding groups.

2.1. Data types and sources

The data used are sourced from the results of interviews directly to respondents, the respondents in question are members of livestock groups, the livestock service and animal health services, direct observation is primary data. Primary data collection aims to classify internal and external factors that function for the development of community farms. Secondary data were obtained from related institutions in the form of results reports, documentation and results of previous studies, the Central Statistics Agency.

2.2. Sampling Method

The respondents used were experts consisting of eight experts in their fields, covering the animal husbandry and animal health service 1 person, each group leader from four districts 4 people, 1 academic person. Selected respondents have the ability to formulate group policies, formulate business development strategies for livestock groups.

2.3. Data analysis method

This research was conducted with descriptive analysis, for data processing using SWOT, SWOT matrix calculation adopted [7]

3. RESULTS AND DISCUSSION

The four districts in this study include Naukenjerai, Semangga, Tanah Miring and Kurik. The most common types of ruminant livestock are cattle and buffaloes. The results of research on the characteristics of herd groups in the four districts show varied values such as history, group members, average education and main occupation of the farmer as in table 1. This is in line with [4] that the traits displayed by community farms are related to aspects of work including education level, experience of raising livestock. The relationship between cattle population and education level is very closely related to the knowledge of farmers about cattle breeding period. According to [6] the average level of knowledge of breeders and when cattle are ready to be mated is quite low.

Table 1. Characteristics of Cattle Groups in four Districts

No	Criteria	Livestock groups in four districts			
		Naukenjerai	Semangga	Tanah Miring	Kurik
1	Since	2010	2008	2005	2005
2	Village	Nasem	Tomer	Semangga jaya	Muram sari
3	Business form	Not yet incorporated	Not yet incorporated	Not yet incorporated	Not yet incorporated
4	Number of Members	15	20	25	15
5	Education	Junior high school	vocation high School	vocation high School	vocation high School
6	The main job	farming	farming	farming	farming

The average age of each group member is 30-55 years and some have been doing business raising cattle from a young age between 10-15 years, breeding knowledge is not only obtained during full education, especially vocational agriculture, also the experience of raising livestock. This experience is very helpful for farmers in developing their group organizations. According to [2] the influence of Education influences the ability to manage livestock businesses. Cattle ownership comes in part from the business of buying and inheritance from parents. The average number of cattle is between 2-4 cattle per person, but some people in the naukenjerai district have a very large number of cattle averaging 100-300 cattle per person with a cattle breeding system in shepherds in the forest and extensive maintenance systems. Such a maintenance system will make it difficult for breeders to control and record. According to [1] the weakness of the extensive breeding system is the difficulty of getting accurate data related to cattle production. Cattle production in Merauke has increased until 2018, this

is inseparable from the role of the government by providing health services in the form of animal health workers (animal health) and animal health posts in each research district.

3.1. Analysis SWOT

Internal factors owned by the four herds groups are almost the same, based on the results of interviews and questionnaires obtained internal factors from the four herds of cattle such as table 2. Strengths and weaknesses of each group have the same indicators as the default. given starting from 1.0 (most important) up to 0.0 (not important). In addition, the calculation of the rating on each factor by giving a scale value of 4-3 for the strength factor and 2-1 for weakness.

Table 2. Internal factor evaluation matrix in four districts

No	Internal Factors	Average weight	Livestock groups in four districts							
			Naukenjerai		Semangga		Tanah Miring		Kurik	
			Rating	score	Rating	score	Rating	score	Rating	score
1	Knowledge held by livestock groups	0.097	3.000	0.261	4.000	0.319	4.000	0.347	4.000	0.321
2	Number of males owned	0.088	3.000	0.277	4.000	0.327	4.000	0.314	4.000	0.344
3	Feasibility of a cage	0.098	2.000	0.154	3.000	0.214	3.000	0.216	3.000	0.210
4	Shepherd's land ownership	0.098	4.000	0.341	4.000	0.379	4.000	0.381	4.000	0.371
5	administration	0.084	2.000	0.159	2.000	0.115	2.000	0.109	2.000	0.119
6	Group legality	0.072	1.000	0.030	1.000	0.100	1.000	0.050	1.000	0.070
7	Reproduction rate	0.095	3.000	0.282	3.000	0.216	3.000	0.217	3.000	0.218
8	The level of learning will	0,085	4.000	0.371	4.000	0.373	4.000	0.321	4.000	0.341
9	Communication between group members	0.089	3.000	0.291	3.000	0.227	3.000	0.246	3.000	0.241
10	Collaboration between group members	0.085	3.000	0.283	4.000	0.317	4.000	0.322	4.000	0.302
11	Responsibilities in groups	0.088	3.000	0.245	3.000	0.221	0.300	0.218	4.000	0.311
Total		0.979		2.694		2.700		2.741		2.848

The results showed that internal factors in the herd group had a score above 2.5, meaning that the entire research group was able to utilize the strengths and be able to withstand the current shortcomings. According to Suardi (2018) that the value of internal factors above 2.5 characterizes the group able to cultivate its strengths to deal with deficiencies.

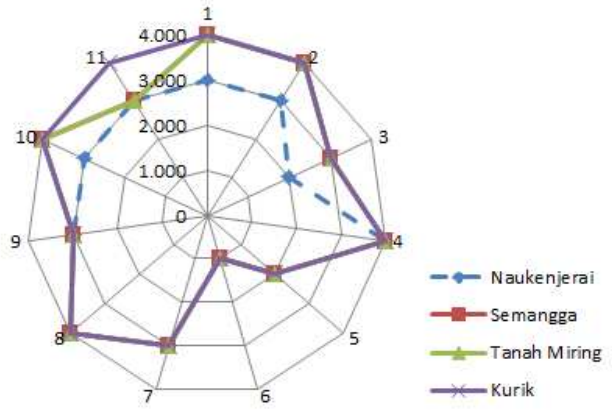

Figure 1. Internal Factor Diagrams of herds in four districts

1. Breeding knowledge owned, 2. Number of males owned, 3. Feasibility of the cage, 4. Shepherd's land ownership, 5. Administration, 6. Group legality, 7. Reproduction rate, 8. Level of learning will, 9. Communication between group members, 10. Cooperation between group members, 11. Responsibility in groups (Note: Figure diagrams numbers 1-11 correspond to the description on the right)

The diagram in Figure 1 shows that there is the lowest to highest value in internal factors, a rating value of 3-4 shows the strength possessed by a group of people's herds, and a value of 2-1 shows the weakness of a group of herds, in this study it can be seen that there are differences in each indicator of strengths and weaknesses. Knowledge indicators become a strength factor, one of which is about understanding the latest information technology, in line with the opinion of [9] stating that knowledge is positively correlated with the strength indicator. This is supported by education status. In addition, the level of reproduction knowledge, such as knowledge of lust detection and knowledge of artificial insemination technology, has a positive impact. According to [6] that the level of education has an influence on knowledge about the detection of lust in cattle. Knowledge of breeders in making fermented feed, fattening and breeding processes provide new opportunities and new strengths.

External factors are part that discusses the factors that support and inhibit the group of cattle in four districts can be seen in table 3.

Table 3. external factor evaluation matrix in four districts

No	External Factors	Average weight	Livestock groups in four districts							
			Naukenjerai		Semangga		Tanah Miring		Kurik	
			Rating	score	Rating	score	Rating	score	Rating	score
1	Government guidance and assistance	0.085	3.000	0.201	3.000	0.168	3.000	0.128	3.000	0.278
2	Corporate agency collaboration	0.078	2.000	0.075	2.000	0.030	2.000	0.071	2.000	0.152
3	Competition between members	0.070	2.000	0.180	2.000	0.167	2.000	0.121	3.000	0.203
4	Epidemic of a disease	0.098	1.000	0.006	1.000	0.015	1.000	0.025	1.000	0.011
5	Availability of animal health workers	0.080	2.000	0.120	2.000	0.121	2.000	0.141	2.000	0.106
6	Market Network	0.075	2.000	0.173	2.000	0.152	3.000	0.162	3.000	0.112
7	Price stability	0.095	3.000	0.228	2.000	0.285	2.000	0.205	2.000	0.185
8	Market demand	0,085	3.000	0.162	3.000	0.180	3.000	0.120	3.000	0.220
9	Availability of feed and water	0.094	3.000	0.240	3.000	0.252	3.000	0.212	3.000	0.228
10	Environmental safety	0.085	3.000	0.270	2.000	0.260	2.000	0.240	2.000	0.263
11	Availability of labor	0.070	2.000	0.187	2.000	0.183	2.000	0.173	2.000	0.181
12	Animal group communication	0.075	3.000	0.269	3.000	0.278	3.000	0.228	3.000	0.285
13	Willingness to breed for generasi muda	0.075	2.000	0.193	2.000	0.203	2.000	0.193	2.000	0.123
14	The existence of AI technology	0.078	2.000	0.103	2.000	0.203	2.000	0.103	2.000	0.094
15	Climatic conditions	0.080	1.000	0.067	1.000	0.017	1.000	0.097	1.000	0.071
Total		1.000		2.473		2.311		2.219		2.512

The results showed that external factors in the herd group had a score below 2.5 meaning that the entire research group was able to take full advantage of the opportunity, but in the kurik district livestock group a score above 2.5 meant that the group was able to take advantage of strengths and be able to withstand the deficiencies that existed at the time this. This is in line with [3] states that external factors have a significant impact on cattle business patterns.

4. Conclusions

The conclusion results show that the analysis of internal and external factors in each group of cattle farms specifically for cattle found that each indicator is the same, but there are several different score scores. The highest score on internal factors is in the group of young livestock, while other indicators such as the level of knowledge of the highest score are found in the welfare group. The same value is also found on external factors, the highest score obtained by the group of young working cattle and the lowest is the welfare group. The results of interviews and analysis showed that farmers needed training and skills in the form of making alternative feed fermentation of feed, fattening models of livestock and breeding.

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