



## Downstream factor of beef cattle company economic sustainability

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### ABSTRACT

The purpose of this study is to examine the index of each application aspect or dimension that is an indicator of the sustainability of beef cattle business in hopes of providing solutions for the beef cattle industry to increase production and income. This study uses a mixed method approach by collecting data through interviews and questionnaires. This research was conducted in one district in Indonesia. The results of the study show that there are several things that have become recommendations in this study in their efforts to maintain the sustainability of beef cattle business, namely. Aspects of the application of the marketing mix are still weak, so it needs to be well organized, especially for marketing and promotion and services. Also, product readiness must always be available in a certain amount for customer satisfaction to achieve economic benefits. In the management aspects of a professional organization, it is recommended that improvements be made in and need to complete deficiencies and also need restructuring and need to recruit experts and place them in accordance with their expertise.

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### 1. Introduction

Beef production in Indonesia has not been able to meet the demand related to various problems in the development of beef cattle. The problems are: 1) calf-cow operation is less attractive to capital owners because it is economically less profitable and takes a long time to maintain, 2) limited availability of superior males in nursery and breeding businesses, 3) availability of non-continuous and low quality feed, especially in the dry season, 4) utilization of agricultural and agro-industrial waste as feed ingredient has not been optimized, 5) low livestock reproduction efficiency with long calving interval limited feed ingredients that can increase livestock productivity and problems of genetic potential that cannot be overcome optimally (Santi, 2008; Kariyasa, 2017), and 7) disease outbreak.

Syamsu et al. (2003) stated that changes of land function from the source of forage feed into food crops or industrial areas and settlements also disrupt the provision of forage livestock feed. On the other hand, the availability of pasture decreased by 30%. Mersyah (2005) urged that there are two factors that lead to the slow development of beef

cattle in Indonesia. First, the center of beef cattle production in Java which accounts for 45% of national beef production is difficult to develop because: a) livestock is kept across rural areas according to livestock households (RTP), b) livestock is fed by forage and agricultural waste, c) low cultivation technology, d) purposes of livestock are as a source of labor, nursery (reproduction) and fattening (Roessali et al., 2005), and e) beef cattle farming which aim is to produce meat and market oriented is low. Second, cattle production center in eastern Indonesia has a 16% share of the national population and extensive grazing areas, cattles become thin, have high mortality rate and low birth rate in long dry season.

Other barriers are reduced grazing areas, low quality resources, difficult access to capital institutions, and low utilization of technology (Syamsu et al., 2003; Ayuni, 2005). The push factor of beef cattle development is the increasing demand for beef, availability of large number of labor, existence of government policies that support beef cattle development, forage and agricultural waste available throughout the year, and local cattle breeding businesses are not affected by the global economic crisis (Nurfitri, 2008; Kariyasa, 2017). Related to the various problems, the use of local feed ingredients is promoted to reduce feed costs without disrupting livestock productivity. One of the efforts is maintaining the livestock in an integrated manner with food crop or plantation.

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Using that effort, forage limitation can be overcome through the use of agricultural or plantation waste, so that crops and livestock productivity becomes better (Utomo and Widjaja, 2004; Kariyasa, 2017). Livestock and crops integration can be performed through partnership between companies and farmers or local government (Utomo and Widjaja, 2004).

Referring to some previous studies, this study is directed to answer problems faced by beef cattle companies through the dimension index approach, so that this study aims to examine the index of each aspect or dimension application namely (1). Production result marketing mix aspect, (2). Professional organization management aspect, (3). Regulatory and legal aspect. Then, the result of each aspect or dimension index are summed and the aspect index totality or dimension index totality or known as the comprehensive index or totality index application of beef cattle companies. Then, to determine whether a company is categorized as good or bad with the categorization based on the range score. It aims to provide recommendations on research results to beef cattle companies to improve and restructure the company both internally and externally.

## 2. Research methods

The research method used was "Mixed research method" or combination between qualitative method and quantitative method, so that the research could qualitatively provide descriptive explanation, and quantitatively display numbers, graphs, charts and statistical data (Creswell et al., 2003).

This research also conducted approaches such as literature study, focus group discussion (FGD), and direct interview using questionnaires. The method used for quantitative data collection to calculate index component value of the implementation of the determinants of economic sustainability of beef cattle companies (IDPPSP) was indicators, variables and dimensions or categories approach so that the calculation process was conducted in stages or "multistage weighted index". This process was taken to obtain the value of Composite index applied to the determinants of economic sustainability of beef cattle companies (IDPPSP).

The procedure used to obtain the Dimension Index value was the multistage weighted index. This method describes several stages of the weighting process that has been given by the researcher to each indexing component to make it procedural. It means that both indicators, variables and dimensions or aspects or components were given weight. For more details on how it works to obtain an index of the application of determinants of economic sustainability of Beef Cattle companies (IDPPSP), we could follow the successive calculation model of the following working stages:

First Stage: create a Likert scale scoring with a range of 1 to 5, meaning that the value of 1 indicates a very bad condition and the value of 5 indicates a

very good condition. This scoring was made for the overall index variable.

Second Stage: Calculate the index of each variable using the following Eq.:

$$I_i = \frac{(S_i - S_{\min})}{(S_{\max} - S_{\min})}$$

where:

$I_i$  = Index on the i variable

$S_i$  = Actual score value on the measurement of i variable

$S_{\max}$  = maximum score

$S_{\min}$  = minimum score

The produced index value was in the range of 0.00 - 1.00, meaning that the lower the obtained index value, the worse the implementation of determinants of economic sustainability of beef cattle companies and the greater the obtained index value meant that the implementation of beef cattle companies was very good.

Third Stage: Multiply the obtained index in each indicator with each weight to obtain an index on the variable. Likewise, for each variable with each weight to obtain an index in dimension.

Fourth Stage: Multiply the index obtained in the dimension with weights to obtain an index of the application of determinants of economic sustainability of beef cattle companies.

Fifth Stage: The index value of the implementation of determinant of economic sustainability of beef cattle companies in each category or dimension was composited into one by dividing the total weight of a number of dimensions and obtaining a new weight for each dimension and multiplying it by the variable index to obtain implementation index of the determinants of economic sustainability of beef cattle companies comprehensively.

To obtain the meaning of index value, the application of determinants of economic sustainability of beef cattle companies (IDPPSP) was input into the category table using a score range from 0.00 to 1.00.

To facilitate data management in order to obtain IDPPSP value, the value of each dimension of weight was multiplied by the value of each variable so that the value of each dimension index was obtained, then the value of each dimension index was summed and the total index value of the comprehensive dimension could be obtained or could be called the index value of determinants of economic sustainability of beef cattle companies (IDPPSP).

## 3. Result and discussion

### 3.1. Production result marketing mix

A company must think about its products and distribute them to the desired market segment. With the existence of product market, the supply of cattle to the market can run smoothly so that the profits to

be achieved by the company such as cattle reproduction products, fattening results, and other by-products. Cattle products from nursery, fattening, and meat processed into meatballs certainly have a market segment by considering the available products, how to promote, pricing and marketing places commonly called the marketing product. Marketing is an overall business activity system designed to plan, determine price, promote and distribute market (place), needs for products, services and ideas to the target market in order to achieve company goals. Furthermore, it was stated that marketing is an effort to direct company funds and power towards consumer satisfaction with the intention that the company can sell production results, earn profits, and achieve company goals.

Therefore, if a company makes a production effort well and supported by costs for promotion and sales force provided, then the company's products shall be sold. Related to this problem, marketing is a function or system that includes production planning or services to satisfy the needs and desires of customers so that the company can obtain the desired profit. Then, the planning to be implemented shall consider about the market share, interest of prospective consumers, efforts to increase market share and dominate market segments. A company must have marketing management that includes a marketing strategy circle consists of segmentation, targeting (target market), positioning in the mind of consumers. It must also consider marketing tactics consist of differentiation that has added value compared to other companies. Then the marketing mix consists of products, price, place or distribution and promotion, and must pay attention to the quality regarding production as needed by consumers, then the quantity (amount of production) to meet market demands, and the most important is service in terms of creating marketing for customers both directly and indirectly.

Marketing mix is a series of marketing variables that can be controlled by the company and used to achieve goals in the target market. [Benyamin \(2002\)](#) stated that marketing mix is a set of marketing tools used by companies to achieve marketing goals. It was also stated that there are four elements of classification of marketing mix tools namely product, price, place and promotion. It can be concluded that marketing mix is a set of marketing variables that can be controlled and used by the company in reaching the target market and improving sale performance so that it is able to compete with its competitors. Therefore, a company must prioritize the quality, quantity and other appearing products such as branded and certified products, and prioritize the look of goods through packaging in marketing its goods. In addition, the place shall be accessible, and provide convenience in terms of parking, affordable price, satisfying information and services for consumers so that they decide to choose the company and make transaction ([Kotler and Armstrong, 2010](#)).

Therefore, the marketing of product is very important. In order to determine that a beef cattle company has conducted its activities properly and correctly, it is necessary to conduct an index evaluation based on variables, indicators, and assessment criteria.

For the marketing mix of meat products from meatball industry, 20 respondents stated that the product indicator for meatball industry is moving from moderate to good. It means that it needs improvement in terms of packaging, it has to be neat and labeled with company logo. Likewise, the 20 respondents assessed that the place is categorized moderate but the marketing aspect needs improvement, it needs to be expanded so that the marketing strategy can reach the consumers. The price indicator is moderate but it needs improvement so that the price is competitive with the price of meatball in other places. Therefore, market price information that applies at that time is required. According to the 20 respondents, sales promotion needs to be increased because the indicators of respondents' assessment are categorized poor. Therefore, reminding and informing through printed media, or social media and using other methods such as installation of banners or posters can be done to increase sales promotion. Meanwhile, service indicator is categorized moderate and shall be improved by increasing service among products without collecting transportation costs.

For the marketing mix of reproductive cattle products on average, according to 20 respondents, the product indicators, prices and services are categorized as moving from moderate to good. It means that this category needs improvement so that consumers become satisfied by guaranteeing the marketed cattle, as well as in terms of service, it is advisable to provide cattle delivery services which are sold with the assumption that the kilometer limit is set.

For the marketing mix of fattening cattle production, according to the 20 respondents, in terms of product indicators, prices offered, promotion techniques is moving from moderate to good category. It means that the method of marketing needs improvement, such as the label and certified logo that the fattened and marketed beef cattle is feasible and recognized in the Indonesian national standard (SNI). Then, from the indicator of service about the marketing mix of fattening beef cattle, it is categorized excellent and needs to be maintained. Yet, there are also weaknesses in this marketing mix, namely the marketing place indicator of beef cattle is categorized poor, meaning that they are still focusing on one place so that they need to conduct repairs to expand the marketing place or several places for the fattened beef cattle marketing office. For more details, please refer to the following [Table 1](#). Based on these results, in [Table 2](#), the total value of marketing mix application index of production in beef cattle companies in Enrekang District, South Sulawesi province is 0.07584. This

value is in the score range between 0.00 - 0.20, which means that the marketing mix of production in beef cattle companies still needs to be organized

well or categorized not professional in managing the marketing mix of beef cattle production

**Table 1:** Research result on marketing mix of beef cattle production results along with the variables, indicators, and assessment criteria selected by respondents

No.	Variable	Indicator	Criteria				
			Poor	Bad	Moderate	Good	Excellent
1.	Marketing Mix	Products	0	0	3	16	1
		Place	0	6	14	0	0
		Price	0	0	12	6	2
		Promotion	2	18	0	0	0
		Service	0	5	9	6	0
2.	Cattle product Industry Result	Products	0	0	6	14	0
		Place	15	5	0	0	0
		Price	0	0	4	16	0
		Promotion	14	2	4	0	0
		Service	0	0	8	12	0
3.	Marketing Mix	Products	0	0	6	14	0
		Place	15	5	0	0	0
		Price	0	0	2	2	16
		Promotion	0	0	4	12	4
		Service	0	0	0	0	20

**Table 2:** Calculation results of variable index, indicator index and marketing mix dimension index of beef cattle production at beef cattle companies in Enrekang Regency, South Sulawesi

No.	Variables and Indicators	Value indicator	Index value indicator	Index value variable	Index value dimension
1.	Meatball		0.5025	0.166	0.02324
	Industry result				
	Products	0.725			
	Place	0.425			
	Price	0.625			
	Promotion	0.225			
	Service	0.5125			
2.	Reproductive result		0.4425	0.1505	0.02106
	Products	0.675			
	Place	0.0625			
	Price	0.700			
	Promotion	0.125			
	Service	0.650			
3.	Fattening result		0.6825	0.2253	0.03154
	Products	0.675			
	Place	0.0625			
	Price	0.925			
	Promotion	0.750			
	Service	1.00			
THE TOTAL VALUE INDEX THE DIMENSIONS OF MARKETING MIX RESULTS PRODUCTION AT BEEF CATTLE NURSERY COMPANY (IBPHP) = 0.07584					

Based on those results, it is recommended to improve and arrange every element of the marketing mix and also restructure and recruit experts as well as position them in their appropriate expertise.

### 3.2. Professional organizational management

In a company, there are natural resources that need to be managed so that the company can achieve its goals. In the management of commodities, a company is considered successful if the value added and value chains are going well. Coltrain et al. (2000) declared that value added is an economic activity to increase the value of a product can be in the form of changes of place, time, and the characteristics of the products to be accepted by the market more. This means that the manufacturer must be able to respond to consumer demands by producing what is

desired by consumers. Indeed, a value added product can be seen from the type of innovation and coordination. This type of innovation focuses on changing the existing processes, procedures, or services into something new so that the success of the innovation can be measured from the technical ability and are able to create a market. Meanwhile, type of coordination is being focus in horizontal coordination and it is conducted by individuals or companies. Then, vertical coordination type including the system contract, strategy of alliance, and licensing agreement, which are in a chain (Peterson and Wysocki, 1997). Vertical coordination can also be called the vertical integration, which is a commodity system in vertical alignment and it forms a series of perpetrators involved in the commodity system, i.e. starting from the manufacturer as the production facilities input provider, production



facilities input distributor, agriculture, collectors, wholesalers, agroindustry, retailers, exporters to global and domestic consumers. Improvement of agribusiness commodities production and agroindustry product value added will be implemented properly if a number of supporting institutional facilities or infrastructure can be provided. Added value can be achieved very quickly if it is supported by value chain. Gloy (2005) declared that value chain is a conceptual tool that is important and can give you long term profits. It is explained that added value is a series of activities, services and products that can bring a product or service reaches subscribers.

With respect to the company that manages beef cattle fattening, reproduction of beef cattle to get quality breed and industry that processed beef into meatballs, surely the value chain process conducted starts from the provision of production input to production process, post-harvest and marketing of the value chain activities to gain added value from the three attempts. Professional organizational management is required so that fattening, reproduction and processing meat into meatball can

run well and reach the ultimate goal, which is profit. Tawaf and Arief (2011) stated that professional organizational management can run well if the organization structure and job description are clear and handled by experts and people who have sufficient experience in their field. Management is indispensable in a company because through management, a company can perform the interpretation process and coordinate resources used. Management division or unit is required in a company so that it can achieve its goals. The division and unit in question is administration division or unit and field division or unit.

With regard to the company so that the value chain can produce a product that has value added, the most suitable management is the professional organizational management that is divided into two main divisions i.e. administration division and field division. Therefore, professional organizational management on beef cattle companies can be measured via variables, indicators and assessment criteria in order to know the applied management level at this time. For more details, please refer to the following Table 3.

**Table 3:** Research results of the professional organizational management with its variables, indicators, assessment criteria selected by respondents

No.	Variable	Indicator	Criteria				
			Absolutely Inappropriate	Inappropriate	Neutral	Appropriate	Absolutely Appropriate
1.	Planning and Realization	(1). Operational	0	0	14	6	0
		(2). Working time	0	5	15	0	0
		(3). Job description	4	16	0	0	0
		(4). Monitoring and evaluation	17	3	0	0	0
2.	Organization	(1). Organization Structure	15	5	0	0	0
		(2). Expert recruitment	17	3	0	0	0
		(3). Work unit operation	16	4	0	0	0
		(4). Employment contract	18	2	0	0	0
3.	Administration Division	(1). Finance	12	4	4	0	0
		(2). Marketing	8	6	6	0	0
		(3). Program Unit	0	16	4	0	0
		(4). Staffing	18	2	0	0	0
4.	Field Division	(1). Field coordinator	2	18	0	0	0
		(2). Fattening	8	12	0	0	0
		(3). Reproduction	8	12	0	0	0
		(4). Feed	8	12	0	0	0
		(5). Production	8	12	0	0	0
		(6). Meatball industry	0	0	4	16	0

In Table 3, it can be seen that there are 4 professional organizational management variables (planning and realization, organization, administration division, field division) and indicators (operational, working time, job description, monitoring and evaluation, organization structure, expert recruitment, work unit operation, employment contract, finance, marketing, staffing, program unit, field coordinator, fattening, reproduction, feeding, production, meatball industry) which average are assessed by 20 respondents. For more details, each variable will be discussed.

On professional organizational management aspects, there were 20 respondents stated that the planning and realization variable with the resulting operational indicator is moving from moderate to good. It means that there are many planned activities that are not yet in line with the realization of the work performed in field in the operational implementation. For example, expert activities handling has not been scheduled well and activities undertaken are not in accordance with the plan so that the standard operational procedure of each expert is not running well. Similarly, according to 20 respondents, working time indicator is moving from bad to moderate. It means that employees or

personnel who work on the beef cattle company have not been doing their job properly because their job description is unclear, there is no evaluation monitoring on the activity progress and it is not reported in writing to the directors of the company and project coordinator. Thus, according to the 20 respondents, monitoring and evaluation indicator is categorized poor to bad since the monitoring and evaluation standard is not arranged or made by the beef cattle company.

For organization variable in organization structure indicator, according to 20 respondents, is categorized poor to bad because experts who are placed in the field are not yet in line with the organization structure, this happens because the job description of each division is unclear and experts who conduct operations are not based on their expertise. As the solution, restructuring and rescheduling are required to create a good and professional structure in the future. This is in line with the expert recruitment indicator applied in beef cattle company that is far from the job description for experts in charge, so according to the 20 respondents, it is categorized poor to bad. For its sustainability, it needs to be reorganized and managed professionally since the current tendency is that the company does not work optimally and professionally. Due to the impact of the organization structure and expert recruitment indicators, operations of any work unit run slow and the reality does not run according to the expectation, let alone the expert recruitment is only in the form of letter of assignment instead of employment contract so that the responsibility of any personnel involved is very weak. The 20 respondents categorized work unit operation and employment contract as poor to bad. Therefore, rearrangement of planning and realization as well as the organization aspects is required to make a company survives and achieves its goals.

For the administration division variable in financial indicator, the 20 respondents categorized it as bad to moderate. It means that financial management carried out by financial actors in this company has not been based on cash flows and notes to financial statements, so as a result, the company has not been able to control its financial flows and does not know whether it is surplus or deficit. Therefore, rearrangement of financial division is required so that each entry such as cash flows, balance sheets, reports on budget realization and operational reports are recorded in the financial statement of the beef cattle company. Similarly, the 20 respondents categorized the marketing indicator as bad to moderate. It means that the marketing division has been running but it is not reporting properly so that the financial division is not working in line with the marketing division and there is the tendency that both divisions work on their own way regardless of the fact that everything is managed in one system. All of these have not been executed properly

because the head of program unit has not applied any substantial assertiveness against monitored and evaluated units since each unit on its own way. It is expressed by the 20 respondents regarding the indicator of head of program unit who monitors and evaluates. This is also evidenced by the 20 respondents on the staffing indicator, which is categorized not discipline to not yet discipline due to unclear job description, monitoring and evaluation are not performed or have not been performed well, personnel of the organization structure have not been based on their expertise, each line runs on its own because the personnel are lacking of responsibility. As a solution, rearrangement and professional management are required in any part on the administration division variable.

For the field division variable in field coordinator, fattening unit, reproduction unit, feed unit, production unit, and meatball industry unit indicators, according to 20 respondents, are categorized poor to bad. It means that each section except for the meatball industry still works according to the standard so they are categorized moderate to good. However, other units work with no reference or standard operational procedure (SOP) or in other words, each working unit does not have a clear direction or clear job so that it cannot achieve its goals. Thus, as a solution, internal rearrangement of the beef cattle company in both procedure reference standard and job description aspects is required. Similarly, expert utilization should be clear and it should be carried out in professional and measurable manner. If this obscurity is handled slowly, one day it will also affect the availability of raw material for meatballs, the raw material will be limited in number.

For the assessment of the application index of professional organizational management dimensions in beef cattle companies in Enrekang Regency, South Sulawesi, it is necessary to weigh dimensions, variables and indicators. The steps to get the dimensions of the dimension application index are used as a reference in obtaining the application index value of professional organizational management dimensions in beef cattle companies in Enrekang Regency, South Sulawesi. It is as shown in [Table 4](#).

It appears in [Table 4](#) that the total value of index of beef cattle companies in Enrekang Regency, South Sulawesi province, obtained a value of 0.027171. This value is in the score range between 0.00 – 0.20, which means that the professional organizational management of beef cattle companies still need serious handling or in other words the company is still not professional in implementing professional organizational management. Therefore, it is suggested to make improvement and complement the shortcoming as well as restructuring and recruitment of experts and place them in their respective expertise.

**Table 4:** Calculation results of variable index, indicator index and dimension index of professional organizational management in beef cattle companies in Enrekang Regency, South Sulawesi

No.	Variables and Indicators	Indicator value	Indicator index value	Variable index value	Dimension index value
1.	Planning and Realization		0.2759	0.0828	0.01242
	(1). Operational	0.575	0.144		
	(2). Working time	0.438	0.1095		
	(3). Job description	0.050	0.013		
	(4). Monitoring and evaluation	0.0375	0.0094		
2.	Organization		0.04431	0.0133	0.001995
	(1). Organization Structure	0.0625	0.01563		
	(2). Expert recruitment	0.0375	0.00938		
	(3). Work unit operation	0.050	0.0130		
	(4). Employment contract	0.025	0.0063		
3.	Administration Division		0.17505	0.03501	0.005252
	(1). Finance	0.150	0.0375		
	(2). Marketing	0.225	0.0563		
	(3). Program Unit	0.300	0.0750		
	(4). Staffing	0.025	0.00625		
4.	Field Division		0.2508	0.05016	0.007524
	(1). Field coordinator	0.225	0.0383		
	(2). Fattening	0.150	0.0240		
	(3). Reproduction	0.150	0.0255		
	(4). Feed	0.150	0.0255		
	(5). Production	0.150	0.0255		
	(6). Meatball industry	0.700	0.1120		

TOTAL INDEX VALUE OF PROFESSIONAL ORGANIZATIONAL MANAGEMENT DIMENSIONS IN BEEF CATTLE COMPANIES (IMOP) = 0.027171

### 3.3. Regulatory and legality

In carrying out company activities, everything should be clean from factors that can disrupt the company's operations such as business location, resources used, marketing network, location permit, relation with local government and central government. Relation with local government is related to protection, security and permit so that all aspects of legality are firm. It is similar to relation with central government. If a business uses central government funds, its legality should have no problems in all aspects, so that the central government considers that the business is feasible. In establishing a company, the regulatory and legality aspects of business establishment must be resolved administratively. Furthermore, it is necessary to consider all aspects when establishing and running a business such as social, political, security, environmental, and administrative legality aspects so that the business can be sustainable. If one aspect is neglected or if the business is not making or arranging a business plan or business plan properly, one day the company might have to deal with bankruptcy.

In connection with beef cattle companies in Enrekang Regency, South Sulawesi, this study also approaches regulatory and legal aspects in terms of support from local government and central government by reviewing the legality of the administration and legal system of company establishment. For research purposes, the regulatory and legal aspects are carried out in variables, indicators, and assessment criteria approaches. From the results of the responses, the number of respondents who chose each option listed on the

answer criteria as the answer to variables and indicators will be revealed. More detailed results of the respondents' choices can be seen in [Table 5](#).

[Table 5](#) shows that there are 2 variables, that is local and central government support with the indicator of business permit, status of business location and security of business location. It is assessed in average by 20 respondents for the indicator of business permit which indicates that the variable of local government support is still limited to the certificate and number taxpayers for the company manager.

Meanwhile, the central government support is limited to a description of business support and coordinating with the local government which is characterized by correspondence between the central and local government. For the local government support and central government support with the indicator of status of business location, according to the 20 respondents, it is only limited to a written notice with due date to certificate of land use for beef cattle company. So, based on the assessment criteria, it can be categorized as poor to bad meaning that such conditions can make the involved personnel in the beef cattle company become restless. A solution is need for the local and central government to give guarantee in regulation and legal for the beef cattle company in conducting its activities. It is in line with the indicator of security businesses location that the land is in dispute between two large institutions. By this fact, the 20 respondents said the Government has not made a serious movement in supporting beef cattle company which is based on assessment criteria, it is included in poor to bad category.

**Table 5:** Research results on regulatory and legality with variables, indicators, and assessment criteria selected by respondents

No.	Variable	Indicator	Criteria				
			Poor	Bad	Moderate	Good	Excellent
1.	Regional Government Support	1) Business permit	0	15	5	0	0
		2) Status of business location	13	7	0	0	0
		3) Security of business location	11	6	3	0	0
2.	Central Government Support	1) Business permit	0	16	4	0	0
		2) Status of business location	13	7	0	0	0
		3) Security of business location	14	6	0	0	0

It means that if it goes prolonged without regulatory and legal support, then gradually the beef cattle company will be deficit in budget the party gradually and the rancher who partnered in it will seek other activities since it makes all personnel who get involved feel the uneasiness. A proposed solution is for the internal company to cooperate seriously with local and central government to settle the issue on business permit, status of business location and security of business location. Moreover, an official document in writing must be obtain for those purposes.

For the assessment of implementation of regulation and legality dimensions, the beef cattle companies in Enrekang Regency, South Sulawesi should be levelling up in terms variable and indicator with measures in order to achieve the standard of indexes dimensions which then can be set as a reference in obtaining the regulatory and legal index values for the beef cattle companies in Enrekang Regency, South Sulawesi. More detailed calculation results are presented in [Table 6](#).

**Table 6:** Results of calculation of index variable, indicator index and regulatory dimension index and legality of beef cattle companies in Enrekang Regency, South Sulawesi

No.	Variables and Indicators	Indicator value	Indicator index value	Variable index value	Dimension index value
1.	Regional Government Support		0.18463	0.09232	0.01385
	1). Business permit	0.3125	0.10625		
	2). Status of business location	0.0875	0.02888		
	3). Security of business location	0.1500	0.0495		
2.	Central Government Support		0.15563	0.07782	0.01167
	1). Business permit	0.300	0.1020		
	2). Status of business location	0.0875	0.02888		
	3). Security of business location	0.075	0.02475		
TOTAL INDEX VALUE OF REGULATORY DIMENSION AND LEGALITY IN BEEF CATTLE COMPANY (IRL) = 0.02552					

It appears in [Table 6](#) that the total value of index of regulation and legality of beef cattle company in Enrekang Regency, South Sulawesi province, obtained a value of 0.02552. This value is in the score range between 0.00 - 0.20, which means that the regulation and legality of beef cattle company still need serious handling or in other words the company is still not mature in establishing and running a business. Therefore, it is suggested to make improvement and complement the shortcoming as well as the completion of business license and the legal status of land that must be supported by the government so that the company does not encounter obstacles in carrying out its activities.

#### 4. Conclusion

Research has not shown good results. Where the marketing mix of production results on beef cattle company still need to be arranged well. In other words, the company is still not professional in handling the marketing mix of beef cattle production. Management aspect of professional organization has not run well, so it needs to be structured in variable of planning and realization, organization,

administrative division, and field division so that in the future, the beef cattle company can achieve economic benefits. In addition, the regulatory and legal aspects still lack support from the regional and central government, for example is business permit and land security. Therefore, serious efforts by the company are needed to find a solution so that the business permit and land can be legalized for operation. For this reason, there are several recommendations in this research as an effort to maintain the sustainability of beef cattle business, namely, the weak marketing mix implementation aspect that needs to be managed well, especially the marketing place, promotion, and service. The products must also be available in certain quantities for the consumer satisfaction in order to achieve economic benefits. In the professional organization management aspect, it is suggested to make improvement and complement the shortcoming, such as restructuring and recruitment of experts and placing them in accordance with their expertise. In terms of regulation, the completion of business license and the legal status of land must be supported by the government so that the company does not encounter obstacles in carrying out its activities.



## Compliance with ethical standards

## Conflict of interest

The authors declare that they have no conflict of interest.

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