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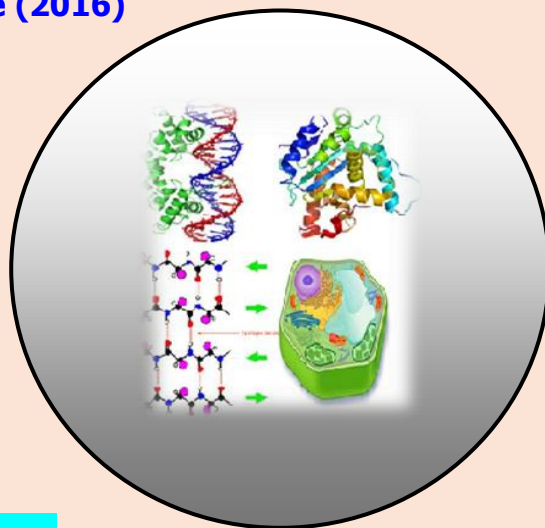
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ABSTRACT

Nusa Penida is a refining area of bali cattle based on the Minister Decree of Agriculture Number 348/Kpts/PK020/5/2016. Bali cattle breeders at Nusa Penida depend on belantik in marketing their livestock that causes the breeders' income is not optimal. This study aimed to determine the appropriate marketing strategy of bali calf to increasing breeder's income at Nusa Penida. This research was conducted at Nusa Penida on July to October 2017 by using survey method to 74 respondents, consisting of 60 breeders, 10 belantik, and 4 key informans. The purposive stratified random sampling technique is used for determining breeder respondents to select all group of bali cattle breeding in five villages in Nusa Penida and then determine three people from each group, consisting of two managers and one member. The data from belantik respondents is determined using the snowball sampling method as the determination of respondents based on information on livestock that sales obtained from interviews with breeder respondents. The expert respondents were determined using purposive sampling technique. All of data were analyzed using IFE, EFE, IE, SWOT, and QSPM. The finding indicated that the marketing strategy analysis shows the priority strategy is to provide certification on cattle which is free from jembrana disease, SE, PMK, MCF, anthrax, and brucellosis, with 2,93 TAS score.
Keywords – Bali Calf, Marketing Strategy, SWOT and QSPM.

INTRODUCTION

Nusa Penida Island (Nusa Penida District) that located in Klungkung regency is a development area of bali cattle. According to the mapping of Animal Husbandry Region of Bali Province, Nusa Penida is a center of bali cattle breedingarea in Bali. In accordance with Klungkung BPS Data of 2016, that shows the population of bali cattle in Nusa Penida currently 22.731 cattle with growth rate – 5, 78 % per year.

The business of bali cattle breeding in Nusa Penida not yet being known, but the livestock business in the Bali generallycould describe the condition of farms in general. In Bali, the bali cattle business is still not running efficient, with the number of livestock ownership ranging from 1 to 5 tail per person. Putri (2014) believe this is because the cattle breeding farm in Bali is used as a secondary business by applying a very simple management for that business. Breeders only focus on the farm (cultivation) sector rather than theoff-farm sector (market and marketing). This statement is supported by Sukanata *et al.* (2010) as the results of his research that shows the marketing of bali cattle, whether beef cattle or calfin Bali is not efficient, this is indicated by the low farmer's share which ranged between 63,48%-69,03% in intercity beef cattle marketing and 75%-76,19% in calf marketing.

The population of bali cattle in Nusa Penida is localized, therefore theycould be free of the nail, snoring, anthrax and other diseases (Chung *et al*., 1998). Although free from any disease, bali cattle in Nusa Penida are kept in the area to adapt to environmental conditions, therefore they could survive for long periods of time as the result of the process of evolution and natural selection.

This could be seen from the size of the body of bali cattle in Nusa Penida smaller than bali cattle in other areas in Bali (Suwiti *et al*., 2014). The income of bali cattle breeders is still very low. In accordance to the opinion of Sukanata *et al*. (2010), the marketing pattern of bali cattle is generally still traditional because the farmers do not sell directly to the consument, but to the wholesaler (*belantik*). As a result, breeders get relatively low prices.

Based on these conditions, it is necessary to do research on marketing strategies, especially marketing strategies of balicalf in Nusa Penida. This research is expected to yield the right strategy recommendation to be applied for bali cattle breeding business in Nusa Penidato help increase breeders' income. The purpose of this research are 1) to analyze the implementation of management of bali cattle breeding business in Nusa Penida; 2) to analyze the marketing system of balicalf in Nusa Penida, and 3) to recommends a proper marketing strategy of balicalf to be implemented by breeders in Nusa Penida.

MATERIAL AND METHODS

This research conducted at Nusa Penida Sub-district, Klungkung Regency, Bali Province from July to October 2017 by using survey method. This location was chosen purposively through purposive sampling technique based on the establishment of bali cattle breeding areas in Bali. This is in accordance with The Data Mapping of Animal Husbandry Region of Bali Province 2016.

The internal and external data were analyzed as the key factors in bali cattle breeding business in Nusa Penida. The ordinal data were obtained then analyzed by using Internal Factor Evaluation (IFE), External Factor Evaluation (EFE), Internal-External (IE), Strength-Weaknesses-Opportunities-Threats (SWOT), and Quantitative Strategic Planning Matrix (QSPM).

The IFE matrix is a formulation tool strategy that summarizes and evaluates prior and other weaknesses in various functional areas of the business. While the EFE matrix is a formulation tool strategy that summarizes and evaluates economic, social, cultural, demographic, environmental, political, government, legal, technological and competition information (David, 2002).

The condition of pig farming business environment is determined based on Internal Factor Analysis and External Factor Analysis, so that the strength, weakness, opportunity, and threats faced in the development of pig farming business are obtained. Each factor is weighted and ranked using the Paired Comparison method (Kinnear and Tylor, 1996). According to David (2002), ranking is analyzed based on the importance of each factor, on a scale of 1 (low / poor), 2 (average), 3 (high / above average), 4 (very high), with the following formula:

$$\propto_i = \frac{X_i}{\sum_{i=1}^{n} X_i}$$

Where:
α_i = Weight of the variable-i
X_i = Weight of the variable-i
i   = 1,2,3, …, n
n   = Number of factors

The SWOT analysis is an overall evaluation of the company's strengths, weaknesses, opportunities and threats. SWOT analysis is a way to observe internal and external marketing environments (Kotler and Keller, 2017). Rangkuti (2006) argues that the SWOT analysis is the systematic identification of various factors to formulate the company's strategy. This analysis is based on the logic that can maximize strength and opportunity but simultaneously can minimize weaknesses and threats.

The QSPM is a strategic tool to evaluate alternative strategies objectively, based on critical factors for previously identified external and internal success. Like other formulation analysis tools, QSPM requires good intuitive of judgment (David, 2002).

RESULTS AND DISCUSSION
Internal and External Analysis
Based on the results of internal environmental analysis, a total score of IFE 3,10 were obtained which indicates that the marketing of balicalf in Nusa Penida is in good internal condition, with the main strength is the bali cattle is genuine cattle germplasm of Indonesia; bali cattle from Nusa Penida are believed to be free from jembrana disease, SE, PMK, anthrax and brucellosis; and NusaPenidastated a bali cattle breeding area (Table 1).

Table 1. Ratings and Scores of External Factors.

Defining Factors		Weight	Rating	Score
Strength				
1	Bali cattle are genuine cattle germplasm of Indonesia	0,15	4	0,60
2	Bali cattle from Nusa Penida are believed to be free from jembrana disease, SE, PMK, MCF, anthrax, and brucellosis	0,14	4	0,56
3	Nusa Penida as a bali cattle breeding area	0,15	4	0,60
4	Bali cattle breeding that spread across villages in Nusa Penida	0,11	2	0,22
5	Breeders try to keep balicalf with good quality to be developed as the next parent candidate	0,11	2	0,22
6	*Belantik*in good organized	0,06	3	0,18
7	Maintenance of bali cattle in Nusa Penida using the organic farming system	0,08	3	0,24
Sub Total				**2,49**
Weaknesses				
1	Most of the bali cattle farms are used as side jobs by breeders	0,04	3	0,11
2	There is no animal market in Nusa Penida	0,04	3	0,11
3	Transportation costs are expensive with high risk	0,06	2	0,12
4	The distancefrom breeders with existing animal market far enough across the ocean so it requires a high cost	0,04	2	0,08
5	Cattle are still used as savings that can be sold at any time	0,01	3	0,03
6	Characteristics of breeders	0,06	3	0,18
Sub Total				**0,61**
TOTAL		**1,00**		**3,10**

The total EFE score of 2,66, this score indicates that the breeder has a good ability to challenge the opportunities and avoid the existing threats (Table 2).

Table 2. Ratings and Scores of Internal Factors.

Defining Factors	Weight	Rating	Score
Opportunities			
1 The high demand for bali cattle from Nusa Penida	0,19	3	0,57
2 Nusa Penida was developed as a source of seeds of bali cattle	0,19	3	0,57
3 The needs of quality and quality of bali cattle seeds that free from jembrana disease	0,17	3	0,51
4 There is a government policy onthe issue of seed certification and seed certification of balicalf	0,13	3	0,39
Sub Total			**2,04**
Threats			
1 Limitations of forage feeds	0,09	2	0,18
2 Limitations of water sources	0,09	2	0,18
3 Limited information on the price of balicalf seeds	0,05	2	0,10
4 The change of agricultural land turn into the tourism sector	0,05	2	0,10
5 The price competition between balicalf seeds in other areas	0,03	2	0,06
Sub Total			**0,62**
TOTAL	**1,00**		**2,66**

The marketing of balicalf in Nusa Penida is on cell IV (grow and build). The appropriate strategies to be applied to these cells are intensive strategies, including market penetration, market development and product development, or integrative strategies, including the backward integration, forward integration and horizontal integration (Figure 1).
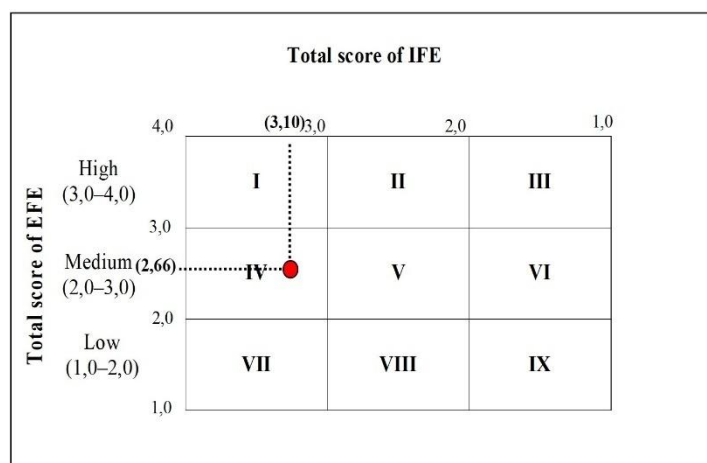

Figure 1. Internal-External Matrix.

The Recommendation of Strategy
The formulation strategy through identification and the analysis of internal factors consist of strengths and weaknesses, and the analysis of external factors consists of opportunities and threats. Strength is a special compensation that provides a comparative advantage to the marketing of calf in Nusa Penida, weaknesses are the limitations or shortcomings of marketing efforts, opportunities are desirable situations or opportunities owned by marketing efforts, and threats are unwanted or threatening situations security and business continuity of balicalf marketing at Nusa Penida.

The formulation strategy is done by combining various factors that have been identified and grouped. The results of this formulation strategy are grouped into four groups formulation strategies that consist of power-opportunity strategy (SO), power-threat (ST), weakness-opportunity (WO), and weakness-threats (WT).

SWOT analysis result of the formulation of strategy needs to be implemented at the formulation policy of marketing strategy of balicalfat Nusa Penida. The alternatives of recommended strategy are: 1) certification of balicalffree of jembrana disease, SE, PMK, MCF, anthrax, and brucellosis; 2) do a livestock exchanges at certain events; 3) build animal markets in Nusa Penida; 4) do a counseling about breeding management; 5) establish a livestock cooperatives managed by regions; and 6) train for forages in the processing of livestock.

Based on the results of QSPM analysis that has been done, it was found that the strategy of certification on balicalffree from jembrana disease, SE, PMK, MCF, anthrax and brucellosis is a priority strategy in marketing balicalf in Nusa Penida with TAS score of 2,93; followed by a strategy to implement the stock exchange with TAS score of 2,36; the third strategy is extension of breeding management with TAS score of 1,81; the fourth strategy with TAS score of 1,66 is to build animal market in Nusa Penida; the fifth strategy is to build a cooperative owned by breeders who are facilitated by the government and managed by professionals with TAS score of 0,75; and the feed process strategy of forage feed with TAS score of 0,69 as the last strategy. Through the alternative arrangement of marketing strategy of balicalf is as expected, the purpose of this research, which is to increase of income of breeders in Nusa Penida can be achieved.

CONCLUSION

Nusa Penida is a refining area of bali cattle. There are six alternative marketing strategies that are recommended for the marketing of balicalf in Nusa Penida, those strategies arethe certification ofcalf that free of jembrana disease, SE, PMK, MCF, anthrax, and brucellosis; hold a stock exchange on certain events; build an animal market in Nusa Penida; do a counseling about breeding management; establishing livestock cooperatives managed by the regions; and forage processing training. The priority strategy that is to certify balicalfbe free of jembrana disease, SE, PMK, MCF, anthrax,and brucellosis.

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