

Farmer Motivation in The Maintenance and Marketing Of Bali Cows In Kecamatan Abian Semal Badung, Indonesia

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Abstract. This study was conducted to determine the motivation of breeders in maintaining and marketing Bali cattle in Abiansemal District, Badung. Explorative research was performed through a survey with a combination of qualitative and quantitative methods. Balinese cattle breeders who sold cows in Selat and Ayunan villages in Abiansemal Subdistrict in Badung Regency were included as respondents. The research location was chosen deliberately (purposive sampling). Fifty respondents were selected on the basis of breeders who raised and marketed Bali cows. The instrument used as an interview guide to help obtain answers from respondents was a structured and closed questionnaire with open questions. Qualitative and quantitative data were used. Qualitative data included respondents' characteristics and breeders' motivation in maintaining and marketing Bali cattle. Results revealed that farmers mainly raised cattle because livestock could be sold in times of financial needs and allocated as savings (as much as 48%), utilizing existing agricultural waste as much as 25% to fill spare time as much as 17% and increasing farmer income by only 7%. This is because cattle farming in Bali is generally carried out as a side business, and livestock is used as savings once it is sold when farmers need large amounts of funds. The respondents were also motivated to sell calves because of the need for school fees for children (54%), traditional ceremonies (18%), and house repair costs (14%). Although the 9-year compulsory school fee has been freed by the government, school fees remain the main reason for selling calves because the awareness of the respondents to send their children to a higher education level is very high.

Keywords: Bali cows; marketing; motivation

1 Introduction

Breeders sell their cows when they are in immediate need of large funds. However, the selling price is relatively cheap because the price determinant lies with intermediary traders. This phenomenon happens because breeders have insufficient knowledge about marketing their

livestock products, especially the price of Bali cattle. Cattle is maintained by community farmers, and most of them are small scale with ownership of one to three heads (Astuti, 2018). This business is usually integrated with other farms, used as savings or considered a hobby and determinants of community social status (Astuti, 2000).

The livestock sector is a series of continuous activities that aim to develop the capacity of the farmers' community so that they can independently carry out the business of raising Balinese cattle. For example, the Bali cattle farming sector in Abiansemai District has potential for increasing the production of Bali cattle, increasing income and welfare, meeting the nutritional needs of the community, creating job and business opportunities and motivating breeders to participate in Bali cattle breeding activities (BPS, 2020). Marketing is one of the activities of entrepreneurs or producers in terms of selling products to generate profits.

An increase in income encourages farmers to raise more cattle. In addition, it will encourage breeders to carry out maintenance more efficiently. As a result, the cattle population in Bali indirectly increases as desired by the government. However, the income obtained by farmers is still far from their expectations. The price received by farmers is still relatively low, so their share is also low. Sukanata et al. (2010) showed that breeders only receive about 63%–69% of the final price given to consumers. As for benefits, cattle farming does not provide a decent profit if all the sacrifices incurred by farmers are considered economically. Such business conditions lead to a weak bargaining position for farmers in the Bali cattle marketing system and are often used by cattle traders/dealers/middlemen. Effective ways should be developed to improve the marketing system and increase farmer–livestock incomes. One of the efforts to improve the Balinese cattle marketing system is to change the farmer–livestock mindset. Raising Bali cattle is not only a savings account but also a business with a steady income every month. The selling price of Bali cattle should be increased by cutting the route of Bali cattle trading so that marketing cost efficiency can be achieved.

The success of a cattle breeding business cannot be separated from the marketing system, so the first step of a variety of problems faced in cattle marketing in Bali, amongst others: inappropriate marketing policies, market structures that tend to lead to monopsony markets, long market chains, game weighing, smuggling, buying and selling of cattle expenditure quotas, inadequate supervision, in addition to the low entrepreneurial spirit of breeders. Therefore, this condition must be improved to enhance the welfare of breeders.

Motivation and internal and external factors, such as age, education level, farming experience, number of family dependents, courage to take risks, livestock ownership and land area, influence the progress and decline of beef cattle farming (Luanmase et al., 2011). For these reasons, the motivation to raise Bali cattle, its marketing and its effect on the income of farmers from their cattle business should be studied fundamentally to determine (i) the reasons for raising Bali cattle, (ii) the farmers' motivation to market Bali cows and (iii) the farmers' share on Bali cattle sales.

2 Research Methods

2.1 Research design

In this explorative research through a survey, qualitative and quantitative methods were combined, but a quantitative approach, which is a systematic approach that corresponds to reality (real system), was mainly used in problem solving. In the Balinese cattle calf marketing system, marketing functions, marketing channels, cost structure, cost and marketing margin, farmer's share and market structure, behavior and implementation are analyzed. In practice,

Balinese cattle farming and Balinese cattle calf marketing involve behavioral and institutional aspects that are sometimes difficult to quantify, but these aspects must be considered. Therefore, apart from using a quantitative approach, a qualitative approach was applied in this study to enrich the discussion so that this research would be sharper and relevant to related problems in the field.

2.2 Location and time of research

This research was conducted in Abiansema Subdistrict in two villages, namely, Selat Village and Ayunan Village, where Balinese cattle breeders marketed their cows, and in Beringkit and belantik animal markets. The research location was chosen purposively (purposive sampling) on the basis of the largest Balinese cattle population amongst 18 villages in Abiansema District and close to the Beringkit animal market. This research was conducted in June 2020.

2.3 Data and data collection

The types of data used in this study could be divided into two. (i) Qualitative data included ideas, views and problems faced by Balinese cattle breeders in Bali in terms of production and marketing. They also included views and ideas from cattle, Dutch and government traders. (ii) Quantitative data were in the form of the number of Bali cattle breeders in Bali and data on costs and investments in Bali cattle farming. Motivation to raise and sell cows, a marketing agency used in marketing cows.

The sources of data used in this study could be divided into three: (i) primary data obtained directly at the research location via an interview using an instrument in the form of a questionnaire or a list of questions prepared previously according to the problem and research objectives, (ii) secondary data from recording data, and (iii) documents sourced from Badan Pusat Statistik and agencies relevant to this research.

2.4 Population and sample

The population of Balinese cattle breeders who marketed their cows is located in two villages, namely, Selat Village and Ayunan Village, in Abiansema Subdistrict. This population could provide data and information on the motivation of breeders to maintain and market Bali cattle. The sample of breeders was taken by purposive sampling (intentionally) and composed of as many as 50 respondents.

2.5 Data and research instrument

Data were taken in the form of primary and secondary data. Primary data were obtained by directly observing activities and conducting interviews with instruments in the form of questionnaires or a list of questions prepared previously in accordance with the problems and objectives of this study. Secondary data were collected through documents or data covering the motivation of breeders in producing and marketing Bali cows.

Instruments or measuring instruments are essential for research activities because data or information relevant to research objectives can only be obtained with good instruments or measuring instruments. As such, measuring instruments must have high validity and reliability. Answers were provided by respondents on the basis of the questions asked or chose alternative answers available on the questionnaire. Qualitative and in-depth explanations that were not included in the questionnaire but were closely related to the research problem were asked using open-ended questions as an interview guide, and the results were recorded.

3 Results and Discussion

Abiansemal Subdistrict in Badung Regency consists of 18 villages, including Selat and Ayunan, which were chosen deliberately as research locations because of the large number of cattle breeders in these villages. Abian Semal Subdistrict has an area of 69.01 km²; geographically, it has the following territorial boundaries: north of Petang Subdistrict, south of North Denpasar District, east side of Gianyar Regency and west side of Tabanan Regency (BPS, 2020), which is an area with a great potential for the development of Bali cattle kept in a village or a group pen.

This potential is supported by fertile soil conditions that favour the growth of agricultural crops and abundant fodder throughout the year. With this fertile agricultural area in Abiansemal Subdistrict, agricultural production is high, so agricultural waste can meet animal feed needs. Agricultural businesses support livestock businesses by providing forage feed. According to 46% of the respondent farmers, Bali cattle is mainly raised because livestock is allocated as family savings after it is sold when the family needs large amounts of funds. Another reason is to utilise existing agricultural waste (as much as 26%), to fill spare time (as much as 16%) and increase the income of farmers (only 12%). The complete data regarding the motives of breeders in raising cattle are presented in Table 1.

The majority of breeders who use livestock business as savings run their business as reasonably as possible without having an orientation to increase profits or amount of maintenance. Farmers feel that their livestock business provides sufficient economic benefits to the family without having to spend considerable time in maintaining it. With this motive, Balinese cattle farming has constantly grown, that is, it is performed by smallholder breeders with an average number of two to three cows (Astiti et al. 2016).

Table 1. Motive for raising cattle in Selat and Ayunan villages

	Selat village		Ayunan village		Total	
	Person	(%)	Person	(%)	Person	(%)
As savings	13	52	10	40	23	46
Utilization of agricultural waste	6	24	7	28	13	26
Take advantage of free time	4	16	4	16	8	16
Increase income	2	8	4	16	6	12
Total	25	100	25	100	50	100

In Selat Village, 52% of farmers raised Bali cows and developed their cattle business because raising cattle is easier than raising other livestock. It is a hereditary activity and can be sold at any time when they need large funds in the sense that it can be used as savings. This observation was supported by Sukanata and Yuniati (2016). Luanmase et al. (2011) indicated that breeders tend to run a Bali cattle business and want to increase their business as savings (81.63%).

Furthermore, farmers mentioned that raising beef cattle is easier than raising other livestock because they have been accustomed to the cattle business for a long time, and cows often cultivate rice farmland. As such, raising cattle is beneficial to transmigrant agricultural lands. On the contrary, local breeders consider the cattle business to be normal (83.67%) and a side

business that can help the family's urgent economic needs in some instances. In addition, the cattle business is considered normal because cows are abandoned in grazing fields all day without any supervision.

Another motive for raising cattle is to take advantage of 16% of free time in Selat and Ayunan villages because raising cattle is only a part-time cropping activity when most Balinese cattle is not the main livelihood in the sense that the main livelihoods of Balinese cattle breeders are rice farming, construction workers, agricultural laborers and others. This phenomenon was supported by Abidin et al. (2018), who indicated that the need for living expenses, including school fees for children, ceremonies, house repairs and daily consumption costs, is increasing daily, but this increase causes respondents to sell their cows. Of the 50 interviewed respondents, 52% sold cows because of the need for school fees for the children.

Although the 9-year compulsory school fee has been freed by the government, school fees remain the main reason for selling cows because the awareness of the respondents to send their children to a higher education level is high, with the hope that the respondents' children will live a more decent life, be able to compete in a more relevant work, have a better life than their parents and be able to raise the dignity of their family. The second dominant reason is ceremonial cost (18%).

Traditional ceremonies in Bali, including Galungan, Kuningan and Piodalan holidays in village temples (pusuh, village and dalem temples), Saka New Year celebrations (Nyepi), weddings, tooth-cutting ceremonies, greetings and otonan, are often carried out. All these religious and traditional ceremonies are costly, so cows that could have been kept to be more mature and more expensive had to be sold to obtain the funds needed. Another motive to market cows is the need for house repair costs 14% due to lack of availability of 10% feed and 4% lack of stables. The availability of pens is important to protect cattle from climate threats and loss or to prevent cattle from being stolen.

Table 2. Motives to market cows

Motives to market cows	Selat village		Ayunan village		Total	
	Person	(%)	Person	(%)	Person	(%)
School fees	13	52	13	52	26	52
Ceremony cost	5	20	4	16	9	18
House repair costs	4	16	3	9	7	14
There is no feed	2	8	3	12	5	10
There is no cage	1	4	2	8	3	6
Total	25	100	25	100	50	100

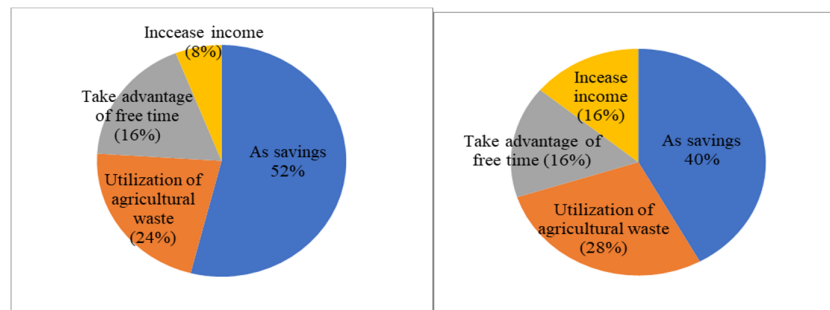


Fig.2. Cattle marketing motive, (a) Selat village, and (b) Ayunan village

4 Conclusion

Bali cattle is raised to produce calves that can be sold at any time when funds, in addition to family savings, are needed by utilizing agricultural waste, spending free time and increasing family income. In marketing Bali cattle calves, breeders should sell their calves directly to other breeders, but they should sell through groups if they have to sell through marketing agencies.

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