Characteristics of the KUB Chicken Market in Fulfilling the Needs of Traditional and Religious Ceremonies in Bali Province

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Abstract. The Kampung Unggul Balitbangtan (KUB) chicken is a superior native chicken, and its rearing aims to meet the protein needs and demands of materials for various religious activities, especially in Bali Province. The high demand for KUB chickens with some feather color specification has implications for scarcity and selling prices. The purpose of this research was to map the characteristics of KUB chicken demand in terms of color for traditional and religious ceremonies in Bali Province. This research was conducted in July–October 2021 in eight districts and one municipality in Bali Province. The respondents in this study were 179 people, consisting of 89 household consumers and 90 traders. These respondents were determined using the multi-stage sampling method. Data collection was conducted through questionnaire survey and observation. The data collected were analyzed using a qualitative descriptive method. The results show that the KUB chicken colors most demanded by household consumers were *brumbun* (76.40%), white (10.11%), black (8.99%), and red (1.12), followed by other colors (1.12%). Purchase decisions by the majority of consumers were based on considerations of color specification (65.17%) and type of chickens (33.71%). Meanwhile, location, price, and services were not the main considerations for consumers in making purchase decisions. The high demand for *brumbun*-colored KUB chickens had an impact on chicken scarcity and the difficulty traders had to face to meet the demand (valued more than 45%). In conclusion, the demand for KUB chickens is still high, but KUB chickens are only available in a limited number. Therefore, efforts to increase their population in Bali Province are necessary.

Keywords: KUB chicken; market characteristics; business growth

1 Introduction

Growths in population and economic conditions simultaneously have an impact on the demand for animal proteins [1]. The Kampung Unggul Balitbangtan (KUB) chicken is a native chicken line that was researched by the Ciawi Livestock Research Institute, Bogor [2], and it was released as one of the national superior lines based on the Decree of the Minister of Agriculture Number 274/Kpts/SR.120/2/2014 [3], [4]. The chicken is characterized by the colors of the feathers, beak, and combs that vary like native chickens in general. The chicken is superior in its egg productivity and selling price [3], [5]. Additionally, it grows relatively faster than ordinary native chickens [3]–[5] and is adaptive to feed changes [5]. The community's goal of farming KUB chickens is, in addition to meeting the needs for protein [6], to meet the needs

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for the essentials needed in religious ceremonies or rituals in Bali Province [7]. The KUB chicken is an example of a sacrificial animal used in Hindu religious ceremonies in Bali Province. The chickens used for ceremonies have various colors, each being suitable for a certain type of rituals [8]. For example, red-feathered chickens are used in cultivating ceremonies in *banten*, white-feathered chickens are used in *Tebasan Penwa Sanga* ceremonies [9], and chickens of white, yellow, red, and black colors as well as those of *brumbun* color are used in *mecaru* ceremonies [10], among others. The high demand for KUB chickens of various types for the purpose of performing existing religious rituals implies scarcity and high selling price. The purpose of this study was to map the characteristics of the market demand for KUB chickens of various colors for traditional and religious ceremonies in Bali Province.

2 Methodology

This research was conducted from July to October 2021 in eight districts and one municipality in Bali Province. The respondents involved in this study were determined using a multi-stage sampling method. In phase I, consumer respondents were selected using a stratified sampling method into three strata, namely industrial consumers, merchant consumers, and household consumers from all districts/municipalities. In phase II, 10 respondents were selected from each stratum and region using quota random sampling. Quota random sampling chooses a certain number of respondents to ensure that certain groups are adequately represented in the determination of quotas [11]. The types of data needed in this research were quantitative and qualitative data, which were derived from primary and secondary sources. Primary data were obtained by conducting survey and observations in the research area. Meanwhile, secondary data were obtained by searching pieces of literature and related documents [1]. The data collected in this study were analyzed using qualitative descriptive methods [12].

3 Results and Discussion

The results show that most respondents (more than 81%) were household consumers, *caru* chicken traders, and *banten* traders who were still of productive age (Table 1). Additionally, the majority of them had formal high school education, respectively at 41.57%, 39.71%, and 59.09% (Table 2). *Caru* trader sell sacrificial animal such as chickens to be used as offerings in traditional and religious ceremonies, while *banten* traders sell ceremonial facilites as a complement to the implementation of the ceremony. *Caru* and *banten* are term as *Yadnya,* a symbol of gratitude to God [13]–[15].

Table 1. Age characteristics of household consumers, *caru* traders, and *banten* traders

Age (year)	Household consumers		*Caru* traders		*Banten* traders	
	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)
< 17	0	0.00	0	0.00	0	0.00
17–25	6	6.74	1	1.47	0	0.00
26–35	4	4.49	6	8.82	0	0.00
36–45	17	19.10	7	10.29	3	13.64
46–55	35	39.33	32	47.06	7	31.82
56–65	15	16.85	14	20.59	8	36.36
> 65	12	13.48	8	11.76	4	18.18
Total	89	100.00	68	100.00	22	100.00

Table 2. Education characteristics of household consumers, *caru* traders, and *banten* traders

Education Level	Household consumers		*Caru* traders		*Banten* traders	
	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)
No school	9	10.11	14	20.59	2	9.09
Primary school	12	13.48	8	11.76	1	4.55
Junior high school	9	10.11	13	19.12	6	27.27
Senior high school	37	41.57	27	39.71	13	59.09
Undergraduate	19	21.35	6	8.82	0	0.00
Graduate	3	3.37	0	0.00	0	0.00
Total	89	100.00	68	100.00	22	100.00

Based on the data presented in Figure 1, the most frequently used chickens by household consumers were those in *brumbun* color (chickens with white, red, and black feathers and with yellow feet and beak). The high demand for *brumbun* chickens for religious ceremonies had an impact on the scarcity of *brumbun* chickens, accounting for 38.20% among household consumers, 47.06% among *caru* traders, and 45.45% among *banten* traders (Table 3).

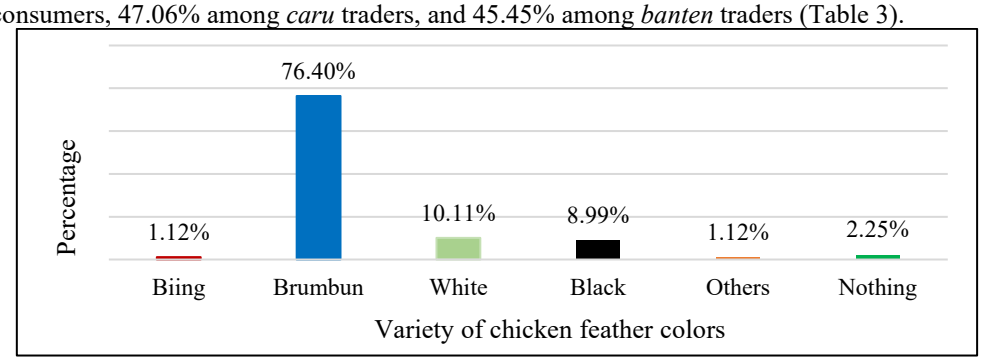

Figure 1. The most frequently used chickens by household consumers by feather color

Table 3. Chickens most difficult to find according to household consumers, *caru* traders, and *banten* traders

Color type	Household consumers		*Caru* traders		*Banten* traders	
	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)
Red	13	14.61	1	1.47	4	18.18
Brumbun	34	38.20	32	47.06	10	45.45
White	10	11.24	9	13.24	0	0.00
Black	2	2.25	2	2.94	0	0.00
Other	17	19.10	21	30.88	7	31.82
None	13	14.61	3	4.41	1	4.55
Total	89	100.00	68	100.00	100.00	100.00

In terms of price, *brumbun* chickens had a higher purchase price for household consumers and a higher selling price for *caru* and *banten* traders nominally than red-, white-, and black-feathered chickens (Table 4).

Table 4. Comparison of the buying prices and selling prices of a variety of chickens by feather color

Price	Buying Price (IDR)	Selling Price (IDR)	
	Household consumers	*Caru* traders	*Banten* traders
Brumbun	32,780.89 ± 9,849.99	27,705.84 ± 7,940.18	36,954.54 ± 12,394.30
Black	31,241.57 ± 9,815.37	26,647.05 ± 8,465.49	34,295.45 ± 15,864.49
White	29,606.74 ± 11,212.17	25,867.64 ± 8,964.11	30,227.27 ± 14,758.95
Red	30,455.05 ± 10,567.32	26,058.82 ± 8,775.61	34,227.27 ± 15,899.03

The data presented in Table 5 show that the purchasing decisions of household consumers were based on chicken specification (65.17%) and type (33.71%). Meanwhile, location, price, and service were not the main considerations for making purchasing decisions. According to [16], [17], price is one of the heuristics in making decisions. Although consumers ten to purchase products at low prices, consumers still purchase based on needs. This gap can be explained by [18] that when they need products with specifications, consumers try to fulfill those needs.

Table 5. Household consumer purchasing decisions

Decision based on	Strongly Agree	Agree	Less Agree	Disagree	Strongly Disagree	Total
Specification	65.17	25.84	7.87	1.12	0.00	100
Type	33.71	25.84	11.24	25.84	3.37	100
Location	6.74	15.73	49.44	24.72	3.37	100
Price	23.60	24.72	26.97	20.22	4.49	100
Service	23.60	25.84	34.83	10.11	5.62	100

Brumbun chickens had a higher demand and selling price than chickens of other colors. Chickens of this type are used as they represent the four basic colors of Hindu belief—white, black, red, and yellow; these chickens are used in almost every religious ceremony [10]. One would insist on purchasing a product, in this case the chicken, even though the selling price is high [19] because it is irreplaceable in ritual ceremonies. This explains why specification and type preceded over other considerations such as location, price, and services provided in decisions on choosing religious ceremony materials [20].

4 Conclusion

The demand for KUB chickens for purposes of religious ceremonies in Bali Province is high and will continue to rise. *Brumbun* chickens are the most frequently used as a religious ceremonial material, and it is more difficult to find them than KUB chickens of other colors, such as red, black, and white. Consumers' decisions on choosing chickens are based only on specification and type, while location, price, and services were not the main considerations.

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