

## Critical Moment and Bali Cattle Marketing At Central Lombok Regency, West Nusa Tenggara Province, Indonesia

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### Abstract

This study was aimed to examine the critical moment and marketing of Bali cattle (local cattle) in Central Lombok Regency, West Nusa Tenggara Province, Indonesia. The interview method was used to survey 60 farmers, 12 traders intermediary (broker) and three traders/inter-island merchants. Descriptive method was carried out analyze the data. The results showed that the average prices of Bali beef cattle weighing 290-300 kg was 6,18 million Rp/head and the calf was average 2,29 million Rp/head. The results showed that the critical moment (cattle prices at the lowest point) in Central Lombok was happened on January was down 14,48% ; February dropped 10.66%; April 5.27% and 4.44% in May. The Calf price (cattle aged 6-12 months) in the same period fell each of the calf 3.74%, 2.85%, 2.56% and 2.06%. The critical moment on January-February were caused farmers needing funds to finance the rice farming and tobacco. The best period to sale the Bali cattle was September (it's up 15, 49%) October up to 10, 89%; August 6.53 % and March 4.89%. The calf price in the same period gone up of each 5, 20%, 3, 81%, 3,63%; and 3,31%. The fourth months was associated with the great anniversary of Islam that on August- September month, necessity of cattle / beef skyrocket because the fast month and Ied Mubarak happened. October was appropriated with Ied Adha (Haji) and March appropriated with the born anniversary of Prophet Muhammad s.a.w. Critical times of the sale of Bali's cattle in two animal markets at Central Lombok was occurred on 17:00 to 18:00pm and the less of critical time on 15:00 to 16:00pm. The Breeders should pay attention to a critical moment in the sale of the cattle.

**Keywords:** critical moment, Bali cattle, The great anniversary of Islam.

### 1. Introduction

The Bali cattle encourage has grown as a branch of business that excited the rural residents and the Praya citizens, the capital of Central Lombok Regency, West Nusa Tenggara Province, Indonesia. The Bali's cattle characteristic that tame easy was made thus breed easily accepted and become an alternative provider of employment for the Central Lombok citizens.

The generally of Bali cattle were carried on a small scale, consist of 2-5 cattles for a farmer. The Safety, feed availability and the information price become a limiting factor in the maintenance of Bali cattle in Central Lombok.

The beef safety remains a classic problem because the threat of robbing can't be expelled. Availability of the feed also been a serious challenge due to the narrowness of the land was average 0.33 ha for every household (Anonymous, 2011). As many 34% of farmers in Central Lombok reported Dahlanuddin (2010) didn't have the land. The cattle Feed was searched in the communal land belongs to the forest.

The safety and land limit was strategy with farmers by raising cattle in the collective cages. The Land cages were rent together by 20-70 farmers. The payment of cages land rent naturally. Shaped the rice or grain by weight 20-30 kg for every farmer in a year.

The Social relations between farmers in collective cages reported Suhubdy, Hermansyah, Sudirman and Purwoto (2012), hasn't given the benefits appropriate economic for farmers. Very rare there are managers of collective cages to accommodate the purchase of cattle members.

The situation requires farmers to take their own decisions in the cattle trading system. The farmers Position have been doubt because most of them don't understand the rise of cattle prices.

The prospects of Bali cattle breeding that excited in Central Lombok haven't made the farmer enlightened. The Information about cattle sales momentum that provides an alternative choice profitability, hasn't available yet. The described Map like an event cattle sale calendar been urgent to raised.

This research was conducted to assess the critical moment of Bali trade cattle in Central Lombok Regency based on opinion of businesses farm such as inter-island traders, farmers, and the broker.

## 2. Methods

This study used a survey method, was happened for four months until February 2012. The survey approach, according to Horne and Stur (2003); Singarimbun and Effendi (1988), is intended to respond a great tendency to use relatively limited sample. The survey, interpreted Wibisono (2003), as the primary data collection method based communications with a representative sample of individuals.

The Central Lombok Election as research location, purposively determined by consideration of the area that has the largest Bali cattle population of Lombok Island in 2010, which is totally 94,759 head or 30.16 percent of the total cattle population at the Lombok island totally 314.223 head. The Central Lombok is also known as the supplier of Bali cows at the national level.

The Respondents include 60 people of Bali cattle farmers, 12 middleman / broker and three traders/ inter-island merchants. The selected Breeders represent variations in region/district with wet type, medium and dry, also represented the western, central and eastern Central Lombok. The third selected districts include Jonggat District, Batukliang and Central Praya. The collected data were analyzed descriptively.

## 3. Results and Discussion

Breeder, broker/penendak (middlemen) and the inter-island traders in Central Lombok most of them were not monitor the rise of beef price/meat in national and international markets. There was only one wholesaler who occasionally observed the movement of prices in the national and international level through the newspaper or online media. The Information about price fluctuations was generally known with cattle breeder by survey in the local market or discussion among farmers.

The ability of Central Lombok farmer to sold cattle included quite bad. That Indications were apparent from their behavior in the marketing process. Most of farmers (85%) do not sell his own cattle in the market but using the broker mediation animals. As many 5% of farmers sold his cow in the market place and broker assisted animals by breeders should give the fee amount broker. Breeder, who sold their own cattle only 10%, comprised a former or still serving as broker. Broker tends to be dominant in determining the price of beef.

The Farmers in Central Lombok also has a tendency to sell the cow if their economic pressed (there were suddenly need) such as begawe/rowah/party or if there were a family member was ill seriously. The Decline of cattle prices as farmers pushed around Rp 200,000-750,000 for every head. Breeders know begawe momentum was not proportional to the incentive price because the begawe cattle prices event tends to be depressed. The Sale of beef happened if many special needs the consideration money earned weren't drained to buy unnecessary purposes.

Trading system in Central Lombok, Bali cattle were hampered according with the Patrick et al findings. (2010) and Amareko (1997). It's said the price competitiveness of Bali cattle in NTB and NTT tends to be determined by traders, not farmers. The Domination of broker often made breeders don't moved in the market. Seasonal factors and specific religious moment also makes Bali cattle prices fluctuate and it effect on the difficulty of farmers to sell cows at reasonable prices.

The farmers Behavior in Central Lombok if related to Mc Morris, Wilton and Pfeiffer Opinion (1986), classified as less efficient. Mc Morris et al. (1986) require for every business farm to behave economically by moving as efficiently as possible in the wear of resources. The same stated were Harris (1970). He argues, the main purpose of most cattle producers was very simple, which is to make money.

The breeders purpose, such as the purpose of most people, it's to carry out the operation advantageous to obtain and protect revenue sufficient for the improvement of living conditions, education and more. To achieve that, Harris and Newman (1994) suggest the breeders to do various forms of efficiency such an effective operations that been measured by costs comparison production of energy, time, money, etc.

The Perceptions of critical sales moment of Bali cattle at Central Lombok, presented in Picture 1. Illustration shows, from 111 Bali cattle were sold during the year 2011, cattle sold at least a row in January-February and April-May. In contrast, the best time to sale Bali cattle was in September, October, August and July period.

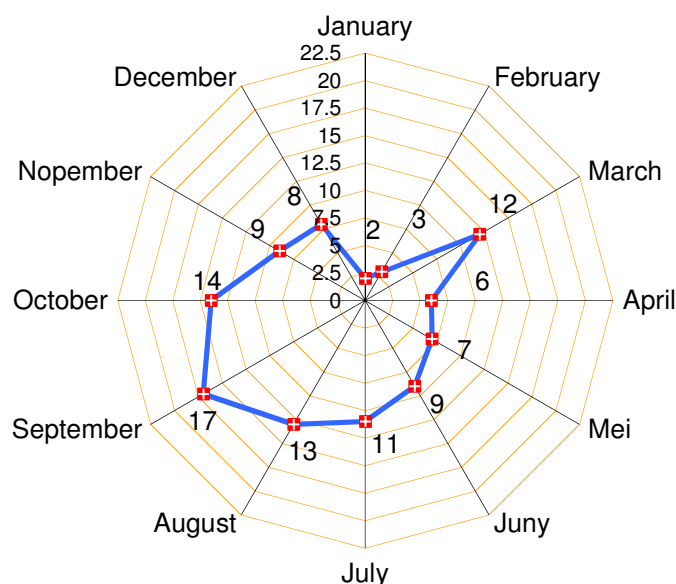


Figure 1. Critical month Bali cattle trade in Central Lombok, 2011.

Cattle prices decline in January-February 2011 occurred because farmers belonging to devote resources to produce the rice. Bali cattle prices are also less attractive in April-May; coincide to farmer needs of the fund land management or to fund the second gadu tobacco plants. Bali cattle prices was the fourth bad moment didn't change much from year to year, unless there is an order for inter-island calf. Critical moment Bali cattle prices are presented in Table 1.

No	Critical moment	Decrease in the average price of beef head (Rp)			
		Cattle	(%)	Calf	(%)
1	January	770.000	14,48	105.000	3,74
2	February	627.000	10,66	80.000	2,85
3	April	325.000	5,27	72.000	2,56
4	Mei	274.000	4,44	58.000	2,06
5	The entry of cattle Sumbawa*	1.000.000	16,21	-	-

Table 1: Critical Moment Bali Cattle Sales in Central Lombok, 2011

\* Such as beef cattle, the time was uncertainty.

The Normal Bali cattle price weighing 290-300 kg in 2011 on average to 6.18 million Rp per head. The Decline value Bali beef in January reached 14.48% of the normal price, followed until 10.66% in February. Bali beef cattle value in April-May slightly improved that marked a price calves reduction just 5.27% and 4.44% compared to normal prices. Calf prices in the same period fell until 3.74%, and 2.85% in February and 2.56% respectively, and 2.06% in April-May.

The entry of Sumbawa's island cattle implicated to fell down the value of Bali's cattle in Central Lombok, amounted 16.21 percent. The decline prices due to the arrival of Sumbawa cattle in a few weeks. The Cattle from the Sumbawa Island were considered disturb the local market because of same size was cheaper to 1 million Rp/head. Under the rules, Bali cattle from Sumbawa should immediately be brought to the abattoir for slaughter, wouldn't sold in the public market as now happens. Breeders hope the government stopping, reducing or managing the allocation and supply the Bali cattle from Sumbawa island.

A Bali cattle price in 2010-2011 in Central Lombok also was down due to the import of cattle amount excessive reported. Although physically the imported beef was not circulated in province, but its impact influence cattle prices in this area. Beef prices were also slightly down in Hajj periode due to wear by Hajj pilgrims candidate to pay off the Hajj cost. It's seemed to the Mubarak Eid moment.

The Best Bali cattle moment sales at Central Lombok in 2011 was listed in Table 2. The fourth best Bali cattle moment sales each year increase 10-11 days because following the Hijriah calendar (Islamic calendar) that number of days less than the Gregorian calendar.

No	Moment/month	Average increase cattle price/head (Rp)			
		Cattle	(%)	Calf	(%)
1	Mubarak Eid/September	956.000	15,49	146.000	5,20
2	Eid al-Adha/October	672.000	10,89	107.000	3,81
3	First week of Ramadan/ August	403.000	6,53	102.000	3,63
4	Mawlid/March	296.000	4,89	93.000	3,31
5	Tobacco planting *	356.000	5,80	148.000	5,27

Table 2: The Best Bali moment cattle prices at Central Lombok, 2011

Source: primary data analysis, 2012

\* Depending on the success-failure of the tobacco crop.

The highest Demand cattle happened a week before and after Eid Mubarak (in September 2011), then in the first week of Ramadan (in August). The increase price of beef cattle on Eid Mubarak reached 15.49% and 5.20% for calf increased. Beef prices increased in August due to ranchers bought calves to be fattened and sold again when Eid al-Adha. A nother day of Ramadan the cattle prices war relatively stable.

Period before Eid al-Adha (in October), before ideal time in Bali cattle sales for pilgrims who want to leave for Mecca require meat to be served at the event begawe. Families and relatives of pilgrims from all over are invited to formed friendships. This family celebration was held for a month. The increase in selling cattle at this moment reached 10.89% for next and 3.81% for the calf.

Neither to fulfill needs of the meat for local market, a head of Eid al-Adha Central Lombok also always gets Bali cattle requests from other areas such as Jakarta, West Java and some areas of Borneo Island. Bali cattle price increased ahead of the Eid al-Adha Rp 1.500.000/head, or an average Rp. 672,000.

In March 2011, the demand for Bali cattle also increased because in most of Central Lombok island celebrate the birth of Prophet Muhammad with a beef dish. In addition to entertaining guests in the village mosque, the same dish prepared for individual guests. Although the prophet birth only lasted a day in every village, but a different implementation makes demand of meat going a full month. Beef prices rise ahead of prophet birth average of Rp. 296,000 per head. Bali cattle price increase in a smaller scale that occurred at other events as if the citizens of tobacco plants successfully.

Moment of Bali cattle sales by hour scale presented in Table 3. Critical time in Bali cattle sale Livestock Market Praya and Barbali occurred at 17:01 to 18:00. At that time the transaction occurred intense because sellers and buyers together in a critical position that farmers hoping quickly to sale cattle and buyer wants the cattle had on hand. Breeders pressured to immediately sell the cow because of reluctance to pay cows transportation return, feed intake lack of preparation and safety factors. Instead the buyer usually has to calculate the profit margins of the various cows are available in the market. Next critical time at 16:01 to 17:00 pm.

No.	Moment sale	% Respondent	Information
1.	14.00 -15.00	-	Respondents include 13 breeders *, 12 broker and 3 inter-island traders
2.	15.01 – 16.00	7,14	
3.	16.01 – 17.00	32,14	
4.	17.01 – 18.00	42,86	
5.	>18.00	17,86	

Table 3. Time in Bali Cattle Sales Livestock Market based scale-hour

Source: primary data analyzed, 2012.

Respondents are those who transact in the livestock market

The crucial moment was transaction after 18.00 pm, before the market broke. In this phase, farmers tend to be victims of trafficking because they were 'forced' to lose up to hundreds thousands of dollars. The broker generally dominant at the critical moment.

#### 4. Conclusion And Recommendations

##### Conclusion

4.1. The critical trade moment Bali cattle in Central Lombok occurred in January-February and April-May every year. At the moment farmers need funds to finance farming. The decline in prices of beef cattle a head in January reached 14.48%, followed in February by 10.66%, in April and May respectively by 5.27% and 4.44%. Price calf per cow in the same period fell respectively 3.74%, 2.85%, 2.56% and 2.06%. The best period of Bali cattle sales occurred in September, August, October and March.

4.2. The critical moment relatively shouldn't become critical moment references in Central Lombok than the cattle sale values haven't been optimal.

#### **Recommendations**

4.1 In order to obtain a more appropriate selling price, farmers in Central Lombok should to consider the cow a critical time in trading system.

4.2 The Breeders should to improve entrepreneurship skills other didn't continuously under pressure other livestock traders.

#### **References**

- Amareko, S.L., 1997. *Cattle Marketing Studies in NTB and NTT*. Cooperation of Lemlit Nusa Cendana University, NTAADP, BPTP Naibonat and Agriculture Research and Development, Jakarta.
- Anonymous, 2011. *Central Lombok in Figures*. BPS NTB. Mataram.
- Anonymous, 2011. Meat import local press. Java Post, March 14, 2011. Surabaya.
- Dahlanuddin, 2010. *Bali Cattle Breeding Strategic Plan 2011-2015 Supporting NTB BSS*. Bali Cattle breeding Discussion National. Mataram, July 13, 2010.
- Harris, D. L., 1970. *Breeding for Efficiency in Livestock Production: Defining the Economic Objectives*. J.AnimSci1970.30:860-865.
- Harris, D. L. and S. Newman, 1994. *Breeding for profit: synergism between genetic improvement and livestock production (a review)*. J. AnimSci1994.72:2178-2200.
- Horne, P. and Stur W.W., 2003. *Solving Problems with Smallholder Agriculture*. ACIAR Monograph no. 99B. Cooperation CIAT and ACIAR, Canberra.
- Julien, D. J. And Tess, M. W, 2002. *Effects of breeding date, weaning date, and grazing season length on profitability of cow-calf production systems in southeastern Montana*. J. AnimSci2002. 80:1462-1469
- McMorris M. R., Wilton J. W. and W. Pfeiffer C. 1986. *Economic Variables in Breeding Beef Production System, Cow Weight and Milk Yield Effects on Various*. J. AnimSci1986. 63:1373-1383
- Patrick, I. W., Marshal G. R., Ambarawati IGAA, and Abdurrahman M., 2010. *Social capital and cattle marketing chains in Bali and Lombok, Indonesia*. ACIAR Technical Reports, No. 74, Canberra, Australia.
- NTB Government, 2010. *Road Map of NTB - Earth Million Cattle*. NTB Government, Mataram.
- Singarimbun M., and S. Effendi, 1989. *Survey Research Methods*. LP3ES, Jakarta
- Suhubdy, Hermansyah, Sudirman and Poerwoto, 2012. *NTB Earth Million Cattle Evaluation. Cooperation the Department of Animal Husbandry NTB with Recent Trends and Gaps*, Faculty of Animal Science University of Mataram. Mataram.

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