

Cattle Breeder Motivation Through Cattle Breeding Profit Sharing System Performance At Maiwa District, Enrekang Regency, South Sulawesi

Angga Nugraha¹, Budi Hartono², Siti Azizah²

¹Master Student Of Animal Sciencefaculty, Brawijaya University, Indonesia.

²Lecturer Of Animal Sciencefaculty, Brawijaya University,Indonesia

Corresponding Author: Angga Nugrahal

Abstract: The objective of the research is to analyze the factors that influence the motivation of cattle breeder with profit sharing system pattern. Data retrieval time was started from January to February 2017. The research was conducted in Maiwa, Enrekang District, South Sulawesi. Research Methods that used in this research was the form of survey research. Sample was amounted to 64 cattle breeding profit sharing breeders taken from the entire population (total sampling). Data analysis method used is statistical model testing using SEM SmartPLS (Partial Least Square) 2.0. The result of this research explain that motivation factor of breeder to do the profit sharing system that is the cattle breeder motivation through cattle breeding profit sharing system performance at Maiwa District, Enrekang is influenced by the amount of cattle owned, non-breeder income, revenue sharing system, farm land ownership, and amount of calf produced.

Keyword: Cattle Breeder Motivation, Performance, Profit Sharing System, Small Scale Cattle

Date of Submission: 15-07-2018

Date of acceptance: 30-07-2018

I. Introduction

1.1 Background

The development of breeding cattle business, agribusiness oriented with partnership pattern is one of alternative to increase breeder profit. Haryadi (2004) explains that a partnership is a business strategy undertaken by two or more parties within a certain period of time to achieve mutual benefit with the principle of mutual need and mutual exaggeration. There are several patterns that can be applied in partnership such as pattern of profit sharing system, plasma core pattern, general trading pattern, agency pattern, and franchise.

Maiwa District is one of the areas that the breeders develop cattle business with the implementation of profit sharing system (*teseng*). The existence of breeders that used profit sharing system (*teseng*) in Maiwa District is positively considered as one way to achieve welfare objectives for breeders who do the profit sharing system (*teseng*). Breeders, who do the profit-sharing system (*teseng*) in Maiwa Sub-district, are breeders who have experience in the profit sharing system (*teseng*) which ranged from 5-10 years from generation to generation.

Profit sharing system implementation (*teseng*) in Maiwa District, involves between two parties between the capital giver and breeder. The party who gives the capital is the party who owns cattle, but does not have enough time to breed the cow, so the capital owner gives the cow to the breeders to be maintained in accordance to the agreements that were built previously. According to breeder, the agreement is not written between the breeder and the capital owner, but only prioritize the concept of trust or kinship so that in the division of the results sometimes less profitable for breeders.

Breeders will be motivated to work if they can meet this need in accordance with Wahjosumidjo's opinion, (2001) states that motivation is an internal force that encourages a person to take action. Therefore, Alderfer in Hellriegel. et al, (1992) added that there are three main groups of needs, the first is the fulfillment of Existence Needs, the second is relationships with the stakeholders (Related Needs), and the third is Growth Needs. The study focuses on the characteristics of breeders, which is expected to influence the motivation of sharing profit (*teseng*) breeders. This study aims to determine whether the characteristics of breeders affect the performance of sharing profit (*teseng*) breeders.

II. Material And Methods

The research method used was survey method. Survey method was used to get data from a certain place that is natural (not artificial), but researchers do warming up in digging data, for example by distributing questionnaires, tests, structured interviews and so forth (Sugiyono, 2007).

The research was conducted in Maiwa District from January to February 2017. The research was located at Maiwa district, Enrekang Regency. Location determination is done intentionally (Purposive). The reason for choosing Maiwa district as a research location because in South Sulawesi one of the Central districts that produce beef cattle is Maiwa Subdistrict, Enrekang Regency which has profit sharing system (*Teseng*).

2.1 Sample

The population of this research is all the farmers who perform the profit sharing system (*teseng*) for 5-10 years in Maiwa District, Enrekang Regency that discuss 64 breeders, then the whole population, in the sense all breeders who use the system of sharing experience of 5-10 years used as respondent (total sampling). The reason for choosing a 5-10 year profit sharing system is because of long-time breeders' experience and maintains a profit sharing system.

2.2 Data Analysis

2.2.1 Testing of Structural Statistic Models of Structural Equation Modeling-Partial Least Square (SEM-PLS)

The study used Partial Least Square (PLS) as an analytical tool. In this case, Motivation is used as a latent variable with each indicator. PLS is one method to implement Structural Equation Modeling (SEM). This PLS model is the most efficient model and indicator that does not meet the ideal model. PLS can be used with a number of samples that are not too large and can be used on all data scales.

SEM-PLS, is a powerful analytical method because it can be applied to any data scale (Category, interval, ordinal, and ratio), does not require many samples and the sample size does not have to be large. PLS can be used as a confirmation theory and also can be used to build relationships, PLS can also be used for reflective and formative construction indicators. The reflective construct requires the validity and reliability of the construct, whereas the formative construct is performed only by the significance of its weight alone. This research uses reflective construct, for this 3 way measurement that is Convergent Validity, Discriminant Validity, Composite Reliability and Cronbach's Alpha (Ghozali, 2014).

III. Result

3.1 Overview of Regional Research

Geographically Maiwa district is dominated by hills / mountains which is about 84.96% of the total district area of Enrekang district while the flat area is only about 15.04%. Topography of Maiwa District, Enrekang Regency generally has a topographical area that varies in the form of hills, mountains, valleys and rivers with a height of 47-3.293 m above sea level and has no coastal area. The season that happened in Maiwa Sub-district of Enrekang Regency is almost same with the other season in South Sulawesi Province that is the rainy season and the dry season where the rainy season occurs in November - July while the dry season occurs in August - October.

3.2 Respondent Characteristics

No.	Respondent Characteristics	Scale	Scale Explanation	Amount	Percentages (%)
1	Age	Age	0 -14 Years	0	0
			15-63 Years	62	96,8
			>63 Years	2	3,1
2	Formal Education	Education Period (Years)	0-6	30	46,8
			7-9	15	23,4
			10-12	14	21,8
			11->16	5	7,8
			5	12	18,7
3	Breeding Experience	Breeding Experience (Years)	6	7	10,9
			7	17	26,5
			8	11	17,1
			9	5	7,8
			10	12	18,7
4	Cattle Amount owned (UT)	Cattle Amount	0,75-1	44	68,7
			1,50-2,5	11	17,2
			>2,75	9	14,1
5	Number of Calf produced by Cattle	Number of Calf produced by Cattle for the last 2 years (UT)	0	4	6,2
			0,25	37	57,8
			0,50	21	32,8
			0,75	2	3,1
			2	1	1,5
6	Number of Family Member	Number of Family Member (Person)	3	30	46,8
			4	17	26,5
			5	11	17,1
			6	3	4,6
			7	2	3,1
7	Agricultural Land Mastery	Land Width (hectare)	<0,4	46	71,8
			0,5-0,9	14	21,8
			>1	4	6,25
8	Number of Members Involved In Maintenance	Number of Members Involved In Maintenance (Person)	1	37	57,8
			2	23	35,9
			3	4	6,2
9	WorkingPeriod Curve	The time that used for breeding (Hours)	2	11	17,1
			3	34	53,1
			4	15	23,4
			5	4	6,2
			a. < Rp 17.500.000		48,4
10	Non-breeding Income	Non-breeding Net Income (Rp)	b.> Rp 17.500.000	31	31,2
			- Rp 20.000.000	20	20,3
			c. >Rp 20.000.000	13	
			a.< Rp 5.000.000		25,0
			b. Rp 5.000.000		70,3
11	Sharing Income System	P = TR-TC	-	16	4,6
			Rp 20.000.000	45	
			c. > Rp 20.000.000	3	

3.2.1 Age

The age of respondents is the age of respondents at the time of the research calculated in units of years. Age is one factor that can affect the productivity of a person in the activity, the age of a person will affect the ability to do heavy work, because there is an increase in physical ability along with increasing age and at a certain age will decrease productivity. Central Bureau of Statistics (BPS) states that the age of the population are grouped into 3, there are:

- a. Age 0-14 years old called young age / unproductive age.
- b. Age 15-63 years old is called adult age / working age / productive age.
- c. Age + 64 years old age / unproductive age / old age.

Based on the distribution of age, the data indicate that the number of respondents is the most are aged 15 -63 years as many as 62 respondents or 96.8 percent. Further followed by respondents with age> 64 years as many as 2 respondents or by 3.1 percent. The result of observation data above shows that most of respondents in Maiwa Subdistrict are in productive age group.

3.2.2 Formal Education

The data of the research shows that from total of 64 respondents there are 30 respondents or equal to 46.8 percent of which is 6 years old education is the most number. These data indicate that the education level of most respondents has a relatively low level of education and relatively the same. The low level of education owned by the respondents has an effect on the level of ability and the way of thinking that they have.

3.2.3 Breeding Experience

The data of the research shows that from a total of 64 respondents there are 17 respondents or 26.5 percent apply a profit sharing system for 7 years in his farm business. This shows that the majority of respondents who have the experience and knowledge that is sufficiently demonstrated by their long time to be a breeder.

3.2.4 Cattle Amount

The data shows that from a total of 64 respondents, there are 44 respondents or equal to 68.7 percent memeiliki livestock as much as 0.75 - 1 UT. The above results indicate that the number of livestock ownership of respondents in Maiwa Subdistrict is community farm. The low number of livestock ownership in Maiwa sub-district is due to the fact that most farmers also have farming business so that farmers choose to choose fewer cattle so they have time to farm the breeder.

3.2.5 Number of Calf produced by Cattle

Data from the research results of a total of 64 respondents, there are 37 respondents or 57.8 percent who have pedet as much as 0.25 UT. The low number of calf ownership in Maiwa Sub-district of Enrekang is due to the fact that most of the breeders of the profit-sharing system only raise cattle on a small scale due to their limited capital.

3.2.6 Number of Family Members

Data show from total of 64 respondents, there are 30 respondents or equal to 46,8 respondents have family member of 3 people. The number of family members affects the farmers in making decisions because the more the number of dependents of the family then the more burden of life that must be borne by a farmer / rancher.

3.2.7 Agricultural Land Mastery

The data shows that from a total of 64 respondents, there are 46 respondents or 71.8 percent who have 0.4 hectares of agricultural land. Lack of control of agricultural land makes it difficult for farmers to find livestock feed so that livestock are kept also relatively small. Tenure of agricultural land other than used to manage agriculture and plantation used farmers to grow grass for as animal feed.

3.2.8 Number of Members Involved In Maintenance

The data shows that from a total of 64 respondents, there are 37 respondents or 57.8 percent of the number of family members involved as many as 1 person. The large number of respondents whose family members involved as many as 1 person because the number of cattle that are kept only small scale so it does not require a lot of manpower.

3.2.9 Work Time Curve

Data show that from 64 respondents 34 of them or equal to 53.1 percent breeding for 3 hours in a day. The time spent on livestock is not much because cattle are kept semi-intensive, in the morning the cows are released in their cages and late in the evening before the cattle are back.

3.2.10 Non-BreedingIncome

The data shows that from 64 respondents, there are 31 respondents or 48.4 percent of them get non-farm income of <Rp 17.500.000 in one year. Non-farm income is obtained from agriculture, plantation, construction worker, and trading.

3.2.11 Sharing System Income

Based on information from a total of 64 respondents, there are 45 respondents or 70.4 percent who earn sharing system Income of Rp 5,000,000 - Rp 20,000,000. The income received is 50:50 between the owner of capital and the breeder in accordance with the agreement.

3.3 Testing Statistical Model

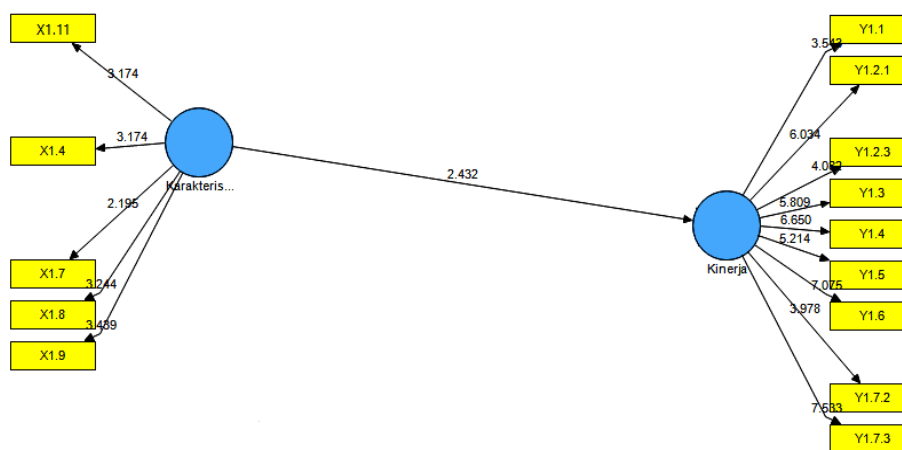


Figure 1. Structural Model

Based on Figure 1 bootstrapping results note that the motivation of breeders on the performance of the system of beef cattle business in Maiwa District, Enrekang Regency is significantly influenced by the characteristic variables of breeders who have five valid indicators.

3.3.1 Analysis of Factors Influencing Cattle Breeders Motivation with Profit Sharing System Pattern on the Performance of Profit Sharing System

Detailed results of the factors (independent variables) related to the motivation of farmers on the performance of the profit sharing system (non-free variable) as follows:

3.3.1.1 Number of Cattle owned

Understanding The number of Cattle owned is the number of beef cattle raised by the respondent both own and others owned by the cultivators, until the time of this research is carried out which is stated in the cattle unit (UT) with the conversion value as follows: one calf equal to 0.25 UT one cow is equal to 0.5 UT and one adult cow equals 1 UT.

The analysis results cross loading of the number of cattle owned show a positive relationship to the performance of profit sharing system with value T-Table 3.174. This result means that there is a real relationship between the numbers of cattle owned by the breeder motivation on the performance of profit sharing system.

For the fact in the field, breeders make his cattle as an investment or as a savings if there is an urgent need then the breeder will sell his cattle, it makes the reason farmers are motivated to breed if have many cattle, either their own or owned by others that cultivated. Research result accordance to Mudita’s opinion (2005),”the number of dairy cow that is controlled by breeder hence the higher motivation of farmer in applying dairy cattle five business.

The role of stakeholders is very influential in the provision of capital to increase the population of beef cattle in Maiwa District Enrekang District. For the fulfillment of capital, it can be done in a way that is to expect profit sharing system, where the stakeholder provides cattle brood stock. The amount of livestock owned by farmers has an effect on the level of income generated. The more livestock kept, the higher the gain.

The numbers of owned cattle motivate the performance of farmers in Maiwa District Enrekang Regency, because of the large population of cattle can be made in some breeders as side livelihood other than as a breeder. With the scale of ownership of large beef cattle will affect the income earned farmers where more ownership of livestock will increase the number of sales and can reduce costs incurred in the maintenance of beef cattle (Prawirokusumo, 1999).

3.3.1.2 Non-Breeding Income

The definition of non-breeding income is the net income of the respondents generated from agriculture, plantation, construction worker, and trading for one year stated in Rupiah (Rp)

Table 2. Non Breeding Income

No.	Job	Income (Rp/Year)
1.	Farming	Rp12.514.063
2.	Gardening	Rp4.992.969
3.	Selling	Rp3.833.333
4.	Construction Laborers	Rp2.912.500

The data in Table 2 explain that non-farm income has different value. The average of non-breeding income is Rp 6,063,216 / year. Farming is the largest non-breeding income with total amount of Rp 12,514,063 / year while the smallest income is construction laborers with the amount of Rp 2,912,500 / year.

The result of cross-loading analysis of non-breeding income shows a positive relationship to the performance of profit sharing system with T-Table 2.195 This result means that there is a real relationship between non livestock income and breeder motivation on the performance of profit sharing system.

The main income of farmers / ranchers in the Maiwa District Enrekang from non-farming is farming on average less sufficient to meet the needs of daily living. The reasons are used as motivation to run a beef cattle production sharing system that is expected to meet the needs other than farming. This is in accordance with the opinion of Hendrayani (2009) which states that one factor people are motivated to work hard is the economic pressure which means satisfaction of the need not only rely on one source of income.

3.3.1.3 Profit Sharing System Income

Profit sharing system income is the income of respondent from profit sharing system of beef cattle which is expressed in the form of Rupiah (Rp). The income of raising beef cattle is calculated using the formula:

$$P = TR - TC$$

Explanation:

P = Total Revenue or profit earned by beef farmer (Rupiah / Year).

TR = Total Income obtained by beef cattle rancher (Rupiah / year)

TC = Total Cost or cost incurred by beef cattle rancher (Rupiah / year)

(Soekartawi, 1995).

Table 3. Revenue Analysis of Farmers of Profit Sharing System Maiwa Kab

No.	Description	Value (Rp /UT)	%
a.	Variable Cost		
1.	Will Cattle	9.046.875	90,00
2.	Feed:		
	Elephant grass	403.125	4,01
	Corn straw	299.063	3,00
	Salt	98.438	0,97
3.	Vitamin	27.188	0,27
4.	Rope	2.719	0,02
5.	Bucket	19.453	0,19
	Variable cost total	9.798.423	
b.	Fixed cost		
1.	Depreciation cage	156.693	1,56
2.	Depreciation tool	97.734	0,97
	Fixed cost Total	254.425	
	Total Cost	10.052.848	100
c.	Acceptance	18.111.078	
d.	Income	8.058.230	

The data in Table 3 explains that the variable cost amounts to Rp 9,798,423. while the revenue of Rp 18,111,078. The income earned by the breeders in Maiwa Sub-district of Enrekang Regency is Rp 8,058,230 per household / year, the income is divided by two with the capital owner in accordance with the agreement.

The results of cross loading analysis revenue sharing system revenues showed a positive relationship to the performance of profit sharing system with value T-Table 3.244. This result means that there is a real relationship between revenue sharing system with the motivation of farmers on the performance of profit sharing system.

3.3.1.4 Agricultural Land Tenure

Agricultural land tenure is the amount of land controlled by respondent which is own land or property of others stated in unit of hectare (Ha).The result of cross loading analysis of farm land tenure shows a positive relationship to the performance of profit sharing system with T-table value 3,489. This result means that there is a real relationship between farm land tenure with the motivation of farmers on the performance of profit sharing system.

The fact in the field of agricultural land use farmers to be used as agricultural land that became the main work of farmers and agricultural wastes such as rice straw and corn straw used as animal feed, it makes farmers more motivated reasons to make beef cattle business because the availability of animal feed on farmland farmers are not difficulty in finding or buying fodder.

3.3.1.5 Number of Calf produced

The number of calves produced is the number of calves produced by livestock owned by respondents during the last two years stated in the cattle unit (UT). The results of cross loading analysis of the number of calves produced showed a positive relationship to the performance of profit sharing system with T-table value 3.174. This result means that there is a real relationship between the numbers of calves produced with the motivation of farmers on the performance of the profit sharing system.

In the fact that calf produced in the last two years motivates breeders of the profit-sharing system because farmers think more and more calves are produced then the farmers feel successful in running the business of beef cattle. This is in accordance with the opinion Sari (2013) which states that one indicator of the success of breeders in Bali cattle breeding business is the increase in the number of cattle ownership.

3.4 Analysis of Factors Affecting the Motivation of Farmers on Profit Sharing System Performance

Tabel 4. Path Coefficient

	Path Coefficient	Standard Error	T-Tabel	Signifikansi	Ket
Breeders Characteristics => Performance	-0.214	0.088	2.433	0.074(**)	Diterima

Characteristics of breeders affect the Performance is proven because with the value of Path Coefficients of -0.214 and Standard Error value of 0.088 then got T-Table value more than 1.96 means the influence of breeder characteristics on the performance significant effect because the characteristics of farmers can affect in doing a beef cattle production system. Characteristics of breeder has 5 valid indicator that is number of cattle owned, non-breeding income, profit sharing system income, farm land ownership and amount of calf produced while 6 invalid indicator that is age, formal education, farming experience, work time outpouring, amount family members, and the number of members involved in maintenance. In line with Fauziyah's research (2015) which states that the personal characteristics and psychology of breeders affect technical competence which further affects the performance resulted in the business of cattle breeding.

IV. Conclusion

4.1 Conclusions

Factors that influence the motivation of beef cattle breeder with the pattern of profit sharing system of beef cattle in Maiwa District Enrekang Regency is influenced by the number of cattle owned, non-breeding income, profit sharing system, farming land ownership, and number of calves produced.

4.2 Suggestions

This research is certainly still many shortcomings and weaknesses, so that it needs improvements that can build further research to be more perfect. Suggestions that can be given for further research is exploring other variables that have not been studied before. While the advice given to the breeder is making the rules written between the breeder and the owner of capital.

References

- [1]. Badan Pusat Stastistik. 2015. *Sulsel.bps.go.id*. Badan Pusat Statistik Provinsi Sulawesi Selatan
- [2]. Fauziyah. D. 2015. *Pengaruh Karakteristik Peternak Melalui Kompetensi Peternak Terhadap Kinerja Usaha Ternak Sapi Potong di Kabupaten Bandung*. Tesis, Institut Pertanian Bogor
- [3]. Ghozali. I.2014. *Partial Least Square Konsep, Teknik dan Aplikasi menggunakan Program SmartPLS 3.0*. Universitas Diponegoro. Semarang
- [4]. Haryadi, F.T. 2004. *Hubungan Motivasi Beternak Sapi Potong dengan Pendapatan Peternak'*, Jurnal Pengembangan Penyuluhan Pertanian, Volume1, Nomor 2, Desember 2006, hlm 10-16
- [5]. Hellriegel D, Slocum J W, and Richard W. 1992. *Organization Behavior*. New York : Penerbit : West Publishing Company
- [6]. Hendrayani E, Febrina D. 2009. *Analisis Faktor-Faktor yang empengaruhi Motivasi Beternak Sapi di Desa Koto banai Kecamatan Banai Kabupaten Singingi*, Jurnal Peternakan Vol 6 No 2 September
- [8]. Mudita, I.GD. N.2005. *Motivasi Petani Ternak dalam usaha Sapi Perah Suatu Kajian Sosiologis di Kecamatan Pujon Kabupaten Malang*. Tesis, Program Studi Sosiologi, Program Pascasarjana Universitas Brawijaya, Malang
- [9]. Prawirokusumo, S. 1990. *Ilmu Usaha tani*. Badan Penerbit Fakultas Ekonomi.Universitas Gajahmada. Yogyakarta..
- [10]. Wahyjosumidjo. 2001. *Kepemimpinan dan Motivasi*. Penerbit Ghalia Indosnesia, Cetakan 3. Jakarta Timur.