



Differences Among Cattle Farmers' Income From Partnership And Non Partnership Systems

Sitti Nurani Sirajuddin*, Ahmad Ramadhan Siregar, Palmarudi Mappigau

*Department of Socio-Economic, Faculty of Veterinary Medicine and Animal Husbandry, Hasanuddin University, Makassar, South Sulawesi, Indonesia
Perintis Kemerdekaan Street, Makassar 90245, South Sulawesi, Indonesia*

ABSTRACT

Background: The partnership system of beef cattle aims to increase the income of farmers. This study aimed to analyze differences in farmers' income of partnership and non-partnership system in Barru Regency, South Sulawesi Province. Research methods: This research was conducted in Tanete Riaja Sub-district, Barru District in April. The type of research was descriptive-quantitative. Data sources were primary and secondary data with the types of data being quantitative and qualitative. Results: The results showed that the income of breeders from the partnership system was lower than non-partnership breeders. Conclusion: Revenues from partnership systems were lower than non-partnership ones, but financially the partnership system was better than non-partnership one.

Keywords: Cattle, Income, Non-partnership system, Partnership system

Corresponding author: Sitti Nurani Sirajuddin

INTRODUCTION

Beef cattle have the greatest contribution as a producer of beef which is not able to meet domestic demand, tending to increase every year. Increased demand for beef cattle develops opportunities locally with scale agribusiness through a partnership (Shi et al., 2007, Suryana, 2009). Business development of cattle with a partnership is one alternative to improve the profitability of farmers and could overcome some of the problems in the beef cattle business, namely, small-scale cattle raising and limited capital (Kariyasa, 2005; Mersyah 2005; Suwandi 2005). Based on problems existed in the beef cattle business, the partnership program is indispensable. Bamber et al. (2014) stated that the partnership is a system of alliances, with various agribusiness activities ranging from preproduction to marketing. Partnership is an agreement between farmers / ranchers and processors or marketing companies to produce beef cattle and partnerships conducted between government, private and community (farmers) aims to extract the potential of natural resources and human resources, shifting typology of livestock business, employment, and application of technology. The availability of more effective and efficient market and marketing network and the availability of qualified cattle, beef cattle, and sustainable livestock waste utilization, are in accordance with the opinion of Syafa'at et al. (2003) in which agribusiness concept or strategy of development of agribusiness system has characteristics such as 1) utilization-based diversity of resources in each region (domestic resource-based), 2) accommodative to the quality of human resources that varies and does not rely heavily on imports and large foreign loans, 3) being export-oriented in addition to utilizing the domestic market and 4) multifunctional nature that is capable to give a

large double impact. Cattle agribusiness is defined as an activity that integrates simultaneous agricultural development with the development of industry and related services within a cluster of beef cattle industry (Suryana, 2009). According to Siregar and Ilham (2003), for the development of agribusiness system, one can accommodate the purpose to improve product competitiveness and also involve the middle to bottom farmers. Three alternative activities can be carried out including 1) vertically professional management by a private company; 2) vertical integration conducted by farmers jointly incorporated in the container of cooperation or other organizations; and 3) the combination of these two known as the partnership business system. Partnerships are agreements between farmers/ranchers and processors and/or marketing companies to produce and fulfill requests with predetermined price agreements (Eaton & Shepherd, 2001). The partnership system on the livestock business undertakes some advantages in line with Strohm and Hoeffler's (2006) opinion that partnerships are very popular in the developing world because they provide some advantages. According to the research carried out by Majid and Hasan (2014) and Wang et al. (2014), the broiler chicken partnership system provides an economic advantage that contributes positively to the production and supply chain efficiency and the effect is significant on the welfare of farmers. In addition, according to Covey (1985), the partnership system reduces risks for producers, which is a basic incentive for them. With this matter, it is necessary to know the income of breeder from partnership system of beef cattle and non-partnership breeders, but financially the partnership of beef cattle is feasible to be developed in Barru regency.

RESEARCH METHODS

This research was conducted for approximately 1 month in Tanete Riaja sub-district, Barru District, South Sulawesi in

April 2017. Tanete Riaja sub-district was chosen as the research location because it had partnership system with the government and the high number of cow breeders. The type of research was descriptive-quantitative that described the income earned by beef cattle farmers following the partnership (showroom cattle) and non-partnership program in Tanete Riaja Sub-district, District Barru. The population in this research were beef cattle ranchers in Tanete Riaja Sub-district of Barru Regency, that among partnership, and non-partnership ones, by using Slovin formula obtained, 14 farmers participated in the study and 14 did not. The type of data used was quantitative data, i.e, data in the form of numbers based on the results of questionnaires of the beef cattle business. While, the data sources were primary and secondary data, and methods of data collection were observation and interview using questionnaire.

RESULTS AND DISCUSSION

3.1. Identity of Respondent

As the subject in the development of beef cattle, the success of the effort depends crucially on the ability of farmers in managing it. Some important factors shown in this study were age, education, farming experience, family size, and scale of business (Sirajuddin *et al.*, 2016).

Table 1. Differences in identity of beef cattle farmers who follow the partnership system and non-partnership system

Variable	Description	Partnership	Non-Partnership
Age (year)	30-40	28,6	21,4
	41-50	57,2	57,2
	51-60	14,2	21,4
Education (year)	Elementary School	14,2	28,5
	Junior High School	7,1	14,3
	Senior High School/ vocational School	71,5	57,2
	Bachelor Degree/S1	7,1	0
Farming Experience (year)	1-10	50	71,4
	11-20	28,6	14,3
	21-30	21,4	14,3
Total Dependents (person)	1-3	35,7	42,8
	4-7	57,2	57,2
	8-10	7,1	0
Total Livestock (a cattle)	1-5	64,3	28,6
	6-10	14,2	28,6
	11-15	21,5	42,8

Table 1 shows that cattle ranchers following partnership and non-partnership system are at productive age (30-60 years old), which means beef cattle farmers have physical ability in managing beef cattle business, this is in accordance with Sirajuddin *et al.* (2016) opinion that age is a factor affecting the productivity of person; the age classification has been known as productivity and non-productivity for ages. Someone who is at productive age will provide higher productivity than those are beyond the productive age. For education, there is

the difference, that is, beef cattle ranchers follow the partnership system mostly at the middle and upper level (78.6%) while the non-partnership percentage is rather low (71.5%); this indicates that breeder beef cattle partnership understands the benefits in following the partnership system. A person's education level would affect a person's perspective on something. The higher education of a person would lead to one's more advanced perspective on something, including in the business of beef cattle breeding that is also a high education, there are farmers following the partnership system, who would increase the perception of breeders about contract partnership agreement. A higher level of education will enable partner farmers to understand the fattening procedure of cattle and the better understanding of the direction given by the company (government), in accordance with Mubyarto's (1986) opinion that the education level of the farmer would influence the thinking pattern, learning ability, and intellectual level. With formal and informal education, the farmers will have extensive knowledge and insight, so it is easier to respond to a profitable innovation for their business. In the breeding experience, mostly located at 1-10 years, both in breeders following the partnership and non-partnership system, this shows that the livestock does not relate to the system of raising beef cattle both partnered and non-partnered, this is in accordance with the opinion of Fitritza *et al.* (2012) that the breeding experience has no significant effect on the partnership agreement contract. This is due to the experience of breeding carried out for generations resulted in plasma farmers' little attention to the aspects of business, especially economic benefits.

3.2. Differences of Cattle Farmers Income that Participate in Partnership and Non-Partnership

The acceptance of beef cattle farming is the total result obtained by the breeder from cattle raising for one year. The total acceptance of beef cattle farmers can be known by looking at the sources of acceptance from the business of beef cattle. In the business of beef cattle in Tanete Riaja Sub-district of Barru Regency, the farmer's income can be seen from the sale of livestock and the end of the year of livestock, which is still owned by the farmer. The total cost of production in the beef cattle business consists of fixed costs and variable costs that follow the showroom cattle program in Tanete Riaja Sub-district of Barru Regency. The variable cost is the scattered cost component incurred by the farmer in his or her business. On the other hand, production costs tend to increase. Total incurred production cost is an average of Rp 1.466.536,00 / head. This is in accordance with the opinion of Swastha and Sukotjo (1993), who state that the total cost represents all costs incurred by the company or in other words, this total cost is the sum of fixed costs and variable costs. This is also in accordance with the opinion of Harnanto (1992) who states that the total cost of each respondent varies depending on the number of population scale of livestock owned by each breeder through the relationship between receipts and costs. Revenue is the difference between total revenue and total cost incurred during one year. If the obtained value is positive, then it can be said that the business is profitable; whereas, if the obtained value is negative, then it can be said that the cultivation business experiences losses. The farmers' income in the beef cattle business in Tanete Riaja Sub-district of Barru Regency can be seen in Table 2.

Table 2. Differences in Cattle Business Income Following Partnership and Non-partnership Program in Tanete Riaja sub district, Barru Regency

Scale Enterprises	Partnership				Non-Partnership			
	Revenue (IDR/head)	Total Cost (IDR)	Income/Head	R/C	Revenue (IDR/head)	Total Cost (IDR)	Income (IDR)	R/C
1-5	6568667	3403167	3165500	1,93	5003563	3147990	1855573	1,59
6-10	3168857	1172714	1996143	1,7	5048726	3331253	1717473	1,51
11-15	1597625	517500	1080125	2,08	4969500	3053435	1916065	1,63

Table 2 shows that the revenue from the partnership system is lower than that of non-partnerships. Differences in profits obtained by farmers vary due to differences in the number of beef cattle owned by farmers-ranchers. This is added by Soekartawi (1995), that the income of cattle business is influenced by the number of livestock sold by the farmers themselves; so that, the more the number of cattle, the higher the income earned. The income of farmers participating in the beef cattle showroom program is determined by the receipts and expenses incurred. The earned income is influenced by the quality of the resulting cow as a considerable body weight determination of the selling price. In the showroom program, cow maintenance is better because of the livestock health, and feeding is easier to control. This is according to Sirajuddin et al. (2016) opinion who state that the motivation factors of cattle breeder showroom is the uniformity of cattle prices on a certain weight, gaining knowledge of breeders about the utilization of aspirated waste, and farmers' awareness about the manufacture of local feed from agricultural waste. The results showed that the income of breeder from beef cattle business is lower in partnership than non-partnership system; it is based on earnings analysis of farming, that the partnership is not able to increase income of the farmer's partner. These results are consistent with a research conducted by Firwiyanto (2008), who classifies partner farmers based on age, education level, duration of livestock, and business status; then, compares 20 breeder farmers with independent breeders. The results show that the level of income earned by partner farmers is lower than the level of income of independent farmers.

CONCLUSION

Revenues from partnership systems are lower than non-partnerships, but financially the partnership system (R / C ratio = 1.9) was better than non-partnership (R / C ratio = 1.47).

ACKNOWLEDGEMENT

The authors are thankful to the Hasanuddin University of Indonesia for facilitating this research.

REFERENCES

1. Bamber, P., Ajmmal, A. and Gary, G. (2014). Burundi in The Agribusiness Global Value Chain: Skills for Private Sector Development. Durham, North Carolina: Duke University.
2. Covey, T.D. Analysis of The Rough Rice Futures Contracts (Agricultural Economics research report/Mississippi Agricultural and Forestry Experiment Station), Dept. Of Agriculture Economic,

- Mississippi Agricultural and Forestry Experiment Station, Mississippi State University, 1985.
3. Eaton, C. and Sheperd, A.W. (2001). Contract Farming: Partnership for Growth. Rome, Italy: FAO Agricultural Services Bulletin 145.
4. Firwiyanto, M. Analisis Pendapatan dan Tingkat Kepuasan Peternak terhadap Pelaksanaan Kemitraan Ayam Broiler (Kasus Kemitraan Peternak Plasma Rudi Jaya Ps Sangawan Kota Depok). Dissertation, Institut Pertanian Bogor, Indonesia, 2008.
5. Fitriza, Y.T., Haryadi, F.T. and Syahlani, S.P. (2012). Analisis Pendapatan dan Persepsi Peternak terhadap Kontrak Perjanjian Pola Kemitraan Ayam Pedaging di Propinsi Lampung. Buletin Peternakan, 36 (1), pp. 57-65.
6. Harnanto. (1992). Akuntansi Biaya untuk Perhitungan Harga Pokok Produk. Yogyakarta, Indonesia: BPFE.
7. Kariyasa, K. (2005). Sistem Integrasi Tanaman-Ternak dalam Perspektif Reorientasi Kebijakan Subsidi Pupuk dan Peningkatan Pendapatan Petani. Jurnal Analisis Kebijakan Pertanian, 3 (1), pp. 68-80.
8. Majid, R.B. and S. Hasan. (2014). Performance at Broiler Contract Farmers: A Case Study in Perak, Malaysia. UMK Procedia, 1, pp. 18-25
9. Mersyah, R. Desain Sistem Budidaya Sapi Potong Berkelanjutan untuk Mendukung Pelaksanaan Otonomi Daerah di Kabupaten Bengkulu Selatan. Dissertation, Institut Pertanian Bogor, Indonesia, 2005.
10. Mubyarto. (1986). Pengantar Ekonomi Pertanian. Jakarta, Indonesia: LP3ES.
11. Shi, G., Qian, Z. And Zhang, D. (2007). Analysis of Supply Chain Principal-Agent Incentive Contract. International Journal of Management Science and Engineering Management, 2 (2), pp. 155-160.
12. Sirajuddin, S.N., Aminawar, M., Amrawaty, A., Nurlaelah, S. (2016). Income Analysis of Beef Cattle Breeders for Traditional Profit-Sharing System (Tesang) in South Sulawesi Province. Available: <http://repository.unhas.ac.id/handle/123456789/17491> (June3, 2017).
13. Siregar, M. and Ilham, N. (2003). Upaya Peningkatan Efisiensi Ternak Ditinjau dari Aspek yang Berdaya Saing. Forum Penelitian Agro Ekonomi, 21 (1), pp. 57-66.
14. Soekartawi. (1995). Agribisnis: Teori dan Aplikasinya. Jakarta, Indonesia: PT.Gajah Grafindo Persada.
15. Strohm, K. and Hoeffler, H. Contract Farming in Kenya: Theory, Evidence from Selected Value Chain & Implication for Development Cooperation. Promotion of Private Sector Development in Agriculture, Ministry of Agriculture and Deutsche

-
- Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, 2006, pp. 1-93.
16. Suryana. (2009) . Pengembangan Usaha Ternak Sapi Potong Berorientasi Agribisnis dengan Pola Kemitraan. Jurnal Litbang Pertanian, 28 (1), pp. 29-37
 17. Suwandi. Keberlanjutan Usaha-Tani pada Padi Sawah-Sapi Potong Terpadu di Kabupaten Sragen: Pendekatan RAP-CLS. Dissertation, Institut Pertanian Bogor, Indonesia, 2005.
 18. Swastha, B. and Sukotjo, I. (1993). Pengantar Bisnis Moderns (Pengantar Ekonomi Perusahaan Modern). Yogyakarta, Indonesia: Liberty Offset Yogyakarta.
 19. Syafa'at, N., Simatupang, P., Mardikanto, S. and Pranadji, T. (2003). Konsep Pengembangan Wilayah Berbasis Agribisnis dalam Rangka Pemberdayaan Petani. Forum Penelitian Agro Ekonomi, 21 (1), pp. 26-43.
 20. Wang, H.H., Wang, Y. and Delgado, M.S. (2014). The Transition to Modern Agriculture: Contract Farming in Developing Economics. American Journal of Agricultural Economics, 98 (5), pp. 1257-1271.