

PROFILE OF PARTNERSHIP SYSTEM OF BROILER LIVESTOCK FARMING WITH CLOSE HOUSE SYSTEM IN MALANG REGENCY

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Abstract

Partnership system is business collaboration between mikro business with intermediate business and/or makro business that followed with founding from mikro business and/or makro business with showed principle of need each other, mutual need, and mutual benefit. The aim of this research was to (1) formulated profile business partnership system of broiler livestock farming with close house system in malang regency and (2) committed analysis of Production Cost of broiler livestock farming with partnership system. Analysis of the data was used descriptive analysis. The result showed that (a) There are three models of partnership system of broiler livestock business with close house system in malang regency namely profit sharing system, sub-contract system, and management fee system; and (b) Analysis of the costs production in all of partnership system that observed during one year or period six. The result of analysis of Production Cost with profit sharing system during one period of Rp. 16.180/kg, during two period of Rp. 15.294/kg, during three period of Rp. 14.064/kg, during four period of Rp. 8.090/kg, during five period of Rp. 14.840/kg, during six period of Rp. 15.510/kg. The result of analysis of Production Cost with sub-contract system during one period of Rp. 15.281/kg, during two period of Rp. 15.263/kg, during three period of Rp. 17.331/kg, during four period of Rp. 18.455/kg, during five period of Rp. 14.159/kg, during six period of Rp. 13.621/kg. The result of analysis of Production Cost with management fee system during one period of Rp. 14.558/kg, during two period of Rp. 17.311/kg, during three period of Rp. 17.927/kg, during four period of Rp. 15.924/kg, during five period of Rp. 15.214/kg, during six period of Rp. 16.905/kg.

Keywords: Broiler, partnership system, close house system, analysis of Production Cost.

BACKGROUND

The high growth of Indonesian population (1.38 per year) is directly proportional to the increasing public demand for chicken meat which reaches 9 kilograms per capita per year. This shows that the poultry industry in the broiler sector is an industry that has great potential to be developed in developing country such as Indonesia. The potential is seen from several advantages of the poultry sector are: a) short harvest period, b) land efficiency, c) small capital, and d) availability of industry from upstream to downstream which is a unity of agribusiness and livestock agroindustry systems, so can recruitment much labor (Banjoko et al., 2014).

The role of government in efforts to promote the poultry industry in Indonesia, especially broiler has been arranged in the form of business partnership based on: 1)

Government Regulation No. 44 of 1997 on partnership, 2) Decree of the Minister of Agriculture No. 940/Kpts/OT.2010./10/97 on guidelines for partnership of agricultural business, and 3) Law No. 9 of 1995 concerning small businesses. Partnership is a collaboration between a small business with a medium-sized business or a large business by demonstrating the principle of mutual need, mutual strength, and mutual benefit.

Government Regulation No. 44/1997 states that partnerships are business partnerships between small and medium-sized businesses and/or large business accompanied by the development of medium and / or large business by demonstrating the principle of mutual need, mutual need and mutual benefit. The objectives of developing agriculture and livestock sectors through business partnerships are: 1) increasing revenues, 2) balancing business, 3) increasing group resources, 4) increasing business scale, and 5) increasing business capability, making it strong and independent (Akinola 2014).

The partnership used in the research is the close house system. Close house system is also called enclosed pen which is a pen system where all conditions inside the pen is not influenced by the circumstances outside the pen, such as temperature, humidity, wind speed, and climatic conditions in the pen can be arranged in such a way as the needs of livestock using a control machine such as fan and cooling pad to facilitate technical maintenance, land savings, and minimization of the amount of labor.

Broiler farming partnership is very diverse, so it will affect the analysis of production cost structure issued as plasma farmers. Production cost analysis consists of fixed costs and variable costs. Fixed costs are the costs incurred relatively fixed amount even though the production obtained a lot or a little, while the variable cost is also called the non-fixed cost of the large costs are affected by the production obtained.

Objectives of Research

The objectives of the research are: 1) to formulate the business partnership system profile on broiler farming with close house system in Malang Regency, and 2) to analyze the production cost of broiler farming with partnership system.

Benefits of Research

This researchs are useful: 1) to study material of poultry industry in broiler farming, 2) as material of broiler farming evaluation on various models of partnership system, and 3) as reference for student, researcher, lecturer, and government in determining partnership policy for broiler farmers.

METHODS

Location and Time of Research

The location of research in Malang Regency, it refers to the consideration that Malang Regency is the second largest broiler production center in East Java as much as 27.642.192 (Ditjennakkeswan, 2016) after Lamongan District with density 7,830 tails / km², and with 3,530 area, 65 km² with 27 sub-districts, so it has potential of supporting area for the development of broiler livestock, while East Java Province is the second biggest broiler production center after West Java.

Operational Definition and Variable Measurement

1. Partnership is collaboration between small and medium business and/or large business accompanthat isd by guidance by medium and/or large business by demonstrating the principle of mutual need, mutual need, and mutual benefit.

2. Production costs consist of fixed costs and variable costs or non-fixed costs.
3. Fixed costs are the costs incurred relatively fixed in number even though the production obtained a lot or a little. Fixed costs for example depreciation expenses, labor wages, pen care, and equipment care.
4. Variable costs are also called non-fixed costs, that is the costs are greatly influenced by the production obtained. Variable costs such as the cost of DOC, feed, vitamins and medicines, electricity, transportation, husks, LPG, and labor consumption costs.

Sample Collecting Method

The study respondents were participants of nucleus-plasma partnership from broiler farming with partnership system. Criteria of the respondent farmers are: 1) farmers cooperating with nucleus-plasma partnership with partnership system for one year or six periods, 2) have complete recording data, 3) livestock farming conducted in Malang Regency, 4) farmers has a minimum three years of farming experience, 5) broiler farming using a close house system, and 6) broiler population at least 10,000 for each period.

Method of Collecting Data

Data were collected using survey method, observation, and direct interview with farmer. The method is used to collect primary and secondary data.

RESULT AND DISCUSSION

Overview of Research Location

The location of broiler farming with partnership system is located in Malang Regency. Malang Regency is geographically adjacent to, north : Lumajang District, West : Kediri Regency, East : Pasuruan Regency, South : Southern Malang Beach

Malang Regency consists of 33 districts which are divided into several villages and sub-districts. Respondent is a farmer type distinguished into a partnership system and the type of DOC it maintains.

Table 1. Identification of Farmers

Farmers	DOC Strain	The amount of DOC	Partnership System
A	CP 707	10.000	Sub-contract
B	Platinum	13.000	Profit sharing
C	Cobb	10.000	Management fee

Source : Primary Data (Processed, 2016)

Production Cost

Production cost is defined as a cost incurred to finance the production process to produce the product. Production costs consist of fixed costs and variable costs. Fixed costs are defined as relatively fixed costs and will continue to be incurred even when production is large or small, while variable costs (variable costs) are large and small costs are influenced by production.

The profit-sharing, sub-contract, and management fee of partnership system spent a fluctuating fixed cost. Profit sharing of partnership system in broiler farming with close house system spent the lowest fixed cost, namely period 4, period 5, and period 6 which amounted to Rp 431,744, while the highest fixed cost occurred in period 1, period 2, and period 3 which amounted to Rp. 597,800.

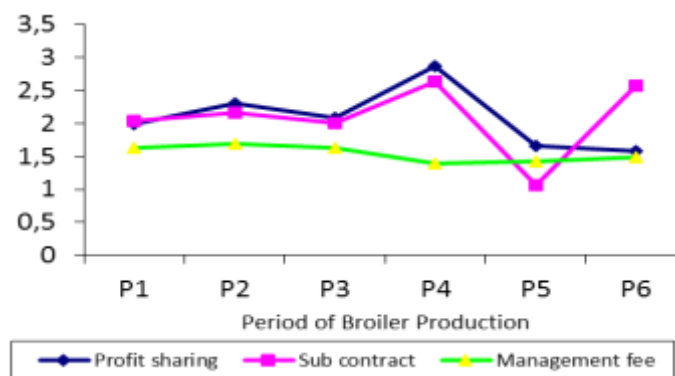


Figure 1. Ratio of Fixed Cost

Sub-contract of partnership system in broiler farming with close house system spent fixed cost of Rp 595,800 for each period of production, so there is no change in the cost structure, while in management fee of partnership system in broiler farming with close house system spent the highest fixed cost in period 1, amounted to Rp 438,203, while in the period 2, 3, 4, 5, and 6 did not change that amounted to Rp 424,400.

Comparison of fixed costs in the three models of partnership system is the average fixed cost of profit sharing of Rp 514,772, sub-contract amounting to Rp 595,800, and management fee of Rp 411,700. The lowest fixed cost expenditures are the management fee systems, profit sharing systems, and sub-contract systems.

The system of livestock business partnerships can help broiler farmers in terms of maintenance and marketing of broiler farming. The partnership system is divided into two principles, namely the type of maintenance and the type of marketing. Based on the management and marketing management, partnership system of broiler farming is generally divided into: 1) profit sharing, 2) sub-contract, and 3) management fee.

Table 2. Accessibility of Broiler Partnership System

Partnership system (Agribusiness)	Profit Sharing		Sub-contract		Management Fee	
	Nucleus	Plasma	Nucleus	Plasma	Nucleus	Plasma
Up Stream						
1. DOC	X		X		X	
2. Area/Land		X		X	X	
3. Pen		X		X	X	
4. Labor		X		X		X
5. Feeder		X		X		X
6. Nipple		X		X		X
7. Blower		X		X	X	
On Farm						
1. Mortalitas	X		X		X	
2. FCR	X		X		X	
3. Vitamine	X		X		X	
4. Medicines	X	X	X		X	
5. Feed	X	X	X		X	
6. Hull of rice		X		X	X	
Down Stream						
1. Time of harvest		X	X		X	
2. Selling of chicken	X	X	X		X	
3. Selling of feces		X		X		X
4. Bonus	X		X		X	
5. Incentive	X		X		X	

Source: Data processed (2016)

Variable Cost

Variable costs consist of costs spent for DOC, feed, vitamins and medicines, electricity, transportation, husks, LPG, and labor consumption costs. The variable cost of broiler farming with close house system is fluctuating. The highest variable expenditure during the production period or six periods is the management fee of partnership system. Variable cost differences in the profit sharing, sub-contract, and management fee are:

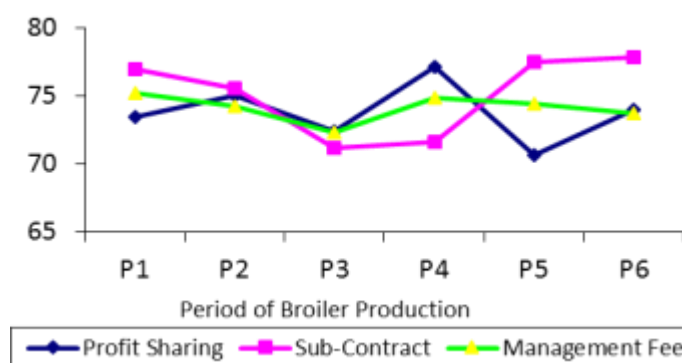


Figure 2. Percentage of Variable Cost

The comparison of variable cost in the three models of partnership system is the average variable cost of profit sharing of Rp 24,971,158, sub-contract of Rp 25,430,054, and management fee of Rp 27,490,025. The lowest variable cost expenditure sequentially is the profit sharing system, the sub-contract system, and the management fee system.

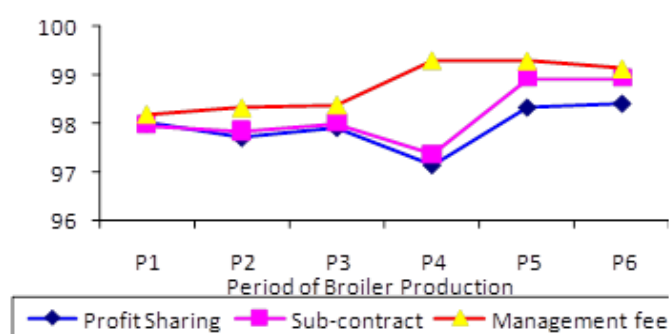


Figure 2. Ratio of Variable Cost

The variable cost of broiler farming with close house system with the largest profit-sharing, sub-contract, and management fee are spent for feed and DOC costs.

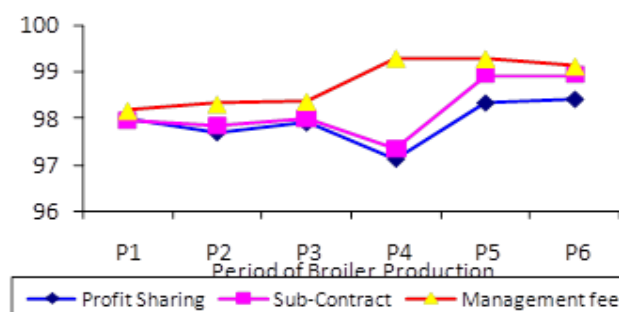


Figure 3. Percentage of Feed Cost

The cost of feeding on broiler farming with close house system for six periods is >70%. This is because the price of feed from company is expensive. Cost of feed in the three highest system of partnership on sub-contract that happened in period five. Heise et al. (2015) explains that the highest production cost is generated from feed variable cost which reaches

75%. The total expenditure of feed cost in broiler farming with closed house system in the profit sharing for six consecutive periods, namely period 1 amounted to Rp 22,012,308, period 2 amounted to Rp 19,455,769, period 3 amounted to Rp 20,733,192, period 4 amounted to Rp 11,593,400, period 5 amounted to Rp 18,422,833, and period 6 amounted to Rp 20,175,328.

Total expenditure of feed cost in broiler farming with close house system in sub-contract for six consecutive periods, namely period 1 amounted to Rp 22,509,000, period 2 amounted to Rp 20,823,000, period 3 amounted to Rp 21,170,000, period 4 amounted to Rp 16,142,000, period 5 amounted to Rp 18,000,000, and period 6 amounted to Rp 18,069,125.

The total expenditure of feed cost in broiler farming with close house system in management fee for six consecutive periods is period 1 amounted to Rp 20,256,066, period 2 amounted to Rp 18,635,175, period 3 amounted to Rp 18,834,150, period 4 amounted to Rp 22,753,408, period 5 amounted to Rp 22,125,640, and period 6 amounted to Rp 21,137,264.

Table 3. Variable Feed Cost

Period	Partnership System (Rp/kg)		
	Profit Sharing	Sub-Contract	Management Fee
1	11.882	11.760	10.947
2	11.472	11.537	12.858
3	10.182	12.333	12.963
4	6.243	13.582	11.924
5	10.490	11.092	11.327
6	11.204	10.721	12.464

Source: Data processed (2016)

The lowest cost of feed on broiler farming with close house system in profit sharing of partnership system spent in the period 4 amounted to Rp 6,243, where the feed price of the nucleus company fell on the market, so the price dropped dramatically, while the highest feed cost on the broiler farming with close house system in profit sharing of partnership system spent in period 1 amounted to Rp 11.882, it is because at the beginning of year demand of animal feed has increased along with the increasing demand of national chicken meat in Indonesia.

The lowest cost of feed in broiler farming with close house system in sub-contract of partnership system spent in period 6 which amounted to Rp 10,721, it is caused by the end of the year the nucleus company will spend all the remaining feed stock in the warehouse so it is not moldy, while the cost of feed the highest in the broiler farming with close house system in sub-contract of partnership system spent the period 4 amounted to Rp 13,582. This is inversely proportional to the nucleus feed supplier company in profit sharing of partnerships system that are falling on the market, because the condition of its competitors is setback, the demand for feed from sub-contract company is increased.

The lowest feed cost in broiler farming with close house system in management fee of partnership system spent in period 1 amounted to Rp 10. 947. Low price of feed in period 1 is part of the company's strategy where at the beginning of the year demand for livestock feed always increases along with the increase national meat requirements in Indonesia. The highest cost of feed on broiler farming with close house system in management fee of partnership system spent in the period 3 amounted to Rp 12,963. The high price of feed in period 3 is due to the increasing market demand for livestock feed, as evidenced by the high price of feed in period 2 and 3 when compared to the price of its competitors' feed. The condition shows that the strategy of decreasing the price of feed in period 1 to be successful, so that in period 2 and 3 there is an increase in demand which causes the increase of feed price per kilogram.

The lowest overall cost of livestock feed in broiler farming with close house system in partnership system has spent in the period 4 for profit sharing of partnership system that is equal to Rp 6.243, while the highest variable cost of livestock feed as a whole in broiler

farming with close house system in partnership system is happened in period 4 of sub-contract amounted to Rp 13,582.

DOC costs also affect the variable costs and broiler production costs. DOC purchase costs in different models partnership system that is profit sharing, sub-contract and management fee. The difference is caused by the different types of DOC offered by the nucleus company to farmers partner.

The total expenditures of DOC on broiler farming with close house system in profit sharing of partnership system for six consecutive periods namely period 1 amounted to Rp 6,500,000, period 2 amounted to Rp 5.000.000, period 3 amounted to Rp 6,522,000, period 4 amounted to Rp 2,358,333, period 5 amounted to Rp 6,552,000, and period 6 amounted to Rp 6,022,000.

The total expenditures of DOC on broiler farming with close house system on sub-contract of partnership system for six consecutive periods, namely period 1 amounted to Rp 5.250.000, period 2 amounted to Rp 5.250.000, period 3 amounted to Rp 7.250.000, period 4 amounted to Rp 5.000.000, period 5 amounted to Rp 4,000,000 and period 6 amounted to Rp 4,000,000.

The total expenditure of DOC cost in the broiler farming with close house system in the management fee of partnership system during the six consecutive periods, namely period 1 amounted to Rp 5,162,623, period 2 amounted to Rp 5.000.000, period 3 amounted to Rp 5,771,350, period 4 amounted to Rp 6,712,000, period 5 amounted to Rp 6,712,000, and period 6 amounted to Rp 6,712,000.

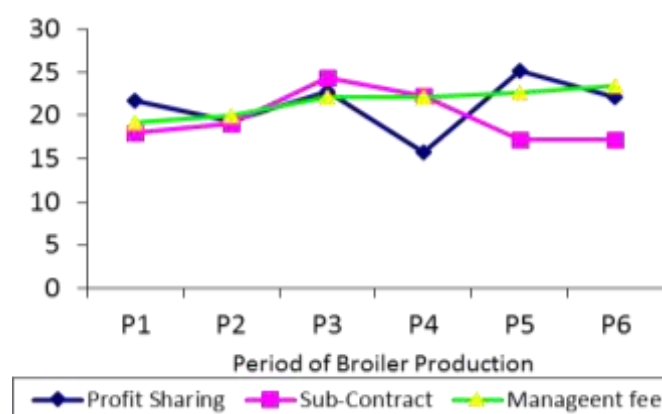


Figure 4. Percentage of DOC Cost

DOC costs in profit sharing, sub-contract, and management fee of partnership system are fluctuating. The lowest purchase cost of DOC is owned by broiler farming in profit sharing system with the percentage of DOC purchase in period 4 that is equal to 15.70% or equivalent 2,358,333 for 1,000 broiler.

Table 4. Variable DOC Cost

Period	Partnership System (Rp/tails)		
	Profit Sharing	Sub-Contract	Management Fee
1	3.509	2.743	2.790
2	2.948	2.909	3.450
3	3.203	4.224	3.972
4	1.270	4.207	3.517
5	3.731	2.465	3.436
6	3.344	2.373	3.958

Source: Data processed (2016)

The lowest cost of DOC in broiler farming with close house system in profit sharing of partnership system spent in period 4 amounted to Rp 1,270 / tails, where the condition was influenced by the decline of the company when compared with the competitor company, it also indicated by the decrease of the company's feed price in period 4 that is only Rp 6,243. The highest cost of DOC in broiler farming with close house system in profit sharing of partnership system happened in period 5 which is Rp 3,731 / tails. The high DOC price in the period 5 was influenced by the low income of the company on animal feed in period 5 when compared to the price of competing company's livestock feed, so to cover the loss in the livestock feed industry, the company raised the selling price of DOC.

The lowest cost of DOC in broiler farming with close house system in sub-contract of partnership system spent in period 6 that is Rp 2.373 / tails. The low DOC price at the end of the year is due to the end of the year the nucleus company will spend all the remaining DOC stock in the warehouse, and it is supported by the low price of feed in period 6 which is only Rp 10,721 and lower than its competitors. The highest cost of DOC in broiler farming for sub-contract of partnership system spent in period 3 that is Rp 4.224 / tails due to tight competition of livestock feed company. Tight competition conditions make the nucleus company of profit sharing unable to compete in the market, thus lowering the selling price. It is a direct match between rising DOC prices and rising feed prices.

The lowest cost of DOC in broiler farming with close house system in management fee of partnership system spent in period 1 that is Rp 2,790 / tails. The low price of DOC is influenced by the decreasing quality of DOC of the company's nucleus management fee, it is supported and proven by the low mortality bonus received by farmers of management fee that is only Rp 95.369, while farmers of profit sharing get bonus of mortality reach Rp 226,289 and a sub-contract amounted to Rp 100,000. The highest cost of DOC in broiler farming with close house system in management fee of partnership system spent in period 6 amounted to Rp 3.958, it is due to the influence of high demand for livestock managed by the nucleus management fee, so that the influence of DOC price increase in period 6.

Other production costs that affect the process of broiler farming with close house system in partnership systems are vitamins and medicines. The cost of vitamins and medicines in profit-sharing, sub-contracts, and management fees are different.

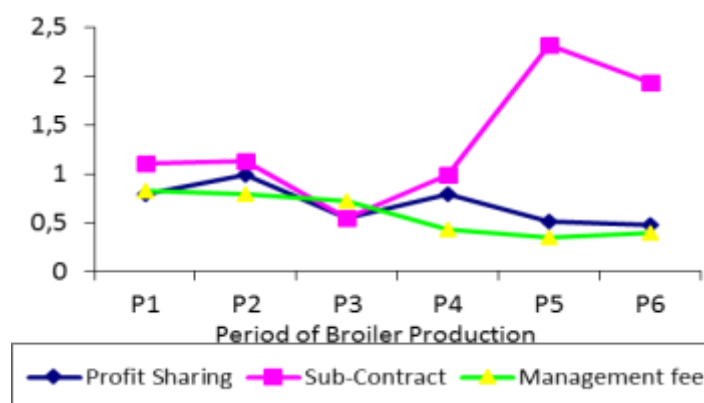


Figure 5. Percentage of Vitamine and Medicine Cost

Variable costs for vitamins and medicines in profit sharing, sub-contracts, and management fees are fluctuated and differentiated. The total expenditure of vitamin and medicines cost in the broiler farming with close house system in profit sharing of partnership system for six consecutive periods are period 1 amounted to Rp 236,146, period 2 amounted to Rp 257.092, period 3 amounted to Rp 156,928, period 4 amounted to Rp 166,667, period 5 amounted to Rp 166,667, and period 6 amounted to Rp 166,667.

The total expenditure of the cost of vitamins and medicines in the broiler farming with close house system in sub-contract of partnership system for six consecutive periods, namely period 1 amounted to Rp 325,061, period 2 amounted to Rp 310,186, period 3 amounted to

Rp 20,000, period 4 amounted to 223,500, period 5 amounted to Rp 539,413, and period 6 amounted to Rp 451,042.

The total expenditure of the cost of vitamins and medicines in the broiler farming with close house system in management fee of partnership system during the six consecutive periods, namely period 1 amounted to Rp 224,171, period 2 amounted to Rp 199.000, period 3 amounted to Rp 186,880, period 4 amounted to Rp 129.569, period 5 amounted to Rp 102.739, and period 6 amounted to Rp 114,608.

Table 5 Variable Vitamine and Medicine Cost

Perio d	Partnership System (Rp/kg)		
	Profit Sharing	Sub-Contract	Management Fee
1	127	170	121
2	152	172	137
3	77	96	129
4	64	188	68
5	76	332	53
6	72	268	68

Source: Data processed (2016)

The lowest cost of vitamins and medicines in the broiler farming with close house system in profit-sharing of partnership system spent in period 4 amounted to 64 Rp/kg, this is due to the decline in the cost of expenditure for feed (table 3) and DOC (table 4) in period 4 so that against the expense of farmers for vitamins and medicines. The highest cost of vitamins and medicines in broiler farming with close house system in profit sharing of partnership system spent in period 2 amounted to 152 Rp/kg. The high cost of expenditure is due to the period 2 spreading stress levels in broiler, thus requiring many vitamins and medicines for healing.

The lowest cost of vitamins and medicines in broiler farming with close house system in sub-contract of partnership system spent in period 3 amounted to 96 Rp/kg, where farmers bought DOC with super quality, so the price of buyers at the level of expensive farmers is Rp 4.224, and it affects The level of broiler health that affects the low expenditure of farmers for the cost of vitamins and medicines. The highest cost of vitamins and medicines in broiler farming with close house system in sub-contract of partnership system spent in period 5 that is equal to 332 Rp/kg. The high expenditure of farmers for vitamins and medicines cost caused by DOC quality decreased in period 5 when compared with the quality of DOC of its competitor, and it is shown by cheaper price of broiler farmers to DOC in sub-contract of partnership system amounted to Rp 2,465 and cheaper if compared to nucleus company of profit sharing amounted to Rp 3,731 and nucleus company of management fee amounted to Rp 3,436.

The lowest cost of vitamins and medicines in broiler farming with close house system in management fee of partnership system spent in period 5 amounted to 53 Rp/kg. The low expenditure of broiler farmers on the cost of vitamins and feed caused by the high market demand for livestock feed, with good feeding quality will affect the health and stress levels in livestock. It is also supported by the highest price of livestock feed which is pegged by the nucleus company when compared with its competitors, which amounted to Rp 11,327. The highest cost of vitamins and medicines in broiler farming with close house system in management fee of partnership system spent in period 2 amounted to 137 Rp/kg. The high production cost expense for period 2 was influenced by the high demand of feed price and the DOC price issued by the company, so other technical problems livestock raising becomes less attention, consequently easy stressful broiler, so farmers add expenses.

CONCLUSION

1. There are three partnership system of broiler livestock farming with close house system in Malang Regency, that is profit sharing, sub-contract, and management fee.
2. The analysis of production costs in all three systems of partnership was observed for one year or six periods. The result of production cost in period 1 is Rp 16,180 / kg, period 2 is Rp 15,294/kg, period 3 is Rp14,064/kg, period 4 is Rp 8,090/kg, period 5 is Rp 14,840 kg, and period 6 is Rp 15,510 / kg.
3. The result of production cost analysis of sub-contract in period 1 is Rp 15,263 / kg, period 2 is Rp 15,263 / kg, period 3 is Rp 17.331 / kg, period 4 is Rp 18.455 / kg, period 5 is Rp 14,159 / kg, and period 6 is Rp 13,621 / kg.
4. The result of production cost analysis of management fee in period 1 is Rp 14,558 / kg, period 2 is Rp 17.311 / kg, period 3 is 17,927 / kg, period 4 is Rp 15,924 / kg, period 5 is 15,214 / kg, and period 6 is 16.905 / kg.
5. In relation to the partnership profile of broiler farming, close house system, it is advisable to do further research on the system of developing broiler farming with partnership system, it aims to assess the accessibility of farmers to various resources needed for business development.
6. Analysis of production cost in the third partnership system of broiler farming with close house system in Malang Regency is the lowest Rp 8.090 / kg and the highest is reaching Rp 18.455 / kg, the amount of production cost greatly affects the sale price of national chicken meat in the level of consumers, it requires the participation of government and stakeholders to suppress the difference in production costs that are too high so that national chicken meat prices stabilized.

REFERENCES

- Akinola, B. D. 2014. Risk Preferences and Coping Strategies among Poultry Farmers in Abeokuta Metropolis, Nigeria. *Global Journal of Science Frontier Research: Agriculture and Veterinary* 14: 1-9.
- Amam. 2016. Model Pengembangan Aksesibilitas Penggunaan Sumber Daya Peternak Terhadap Usaha Ternak Ayam Pedaging Pola Mandiri dan Kemitraan di Kabupaten Malang. Proposal Disertasi Program Doktor Ilmu Ternak. Fakultas Peternakan Universitas Brawijaya.
- Amam dan Julian, A. R. 2017. Komparasi Nilai profitabilitas Usaha Ternak Ayam Pedaging Pada Tiga Model Kemitraan Sistem Close House di Kabupaten Malang. Seminar dan Konferensi Internasional FoSSA Tahun 2017. Fakultas Pertanian Universitas Jember.
- Banjoko, I. K., Fabola, A., Babatunde, F. B. and Atulagbe, R. 2014. Assesments of Risks and Uncertainties in Poultry Farming in Kwara State, Nigeria. *Science, Technology and Arts Research Journal*. 4: 64-70.
- Ditjennakkeswan. 2011. Pertumbuhan Populasi Ternak antar-provinsi di Indonesia. Data Direktorat Jenderal Peternakan dan Kesehatan Hewan. Kementerian Pertanian Republik Indonesia.
- Heise, H. Crisan, A. and Theuvsen, L. 2015. The Poultry Market in Nigeria: Market Structures and Potential for Investment in the Market. *International Food and Agribusiness Management Review*. 1: 197-222.
- Keputusan Menteri Pertanian. 2010. Keputusan Menteri Pertanian Nomor 940/Kpts/OT.2010./10/97 tentang pedoman kemitraan usaha pertanian. Keputusan Menteri Pertanian Negara Kesatuan Republik Indonesia.
- Peraturan Pemerintah. 1997. Peraturan Pemerintah Nomor 44 Tahun 1997 tentang Kemitraan. Peraturan Pemerintah Negara Kesatuan Republik Indonesia.
- Undang-undang Republik Indonesia. 1995. Undang-undang Nomor 9 tahun 1995 tentang usaha kecil.