



## Study of Feasibility on Broiler Business Development

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### Abstrack

The method used in the article writing here is a review of several journals related to the development of broiler farming patterns. The purpose of writing this article is to know the advantages, disadvantages and financial analysis of broiler development patterns independently and partnership system. Financially analyzed results obtained Day Old Chick input price (DOC) on partnership system 9,52% higher than independent system. The feed price on independent systems is relatively cheaper than the partnership system where the feed price difference is about 1000, - / kg of feed. The total revenue earned by independent farmers is 6,25% higher than the partnership system. BEP (Break Event Point) in the partnership system is relatively larger than the independent system. The R/C ratio analysis of independent system pattern is more advantageous than the partnership system where the independent system obtained R / C ratio of 1.31 and the partnership system of 1.11.

**Key words:** study of fisibility on broiler; broiler business;

### Introduction

The increase of population in Indonesia reaches 1.49% every year or about 3-4 million per year gives big enough opportunity for food business from livestock especially chicken. The level of broiler consumption according to data obtained from the Agriculture Departement in 2012 increased by 2.2 million larger than in 2009 which only reached 1.9 million head. The need for chicken meat in Indonesia is increasing from year to year due to increasing population, increasing income so as to increase people's purchasing power, increasing middle-class society, increasing public awareness about the importance of nutritional value, lifestyle changes, the increasing need of ready-to-cook food especially in urban areas, the increasing number of fast food establishments offering a wide variety of food menus derived from livestock products, etc. the problem arises as Indonesia's demand

for animal protein increases, because in fact the ability to supply animal protein needs is still low (Nurtini et al, 2017., Murti, 2015 dan Kadek et al, 2015).

The imbalance between demand and supply of animal products, especially chicken meat requires a large-scale development on the broiler business. Development of broiler business is considered to have a chance to be developed but to start the business required a relatively large capital. Limited capital becomes one of the barriers to start a broiler business especially for small farmers. According to Wijayanto et al. (2014) the amount of capital that must be spent to start a broiler business is one reason farmers to do business with a partnership pattern system. Pattern of livestock development with partnership system with core company is done with purpose to get additional venture capital. The addition-

al capital of the core entrepreneur has several advantages and disadvantages compared to the independent system. In order to be more wise breeders in choosing the pattern of development that will be used in developing the broiler business it is necessary to discuss the advantages and disadvantages of the pattern of independent and partnership development system.

## Material and Methods

The material used in writing this article is a collection of research journals on broiler business development. The method used in the writing is a review of the journals

## Results and Discussion

Broiler is a chicken that has a superior quality to cultivate because it has a fast growth capability and maintenance period is relatively short. Broilers have a fast growth ability and can be harvested at 4-7 weeks of age. Broiler maintenance period is relatively short due to genetic improvements in order to maximize the appearance of broiler production and reduce production costs. The reason for the development of the broiler business in meeting the national demand for meat in Indonesia is a relatively short poduksi cycle that is about 4-7 weeks so that the capital turnover is relatively fast, the broiler business has the ability to absorb the amount of labor extensively, is one of the commodities that have the opportunity for export (Tuffour and Oppong, 2012., Nurtini et al., 2017., Pakage et al., 2009, Schmidt, 2008., Murti et al., 2015).

Pattern of existing broiler business development in Indonesia among the people's livestock system is by using independent capital and with a partnership system. Currently, the pattern of broiler business development in Indonesia is mostly managed by partnership system instead of independent people's farm (Nurtini et al, 2017). Partnership system applied in Indonesia is plasma core system. in this system the farmer acts as a plasma and the farming company acts as the core that nurtures the farmer who becomes his plast to be more successful in managing his livestock business (Murti et al., 2015, Wijayanto, 2014). The differences between independent broiler business and partnership sys-

tem include the following: (1) Independent broiler farming system Independent broiler farming system is a pattern of development where all business capital is obtained from the farmers themselves (a) Advantages of broiler development pattern of independent people's livestock system the full right to manage the business the full right to sell the final product, full rights to choose production facilities and infrastructure such as Day Old Chick (DOC), feed, medicine, vaccine etc. The price of production facilities and infrastructure such as DOC, medicine, vitamins, vaccines etc. is relatively cheaper than the partnership system. The selling price of the product follows market price fluctuations. (b) Disadvantages of broiler development pattern of independent people's livestock system, Requires relatively large capital, There is no supervision and guidance from health workers, In case of market price decline, the level of risk of loss is greater, The risk of loss is self-contained. (2) Partnership broiler farming system Partnership broiler farming system is a system of cooperation between farmer with farming company, where farmer role as plasma and company act as core. According to Wijayanto et al. (2014) the obligations of plasma and core in partnership system cooperation are as follows: Core company obligations, Provide production facilities and infrastructure such as DOC, feed, vitamin etc. with credit system to plasm Buy all livestock produced from plasma, Provide guidance and counseling to plasma on livestock and health management in accordance with core company standards, Farmer / Plasma obligation, Provide cage and labor in accordance with core company standards, Manage and maintain livestock according to core company standards, Selling all livestock products to the core company (a) The advantages of broiler development partnership system Capital is obtained from core companies, There is technical guidance on livestock health from core company experts, The selling price of the product is guaranteed in accordance with the contract agreement at the beginning of the DOC entered, Production facilities and infrastructures are provided by core companies, (b) Lack of broiler development partnership system The low bargaining position of plasma to core companies. The price of facilities and infrastructure and final product is determined unilaterally by the core company

Farmers can not control the quality of production facilities and infrastructure such as DOC, feed, medicines, vitamins etc. (Wijayanto, 2014., Nurtini et al, 2017). Financial Analysis of Broiler Business Development Pattern.

Financial analysis is very important in a business because financial analysis will determine whether a business gets a profit or losses over a certain period. According to Fanani (2017) benefit-cost analysis is done with the following stages: (1) Analyze goals and attributes, (2) Reviewing alternatives, (3) The key issues of discounting, (4) Interest rate

Research Wijayanto et al. (2014) in Jombang district of East Java Indonesia obtained data about independent broiler business and partnership system which can be seen in Table 1.

### Cost Production

Production costs in a business are grouped over fixed costs and variable costs. Fixed costs are the amount of costs incurred in a relatively fixed amount and are not dependent on changes in activity levels to produce a livestock product within a certain interval. Components included in fixed costs are labor costs, depreciation of cages, depreciation of equipment, heating, electricity and water. Variable cost is the amount of cost incurred in which the amount is always changing in accordance with the changes in production levels. Components included in variable costs are DOC, feed, medications, vitamins and vaccines. Production costs and amount of revenues may change in each production period. this difference in production costs can occur due to differences in the use of feed, medicines, vitamins and also the differences in prices in every

**Table 1. Cost Comparison, Reception and Broiler Farm Business Income On Partnership and Independent systems at Jombang Regency of East Java Indonesia**

Description	Independent		Partnership		Comparation
	Value	Contribution	Value	Contribution	
<b>Fixed Cost</b>					
<b>Variabel Cost</b>					
DOC*	5074,10	41,41	5557,20	41,16	9,92
Feed	6005,40	49	7002,60	51,87	16,61
Medicine & Vaccine	259,81	2,12	241,56	1,79	7,02
Husk	280,84	2,29	207,24	1,54	26,2
LPG	190,15	1,55	204,14	1,51	7,3
Labor	110,14	1,34	117,48	0,87	6,6
Cost Harvest	115,04	1,4	100,21	0,74	0,9
Etc	113,82	1,39	14,52	0,11	87,24
<b>Total variabel Cost</b>	<b>12174,41</b>	<b>99,36</b>	<b>13444,95</b>	<b>99,59</b>	<b>10,41</b>
<b>Total Cost</b>	<b>12252,37</b>	<b>100,00</b>	<b>13500,39</b>	<b>100,00</b>	<b>10,18</b>
<b>Total Revenue**</b>	<b>16000,00</b>		<b>15000,00</b>		<b>6,25</b>
<b>Total Income</b>	<b>3747,63</b>		<b>1499,61</b>		<b>59,98</b>
<b>R/C</b>	<b>1,31</b>		<b>1,11</b>		

Source: Wijayanto et al. (2014)

Description: \* = DOC Strain independent and partnership system is no different

\*\* = for one broiler equivalent to 1.7 kg (35 days)

In the financial analysis of several factors that need to be considered on the broiler business is the cost of production, revenue and income of farmers (Murti et al., 2015).

production period (Murti, 2015, Pakage et al., 2014., Kadek et al., 2015).

## Revenue

According to Murti et al., (2015) on broiler farms, the components included in the revenue are the sale of livestock products, compost sales, sales of feed sacks, FCR bonuses, mortality bonuses etc. Wijayanto et al. (2014) stated that the total revenue earned by independent farmers is 6.25% higher when compared to the partnership system. The difference in revenue is due to the difference in the selling price of the product, which in the partnership system of the selling price of the product is determined in the contract made by the core company before the DOC arrives. The selling price of the products listed in the contract is rarely above the market price.

## Income

Income is the difference between receipts and production costs incurred. Some factors that greatly affect the size of income received by broiler farmers are:

### DOC

DOC has a very important role to the income received by farmers. DOC prices have a big effect on production cost and quality of DOC also have a very big influence on the efficiency of feed use, vitamin of medicine etc (Tuffour et al, 2012). Murti et al. (2015) also stated that the price of DOC influences the profit. Based on the research Wijayanto et al. (2014) on the pattern of broiler development partnership system, plasma farmers can not determine the quality of DOC because the type and quality of DOC is determined by the core company. DOC input prices in the partnership system are also 9.52% higher than the DOC purchase price on independent systems.

### Feed

The cost of feed is the largest production cost. Feed accounts for more than 70% of total production costs. Tuffour et al (2012) states that the broiler business feed prices have a very big influence on the profits gained farmers. A similar study was also obtained from Niswatin et al (2016) study that the decrease in feed costs can increase the income earned by broiler farmers. Research Wijayanto et al. (2014) found that

feed price of independent farming pattern is relatively cheaper than partnership system where the difference of feed price can reach 1000, - / kg of feed.

Feed quality also has a big effect on income because feed with good quality will have an effect on high feed efficiency. High feed efficiency is shown by small FCR (Feed Conversion Ratio) value. Nurtini et al. (2017) shows that the large or small value of FCR has a very large influence on income, this can be seen in Figure 1.

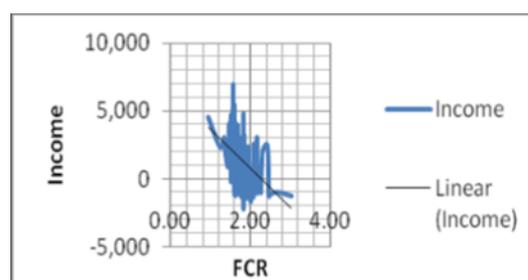


Figure 1. Effect of FCR on income

### The selling price of livestock products

Niswatin et al (2016) showed that the increase of selling price of livestock products in one production period significantly affected the increase of farmer's income. This is due to the selling price of the product is the largest component in the acceptance of farmers. Wijayanto dkk., (2014) mentioned that the selling price of livestock products of partnership system is relatively lower than independent farmers.

### Break Even Point Analysis (BEP)

Break even point analysis is used to find out minimum production per year, minimum price per kilogram of live weight, annual maintenance cost needed to prevent loss of certain cost which can decrease profit rate (Kadek et al., 2015, Niswatin et al, 2015). BEP value is obtained from the total amount of production cost incurred to get 1 kilogram of product. The higher the production cost and the lower the production value the greater the BEP value will be. Based on the description above can be seen that the partnership system of production facilities used by plasma farmers is determined by the core company both quality and price. The price of facilities and infrastructure obtained by plasma farmers is relatively more expensive than independent farm-

ers, so the BEP in the partnership system is relatively larger than the independent farmer.

### Analysis of Revenue Cost Ratio (R/C)

Analysis of revenue cost ratio is used to analyze how much efficiency of a broiler business in a certain period. This efficiency can be achieved by increasing production and reducing the amount of production costs incurred in one period (Kadek et al, 2015). Wijayanto et al. (2014) shows that based on R / C ratio analysis, the pattern of broiler business development independently is more advantageous than partnership system where in independent system obtained R / C ratio of 1.31 whereas in partnership system of 1.11 . When viewed from the value of the figure then the development of independent broiler or partnership system is profitable.

### Conclusion

The conclusions obtained from the writing of this paper are Development of broiler farms using either the partnership system or independently equally provide benefits and feasible to continue, this can be seen in the R / C ratio above 1. Financial analysis of independent systems is relatively higher than the partnership system. This can be seen by the lower BEP value in the independent system than the partnership system.

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