

## Income Analysis of Broiler Farm with Partnership Patterns in Tanjung Putus Village, Padang Tualang District

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### Abstract

In order to meet the high level of demand for chicken meat, the right strategy is needed so that the livestock system runs optimally. The farming system commonly used by breeders in cultivating broiler chickens is a farming system with a partnership pattern. This system is a form of cooperation between the company and the breeders to provide benefits to both parties. One of the villages that implements this system is Tanjung Putus Village. This research aims to analyze the income of raising broiler chickens using a partnership system in Tanjung Putus Village, Padang Tualang District. The method used is purposive for independent and partnership system business actors. The data analysis used is income analysis, expenditure analysis and business efficiency analysis. The research results show that the business efficiency of a livestock system with a partnership pattern has a greater value than an independent system, 1.08. A livestock system with a partnership pattern has the potential to have a greater level of profit and a lower level of risk. [INCOME ANALYSIS OF BROILER FARM WITH PARTNERSHIP PATTERNS IN TANJUNG PUTUS VILLAGE, PADANG TUALANG DISTRICT] (*J. Math. Nat. Sci.*, 4(1): 7-12, 2024)

**Keywords:**  
Income, Analysis,  
Broiler Farm,  
Partnership, Profit

### Introduction

The broiler chicken farming business is an agricultural sector that has great potential in its contribution to the national economy. Broiler chickens are a type of chicken that is bred specifically for the purpose of producing meat in a short time. Along with the increasing demand for chicken meat in domestic and international markets, this sector continues to experience significant growth. In facing growing demand, an integrated livestock system is needed so that supply and demand are met optimally.

Strategies for meeting the high level of demand for broiler chickens can use independent farming systems and partnership farming systems. The independent farming system is a business

system for raising broiler chickens with all the capital from the farmer. Breeders independently provide DOC seeds, feed, cages, equipment, labor and livestock production facilities and market them in live form or in carcass form. The weakness in this system lies in the amount of capital that must be provided independently, making it difficult to develop and difficult to market on a large scale. Apart from that, the high risk of disease and death must be borne by independent livestock (Dafitra *et al*, 2018).

The partnership farming system is a collaboration between entrepreneurs as investors and breeders as implementers in managing the broiler chicken farming business. Commitment in the cooperation agreement between the two parties is the

most important urgency to be agreed so that the goals of the partnership system can be achieved and are mutually beneficial. In this partnership system, capital owners (parents) and independent breeders (partners) work together to produce broiler chickens together. This system offers various benefits, including for partner breeders who may not have large enough capital to start a business independently. By partnering with capital owners, partner breeders can access capital, technology and larger markets (Taluke et al., 2021).

This partnership system offers various benefits for farmers, such as access to quality chicken seeds, animal feed, medicines, as well as technical guidance from partner companies. Apart from that, this partnership also guarantees that there is a market for livestock products, so that farmers do not need to worry about marketing their products. However, there are several risks that need to be considered, such as dependence on partner companies and potential unfairness in profit sharing.

One of the villages that implements broiler chicken farming using a partnership system is Tanjung Putus Village, Padang Tualang District. Farmers in this village choose a partnership system in the hope of getting maximum profits with minimal capital. As a large farmer in this village, this partnership system has greatly helped them, but they have not been able to analyze the potential for raising broiler chickens using a partnership system.

Analysis of broiler chicken farming businesses using a partnership system is important to understand the impact of this system on the welfare of farmers. Social factors such as education, experience and skills of breeders, as well as economic factors such as income, capital and access to resources, all play a role in determining

the success of livestock businesses (Hanum & Safuridar, 2018).

Based on the description above, the partnership farming system has advantages in terms of accelerating development and marketing, so this research aims to analyze the income of raising broiler chickens using a partnership system in Tanjung Putus Village, Padang Tualang District.

## **Materials and Methods**

### **Time and Place of Research**

This research was carried out in Tanjung Putus Village, Padang Tualang District for 4 months starting from January 2024 to April 2024.

### **Sample Determination Method**

Sampling was carried out using a purposive survey method on 2 respondents in each Broiler chicken farming business with an independent system and a partnership system. Sample selection was carried out on breeders who have carried out livestock farming continuously, thereby increasing the validity of information and data about the business.

### **Data Types and Sources**

The types of data used in this research are primary data and secondary data. Primary data is direct observation by interviewing breeders. The farmer interview questionnaire includes the respondent's age, education, farming experience, costs, production and matters related to research. Secondary data is data from related agencies, such as population data and broiler chicken production, research area profiles, etc. that are needed to support research.

**Data analysis**

**Income Analysis**

To determine the amount of income (profit) of farmers from the broiler chicken business, the following formula (Soekartawi, 2006) is used:

$$PD = TR - TC$$

PD: Total Revenue

TR: Total Receipts

TC: Total Expenditures

**Business Efficiency Analysis (R/C)**

Efficiency (feasibility) analysis of the broiler chicken farming business is calculated using the formula:

$$R/C = TR/TC$$

R/C: Business efficiency analysis

TR: Total receipts

TC: Total Cost

The criteria commonly used in assessing a broiler chicken farming business are:

R/C > 1: Efficient business (profit)

R/C < 1: Business is inefficient (loss)

R/C =1: Effort worth BEP (return on capital)

**Results**

**Recapitulation of Research Results**

The results of research regarding the income of broiler chicken farmers with independent and partnership farming systems, differences in profits and efficiency values. This is caused by several factors, namely population size, production prices and production costs (Table 1).

Table 1. Income and Efficiency Level of Independent and Partnership System Broiler Chicken Farming in Tanjung Putus Village, Padang Tualang District

| No | Animal Husbandry System | Total Revenue (TR) | Total Expenditure (TC) | Profit         | Business Efficiency |
|----|-------------------------|--------------------|------------------------|----------------|---------------------|
| 1  | Independent             | Rp. 18,700,000     | Rp. 18,135,400         | Rp. 564,600    | 1.03                |
| 2  | Partnership             | Rp. 187,000,000    | Rp. 173,154,000        | Rp. 13,846,000 | 1.08                |

Based on Table 1, it can be seen that there is quite a significant difference in profit levels between independent and partnership farming systems. The independent farming system has a net profit of Rp. 564,600 while the partnership system is Rp. 13,846,000. This is because there are very large differences in terms of the number of broiler chicken populations kept. The greater the number of broiler chickens raised has the potential to produce greater profits. The number of livestock kept will influence the amount of income earned by the farmer. The greater the number of chickens, the higher the

income earned by farmers, as well as the production costs incurred (Utomo, 2015).

The difference in income at each level of business scale is very real so that benefits and profits can be obtained on a larger business scale (Gusasi & Saade, 2006). Even though there is a very significant difference in the level of profit obtained, if we look at the value of business efficiency, livestock systems with independent and partnership patterns both provide a value of >1, which means that the business undertaken is worthy of development.

Other research regarding broiler chicken businesses with independent and partnership systems has also been carried out in Central Kuantan District with an efficient value of 1.02 for the independent system and 1.07 for the partnership system (Dafitra *et al* 2018).

**Total Revenue (TR)**

The total revenue from the broiler chicken farming business in Tanjung Lepas Village, Padang Tualang District is explained in detail in Table 2.

Table 2. Total revenue from broiler chicken farming in Tanjung Putus Village, Padang Tualang District

| No | Animal Husbandry System | Business Scale (tail) | Production (Kg) | Price/Kg (Rp) | Reception (Rp) |
|----|-------------------------|-----------------------|-----------------|---------------|----------------|
| 1  | Independent             | 500                   | 850             | 22,000        | 18,700,000     |
| 2  | Partnership             | 5000                  | 8,500           | 22,000        | 187,000,000    |

Based on Table 2, the total revenue from broiler chicken farming with an independent system is IDR. 18,700,000 from 500 individuals maintained while the partnership system is Rp. 187,000,000 of 5000 individuals reared. There is a difference the total production sold is profitable in the partnership system. Broiler chickens can generally be marketed at the age of 5-6 weeks with a live weight of between 1.3-1.7 kg.

**Total Expenditure (TC)**

Total Expenditures are the total costs incurred or spent by broiler chicken farmers during the production process. Production costs consist of fixed costs and variable costs. Fixed costs consist of cage depreciation costs, equipment depreciation costs and land and building taxes, while variable costs include the cost of DOC seeds, feed costs, vaccine and medicine costs, electricity costs and labor costs. A recapitulation of total expenditure in this study can be seen in Table 3.

Table 3. Total Broiler Chicken Farming Expenditures in Tanjung Putus Village, Padang Tualang District

| No | Animal Husbandry System | Fixed Costs (Rp) | Variable Costs (Rp) | Total Expenditure (Rp) |
|----|-------------------------|------------------|---------------------|------------------------|
| 1  | Independent             | 130,400          | 18,005,000          | 18,135,400             |
| 2  | Partnership             | 1,304,000        | 171,850,000         | 173,154,000            |

Based on table 3, variable costs (non-fixed costs) have the highest value that must be incurred in the two livestock system patterns. The standalone system has variable costs of Rp. 18,005,000 or around 99% of total expenses, while fixed

costs only cover 1% or Rp. 130,400. The partnership system has variable costs of Rp. 173,154,000 or around 99% of total expenses and the rest are fixed costs.

The highest variable costs are feed costs which reach 60 - 70% of total expenses

during maintenance. Other research supports this statement, data on maintaining 5000 heads, which can cost around 60% or IDR 108,300,000/period for feed costs (Nauratudini, 2022). This is in accordance with research from Bahari *et al*, (2012) stated that at a rearing scale of more than 2,000 head, the largest production cost was feed costs, namely IDR 35,456,471 per

period, he also added that feed costs from the total livestock business costs ranged from 60-70% (Bahari *et al*, 2012).

### Business Efficiency

The efficiency value of the broiler chicken farming business in Tanjung Lepas Village, Padang Tualang District can be seen in Table 4.

Table 4. Efficiency of broiler chicken farming in Tanjung Lepas Village, Padang Tualang District

| No | Animal Husbandry System | Total Revenue (IDR) | Total Expenditure (IDR) | Business Efficiency |
|----|-------------------------|---------------------|-------------------------|---------------------|
| 1  | Independent             | 18,700,000          | 18,135,400              | 1.03                |
| 2  | Partnership             | 187,000,000         | 173,154,000             | 1.08                |

Based on Table 4, the business efficiency value of the partnership farming system is greater than that of the independent farming system, 1.08 versus 1.03. This is supported by research on partnership patterns in Nanggung District, namely that there are no farmers who experience losses with the highest business efficiency value of 1,158 (Illahi *et al* 2019).

### Conclusion

Analysis of the efficiency of livestock businesses with a partnership pattern in Tanjung Putus Village, Padang Tualang District has a value of 1.24, which means the business is efficient and feasible to develop. A livestock system with a partnership pattern has the potential to have a greater level of profit and a lower level of risk.

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