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Analysis of Broiler Chicken Farming Income in Open House Partnership Scheme in Dampang Village, Gantarang Subdistrict, Bulukumba Regency

Mihrani[1]

[1] Politeknik Pertanian Negeri Pangkajene Kepulauan, Pangkep, Indonesia

Abstract

This study aims to determine the income of broiler chicken farmers in the open house partnership scheme in Dampang Village, Gantarang Subdistrict, Bulukumba Regency. The population of broiler chicken farmers utilizing this partnership scheme in Dampang Village, Gantarang Subdistrict, Bulukumba Regency, consists of seven individuals. The research employed a census approach, where the entire population was considered as the sample, and a quantitative method was used. The study results revealed the income earned by the farmers over three periods in Dampang Village, Gantarang Subdistrict, Bulukumba Regency, as follows: Respondent 1, with a population of 4000, earned Rp. 61,815,283; Respondent 2, with a population of 2500, earned Rp. 53,008,671; Respondent 3, with a population of 4000, earned Rp. 55,974,445; Respondent 4, with a population of 3500, earned Rp. 65,794,186; Respondent 5, with a population of 5000, earned Rp. 82,527,734; Respondent 6, with a population of 2500, earned Rp. 35,764,064; and Respondent 7, with a population of 3000, earned Rp. 60,972,701.

Key words: Broiler Chicken, Farmer, Income, Production Costs.

INTRODUCTION

Livestock farming plays a crucial role in agriculture, holding promising business potential and prospects for the future (Diao, Hazell, Kolavalli, & Resnick, 2019). The demand for livestock meat in Indonesia continues to grow annually, with poultry being a significant contributor to this demand (Astiti, Wedaningsih, & Parwata, 2023). Commonly raised poultry in Indonesia includes village chickens and broilers. The development of livestock farming aims to provide high-nutrition animal products such as meat, milk, and eggs, enhance farmers' income, and contribute to foreign exchange earnings and employment opportunities (Bhagowalia, Kadiyala, & Headey, 2012). These factors drive

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the development of the livestock sector, with the hope that it will make a substantial contribution to the nation's economic development in the future.

Broiler chickens, which are domesticated descendants of wild junglefowl dating back approximately 8000 years, have been further cultivated over time to improve meat, egg, and seed quality (Josephson, 2020). The commercial breeding of chickens began in the early 19th century and gradually evolved into modern systems through selective breeding programs, leading to remarkable advancements in both broiler and layer chicken production efficiency (Derry, 2022). Broiler chicken farming is one of the growing poultry sectors, serving the purpose of providing high-quality animal protein in a cost-effective and easily accessible manner.

To meet the demand for animal protein and increase farmers' income, the government and farmers have focused on utilizing various livestock commodities, including broiler chickens. Broilers are known for their relatively rapid meat production compared to other livestock, making them a favored choice among many farmers (Saatkamp, Vissers, Van Horne, & De Jong, 2019).

Broiler chickens offer considerable economic potential in Indonesia due to their high value as a source of animal protein (Khalil, Berawi, Heryanto, & Rizalie, 2019). In the village of Dampang, Gantarang Subdistrict, farmers raise broiler chickens using the Open House system, taking advantage of the suitable temperature and climate conditions and the ease of access for distributors and retailers. As a result, many farmers opt for the Open House system, which inevitably affects the income generated from broiler chicken farming in Dampang Village, Gantarang Subdistrict, Bulukumba Regency. There are seven farmers in Dampang who utilize the Open House partnership scheme, each with varying broiler chicken population sizes. The number of farmers using the Open House system in Dampang Village, Gantarang Subdistrict, can be seen in Table 1.

Table 1. Farmers who use open house cages in Dampang village, Gantarang sub-district.

Farmer's Name	Address	Type of Cage	Population
Kurniayan	Dampang	Open House	4000
Kahar	Dampang	Open House	2500
Ansriandi	Dampang	Open House	4000
Alimin	Dampang	Open House	3500
Asdar	Dampang	Open House	5000
Muh. Nasir	Dampang	Open House	2500
Tasbir	Dampang	Open House	3000

Source: Primary data processed after 2022.

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The income analysis of broiler chicken farming using the Open House Partnership scheme is essential as farmers often overlook their expenses and revenues, leading to uncertainty about their actual earnings. Conducting an income analysis helps determine the production costs and the income received by farmers.

LITERATURE ANALYSIS AND METHODOLOGY

LITERATURE REVIEW

Broiler Chickens

Broiler chickens are a type of poultry with a relatively short and rapid harvesting age, typically reaching harvest age in 35 days. Environmental factors such as food, ambient temperature, and management practices significantly influence broiler chickens, guided by their genetic traits (Rukmini, Mardewi, & Rejeki, 2023). The distinctive characteristics of broiler chickens indicate that they are superior strains originating from subtropical regions, and their productivity cannot be equaled when raised in tropical areas. Environmental, genetic, and management factors can hinder production achievements, hence achieving optimal growth requires efforts such as providing high-nutrition feed and improving management by maintaining optimal environmental temperatures (Chen et al., 2020).

Housing

One crucial factor that significantly influences the success of broiler chicken farming is the housing system. The chicken coop serves as the living and activity space for the chickens, making a comfortable and suitable housing essential for achieving optimal productivity. The coop is the place where the chickens reside from the early stages of their lives until the harvesting period. Therefore, the housing system needs to be carefully considered, including factors such as temperature, humidity, livestock density, and the type of flooring used, all of which contribute to the optimal production of broiler chickens (Li, Arulnathan, Heidari, & Pelletier, 2022).

Open House

Open house housing is a type of chicken coop with open walls, commonly made of bamboo, allowing the free flow of air and utilizing natural sunlight (Oloyo & Ojerinde, 2019). The walls can be covered with curtains to regulate ventilation. The conditions inside the coop are influenced by the external environment. The advantage of open house housing is the relatively low investment cost for constructing an open coop. However, its

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drawback is its susceptibility to external environmental factors such as heat, humidity, and wind, especially in Indonesia with its tropical climate where weather changes can be extreme. In lowland areas, temperatures can be very high, and winds can be quite strong, while in highland areas, temperatures are very cold with high humidity.

Close House

Close house housing, also known as enclosed housing, is a system that can remove excess heat, water vapor, and harmful gases, such as ammonia and carbon dioxide, from the coop while providing sufficient oxygen for the chickens (Al-Kodmany, 2018). This type of housing is believed to minimize the negative effects of the environment and prioritize the productivity of the chickens. The advantages of close house housing include the ability to accommodate a larger population, protection of chickens from external disturbances, weather conditions, and disease, avoidance of pollution, better uniformity of chickens, efficient feed usage, and better control of air conditions compared to open housing. However, the drawback of close house housing is the need for higher investment and operational costs for construction. Additionally, it requires proper infrastructure and technological know-how.

Partnership

Partnership refers to the collaboration between small businesses, including cooperatives, with medium or large enterprises, guided and developed by the latter, with the principles of mutual dependence, mutual reinforcement, and mutual benefit. The purpose of partnership is to empower small businesses in terms of management, products, marketing, capital, and technical aspects, enabling them to become self-reliant and break free from dependency (Child, Faulkner, & Tallman, 2005).

Production Costs

Production costs refer to all expenses incurred by producers to obtain production factors and other support services used to achieve the planned output effectively (Gold, 1996). Adding to production costs are the expenditures involved in processing raw materials into finished products ready for sale. The components of production costs include raw material costs, labor costs, and factory overhead costs. Production costs can be categorized into two types: fixed costs and variable costs (Sinambela & Djaelani, 2022).

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Fixed Costs

Fixed costs are expenses incurred by broiler chicken farming that do not vary with the level of production in a given period (Olorunwa, 2018). Fixed costs consist of depreciation, salaries, insurance, rent, maintenance costs, interest, and other indirect expenses. These costs do not change regardless of fluctuations in output. Fixed costs are involved in production and remain constant even when there are changes in the quantity of meat produced. They include depreciation costs, such as the depreciation of feeding equipment, waterers, and other facilities, as well as the depreciation of the coops, loan interests, taxes, and other miscellaneous expenses (Doye, Freking, Payne, & Ferrell, 2012; Nurlaelah, Asnawi, Sirajuddin, & others, 2022).

Variable Costs

Variable costs are expenses that change in proportion to the volume of activity. According to (Sinambela & Djaelani, 2022), these are costs incurred in tandem with the increase in the number of chickens being raised. As the number of chickens raised grows, the cost per unit components, including feed, chicks, healthcare, and labor, also increase. The variable production costs primarily consist of feed expenses, which can account for up to 70% of the total variable costs, while the remainder is allocated to chicks, maintenance, and healthcare.

Receipts

Receipts represent the total earnings obtained from the production process during a specific period, which can be observed based on the number of livestock sold. These receipts obtained by the farmers are then used to cover the total costs incurred (Barnard & Nix, 1979). When the farm's production output is sold in the market or to other parties, a certain amount of money is generated as a result of the products sold. The amount of money obtained depends on the quantity and value of the goods sold. The goods will have a higher value if the demand exceeds the supply or if the production is limited. The total amount of money received in exchange for the sold livestock products is referred to as receipts (Al-Rubaye & Price, 2023).

The general formula for calculating receipts is TR = P x Q, where TR represents total receipts, P is the selling price per unit, and Q is the quantity of products sold. The magnitude of receipts depends on the variables of the selling price per unit and the quantity of production (Rasyaf, 2003). The formula for calculating receipts is expressed as follows:

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$$TR = Q \times P$$

Where:
TR = Total Revenue (Receipts)
Q = Quantity (Quantity of Production)
P = Price (Unit Price of Production)

Income

Profit analysis is the goal of every type of business. Profit can be achieved when the total receipts obtained from the business exceed the total expenses (Klein, Koch, Steinhardt, & Strauss, 2020). The higher the difference, the greater the profit that can be obtained. In economics, income is defined as the monetary or material gains achieved from the use of wealth or human services. Net income or net profit before tax is the amount left after all non-operational income or expenses are taken into account. Income in the context of poultry farming refers to the total earnings from the broiler chicken husbandry process, calculated in Indonesian Rupiah per month (Muttaqin & Halim, 2020).

The income from broiler chicken farming is influenced by livestock capacity, market prices, and the weight of the livestock at the time of harvesting. Higher livestock capacity and higher market prices will result in greater income for the farmers. The formula to calculate income is as follows:

$$Income\ (Pd) = Total\ Receipts\ (TR) - Total\ Costs\ (TC)$$

Where:
Pd = Total income (in Indonesian Rupiah, Rp)
TR = Total Receipts (in Indonesian Rupiah, Rp)
TC = Total Costs (in Indonesian Rupiah, Rp)

RESEARCH METHODS

Place and Time of Research

This research was conducted in the open house partnership broiler chicken farm in Dampang Village, Gantarang Subdistrict, Bulukumba Regency. The research was carried out from January 2023 to April 2023.

Research Instruments

The instruments or tools used for data collection are as follows:

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Questionnaire

A questionnaire is an instrument that contains a list of questions and is used to collect research data from respondents.

Interview

Interviews are one of the instruments commonly used for qualitative research. In this case, the researcher gathers information from respondents through verbal interaction.

Observation

Observation is a direct method of data collection where the researcher observes the objects being studied.

Data Sources

The data sources are divided into two types: primary data and secondary data.

Primary data. This type of data is obtained and collected by the researcher and is considered relevant to the research, such as data obtained from interviews conducted at the research location.

Secondary data. This type of data is collected by the researcher from literature books, previous research, journals, and articles found through internet searches that are relevant to the research, such as existing potentials in poultry farming.

Sampling Technique

The total population of broiler chicken farmers using the open house partnership model in Dampang Village, Gantarang Subdistrict, Bulukumba Regency, is 7 farmers. Due to the small population size, all 7 farmers will be taken as the sample for this study.

Data Collection Techniques

The data collection techniques to be used in this research are as follows:

Interview. Interviews will be conducted to gather primary data by directly interviewing the selected respondents based on the sample of the research, using prepared questionnaires.

Observation. Observation techniques will involve direct observations of the objects under study.

Documentation. This includes the collection of images as well as the analysis of documents. The documentation carried out by the researcher will consist of photographs taken during the research process.

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Literature Study. This will be based on various journals and books as sources of literature and theoretical foundations related to this research.

Data Analysis

The method used to analyze the income of broiler chicken farmers in Dampang Village, Gantarang Subdistrict, Bulukumba Regency, is by using the following formulas:

Formula for Calculating Depreciation Cost:

(Acquisition Cost - Residual Value) : Economic Life = Depreciation Value.

Formula for Calculating Production Cost:

$$TC = TFC + TVC$$

Where:

TC = Total Cost / Total Production Cost (Rp)

TFC = Total Fixed Cost (Rp)

TVC = Total Variable Cost (Rp)

Formula for Calculating Revenue:

$$TR = Q \times P$$

Where:

TR = Total Revenue (Rp)

Q = Quantity (Production Quantity)

P = Price (Unit Price of Production)

Formula for Calculating Income:

$$Income = TR - TC$$

Where:

Income = Total Income (Rp)

TC = Total Cost / Total Expenses (Rp)

TR = Total Revenue / Total Income (Rp)

RESEARCH AND RESULTS

Fixed Costs

Fixed costs are the expenses incurred by broiler chicken farmers that do not change with changes in the quantity of production obtained by the farmers. In other words, fixed costs are considered constant up to a certain capacity. However, when production capacity increases, fixed costs may change (Siallagan, Sembiring, Sepriadi,

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Purba, & Mirwandhono, 2020). Fixed costs include expenses not influenced by the level of production, such as salaries, rent, bank loan interest, equipment depreciation, and taxes (Hismawati, 2006). The depreciation costs, including depreciation of equipment and coops, taxes, and interest, are calculated and can be seen in the appendix, 3, 9, 15, 21, 27, 33, 39. The fixed costs incurred in broiler chicken farming in Dampang Village, Gantarang Subdistrict, are the depreciation of equipment and tax. For further details, please refer to Table 2 below:

Table 2. Fixed Costs and Taxes

No	Respondent	Depreciation	Tax (Rp)	Labor Cost (Rp)	Total Fixed Costs
1	Respondent 1 - Period 1	1,198,346	37,500	2,000,000	3,835,019
	Respondent 1 - Period 2	1,198,346	37,500	2,000,000	3,835,019
	Respondent 1 - Period 3	1,198,346	37,500	2,000,000	3,835,019
	Total Respondent 1	11,505,057			
2	Respondent 2 - Period 1	1,308,528	37,500	1,345,528	4,036,584
	Respondent 2 - Period 2	1,308,528	37,500	1,345,528	4,036,584
	Respondent 2 - Period 3	1,308,528	37,500	1,345,528	4,036,584
	Total Respondent 2	4,036,584			
3	Respondent 3 - Period 1	2,759,837	45,000	1,000,000	3,804,835
	Respondent 3 - Period 2	2,759,837	45,000	1,000,000	3,804,835
	Respondent 3 - Period 3	2,759,837	45,000	1,000,000	3,804,835
	Total Respondent 3	11,414,505			
4	Respondent 4 - Period 1	1,154,752	52,500	3,000,000	4,207,252
	Respondent 4 - Period 2	1,154,752	52,500	3,000,000	4,207,252
	Respondent 4 - Period 3	1,154,752	52,500	3,000,000	4,207,252
	Total Respondent 4	12,621,756			
5	Respondent 5 - Period 1	3,395,577	52,500	3,000,000	6,448,077
	Respondent 5 - Period 2	3,395,577	52,500	3,000,000	6,448,077
	Respondent 5 - Period 3	3,395,577	52,500	3,000,000	6,448,077
	Total Respondent 5	19,344,231			
6	Respondent 6 - Period 1	1,308,528	37,500	2,500,000	3,846,028
	Respondent 6 - Period 2	1,308,528	37,500	2,500,000	3,846,028
	Respondent 6 - Period 3	1,308,528	37,500	2,500,000	3,846,028
	Total Respondent 6	11,538,084			

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7	Respondent 7 - Period 1	1,308,903	45,000	1,350,903	4,052,709
	Respondent 7 - Period 2	1,308,903	45,000	1,350,903	4,052,709
	Respondent 7 - Period 3	1,308,903	45,000	1,350,903	4,052,709
				Total Respondent 7	**4,052,709**
				Total Fixed Costs	**74,512,926**

Source: Primary data processed in 2023

Table 2 shows that the amount of equipment depreciation (NPA) for Respondent 1 in Period (1, 2, 3) is Rp. 3,835,019. For Respondent 2 in Period (1, 2, 3) is Rp. 1,345,528. For Respondent 3 in Period (1, 2, 3) is Rp. 3,804,835. For Respondent 4 in Period (1, 2, 3) is Rp. 4,207,252. For Respondent 5 in Period (1, 2, 3) is Rp. 6,448,077. For Respondent 6 in Period (1, 2, 3) is Rp. 3,846,028. For Respondent 7 in Period (1, 2, 3) is Rp. 1,350,903. The fixed costs in a broiler chicken farm are quite high due to the high equipment depreciation value as there are many tools used in broiler chicken farming and the cost of cage depreciation is high.

Variable Costs

Variable costs are costs that change as a result of changes in the quantity of production obtained by the open house broiler chicken farmers. Variable costs include the cost of livestock, feed, medications, husks, telephone, and gas cylinders, but some of these variable costs are provided by the partners. The partnership between the farmers and PT.Ciomas Adisatwa, a subsidiary of PT. Japfa TBK, must be able to obtain a sufficient amount of main raw materials every day to meet market demand. The partnership program with the community involves the company collaborating with the community in the process of broiler chicken farming. In this case, the company provides various needs required in the process of broiler chicken farming, such as chicks, feed, and medications, while the farmers only provide the cages and labor. The resulting livestock is then sold back to the company. The total amount of variable costs incurred by each respondent in maintaining the broiler chickens in Desa Dampang, Kecamatan Gantarang, can be seen in Table 3 below.

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Table 3. Variable Costs

No	Respondent	Company Expenses (Rp)	Farmer Expenses (Rp)	Total Variable Costs (Rp)
1	Respondent 1 - Period 1	210,457,000	3,160,000	213,617,000
	Respondent 1 - Period 2	212,360,500	3,260,000	215,620,500
	Respondent 1 - Period 3	210,744,000	3,820,000	214,564,000
	Total Respondent 1			**643,801,500**
2	Respondent 2 - Period 1	117,024,250	1,610,000	118,634,250
	Respondent 2 - Period 2	122,425,000	1,710,000	124,135,000
	Respondent 2 - Period 3	120,970,250	1,571,000	122,541,250
	Total Respondent 2			**365,310,500**
3	Respondent 3 - Period 1	212,037,750	3,250,000	215,287,750
	Respondent 3 - Period 2	210,437,500	3,450,000	213,887,500
	Respondent 3 - Period 3	211,544,000	3,350,000	214,894,000
	Total Respondent 3			**644,069,250**
4	Respondent 4 - Period 1	183,671,250	3,200,000	186,871,250
	Respondent 4 - Period 2	190,865,000	3,200,000	194,065,000
	Respondent 4 - Period 3	188,503,750	3,177,000	191,680,750
	Total Respondent 4			**572,617,000**
5	Respondent 5 - Period 1	254,365,000	2,940,000	257,305,000

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	Respondent 5 - Period 2	244,300,000	2,940,000	247,240,000
	Respondent 5 - Period 3	251,848,750	2,864,000	254,712,750
	Total Respondent 5			**759,257,750**
6	Respondent 6 - Period 1	124,916,250	960,000	125,876,250
	Respondent 6 - Period 2	127,407,500	1,060,000	128,467,500
	Respondent 6 - Period 3	125,952,750	980,000	126,932,750
	Total Respondent 6			**381,276,500**
7	Respondent 7 - Period 1	151,852,500	1,215,000	153,067,500
	Respondent 7 - Period 2	156,145,000	1,815,000	157,960,000
	Respondent 7 - Period 3	154,318,750	1,120,000	155,438,750
	Total Respondent 7			**466,466,250**
			Total Biaya Variabel	**3,832,798,750**

Source: Primary data processed in 2023

Table 3 shows that the variable costs for Respondent 1 are Rp. 213,617,000 for Period 1, Rp. 215,620,500 for Period 2, and Rp. 214,564,000 for Period 3. For Respondent 2, the variable costs are Rp. 118,634,250 for Period 1, Rp. 124,135,000 for Period 2, and Rp. 122,541,250 for Period 3. Respondent 3 has variable costs of Rp. 215,287,750 for Period 1, Rp. 213,887,500 for Period 2, and Rp. 214,894,000 for Period 3. For Respondent 4, the variable costs are Rp. 186,871,250 for Period 1, Rp. 194,065,000 for Period 2, and Rp. 191,680,750 for Period 3. Respondent 5 has variable costs of Rp. 257,305,000 for Period 1, Rp. 247,240,000 for Period 2, and Rp. 254,721,750 for Period 3. Respondent 6's variable costs are Rp. 125,876,250 for Period 1, Rp. 128,467,500 for Period 2, and Rp. 126,932,750 for Period 3. Respondent 7 has variable costs of Rp. 153,067,500 for Period 1, Rp. 157,960,000 for Period 2, and Rp. 155,438,750 for Period 3. The expenses incurred by the farmers in broiler chicken farming have varying levels in each period due to factors such as price, DOC, and regular feed provision in broiler chicken farming. Proper

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maintenance in broiler chicken farming leads to increased body weight produced. The feed provision should not exceed the prescribed amount as it will impact the expenses incurred.

Production Costs

Production costs are all expenditures made by producers to obtain production factors and other supporting factors used to achieve the planned products (Hermanto, 1996). Production is the activity of a company to process and transform raw materials into finished goods through the use of labor and other production facilities. The production costs in this research are divided into two categories: fixed costs and variable costs. The following table presents the production costs in the broiler chicken open house farming:

Table 4. Production Costs

Respondent	Fixed Costs (Rp)	Variable Costs (Rp)	Production Costs (Rp)
Respondent 1 - Period 1	3,835,019	213,617,000	217,452,019
Respondent 1 - Period 2	3,835,019	215,620,500	219,455,519
Respondent 1 - Period 3	3,835,019	214,564,000	218,399,019
Total Respondent 1			**655,306,557**
Respondent 2 - Period 1	1,345,528	118,634,250	119,979,778
Respondent 2 - Period 2	1,345,528	124,135,000	125,480,528
Respondent 2 - Period 3	1,345,528	122,541,250	123,886,778
Total Respondent 2			**369,347,084**
Respondent 3 - Period 1	3,804,835	215,287,750	219,092,585
Respondent 3 - Period 2	3,804,835	213,887,500	217,692,335

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Respondent 3 - Period 3	3,804,835	214,894,000	218,648,835
Total Respondent 3			**655,433,755**
Respondent 4 - Period 1	4,207,252	186,871,250	191,078,502
Respondent 4 - Period 2	4,207,252	194,065,000	198,272,252
Respondent 4 - Period 3	4,207,252	191,680,750	195,888,002
Total Respondent 4			**585,238,756**
Respondent 5 - Period 1	6,448,077	257,305,000	263,753,077
Respondent 5 - Period 2	6,448,077	247,240,000	253,688,077
Respondent 5 - Period 3	6,448,077	254,712,750	261,160,827
Total Respondent 5			**778,601,981**
Respondent 6 - Period 1	3,846,028	125,876,250	129,722,278
Respondent 6 - Period 2	3,846,028	128,467,500	132,313,528
Respondent 6 - Period 3	3,846,028	126,932,750	130,778,770
Total Respondent 6			**392,814,576**
Respondent 7 - Period 1	1,350,903	153,067,500	154,418,403
Respondent 7 - Period 2	1,350,903	157,960,000	159,310,903
Respondent 7 - Period 3	1,350,903	155,438,750	156,789,653
Total Respondent 7			**470,518,959**
		Total Production Costs	**3,907,261,668**

Source: Primary data processed in 2023

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Table 4 shows that the production costs for Respondent 1 in Period 1 were Rp. 217,452,019, and it increased in Period 2 to Rp. 219,455,519, and in Period 3 to Rp. 218,399,019. For Respondent 2, the production costs in Period 1 were Rp. 119,979,778, and it increased in Period 2 to Rp. 125,480,528, and in Period 3 to Rp. 123,886,778, mainly due to the increase in fixed costs.

Respondent 3 incurred production costs of Rp. 219,092,585 in Period 1, which decreased to Rp. 217,692,335 in Period 2, and then increased again to Rp. 218,648,835 in Period 3. For Respondent 4, the production costs in Period 1 were Rp. 191,078,502, increased to Rp. 198,272,252 in Period 2, and then decreased to Rp. 195,888,002 in Period 3.

In the case of Respondent 5, the production costs in Period 1 were Rp. 263,753,077, decreased to Rp. 253,688,077 in Period 2, and then increased again to Rp. 261,160,827 in Period 3. Respondent 6 had production costs of Rp. 129,722,278 in Period 1, increased to Rp. 132,313,528 in Period 2, and then decreased to Rp. 130,778,770 in Period 3. For Respondent 7, the production costs were Rp. 154,418,403 in Period 1, increased to Rp. 159,310,903 in Period 2, and then decreased to Rp. 156,789,653 in Period 3. Production costs represent all the expenses incurred by the company to acquire production factors and raw materials used in creating the company's products (Atasu, Dumas, & Van Wassenhove, 2021).

Revenue

Revenue from the poultry farming business refers to all the income obtained from the total production output. It is solely observed in the form of cash received by the farmers from the sales of products, which is taken into consideration for revenue calculation (Dewi, Azis, Rauf, Sahabuddin, & Karim, 2022). Total revenue includes the sales of broiler chickens and the income generated from the sale of chicken manure in Desa Dampang Kecamatan Gantarang Kabupaten Bulukumba.

Table 5. Revenue

Respondent	Period 1	Period 2	Period 3	Total Revenue
Respondent 1	245,652,750	229,611,060	241,858,030	717,121,840
Respondent 2	144,625,500	135,525,260	142,204,995	422,355,755
Respondent 3	246,624,500	228,404,260	236,377,440	711,406,200
Respondent 4	216,878,250	215,535,875	218,618,820	651,032,945
Respondent 5	293,918,250	278,803,245	288,368,220	861,089,715
Respondent 6	144,218,250	140,609,075	143,751,315	428,578,640

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Respondent 7	179,457,000	171,905,290	180,129,375	531,491,665
Total				4,323,076,760

Source: Primary data processed in 2023

Based on the analysis in Table 5, Respondent 1 obtained a total revenue of Rp. 245,652,750 for Period 1, and experienced a decline in Period 2 due to the low selling price of the chickens, amounting to Rp. 229,611,060. However, in Period 3, there was an increase again, reaching Rp. 241,858,030, attributed to the increased chicken prices. For Respondent 2, in Period 1, the revenue was Rp. 144,625,500, with a relatively high selling price. It declined in Period 2 to Rp. 135,525,260, as the selling price of chickens decreased, but it increased again in Period 3 to Rp. 142,204,995.

Respondent 3 obtained a revenue of Rp. 246,624,500 in Period 1, which declined to Rp. 228,404,260 in Period 2 due to different chicken selling prices in these periods. However, there was an increase in Period 3, reaching Rp. 236,377,440, although it did not surpass the revenue in Period 1. For Respondent 4, the revenue was Rp. 216,878,250 in Period 1, Rp. 215,535,875 in Period 2, and there was an increase in Period 3 to Rp. 218,618,820.

Respondent 5 obtained a revenue of Rp. 293,918,250 in Period 1, but it declined to Rp. 278,803,245 in Period 2 due to the low selling price of chickens. However, in Period 3, it increased again to Rp. 288,368,220. Respondent 6 had consistent revenues in each period: Rp. 144,218,250 in Period 1, Rp. 140,609,075 in Period 2, and Rp. 143,751,315 in Period 3.

Lastly, Respondent 7 had a revenue of Rp. 179,457,000 in Period 1, which declined to Rp. 171,905,290 in Period 2, but increased again in Period 3 to Rp. 180,129,375. This indicates that the population of chickens being raised significantly influences the revenue obtained.

Income

Income is the revenue obtained from the difference between the expenses incurred in a certain form of activity to produce a business in the field (Anggara, Anggraini, Lurrohman, Sitanggang, & Fransiska, 2022). Income represents the total earnings from broiler chicken farming during the production process, minus the total production costs, measured in Indonesian Rupiah per month. The income obtained by the farmers can be seen in the following Table 6.

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Table 6. Income.

Respondent	Period	Revenue (TR) (Rp)	Production Cost (TC) (Rp)	Income (TR-TC) (Rp)
Respondent 1	Period 1	245,652,750	217,452,019	28,200,731
	Period 2	229,611,060	219,455,519	10,155,541
	Period 3	241,858,030	218,399,019	23,459,011
Total Respondent 1				**61,815,283**
Respondent 2	Period 1	144,625,500	119,979,778	24,645,722
	Period 2	135,525,260	125,480,528	10,044,732
	Period 3	142,204,995	123,886,778	18,318,217
Total Respondent 2				**53,008,671**
Respondent 3	Period 1	246,624,500	219,092,585	27,531,915
	Period 2	228,404,260	217,692,335	10,711,925
	Period 3	236,377,440	218,648,835	17,728,605
Total Respondent 3				**55,974,445**
Respondent 4	Period 1	216,878,250	191,078,502	25,799,748
	Period 2	215,535,875	198,272,252	17,263,620
	Period 3	218,618,820	195,888,002	22,730,818
Total Respondent 4				**65,794,186**
Respondent 5	Period 1	293,918,250	263,753,077	30,165,173
	Period 2	278,803,245	253,688,077	25,115,168
	Period 3	288,368,220	261,160,827	27,207,393
Total Respondent 5				**82,527,734**
Respondent 6	Period 1	144,218,250	129,722,278	14,495,972
	Period 2	140,609,075	132,313,528	8,295,547
	Period 3	143,751,315	130,778,770	12,972,545
Total Respondent 6				**35,764,064**
Respondent 7	Period 1	179,457,000	154,418,403	25,038,592
	Period 2	171,905,290	159,310,903	12,594,387
	Period 3	180,129,375	156,789,653	23,339,722
Total Respondent 7				**60,972,701**
Total Income				**415,857,084**

Source: Primary data processed in 2023

Based on the analysis in Table 6, Respondent 1 can obtain income from approximately one and a half months of production. The production costs for Respondent 1 in Period 1 amount to Rp 217,452,019, in Period 2 amount to Rp 219,455,519, and in Period 3 amount to Rp 218,399,019. The corresponding revenues for Respondent 1 in Period 1, Period 2, and Period 3 are Rp 245,652,750, Rp 229,611,060, and Rp

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241,858,030, respectively. Therefore, the calculated income for Respondent 1 in Period 1 is Rp 28,200,731, in Period 2 is Rp 10,155,541, and in Period 3 is Rp 23,459,011.

For Respondent 2, the production costs are Rp 119,979,778 in Period 1, Rp 125,480,528 in Period 2, and Rp 123,886,778 in Period 3. The corresponding revenues for Respondent 2 are Rp 144,625,500 in Period 1, Rp 135,525,260 in Period 2, and Rp 142,204,995 in Period 3. Consequently, the income for Respondent 2 in Period 1 is Rp 24,645,722, in Period 2 is Rp 10,044,732, and in Period 3 is Rp 18,318,217.

Respondent 3 incurs production costs of Rp 219,092,585 in Period 1, Rp 217,692,335 in Period 2, and Rp 218,648,835 in Period 3. The revenues for Respondent 3 in Period 1, Period 2, and Period 3 amount to Rp 246,624,500, Rp 228,404,260, and Rp 236,377,440, respectively. As a result, the calculated income for Respondent 3 in Period 1 is Rp 27,531,915, in Period 2 is Rp 10,711,925, and in Period 3 is Rp 17,728,605.

Respondent 4's production costs are Rp 191,078,502 in Period 1, Rp 198,272,252 in Period 2, and Rp 195,888,002 in Period 3. The corresponding revenues for Respondent 4 in Period 1, Period 2, and Period 3 are Rp 216,878,250, Rp 215,535,875, and Rp 218,618,820, respectively. Hence, the income for Respondent 4 in Period 1 is Rp 25,799,748, in Period 2 is Rp 17,263,620, and in Period 3 is Rp 22,730,818.

As for Respondent 5, the revenues are Rp 263,753,077 in Period 1, Rp 253,688,077 in Period 2, and Rp 261,160,827 in Period 3, while the production costs amount to Rp 293,918,250 in Period 1, Rp 278,803,245 in Period 2, and Rp 288,368,220 in Period 3. The income for Respondent 5 in Period 1 is Rp 30,165,173, in Period 2 is Rp 25,115,168, and in Period 3 is Rp 27,207,393.

For Respondent 6, the production costs are Rp 129,722,278 in Period 1, Rp 132,313,528 in Period 2, and Rp 130,778,770 in Period 3. The corresponding revenues for Respondent 6 are Rp 144,218,250 in Period 1, Rp 140,609,075 in Period 2, and Rp 143,751,315 in Period 3. Thus, the income for Respondent 6 in Period 1 is Rp 14,495,972, in Period 2 is Rp 8,295,547, and in Period 3 is Rp 12,972,545.

Respondent 7's production costs are Rp 154,418,403 in Period 1, Rp 159,310,903 in Period 2, and Rp 156,789,653 in Period 3. The revenues for Respondent 7 in Period 1, Period 2, and Period 3 amount to Rp 179,457,000, Rp 171,905,290, and Rp 180,129,375, respectively. Hence, the income for Respondent 7 in Period 1 is Rp 25,038,592, in Period 2 is Rp 12,594,387, and in Period 3 is Rp 23,339,722.

Based on the above calculations, the income of the breeders is not solely dependent on the population of livestock but is also influenced by the amount of production costs incurred and the level of production achieved. The higher the prices and

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production yields, the higher the breeders' income will be. Income refers to the inflow or increase in assets of a company or the settlement of the company's obligations, or a combination of both during a specific period resulting from the delivery or production of goods, provision of services, or other activities, which represent the company's primary ongoing operations.

CONCLUSION AND RECOMMENDATIONS

CONCLUSION

In conclusion, the analysis of the data and discussions led to the following findings: Firstly, the production costs for breeders and partners varied between Rp 369,347,084 and Rp 778,601,981 over the three periods. Secondly, the revenues generated during the same periods ranged from Rp 422,355,755 to Rp 861,089,715. Thirdly, the income earned by breeders during the three periods fell within the range of Rp 35,764,064 to Rp 82,527,734. Lastly, it was evident that the number of broiler chickens raised directly impacted the production costs, with higher production yields resulting in increased income for the breeders.

Recommendations

1. Breeders in Dampang Village, Gantarang Subdistrict, Bulukumba Regency, are encouraged to continuously enhance their knowledge and skills in the livestock subsector, particularly in managing broiler chicken businesses.
2. Partner companies should provide educational programs to the breeders to help them learn about effective strategies to improve broiler chicken production yields.

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