

## PROFIT ANALYSIS OF BROILER CHICKEN BUSINESS INDEPENDENT PATTERN AND PARTNERSHIP IN KLATEN REGENCY

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### ABSTRACT

*This study aims to determine the benefits of broiler chicken farming business, partnership patterns and independent patterns in Klaten Regency. The research method used is descriptive analysis and the sample used is determined intentionally and uses the analytical method used to calculate receipts, calculate costs and profits. The data used are primary and secondary data. The total profit received was IDR -6,703,735 while the partnership farmers amounted to IDR 28,004,337, which was greater than the profits of farmers by applying an independent pattern. The economic advantage of the independent pattern results in a much smaller profit per unit of chicken due to the small productivity, however, the partnership pattern is more stable in obtaining income and market guarantees.*

### KEYWORDS

*Broiler Chickens, Advantages, Animal Husbandry*



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## INTRODUCTION

The cultivation of purebred chickens in Indonesia is a business that has great opportunities because domestic chicken meat consumption is high. According to Indonesian statistical data in 2022, the average per capita consumption in a week of purebred chicken meat is 0.111 kg (BPS, 2023). This result shows an increase from 2021 where the per capita consumption of purebred chicken meat a week was 0.101 kg (BPS, 2022). This phenomenon is caused by an increase in population and increasing people's income so that chicken meat as a source of animal food is in great demand.

Broiler chicken farmers have two kinds of business patterns, namely independent patterns and partnerships. Independent pattern breeders bear costs including cages, feed costs, labor costs and other costs. The accepted consequence of the independent pattern is that marketing is quite difficult at the time of harvest and the selling price received is low. The advantage of applying an independent pattern is that there is no risk sharing when livestock businesses experience profits or losses. On the other hand, broiler farmers with an independent pattern, still maintain their business because they feel they still have a strong source of capital and do not want to be tied to other parties, the independent pattern is considered to provide more profits because the selling price is high when the harvest period arrives.

The partnership has the characteristics of obligations as the core of providing seeds or Day Old Chick (DOC), feed, vaccines and marketing of the harvest. While the obligation

of plasma is to care for and enlarge broiler chickens until they are ready to be harvested. Farmers only provide cages and care for broiler chickens and undergo according to contractual agreements with related companies.

Many broiler chicken farmers in Klaten Regency have strategies to partner with other parties to reduce business risks. Other causes such as wanting certainty in the price of production facilities and selling prices according to the contract and getting other benefits (bonuses) when the selling price is high. Similarly, when prices fall, broiler chicken farmers with a partnership pattern do not experience confusion to market their products. While the advantage of a partnership pattern chicken farming business is that it does not require high capital and has certainty of marketing broiler chickens when harvesting. The business pattern between partnership and independent pattern is still a debate, regarding which pattern is more profitable for farmers in Klaten Regency.

## **RESEARCH METHOD**

The location of the study was determined by purposive (deliberate) method. The research locations are Jatinom District and Tulung District, Klaten Regency. The consideration took the location of the study, because Jatinom District and Tulung District are districts that have the third and fourth largest broiler chicken populations in Klaten Regency. This research will be conducted in March-July 2023 in Klaten Regency. Analysis methods used Calculating Acceptance

- (1) Revenue is the result of multiplication between the amount of production and price sell. Total receipts can be calculated using the following formula:

$$\mathbf{TR = P \cdot Q}$$

Information:

TR = Revenue (Rp/production period)

P = Production Price (Rp/ kg)

Q = Total Production (kg/production period) (Pakage et al. 2018).

- (2) Calculating Total Cost. Total cost is the overall cost incurred to carry out the production process. Total cost is the sum between fixed costs and variable costs.

$$\mathbf{TC = FC + VC}$$

Remarks :

TC = Total Cost or Total Cost

FC = Fix Cost or Fixed Cost in this study such as maintenance costs, depreciation of cages and equipment.

VC = Variable Cost in this study broiler breeds (DOC), feed, medicine (vaccines, drugs and vitamins), electricity, fuel and labor (Pakage *et al.* 2018).

- (3) Calculating profit. Profit is the revenue received minus the total cost available. The formula according to abadi *et al.*, (2022) to seek profit is as follows:

$$\mathbf{\pi = TR - TC}$$

Remarks :

$\pi$  = Profit

TR = Total revenue

TC = Total cost

## **RESULT AND DISCUSSION**

### **(A) Revenue of Chicken Broiler Livestock**

Livestock business revenue is the result of all harvest obtained by calculating chicken sales, and chicken feces (manure) as additional income. The following is a

table of broiler chicken business revenues, independent patterns and partnership patterns, crop yields and prices can be seen in table 1.1:

Table 1.1 Average Crop Yield and Stool Price

Description	Chicken/Kg Price	Yield/kg	Stool Price (Poop) /Sack	Number of Feces/sacks
Independent Pattern	IDR 21.633	1.993	Rp 5.000	54
Partnership Pattern	IDR 19.968	16.010	Rp 5.000	406

Based on table 1.1 data, it can be seen that the average price of chicken per kilogram of independent pattern is higher than the partnership pattern, namely the independent pattern of IDR 21.633 while the partnership pattern is IDR 19.968. This is because the partnership pattern has a price in accordance with the contract signed together according to the agreement between partners and breeders, so farmers must follow the rules according to the applicable contract. Independent patterns in selling their crops directly to broiler chicken collectors at self-set prices and looking at prices on the market, so that the prices received fluctuate. According to Jojo *et al.*, (2021) High price fluctuations cause disincentives for poultry sector business actors because they cause business uncertainty. The other side of prices that tend to rise is also detrimental to consumers. This fluctuation is caused in the production process of livestock commodities is uncertain and seasonal.

Table 1.2 Analysis of Independent Pattern Broiler Chicken Business Revenue in Klaten Regency per Harvest Season / 1000 Heads

No	Chicken Yield	Stool (feces)	Total Receipts	Conversion/1000 heads
1	IDR 23.000.000	IDR 100.000	IDR 23.100.000	IDR 46.200.000
2	IDR 31.500.000	IDR 150.000	IDR 31.650.000	IDR 45.214.286
3	IDR 37.400.000	IDR 190.000	IDR 37.590.000	IDR 46.987.500
4	IDR 114.000.000	IDR 500.000	IDR 114.500.000	IDR 38.166.667
5	IDR 44.000.000	IDR 190.000	IDR 44.190.000	IDR 44.190.000
6	IDR 21.000.000	IDR 125.000	IDR 21.125.000	IDR 42.250.000
7	IDR 44.000.000	IDR 200.000	IDR 44.200.000	IDR 44.200.000
8	IDR 26.400.000	IDR 140.000	IDR 26.540.000	IDR 44.233.333
9	IDR 30.800.000	IDR 300.000	IDR 31.100.000	IDR 44.428.571
10	IDR 63.000.000	IDR -	IDR 63.000.000	IDR 42.000.000
11	IDR 44.000.000	IDR 400.000	IDR 44.400.000	IDR 44.400.000
12	IDR 37.400.000	IDR 275.000	IDR 37.675.000	IDR 47.093.750
13	IDR 22.000.000	IDR -	IDR 22.000.000	IDR 44.000.000
14	IDR 44.000.000	IDR 405.000	IDR 44.405.000	IDR 44.405.000
15	IDR 51.600.000	IDR 400.000	IDR 52.000.000	IDR 43.333.333
	<b>Sum</b>			IDR 661.102.440
	<b>Average</b>			IDR 44.073.496

Based on table 1.2, it shows that the highest acceptance of independent breeders was found in respondent 4 with a population of 3,000 heads of Rp 38,000 / head, while the lowest acceptance of independent breeders in respondent 6 with a population of 500 heads of 42,000 / head. The conversion rate of independent pattern breeders per 1,000 heads gets an average of IDR 44,073,496 The acceptance of independent pattern broiler chicken farmers is much smaller than the partnership pattern. This happens due to the difference in the yield of smaller broiler chicken crop productivity.

Table 1.3 Analysis of Pattern Partnership Broiler Chicken Business Revenue in Klaten Regency per Harvest Season / 1000 Heads.

No	Chicken Production	Stool (feces)	Total Receipts	Conversion/1000 heads
1	IDR 331.200.000	IDR 150.000	IDR 331.350.000	IDR 36.816.667
2	IDR 402.800.000	IDR 3.500.000	IDR 406.300.000	IDR 40.630.000
3	IDR 205.000.000	IDR 1.250.000	IDR 206.250.000	IDR 41.250.000
4	IDR 120.000.000	IDR 1.000.000	IDR 121.000.000	IDR 40.333.333
5	IDR 204.500.000	IDR 1.050.000	IDR 205.550.000	IDR 39.528.846
6	IDR 652.800.000	IDR 1.250.000	IDR 654.050.000	IDR 38.473.529
7	IDR 380.000.000	IDR 2.500.000	IDR 382.500.000	IDR 38.250.000
8	IDR 426.800.000	IDR 2.900.000	IDR 429.700.000	IDR 39.063.636
9	IDR 228.000.000	IDR 1.500.000	IDR 229.500.000	IDR 35.307.692
10	IDR 123.480.000	IDR 1.800.000	IDR 125.280.000	IDR 32.968.421
11	IDR 395.850.000	IDR 2.600.000	IDR 398.450.000	IDR 39.845.000
12	IDR 194.040.000	IDR 1.000.000	IDR 195.040.000	IDR 39.008.000
13	IDR 131.150.000	IDR 500.000	IDR 131.650.000	IDR 43.883.333
14	IDR 225.400.000	IDR -	IDR 225.400.000	IDR 35.777.778
15	IDR 161.600.000	IDR 1.000.000	IDR 162.600.000	IDR 44.250.000
16	IDR 360.000.000	IDR 2.500.000	IDR 362.500.000	IDR 36.250.000
17	IDR 722.000.000	IDR 5.000.000	IDR 727.000.000	IDR 36.350.000
18	IDR 168.000.000	IDR 1.000.000	IDR 169.000.000	IDR 37.555.556
19	IDR 266.500.000	IDR 1.500.000	IDR 268.000.000	IDR 38.285.714
20	IDR 630.400.000	IDR 3.500.000	IDR 633.900.000	IDR 39.618.750
<b>Sum</b>				IDR 773.446.256
<b>Average</b>				IDR 73.661.548

Based on table 1.3, partner breeders have the highest acceptance in respondent 17 with a population of 20,000 of Rp 36,100/head, while the lowest acceptance of partner breeders in respondent 10 with a population of 3000 of 40,000/head. This happens because there are differences in the average weight of broilers that affect the sales price of broiler chickens, so that the value of receipts from the sale of broiler chickens is different for each breeder. The conversion of partnership pattern breeders per 1,000 heads has an average of Rp 73,661,548. The acceptance of partnership pattern broiler chicken farmers is much greater than that of independent patterns

**(B) Total Cost of Broiler Livestock Business**

Total production costs are those costs incurred to produce a product obtained by calculating the cost of purchasing seeds, feed, medicines, cage rent, equipment and labor costs. According to Erwan., *et al* (2023) stated that the total cost of broiler chicken production can be classified into fixed costs and non-fixed costs. Fixed costs are costs that are fixed in amount and do not depend on the size of the amount of production, to its possible capacity, such as land rent, loan interest and electricity. Variable costs are costs incurred because there are chickens on the farm or costs that change when there is a change in the acquisition of meat produced.

Table 1.4 Analysis of Average Conversion of Total Production Cost of Broiler Chickens Partnership Pattern and Independent Pattern in Klaten District Per Harvest Season / 1000 Heads

Description	Types of Business Patterns	
	Partnership pattern (IDR)	Independent Pattern (IDR)
<b>Fixed Costs</b>		
Cage Shrinkage	596.279	1.690.158
Tool Depreciation	409.084	359.124
UN Tax	16.148	662.096
Electricity	591.445	310.096
<b>Total Fixed Costs (1)</b>	1.612.956	3.021.474
Description	Types of Business Patterns	

	Partnership pattern	Independent Pattern
<b>Variable Costs</b>		
.DOC	9.782.124	9.566.857
Feed	32.732.836	34.473.790
Medicinal drugs	377.832	662.096
Gasolet	316.673	454.919
Workforce	834.791	2.598.096
<b>Total Variable Costs (2)</b>	<b>44.044.255</b>	<b>47.755.757</b>
<b>Total Cost (1+2)</b>	<b>45.657.211</b>	<b>50.777.231</b>
<b>Contribution of variable costs to fixed costs</b>	<b>96%</b>	<b>94%</b>

Based on table 1.4, it can be seen that the average total cost of the partnership pattern is IDR 45,657,211 lower than the independent pattern of IDR 50,777,231. This is due to the difference in the number of production cost factors that must be incurred for the purchase of seeds, feed, cage and equipment rental, drug costs, labor costs and other production costs. The difference in total costs is almost doubled due to the cost of cages in the partnership pattern because it has an average permanent cage with a large cost and the presence of technology such as *closed house* cages. The contribution of variable costs of partnership pattern farmers to total costs is 96% and fixed costs is 4%, while the contribution of variable costs of independent pattern farmers to total costs is 95% and fixed costs are 5%. This is because variable costs are higher than fixed costs because more variable costs are needed.

### (C) Profit Analysis

The difference in the total amount of business income and the total expenditure that must be incurred for the production costs of the business is a method for determining the total amount of business profits. The total livestock business obtained is a benchmark for the success of the livestock business with the amount of income, there is also an excess of livestock business income which is income generated for household use (Murti et al., 2020). The farmer's household income is the profit from the livestock business plus household cash receipts, which are used by the farmer for payments that have nothing to do with the livestock business.

Table 1.6 Table of Profits of Broiler Chickens Partnership Pattern and Independent Pattern in Klaten Regency Per Harvest Season / 1000 Heads

Description	Partnership Pattern (IDR)	Independent Pattern (IDR)
Reception (TR)	73.661.548	44.073.496
Total Cost (TC)	45.657.211	50.777.231
Profits ( $\pi$ )	28.004.337	-6.703.735

Based on the results of primary data calculations in table 1.6, it shows that the total profit received by independent farmers is IDR -6,703,735, while partnership farmers are IDR 28,004,337 greater than the profits of farmers by applying the partnership pattern. The difference between income and total costs that must be incurred in the process of livestock business is the method used to be able to find out profits and calculate the amount of value earned by farming families as wages for their own labor. The factor that affects the amount of value obtained is capital, both own capital and loans. Productivity comparisons and value benefits such as productivity partnership patterns often achieve higher levels of productivity due to greater technical support and resources from partner firms. However, self-sustaining patterns can provide greater opportunities for exploration and innovation. The economic profitability of the independent pattern results in a much greater profit per unit of chicken because there is no profit sharing. However, the partnership pattern is more

stable in obtaining income and market guarantees, but the conversion per 1000 heads of broiler chicken farming business with the application of an independent profit pattern is not in accordance with the costs incurred.

## CONCLUSION

The independent pattern broiler chicken business has an average conversion acceptance rate of IDR 44,073,496 per 1000 heads, while the conversion of the farmer partnership pattern per 1000 heads averages IDR 73,661,548. The average cost of the partnership pattern is IDR 45,657,211 lower than the independent pattern of IDR 50,777,231. The contribution of variable costs of partnership pattern farmers to total costs is 96%, while the contribution of variable costs of independent pattern farmers to total costs is 94%. The total net profit received by independent pattern farmers amounted to IDR -6,703,735 while partnership pattern farmers amounted to IDR 28,004,337 greater than the profits of farmers by applying the partnership pattern.

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