

Profit Analysis of Broiler Chicken Business in Semi Closed House and Closed House in Marrang District, Pangkajene Islands Regency

Subhan Effendy^{1*}, Muhammad Fajri², Fitriani³, Nurjannah Bando⁴
State Agricultural Polytechnic of Pangkajene Islands

Corresponding Author: Subhan Effendy subhaneffendi@polipangkep.ac.id

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ABSTRACT

Competition in the business world is getting tighter, nowadays entrepreneurs are required to be able to develop their business in order to develop, progress, grow and become successful entrepreneurs. The purpose of this study was to determine how the income of broiler farmers compares in Semi Closed House and Closed House in Attangsalo Village, Ma'rang Kecamatan, Pangkep Regency. The research was conducted in June 2024. The method used is descriptive method with observation, interview, survey and documentation techniques. The profit obtained in the first period amounted to Rp.95,182,489 in the second period of Rp.85,110,261, the third period amounted to Rp.80,248,972, in the fourth period amounted to Rp.166,780,136, in the fifth period Rp.125,964,691, in the sixth period Rp.87,759,266, in the seventh period Rp.74,914,884, in the eighth period Rp.39,188,492. Comparison of farmer profits over the past 2 years with a population of 14,000 heads in close house cages that do not apply technology, the income earned decreases in each period while cages with a population of 24,000 heads in close house cages by applying technology increases in each period. This shows that farmers who use technology are much better.

INTRODUCTION

Increasingly fierce competition in the business world, entrepreneurs are currently required to be able to develop their business in order to develop, advance, grow and become successful entrepreneurs. Good business development starts from entrepreneurs who face many obstacles in the business world. Therefore, a strategy is needed in business development so that the business can last long and not go bankrupt. Strategy is a series of integrated actions that are a tool to increase the success and long-term strength of a company in achieving competitive advantage. Basically every company has a strategy in business. But it can happen that a company leader doesn't realize it. Strategy is an action that is continuous and continuous, and is carried out based on the perspective of what customers expect in the future. So it requires the speed of new market innovations and changes in consumer consumption patterns supported by the company's core competencies.

Broiler farming is spread across several regions in Indonesia, this is because broilers are one of the poultry commodities that have an important role in producing meat to support the availability of animal protein. Especially when viewed from the production period and opportunities that can be seen in the market today, chicken is a staple food that is very popular with the people of Indonesia. In fact, there are many restaurants that provide menus made from broilers. However, in the world of animal husbandry there are many problems that exist such as disease, fluctuating prices and so on.

Profit analysis can show the financial situation of a farmer regarding financial development, selling prices and profits from the business being run and developed, so that it can show the efficiency of the business. The broiler farming business in Ma'rang District, Pangkep Regency, which has a broiler population of 24,000 chickens in automatic cages while the semi-automatic has a population of 14,000 Tails. The maintenance system in Ma'rang Subdistrict, there are two maintenance systems, namely automatic and semi-automatic maintenance systems, which clearly have a very far difference starting from the cost of cages and equipment. The purpose of this study was to determine how the comparison of the income of broiler farmers in Semi Closed House and Closed House in Attangsalo Village, Ma'rang Kecamatan, Pangkep Regency.

LITERATURE REVIEW

Broiler chickens are a breed of poultry whose main ability is to produce a lot of meat with a very rapid growth rate. Within 5-6 weeks broilers already have a body weight of up to 2 kg. This chicken is a superior breed of crossbreeds of chicken nations that have high productivity, especially in producing meat (Rasyaf, M. 2003). The advantages of broiler chickens are tender meat, large body size, wide chest shape, dense, and full, high efficiency of feed most of the feed is converted into meat. Broilers are harvested around 4-6 weeks with a body weight of 1.2-1.9 kg/head (Santoso and Sudaryani, 11; Yamima, 2014).

Income or profit is the difference between total revenue and total production costs incurred by farmers to run a business. Income is the income that business actors are entitled to from the sale of products that have been received after deducting the total production costs during the production process (Wadi

et al., 2022). The income obtained by farmers will vary according to the level of the farmer's own ability to allocate the factors they have including the number of DOC, feed, labor, vaccines, drugs, vitamins, heaters and mortality, farmers must be able to manage these production factors so that maximum production can be achieved (Labatar et al., 2023).

Production costs are a number of costs incurred by farmers in livestock business production activities, such as fixed costs and variable costs. Total production costs are the sum of fixed costs and non-fixed costs (Pramudito, et al., 2023). When production activities begin, at that time the business actors or breeders will incur production costs. Production costs are all costs used to finance the entire business process (Irwan et al., 2020). Production costs are costs incurred to process raw materials into finished products that are ready for sale, broadly speaking, these production costs are divided into raw material costs, direct labor costs and overhead costs (Ramadhan, 2021). Production costs are a number of costs incurred by farmers in the production activities of partnership broiler farming, the costs incurred by farmers consist of fixed costs and variable costs (Saputra et al., 2020).

Income is the amount of revenue obtained from business results greater than the amount of expenses or total costs (Saputra et al., 2020). Income is also said to be the total money received by breeders which is the result of the business being run where the income has been reduced by the costs in production activities. Income is the amount of money received by the breeder's industrial business after deducting expenses, after deducting the amount of expenses which are then reduced again by administrative/marketing costs in order to calculate the income or profit earned by the breeder's business industry (Irwan et al., 2020). Income is the profit received by farmers from the results of their business (Akbar, 2019). Income is the difference between revenue and total costs incurred by farmers (Evadewi and Sukmaningsih, 2021).

METHODOLOGY

This study examined the physico-chemical quality of cork fish flour with the application of several processing methods. The experimental design used in the study was a completely randomised design (CRD) with three replications. The research was conducted in the Fishery Product Processing Technology laboratory, Chemistry laboratory and Microbiology laboratory at the Department of Fishery Product Processing Technology, Pangkep State Agricultural Polytechnic.

This research was conducted in June 2024. This research took place in Attangsalo Village, Ma'rang District, Pangkep Regency. The method used in this research is descriptive quantitative method, which describes the results of research using statistical numbers through surveys, including certain data collection, by giving questionnaires to respondents and conducting direct interviews with broiler breeders with the aim of finding out related information, data which is then concluded and given suggestions.

Population in research is the total number of subjects in the area that researchers want to study that have certain qualities and characteristics. And also

the population of farmers in Attangsalo Village, Ma'rang District, Pangkep Regency, totaling 14,000 heads and 24,000 heads.

The sample in research is part of the population that wants to be the object of research to be carried out. The sample taken in this study is the Al-An'am Animal Husbandry business. The criteria or reason for taking the sample above is the scale at Al-An'am Ranch, which is 24,000 heads and 14,000 heads and makes it easier for researchers to collect primary and secondary data because it has been discussed and permitted in recording.

The method used is descriptive method with observation technique. Observation is an activity by making observations first and then recording systematically objectively, logically and rationally of events in an actual situation or planned situation. The types of data collected include primary data (main data) and secondary data (Laili et al., 2022). Primary data was obtained by researchers through direct observation and direct interviews with broiler farmers in closed house cages in Attangsalo Village, Ma'rang District, Pangkep Regency.

Research data were collected using observation, interview, survey and documentation techniques. Observations were carried out for 1 week, carried out by means of documentation, namely looking at harvest data bookkeeping and interviews, namely data collection conducted through direct interviews with farmers using questionnaire tools.

RESULTS AND DISCUSSION

Production Cost

Production costs are classified into fixed costs and non-fixed costs. The costs that must be incurred by broiler farms in Ma'rang Subdistrict consist of fixed costs and variable costs. Fixed costs that must be incurred by independent broiler farmers in Ma'rang Subdistrict consist of depreciation of cages and equipment, while costs incurred for livestock production facilities such as day old chicken (DOC) seeds, feed costs, medicine, electricity and diesel.

Table 1. Total Cost of Production on Closed House Farm

Periods	<i>Semi Closed House Farm Al-An'am</i>		
	Fix Cost (Rp.)	Variabel Cost (Rp.)	Total Production Cost (Rp.)
I	29.509.730	910.156.565	939.666.295
II	29.509.730	959.568.717	989.078.447
III	29.509.730	1.206.777.579	1.236.287.309
IV	29.509.730	786.499.860	816.009.590
V	29.509.730	965.555.482	995.065.212
VI	29.509.730	847.379.063	876.888.793
VII	29.509.730	892.636.723	922.146.453
VIII	29.509.730	1.131.632.902	1.161.142.632

Source: Primary Data After Processing, 2024

Based on Table 1 shows that the costs incurred during the four periods of fixed costs and variable costs on broiler farmers in Ma'rang sub-district during the first period amounted to Rp. 939,666,295, the second period amounted to Rp.989,078,447, the third period Rp.1,236,287,309 and the fourth period Rp.816,009,590, the fifth period Rp. 995,065,212, the sixth period Rp.876,888,793, the seventh period Rp.922,146,453, in the eighth period Rp.1,161,142,632.

The increase in production costs each period can be seen from the cost of purchasing DOC and feed. Both have a significant increase compared to other variable costs. Mufid and Wawan (2016) explained that every harvest period the costs incurred are fluctuating or up and down. The amount of costs most incurred is the cost of feed. Feed costs cannot be constant at one price and one type of feed in each production period. Several factors cause farmers to have higher feed costs, because the entire feed given to livestock is a complete feed for both the starter and finisher phases so that in the maintenance of broilers there is no shortage of feed. The price of feed is faced with a situation where the price level of raw materials for making feed.

Reception

Revenue is the total number of products successfully sold multiplied by the price of that product, so revenue is the overall result of the number of goods or products successfully sold multiplied by the price of goods that apply at that time, The period and period of time can be one hour, one day, one year or other periods. Taste, the price of an item, the amount of consumer income, consumer confidence in certain goods, advertising, and so on taking into account the circumstances that must be considered. Al An'am Broiler Farming Business in one period of raising chickens is harvested in stages up to six harvests.

Table 2. Total revenue of Semi Closed House and Closed House Al-An'am

Periods	<i>Semi Closed House Farm Al-</i>	<i>Closed House Farm</i>
	<i>An'am</i>	<i>Al-An'am</i>
	Chicken Sales (Rp.)	Chicken Sales (Rp.)
I	599.025.418	999.195.238
II	562.400.320	1.099.464.132
III	699.198.200	1.271.198.820
IV	610.001.200	937.001.200
V	562.113.220	1.469.213.200
VI	540.244.100	1.110.244.150
VII	517.918.780	1.117.998.820
VIII	497.891.260	1.397.701.260

Source: Primary Data After Processing, 2024

The results of primary data processing in Table 2 show that if the scale of the business is small then the sales results are small and in period four the total revenue is lower, this is because the average mortality rate reaches 2.5% so that the acceptance of small farmers. Livestock business revenue is the result received from the main sales efforts of the livestock business being run, while the capital used for the business is not included in it. The selling price set in the market multiplied by the amount of business production is the gross revenue obtained through the livestock business. (Siregar, 2009). Siregar (2003) stated that the amount of chicken sales will depend on body weight gain and the price per kilogram of chicken. The price is determined based on the live weight of the chicken. The price continues to fluctuate with market demand and supply. The amount of breeder revenue can be analyzed by means of the predetermined product price multiplied by the amount of business production, as well as the sale of feces that are traded.

Revenue

Income is the difference in total cash receipts minus all costs sacrificed in a period of maintenance or production. The total costs in question are fixed costs (including depreciation costs) and variable costs, while revenue comes from the sale of broilers in four maintenance periods. The total effort obtained is a measure of the success of broiler farming.

Table 3. Comparison of farmers' income over 8 periods

Periods	<i>Semi Closed House</i>		<i>Closed House</i>	
	Population (chicken)	Revenue (Rp.)	Population (chicken)	Revenue (Rp.)
I	14.000	89.307.489	24.000	59.528.943
II	14.000	79.860.261	24.000	110.385.685
III	14.000	74.498.972	24.000	34.911.511
IV	14.000	161.280.136	24.000	120.991.610
V	14.000	119.839.691	24.000	474.147.988
VI	14.000	81.509.266	24.000	233.355.357
VII	14.000	68.789.884	24.000	195.852.367
VIII	14.000	31.438.492	24.000	236.558.628

Source: Primary Data After Processing, 2024

Table 3 shows that the comparison of farmers' income over the past 2 years with a population of 14,000 heads in semi-closed house cages, the income earned increased in period IV by Rp.161,280,136 and V by Rp.119,839,691 then in periods VI, VII and VIII decreased in income, namely period IV by Rp.81,509,266, period VII by Rp.68,789. The lowest income at Semi Closed House Farm Al-An'am is in the eighth period, this is due to lower chicken sales compared to periods 1,2,3,4,5,6 and 7 market prices which are lower than sales in other periods. meanwhile, a cage with a population of 24,000 close house cages using technology increases in each period. A very significant decrease in total income only occurred in the first period of Rp.59,528,943 and the third period of Rp.34,911,511 this was due to the use of feed and medicine costs which were greater than in other periods. This shows that farms that use technology (closed house) are much better run this is because in closed house farms farmers can more easily control the temperature and humidity in the cage so as to maximize the amount of production.

CONCLUSION AND RECOMMENDATION

The results of research that have been carried out and analyzed on the broiler farming business in Attangsalo Village, Marrang District, Pangkep Regency can be concluded. Farmers' income over the past 2 years with a population of 14,000 heads in semi-closed house cages the income obtained in the first period amounted to Rp.89,307,489 in the second period of Rp.79,860,261, the third period amounted to Rp.74,498,972, in the fourth period of Rp.161,280,136, in the fifth period Rp.119,839,691, in the sixth period Rp.81,509,266, in the seventh period Rp.68,789,884, in the eighth period Rp.31,438,492. While the income of farmers over the past 2 years with a population of 24,000 heads in closed houses, the income earned in the first period amounted to Rp.59,528,943 in the second period amounted to Rp.110,385,685, the third period amounted to Rp.34,911,511,

in the fourth period amounted to Rp.120,991,610, in the fifth period Rp.474,147,988, in the sixth period Rp.233,355,357, in the seventh period Rp.195,852,367, in the eighth period Rp.236,558,628. The broiler farming business in Attangsalo village, Marrang subdistrict, Pangkep Regency against semi-closed house cages with closed houses shows that the income of using technology is more increased, this can be seen from the fixed costs, depreciation costs, variables and income from the research results.

ADVANCED RESEARCH

Based on the findings from the broiler farming business analysis in Attangsalo Village, Marrang District, further research could explore factors contributing to the significant income fluctuations across periods, especially comparing semi-closed and fully closed house cage systems. Given that closed houses appear to support higher income levels due to better control over production conditions and costs, future studies could investigate specific technological improvements that enhance efficiency. Additionally, expanding the sample size and tracking long-term income trends could provide a more comprehensive view of how different housing systems impact broiler farming profitability. Researchers could also examine environmental and management factors, such as climate control and feed efficiency, which might play a role in maximizing profits in closed house systems.

REFERENCES

- Aprizal, R. R. 2019. Analisis Perbandingan Sebelum Dan Sesudah Penerapan Biaya Standar Dalam Pengendalian Biaya Produksi Pada PT Bogor Kopi Indonesia (Doctoral dissertation, Fakultas Ekonomi Dan Bisnis Universitas Pakuan).
- Bahtiar, M. I. 2020. Analisis Kelayakan Usaha Ternak Ayam Broiler (Studi Pada Peternakan Bapak Sumali di Desa Sidokerto Kecamatan Mojowarno Kabupaten Jombang) (Doctoral dissertation, IAIN Kediri).
- Bahtiar, M. I. 2020. Analisis Kelayakan Usaha Ternak Ayam Broiler (Studi Pada Peternakan Bapak Sumali di Desa Sidokerto Kecamatan Mojowarno Kabupaten Jombang) (Doctoral dissertation, IAIN Kediri).
- Budiraharjo, K., & Handayani, M. 2008. Analisis profitabilitas dan kelayakan finansial usaha ternak itik di Kecamatan Pagerbarang Kabupaten Tegal.
- Nawawi, A. M., ANDAYANI, S. A., & DINAR, D. 2017. Analisis Usaha Peternakan Ayam Petelur (Studi Kasus Pada Peternakan Ayam Petelur Cihaur, Maja, Majalengka, Jawa Barat). *Agrivet: Jurnal Ilmu-Ilmu Pertanian dan Peternakan (Journal of Agricultural Sciences and Veteriner)*, 5(1).
- Ratnasari, R., Sarengat, W., & Setiadi, A. 2015. Analisis pendapatan peternak ayam broiler pada sistem kemitraan di Kecamatan Gunung Pati Kota Semarang. *Animal Agriculture Journal*, 4(1), 47-53.

- Safitri, A. R. 2022. Keuntungan Usaha Ayam Petelur pada Berbagai Skala Pemeliharaan di Kecamatan Lalabata, Kabupaten Soppeng= Profits from Laying Chicken Business at Various Maintenance Scales in Lalabata District, Soppeng Regency (Doctoral dissertation, Universitas Hasanuddin).
- Safitri, A. R. 2022. Keuntungan Usaha Ayam Petelur pada Berbagai Skala Pemeliharaan di Kecamatan Lalabata, Kabupaten Soppeng= Profits from Laying Chicken Business at Various Maintenance Scales in Lalabata District, Soppeng Regency (Doctoral dissertation, Universitas Hasanuddin).
- Saputro, B. E. 2018. Analisis Pendapatan Peternak Ayam broiler Pola Kemitraan di kecamatan pajangan Kabupaten Bantul (Doctoral dissertation, Universitas Mercu Buana Yogyakarta).
- Samekarian, H. 2018. Analisis Ekonomi Peternakan Ayam Broiler Pola Kemitraan Dan Mandiri Di Sleman Utara Kabupaten Sleman (Doctoral dissertation, Universitas Mercu Buana Yogyakarta).
- Shintya, R. 2020. Umur Panen Dan Tingkat Keuntungan Usaha Peternakan Ayam Pedaging Pola Usaha Mandiri Di Kenagarian Sungai Beringin Kecamatan Payakumbuh Kabupaten Lima Puluh Kota (Doctoral dissertation, Universitas Andalas).
- Simanjuntak, M. C. 2018. Analisis usaha ternak ayam broiler di peternakan ayam selama satu kali masa produksi. *Jurnal FAPERTANAK: Jurnal Pertanian dan Peternakan*, 3(1), 60-81.
- Subowo, E., & Saputra, M. 2019. Sistem Informasi Peternakan Ayam Broiler Di Kabupaten Pekalongan Berbasis Web Dan Android. *Jurnal Surya Informatika: Membangun Informasi dan Profesionalisme*, 6(1), 53-65.
- Wulandari, R. 2019. Strategi Pengembangan Urban Farming Sayuran Hidroponik "Pekanbaru Green Farm" Di Kelurahan Labuh Baru Timur Kecamatan Payung Sekaki Kota Pekanbaru (Doctoral dissertation, Universitas Islam Riau).