# ANALYSIS OF INCOME AND BUSINESS FEASIBILITY AT UMBU BAHI'S BROILER CHICKEN FARM IN KAMBAJAWA VILLAGE

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#### **ABSTRACT**

This study aims to determine the income of broiler breeders with an independent system in the Kambajawa village. The data collection method is through a case study on one of the broiler breeders, Mr. Umbu Bahi. This research activity uses the interview method and direct data collection in the field at Mulan from October 2022 to March 2023. The research variables analyzed include: total costs, total revenue, total income, R/C ratio, and B/C ratio. Data analysis used descriptive analysis for 1 year when the livestock business was run. The results showed that the average total income of Mr. Umbu Bahi's broiler breeders were IDR 99,780,000 / year with an average monthly income of IDR 8,315,000 / month, the R/C ratio was 1.48 and the value B/C ratio of 0.48.

Key words: Broiler chicken, total cost, total receipt, total revenue

#### INTRODUCTION

The livestock subsector is part of the agricultural sector which has an important role in supporting the regional and national economy. Poultry business in Indonesia has become a business that has complete components from upstream to downstream sectors. The development of livestock businesses makes a real contribution to agricultural development and has strategic value, namely meeting domestic animal protein needs and providing employment opportunities for the community.

However, a business cannot be separated from its share of problems/constraints. The problems that often occur in the broiler chicken farming business are production and income. In the production section, problems that often occur can be seen from the death rate caused from various sources, the highest death rate occurs in the first week of rearing where the death rate is high when the chickens are 1-3 days old. In terms of income, the problems that often occur are decreasing market demand, farmers' lack of mastery of technology, rising feed prices and fluctuating selling prices for broiler chickens.

The development of the broiler farming business in Indonesia, which is more towards commercial business, can be seen from the rearing system which is increasingly modern and driven by people's demands for animal protein. Meat is a source of protein that is really needed by the human body. This situation is a positive impact of increasing people's income and education which leads to public awareness of highly nutritious products, as well as increasing the scale of consumers. Broiler chicken farming is one of the livestock sectors that produces animal food that has high nutritional value. The genetic development of broiler chickens is increasingly rapid, so that broiler chickens are no longer slaughtered at 35 days of age but rather at 29 days of age. Broilers are breeds of chicken that are deliberately bred and developed to produce meat faster than other birds. Fast broiler growth needs to be supported by providing the necessary food substances, so that body weight gain and ideal ration conversion can be obtained (Rasyaf, 2008).

Broiler chickens are the most economical livestock compared to other livestock. The advantages of broiler chickens include very fast growth with a high body weight in a relatively short time, low feed conversion, ready to be slaughtered at a young age and producing quality soft-fiber meat. The rapid development of broiler chickens is also an effort to balance society's need for chicken meat. This development is supported by the increasingly strong downstream industry, such as breeding farms which produce various types of strains. The development of the livestock sub-sector is an inseparable part of agricultural development in general and aims to increase people's income and standard of living, expand employment and business opportunities and meet appropriate food and nutritional needs. The development of business, especially purebred chickens in East Nusa Tenggara Province, has increased significantly from year to year, as an illustration of data from 2015 shows the population of broiler chickens was 2,687,269 and in 2019 there were 7,300,378 or an average population increase of 12.4 % per year (Central Statistics Agency, 2019; Mulyantini, 2009). The development of the broiler chicken farming business needs to be studied so that it is known what the profit margin of a broiler chicken farming business is. Therefore, researchers feel it is necessary to conduct case study research on Mr. Umbu Bahi's broiler chicken business Kambajawa Village.

### **MATERIALS AND METHODS**

This research was carried out for 6 months from October 2022 to March 2023 in Kambajawa Village, Waingapu City District, East Sumba Regency. The research location was determined deliberately (purposive

sampling) with the following considerations; Firstly, the Waingapu City District which was used as a research location is a good place in the broiler chicken farming business process because this area has a high number of livestock areas in the broiler chicken farming business and can meet production factors. Second, the sub-district that will be used as a research location is an area that is easy to reach by the public and by means of transportation. Third, the subdistrict that will be used as a research location is an area close to the community's business development area and will be used as a research location. This location was chosen based on the consideration that in Umbu Bahi in Kambajawa Village there are several Broiler Chicken farming businesses (independent breeders) both those that have been established for quite a long time and livestock businesses that are still relatively new in raising broiler livestock.

#### RESULTS AND DISCUSSION

Production costs consist of fixed costs and variable costs incurred during one broiler chicken breeding period. Fixed costs incurred by Umbu Bahi farmers for the broiler rearing business in Kambajawa subdistrict with investment costs for buildings and equipment amounting to Rp. 9,560,000, where the costs used were for investment in the form of building a chicken coop, drilled well, and feeding and drinking equipment. The fixed costs in the form of investment in cages and equipment are subject to depreciation costs of 1.74 million per year (Table 1).

Table 1. Fixed Costs of Broiler Chicken Business

No	Description	Amount	Unit price Rp	Total (Rp)	Economic Age (Years)	Depreciation /Year
1	Pen	1	5.000.0000	5.000.000	5	1.000.000
2	Feed place	22	50.000	1.100.000	4	275.000
3	Drinking places	22	30.000	660.000	4	165.000
4	Boreholes	1	3.000.000	3.000.000	10	300.000
Tota	al Fixed Costs			9.560.000		1.740.000

Variable costs for a year on Mr. Umbu Bahi's broiler chicken farm in Kambajawa sub-district is IDR. 204,480,000. These variable costs are used to purchase DOC. feed, vitamins, electricity, and labor costs. Based on the research results of Elpaewati et al. (2018), the total variable costs for the broiler chicken business in Cibinong Village are IDR 594,354,600, of which IDR 92,400,000 is used to purchase DOC, IDR 421,980,000 for feed, IDR 21,357,000 for medicines, IDR 12,000 for electricity. ,000, 15,064,280,000, petrol Rp. labor Rp. 1,216,000,000, detergent Rp. 104,000, disinfectant Rp. 2,380,000, gas Rp. 20,400,000, chlorine Rp. 720,000, husk Rp.

3,740,000, and meal allowance of IDR 3,200,000. Based on this comparative data, it can be seen that the results of interviews and observations of the chicken farming business in Mr. Umbu Bahi are not very complete, where there are only 5 sources of costs in variable costs compared to the report by Elpaewati et al. (2018) reached 12 sources of variable costs. The largest use of variable costs in the selection of Mr. Umbu Bahi's broiler chickens is feed costs at 58.74% of the total variable costs for a year. This value is not much different from the report by Kamang et al. (2022) that feed costs are the largest costs in the broiler chicken business at 59.85% of variable costs.

Table 2. Broiler Chicken Business Costs

No	Details	Amount	Unit Price (Rp)	Total Fees/Year (Rp)
1	DOC	48	1.350.000	64.800.000
2	Feed	264	455.000	120.120.000
3	Vitamin	96	35.000	3.360.000
4	Electricity	12	350.000	4.200.000
5	Labor	12	1.000.000	12.000.000
		Total Variable Costs		204.480.000

#### 4.2. Broiler Chicken Business Acceptance

Based on Table 3, the annual income from Mr. Umbu Bahi's broiler chicken farming business in Kambajawa Village is IDR 306,000,000 / year. This income was obtained from sales of 4,080 broiler chickens during the year. Based on the results of interviews, it is known that the chicken mortality rate is quite high with an average value of 15% in each rearing period. Chickens are usually sold at 1.5-2.5 kg with an average price of IDR 35,000 / kg live weight. Based on this, the selling price of chickens is calculated at an average of IDR 75,000 / head with a normal weight when sold weighing 2 kg / head. In this broiler chicken farming business, there is no sale of chicken feces, where the dried feces are then piled up and used by local residents to make fertilizer. Fahruningsih and Rinda (2021) reported that there is one independent business broiler chicken breeder in Maklalut Village who has a chicken meat sales value of IDR 750,000,000 / year with a total income of IDR 45,750,000 / year. Other results were also reported by Kamang et al. (2022) that the average income from the broiler chicken business in Kambajawa Village is 269 million rupiah per year. This difference in acceptance in the broiler chicken business is of course due to various factors including the scale of the rearing business which has a big impact on the maintenance of broiler chickens.

Table 3. Broiler Chicken Business Revenue

No	Description	Amount	Unit price (Rp)	Total Revenue / Year (Rp)
1	Chicken sales	4.080	75.000	306.000.000
2	Sale of feces	-		
		Total Revenue		306.000.000

#### 4.3. Broiler Chicken Business Income

Income or profit is the goal of every type of business. Profit can be achieved if the amount of income obtained from business results is greater than the amount of expenditure. The higher the difference, the greater the profit that can be obtained. It can also be interpreted that economically the business is worth maintaining or continuing. If the situation is reversed, the business suffers losses and is not economically viable to continue. The income of Mr. Umbu Bahi's broiler chicken business based on several maintenance periods and interviews can be seen in Table 4 below.

Table 4. Broiler Chicken Business Income

No	Description	Total / Year (Rp)
1	Total cost	Rp 206.220.000
2	Revenue	Rp 306.000.000
3	Benefit	Rp 99.780.000

Based on Table 4 above, the income of Mr. Umbu Bahi's broiler chicken business in Kambajawa Village is IDR 99,780,000 / year, or the equivalent of IDR 8,315,000 / month. The income from the business of raising broiler chickens on Mr. Umbu Bahi's farm is greater than the income from the East Sumba Regency minimum wage of IDR. 2,100,000 / month (BPS East Sumba Regency, 2023). This income is obtained from the sum of all receipts in the form of sales of chicken meat subtracted from all fixed and variable costs in one year. Radandima et al. (2022) and Sudarma et al. (2021) shows that the value of profit can also be measured from the use of feed in poultry, where the most efficient feed will provide the most profit. This income value is very high when compared with the results reported by Kamang et al. (2022) that the income of chicken farmers in Kambajawa Village is IDR 46,840,000 / year or the equivalent of 3.9 million rupiah per month. This difference is due to the different selling values of chickens, where the livestock business owned by Umbu Bahi has an average selling value of chickens of IDR 75,000 per head, whereas based on the report by Kamang et al. (2022) only IDR 60,000 /head. This is of course very fluctuating considering that the selling price of chicken meat products relatively fluctuates.

**Feasibility of Broiler Chicken Business** 

Table 5. Business Feasibility Analysis Values

No	Description	Value	
1	R/C	1,48	
2	B/C	0,48	

## Revenue/ Cost (R/C) Ratio

Based on Table 5 above, the R/C ratio value for Mr. Umbu Bahi's broiler chicken business is 1.48. This shows that the R/C value is greater than one (1) so that this broiler chicken business is declared feasible or profitable. The results of this report are higher than the results reported by Kamat et al, (2022) that the R/C value for one of the breeders in Kambajawa Village was 1.21. This value is of course quite different, where the R/C value of 1.48 shows that with capital of 1 rupiah, the farmer is able to generate income of 1.48 rupiah or almost 50% of the investment value returned in the first year of business.

# Benefit/Cost (B/C) ratio

The profit over cost ratio (B/C ratio) is a comparison of opinions to costs incurred. Based on table 4, it is known that Mr. Umbu Bahi's broiler chicken business income is IDR 99,780,000 / year while the total costs incurred are IDR 206,220,000 / year, so the B/C ratio value is 0.48. This shows that the B/C value is greater than zero (0) so that this broiler chicken business is worth running. The results of this study are higher than the results reported by Kamang et al. (2022) where the B/C ratio in Mr Aris Umbu Pari's broiler chicken business is only 0.21. This is apparently due to the higher selling price of chickens (Rp. 75,000/head compared to Rp. 60,000/head) which ultimately determines the amount of profit obtained.

#### **CONCLUSION**

The income from the broiler chicken business on Mr Umbu Bahi's farm is IDR 99,780,000 per year or the equivalent of IDR 8,315,000 per month. Mr. Umbu Bahi's broiler chicken farming business was declared feasible to run with an R/C Ratio value of 1.48 and a B/C value of 0.48.

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