

Implementation of Digital Applications to Broiler Chicken Farmers in Jenggawah District, Jember District



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ABSTRACT: Research data collection was carried out on July 1 – October 30, 2022, at breeders in the Jenggawah sub-district, Jember district. The purpose of this study was to find out the analysis of partnership pattern broiler farming in Jenggawah sub-district, Jember district. The research method used is a type of survey method. The data used in this research are primary and secondary data. The sample is used all at once, constituting the entire number of breeders, this is because broiler breeders in the partnership pattern in Jenggawah, Jember district, only have 1 breeder. The data obtained was analyzed descriptively using tables of available numbers, then conducting a description using economic formulas in accordance with the research objectives. Based on the research results of the Partnership Pattern Broiler Farming Business Analysis in Jenggawah District, Jember Regency, income has increased erratically despite experiencing profits. The average profit of breeders per period per head is Rp. 16,300,790, Rp. 20,100,200 and Rp. 30,268,900. The R/C analysis shows that the business of raising broiler chickens is profitable because the R/C value is > 1 , the average R/C value for one sub-district is 2.045. And based on the product BEP analysis and price BEP in the last 3 periods, it still fluctuates. product BEP and price BEP. However, the broiler chicken farming business in Sumber Rejo sub-district continues to experience a breakeven point, does not experience a profit and does not experience a loss, if the nominal value of the average product BEP is only 35,000 heads and the BEP price is only Rp. 40,000. The conclusion that can be drawn is to review from the analysis researched by the author, the business is still feasible to run and develop.

I. INTRODUCTION

The livestock industry is one of the agricultural sub-sectors because animal husbandry is an activity of cultivating chickens starting from caring for, feeding and administering vaccines so that chickens are ready to be sold/consumed by consumers. This broiler chicken (broiler) is also a chicken that is often needed by the market, besides the considerable consumer demand, broiler chicken is also very easy to get, both in traditional markets and in modern markets, so there are quite a lot of broiler chicken breeders.

An interesting business activity studied in the livestock sub-sector is the broiler agribusiness business. Broiler chickens, also called broiler chickens, are one of the most promising livestock commodities because their production is fast enough to meet market needs compared to other livestock products. In addition, the advantages of broiler chickens include very fast growth with high body weight in a relatively short time. small feed conversion, ready to be cut at a young age and produce quality soft fibrous meat. The rapid development of broiler chickens is also a handling effort to balance people's needs for chicken meat.

Broiler chicken business is a superior breed resulting from crossbreeding of chicken breeds that have high productivity, especially in producing chicken meat. In fact, broiler chickens have only become popular in Indonesia since the 1980s, when those in power announced the promotion of ruminant meat consumption, which at that time was difficult to empower. Until now, broiler chickens have been known by the people of Indonesia with their various advantages. Only 5-6 weeks can be harvested, with a relatively short and profitable rearing time, so many new breeders and seasonal breeders have sprung up in various parts of Indonesia.

The development of poultry is always volatile at any time, this can be seen from the prices of poultry products which always go up and down, not even just weekly but up to daily prices. Rising and falling prices are influenced by various factors,

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including people's purchasing power of the poultry product itself. Therefore the poultry business is categorized as a high risk business (high risk). Most of the actors in the poultry business, especially broiler chickens, are private companies, for this reason, the government's intervention is no longer needed, but the government is obliged to help maintain a balance of supply and demand so that supply and demand fluctuations do not occur.

Some of the main problems in the poultry industry include: (1) Not having online marketing through marketplaces (2) Lack of quality human resource management, (3) Not having a business activity bookkeeping system.

Broiler farming is divided into two patterns, namely the independent pattern and the partnership pattern. In principle, independent breeders provide all production inputs from their own capital and are free to market their products. Decision-making includes when to start breeding and harvesting livestock, as well as all benefits and risks borne entirely by the breeder (Supriyatna et al, 2006). There are several factors that cause broiler farming businesses to be managed independently by most broiler breeders, namely: 1. Maintenance is quite easy; 2). Maintenance time is relatively short (\pm 4 weeks) because the marketing system is in the form of tails; and 3). The rate of return on capital is relatively fast. But apart from that there are several things that become obstacles, namely: 1). Production facilities are lacking; 2). Inadequate breeder management/skills; 3). Capital is relatively limited.

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The partnership pattern is a broiler farming business carried out with a plasma core pattern, namely a partnership between partner breeders and partner companies, where the partner group acts as the plasma, while the partner company is the core. In the current broiler plasma partnership core pattern, partner companies provide livestock production facilities (saponak) in the form of: DOC, feed, medicines, vitamins, technical guidance and marketing the results, while the plasma provides cages and labor. The motivating factors for breeders to join the partnership pattern are: 1). Availability of livestock production facilities; 2). Availability of experts; 3). Working capital from the core; 4). Guaranteed marketing. However, there are several things that become obstacles for partnership pattern breeders, namely: 1). The low bargaining position of the plasma party on the core party; 2). Sometimes there is a lack of transparency in determining input and output prices (determined unilaterally by the core). Plasma's inability to control the quality of saponak it buys causes losses for plasma.

Along with the improvement in the national economy and increasing public purchasing power, this has resulted in an increase in demand for broiler meat, resulting in an increase in broiler meat prices. This condition stimulates independent breeders to return to broiler farming but due to limited capital, this opportunity is difficult for independent breeders to achieve, unless they change the independent pattern to a partnership pattern. In the broiler partnership program, it seems that the partnership pattern is considered as an appropriate concept in solving the problem of the sustainability of people's livestock businesses. Through partnerships, it is hoped that mutualistic symbiosis can quickly occur so that the shortcomings and limitations of breeders can be overcome. The shift of broiler breeders from an independent business model to a partnership pattern means changing the structure of the people's broiler poultry industry. This has an impact on breeder income.

Jember Regency, especially Jenggawah District is one of the areas that has developed broiler chicken farms. In Jember Regency, the highest population of broiler chickens is in Jenggawah District.

As for the initial site survey that had been conducted previously, it was found that almost all of the farms raising broiler chickens in Jenggawah District, Jember Regency, worked together with several partnership companies. Based on these facts, it aroused the interest of the Maching Fund Team at the East Java Veterans National Development University to conduct research with the title Application of Digital Applications to Broiler Chicken Breeders in Jenggawah District, Jember Regency.

This activity will also provide benefits in supporting the achievement of the Main Performance Indicator, namely the quality of graduates. In the implementation of this activity will involve 10 students from the management study program. Students according to their competencies will be directly involved by providing training and mentoring during the activity funding period which is equivalent to 20 credits off campus. Some of the selected students already have entrepreneurship training certificates so that they have sufficient experience in the field of entrepreneurship. In addition, several students who are members also have expertise in the field of digital marketing through the various trainings they participate in. In terms of

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recording financial reports, some students are also experts in the field of Financial Management so that they are able to help partners later in business assistance. This activity will be carried out for 4 months and will involve students directly by providing training and mentoring so it is hoped that after graduation students can play a role in campus, industry and society in carrying out mentoring activities, training and product innovation so that it is hoped that later students will become creative beings, innovative and has an entrepreneurial spirit in accordance with the vision of the East Java Veterans National Development University to become a superior campus, science and technology insight and entrepreneurial spirit. In addition, the benefits of partnering with DUDI for students are as a place for student internships in learning to do business and developing their entrepreneurial skills so they are ready to enter the world of work.

The objectives to be achieved are:

1. To create partnerships between industry and universities to support the independent learning program.
2. To support industrial world partners to be more independent, innovative and competitive.
3. For a place for students to study outside the campus to support the creation of an independent learning ecosystem.
4. For a forum for lecturers to learn to partner with the industrial world as a manifestation of Higher Education's Tri Dharma activities.

Contribution to partner institutions and Estimation/Activity Contribution from activities

In detail, this matching fund is described as follows in Table 1:

Table 1. Beneficiaries of the Matching Fund Program

No	Beneficiary Group	Amount (People)
1	Chicken farmer	1 People
2	Student	10 People
3	Lecturer	4 People
4	Communities around the Chicken Seller	10 People

II. TYPES OF RESEARCH

The type of research used is a survey method. As stated by Arikunto, (2006) that surveys are direct observations in the field to find out the object to be studied. The data used in this research are primary and secondary data.

III. METHOD OF COLLECTING DATA

Data collection methods used in this study include:

- a. Observation, namely data collection carried out through direct observation of the conditions of the research location, as well as various activities of farmers in conducting broiler farming business.
- b. Interviews, namely data collection carried out through direct interviews with farmers who carry out broiler chicken farming businesses.

IV. BUSINESS ANALYSIS

a. Cost Analysis

Total production costs are all expenses for the production process during maintenance in a certain period which are formulated as follows (Suratiah, 1996 in Hartono, 2008):

$$TC = FC + VC$$

Information:

TC = Total cost or total production cost (Rp/period)

FC = Fixed cost or fixed cost of cultivation business (Rp/period)

VC = Variable cost or variable cost of cultivation (Rp/period).

b. Acceptance Analysis

According to Candra (2012) Total business revenues are all revenues obtained from sales that have not been deducted by production costs which are formulated as follows:

$$TR = (TR1 \times P) + (TR2 \times P) + (TR3 \times P)$$

Information:

TR = Total revenue or total receipts

TR1 = Meat production rate (kg)

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TR2= Faeces/Feces (Rp)

TR3=Sacks of Used Feed (Rp)

P = selling price per unit (Rp).

c. Revenue Analysis

Income is the difference between total revenue and total production costs that have been incurred which is formulated as follows (Suratiah, 1996 in Hartono, 2008):

$$\pi = TR - TC$$

Information:

π = Operating income (Rp/period)

TR = Total revenue or total business revenue (Rp/period)

TC = Total cost or total business production costs (Rp/period).

d. R/C ratio analysis

R/C ratio merupakan perbandingan antara penerimaan total dan biaya total. Berikut rumus untuk menghitung R/C ratio (Hartono, 2012):

Information:

R = Revenue (Rp/Period)

C = Cost (Rp/Period)

e. Break Even Point (BEP)

BEP is a condition where a company does not experience losses or gain profits which are formulated as follows (Candra, 2012)

V. RESULTS AND DISCUSSION

Production costs can be classified into fixed costs and variable costs. Fixed costs and variable costs are production costs incurred by livestock businesses to produce in order to achieve the target. The costs incurred each period of the harvest period fluctuate. While the one with the highest expenditure value is feed, due to following the existing feed stock, the feed cannot be consistent on just one feed, which affects the price and costs that will be incurred. From Appendix 4. In the pattern table, the fixed and variable cost data per head per period can be obtained as follows.

Table 5.1. Fixed Cost Per Period Per Head

No	Fixed cost	Amount / head	%
1	Cage depreciation costs	Rp. 455	67
2	Depreciation of cage equipment	Rp. 52	7
3	Land lease	Rp. 231	27
Amount		Rp. 738	101

Source: Processed Primary Data, 2022

Table 5.2. Per-Period Variable Cost Per-Chief

No	Fixed cost	Amount / head	%
1	Meat	Rp. 30.595	99
2	Dirt/Feces	Rp. 196	0,64
3	Feed sacks	Rp. 122	0,40
Amount		Rp. 347,595	100,04

Source: Processed Primary Data, 2022

Table of Variable Costs / Head / Period			
No	Price	Amount	%
1	Vaccines, Vitamins, And Medicines.	Rp. 308	1
2	Heating	Rp. 146	0,6
3	Skam and Newspapers	Rp. 267	0,8
4	Electricity and Water	Rp. 174	0,7
5	Feed	Rp. 21.650	78

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6	DOC	Rp. 5.180	22
7	Employee salary	Rp. 446	2
Amount		Rp. 28.171	105.1

Source: Processed Primary Data, 2022

From The Table Above It Can Be Concluded That In Broiler Farming Business, Feed Plays A Very Important Role In Ensuring The Survival Of The Business. Where As It Is Known That 76% Of The Total Livestock Production Facilities Are Spent On Purchasing Feed, The Presence Of Feed Greatly Influences The Success Of Broiler Breeders, In Particular.

Table 5.3. Total Fixed and Variable Costs Per Period Per Head.

No	Fee Type	Amount / head	%
1	Variable cost	Rp. 28.670	96
2	Fixed cost	Rp. 740	4
Amount		Rp. 29.410	100

Source: Processed Primary Data, 2022

Reception

The size of the income depends on the quantity and quality of the maintenance of the broiler chickens. Revenue from broiler chicken farming is not only from the sale of chickens, but also from the sale of manure and the sale of used feed sacks. From the list of tables, it can be obtained data per head per period is as follows.

Income

Siregar (1990) in Yoga (2008) says that income is the result of the difference between receipts and costs or expenses. From the list of tables, the income data per head per period can be obtained as follows.

Table : Breeder Income Per Period Per Head

No	Description	Rp
1	Total receipts / head	Rp. 30.200
2	Total cost / head	Rp. 29.450
Total Income / head		Rp. 59.650

Source: Processed Primary Data, 2022

Break-even point (BEP)

According to Munawir (2002) in Candra (2012) states, break even point can be interpreted as a situation where in the company's operations, the company does not earn profits and does not suffer losses (income = total costs).

R/C Ratio

Based on the R/C analysis, the broiler chicken farming business is profitable because the R/C value is > 1 . This proves that the broiler chicken business in Sumberrejo District, Bojonegoro Regency is feasible to run and develop. The following is a table of the average R/C ratio and BEP for the last 3 periods.

VI. CONCLUSIONS

The average value of R/C in broiler farming partnerships in one Jenggawah sub-district is 1.045, meaning that broiler farms in Jenggawah District, Jember Regency are feasible to run because $R/C > 1$.

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