Business feasibility analysis of quail cattle (Cortunix japonica) in quinsha farm

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Abstract. Quail is one of the livestock that is easily cultivated and has advantages, namely high egg, and meat production and a short and easy maintenance period. Another feature of quail is that it has a short life cycle, a small body that does not require a large space. The purpose of this study was to determine the feasibility of the quail laying business of Quinsha Farm (Takalar Quail House) in terms of economic aspects. The research method used is descriptive research method by analyzing the quail farm business directly in Quinsha Farm (Takalar Quail House). The results of the study of business feasibility analysis at Quinsha Farm (Takalar Quail House) are an Investment Cost of Rp. 98,000,000 - production costs Rp. 262,252,000 - receipts of Rp. 576,900,000 -, profits, Rp. 281,253,536 - R/C Ratio 1.95 B/C Ratio of 0.95 ROI of 46.20% BEP Price of Rp. 16,667 - BEP Production of 9,855 Shelves and PBP 6.27 Months. The conclusion of this Business Analysis Study is the laying quail farming business in Quinsha Farm (Takalar Quail House) that is profitable and feasible to develop.

1. Introduction
The Agriculture sector in Indonesia has a significant contribution to the Indonesian economy, trade surplus, and the primary source to meet domestic consumption [1]. One of the fields of agriculture that is quite popular lately is in the poultry farm business. The poultry farming business has the advantage in terms of productivity and the most efficient in providing meat and eggs and is a nutritious food source of the high quality, which many communities, namely the business of quail farms [2]. The advantages of high quail productivity, becoming the carrying capacity that adds to the quail farms, are becoming increasingly attractive. Recently, sales and demand for quail eggs in Indonesia has increased; many restaurants sell quail eggs as a side dish [3].

The quail is one of the cattle that today started to develop, which is being treated as a laying quail because the community favors quail eggs. In addition to egg, farmers can also utilize meat and quail dirt as an additional source of income [4]. Quail Farms are one of the most productive farming sectors in providing meat and eggs as well as highly nutritious animal source foodstuffs [5].

The development of laying quail farms in South Sulawesi is priceless enough because the public consumption rate of poultry egg production has begun to increase, but supported by the availability of excellent feedstuffs. The selling value of egg and whirlwind of rejects in each age is high enough, either egg consumption, egg tests, and egg seedlings
The business prospects and development of the quail farms are excellent, but they are still rarely publicizing and known to the public. In the management of quail farms, besides having to pay attention to maintenance management is also very important to pay attention to aspects of capital management. Quail farms are still very dependent on the commercial feed, so that the need for production costs is high [6].

2. Methods

2.1. Research approaches and types
The selection of research samples is determined purposive sampling with the assessment based on population number and livestock experience.

2.2. Location and time of research
The research took place in March-June 2019, which held in the business of laying quail farms Quinsha Farm (Quail Takalar) in Banyuanyara village, Sanrobone District, Takalar Regency, South Sulawesi Province, Indonesia.

2.3. Types and analysis techniques
The study carried out with a descriptive research method that is to directly expose the economic feasibility of the livestock business that is a sample of research with the research parameters is the cost, income, profit, R/C Ratio, B/C Ratio, Return On Investment (ROI), BEP price and products, and Payback Period (PBP).

3. Results and discussion
The results of the business feasibility analysis at the laying quail of Quinsha Farm (Quail Takalar House) showed in the table below.

Table 1. The result of the business analysis of laying quail Livestock at Quinsha Farm in the village of Banyuanyara, Sanro Bone, District Takalar.

| Description                  | Analysis of Quail Layer Breeding Business in one production period (18 months) |
|-----------------------------|--------------------------------------------------------------------------------|
| Investment Cost (Rp)        | 98,000,000,-                                                                   |
| Production Cost (Rp)        | 262,252,000,-                                                                 |
| Receipt (Rp)                | 576,900,000,-                                                                 |
| Benefits (Rp)               | 281,253,536,-                                                                 |
| R / C Ratio                 | 1.95                                                                            |
| B / C Ratio                 | 0.95                                                                            |
| Return On Investment (ROI)  | 46.20                                                                           |
| BEP Price (Rp)              | 16,667,-                                                                       |
| BEP Product (Rack)          | 9,855                                                                          |
| Payback Period (PBP) (Month)| 6.27                                                                            |

Source: Primary Data, Processed in 2019

3.1. Investment costs
The cost of investment incurred in the business of the Quail Farms is Rp. 98 million,-and the size of the Economics (JUE) cost of investment that must be issued every month is Rp. 555,248,-.
3.2. Production costs
The cost of production is one of the supporting factors in a business activity, where each farmer must spend such costs for the sustainability of the business that runs. Production costs consist of fixed costs and variable costs.

3.3. Fixed cost
The fixed cost is a cost that is not influenced by the production capacity, such as electricity and water costs, employee salaries, and JUE investments. A fixed fee that must spend in one-time production (18 months), i.e., Rp 33,394,464.

3.4. Variable cost
Variable cost is a mutable cost – change according to the big small production capacity, such as seedlings, feed, vaccines and medicines – drugs, and others. Variable costs are issued Rp. 262,252,000. -once the production period (18 months).

3.5 Admission
As revenue for one period, farmers will get Rp. 576.9 million.-.

3.6. Profit/Profit
Profit is a difference in income and profit after deducting expenses and losses. Profit is one of the gauges of operation activity and is calculated based on accrual accounting. The amount of profit obtained by the Quail Farms Quinsha Farm is total acceptance – Total cost of production (Rp. 576.9 million-Rp. 295,646,464), i.e., Rp. 281,253,536-in a single period production.

3.7. R/C Ratio
Based on the calculation of the R/C Ratio conducted on the business, Quail hatchling efforts Quinsha Farm shows that the business is profitable and worthy to be developed because the value of R/C Ratio is 1.95 meaning that is every Rp. 1,000.- cost Issued an additional acceptance of Rp. 1,950-this is in line with the opinion of Soekarwati that if R/C Ratio > 1, then the business that runs is profitable or feasible to be developed, but if the R/C Ratio of the < 1, then the business Loss or abnormal development. Furthermore, if R/C Ratio = 1, then the business is at breakeven (Break-Even Point).

3.8. B/C Ratio
B/C Ratio (Benefit-Cost Ratio) is the size of the comparison between the revenue and the total cost of production. The size of the B/C ratio obtained from the Business Quail Farms Quinsha Farm is 0.95, and it is worth to be developed because the number > 0 means that each expenditure of Rp. 1,000-will make a profit of Rp. 950. -it is in line with Soekarwiti's opinion that if B/C Ratio is > 0, then the business is run experiencing profit or prospects to be developed. If the B/C Ratio is < 0, the business is lost or unworthy of development. Next, if B/C Ratio = 0, Then the business is at breakeven (Break-Even Point).

3.9. Return On Investment (ROI)
Return On Investment (ROI) is a form of profitability ratio that is intended to measure the company's ability with an entire fund instilled in assets used for the operation of a company to produce The profit to achieved [7]. The result of the calculation of ROI obtained from the quail farming business of Quinsha Farm is 46.20%, where the number is more significant than the current bank interest rate in the year 2019 is ± 12%. So the effort has an excellent opportunity to developed.
3.10. BEP Price
BEP Price is a comparison between the total business cost of quail cattle with a total production of eggs every period. The analysis of BEP Price aims to know the price of the sale of eggs; each box can return the business capital (reaching breakeven). The size of the BEP price obtained from the business of Quail Farms Quinsha Farm is Rp. 15,667—that means with the selling price, then the business will be at breakeven or in a state of no profit and no loss, so it is necessary to sold price more than that number.

3.11. BEP Products
Production BEP is a comparison between the total cost of quail farms business with the unit sales price of egg production. Production BEP used because it benefits from knowing how much capacity to produce so that it can achieve the level of return of capital (breakeven). The size of BEP products obtained from the business of the Quail Farms Quinsha Farm is 9,855 Rak means that the amount of production that must sell at a market price of Rp. 30,000-so that the breakeven reaches the cost of capital production costs.

3.12. Payback Period (PBP)
Payback Period (PBP) is the period for the initial refund. The sooner the return then the alternative is more interesting than other alternatives. The size of the Payback Period (PBP) obtained from the Business Quail Farms Quinsha Farm is 6.27 months or six months three weeks six days, meaning that the profit earned by the company can achieve a return of initial capital during 6.27 Months.

4. Conclusions
The business of laying quail farms Quinsha Farm) in the village of Banyuanyara, Kec. Sanro Bone, Kab. Takalar profitable and worthy to developed economically because of each expenditure Rp. 1,000-will generate additional admission Rp. 1,950-with the current population of 4,000 tails can make a profit of Rp. 281,253,536.-per Period. Moreover, the maximum time of return target capital after six months three weeks. As well as being breakeven when sales production reaches 9,855 shelves and selling price of Rp. 15.67.-with ROI 46.20% and B/C 0.95.

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