

BUSINESS FEASIBILITY AND CULTIVATION MANAGEMENT OF BROILER UNDER PARTNERSHIP SCHEME

(A Case Study of Plasma Breeders and PT Charoen Pokphan Jaya Farm in the Sub-district of Kalawat, District of North Minahasa, Indonesia)

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Abstract

This study goals to investigate business feasibility of broiler cultivation under partnership scheme between plasma breeders and PT Charoen Pokphan Jaya Farm, in the Sub-district of Kalawat, District of North Minahasa, Province of North Sulawesi, and acknowledge cultivation management, income, and Break Even point value. Thus, the site of research was employed purposive method. While, selection method of respondents, as sample, was done by census sampling against 15 plasma breeders. As a result, this research finds that partnership scheme of plasma breeders and PT Charoen Pokphan Jaya Farm was Public Main Company (PIR). Reasonably, this was used since it was beneficially profitable in capital fulfillment for plasma breeders, where the main company provided production facility of husbandry and marketing insurance. Further, Break Even Point (BEP) within a unit was 6,599,03 kilograms, and breeders' averagely production mean was 8,275 kilograms. While, BEP (in Rupiah) was Rp. 14,350 /kg and its breeders' average sales was Rp. 17,822 /kg. In sum up, it shows that broiler business under partnership scheme performed by PT Charoen Pokphan Jaya Farm in the Sub-district of Kalawat had reached its BEP unit and BEP in Rupiah. The gross B/C value of broiler cultivation was 1,32. According to economic analysis, income, the measurement of BEP and gross B/C can be concluded that partnership scheme of broiler in the Sub-district of Kalawat, District of North Minahasa was beneficially profitable and feasible to be developed further.

Keywords: business analysis, income, broiler partnership

Introduction

Background

Productively, broiler has highly productivity, mainly in producing meat. It then is able to produce one kilogram of meat, only within 30-45 days. From its texture, its meat is delicately tender, and its bone is easily crushed, while biting. A better broiler is broiler consuming two kilograms of feed to produce one kilogram of its body's weight (Lima and Naas, 2005; Maulana *et al.*, 2014; Kadek *et al.*, 2015).

One of company producing broiler is PT. Charoen Pokphan Jaya Farm, a company operating in husbandry, including poultry. It specifically concerns on broiler under partnership scheme in order to increasingly assist in accelerating productivity, quantity, quality, and efficiency of broiler's well-management. In this case, PT. Charoen Pokphan Jaya Farm is provider of husbandry facility, comprising of DOC (Day Old Chick), feed, medicine, vaccine, marketing (ready-to-harvest broiler) and Field Counseling Officer (PPL) dispersedly assigned to plasma by pricing agreement in advance (contract price).

Since 1984, husbandry partnership pattern has been developed in Indonesia through People Main Company (PIR) in poultry. This company functions as parental and public breeders is its plasma, henceforth well-known as Main-Plasma. Under this partnership, it can expectedly become solution to stimulate breeders' intention as public breeders, having relatively small capital (Areerat *et al.*, 2012; Salam *et al.*, 2006).

In fact, PT. Charoen Pokphan Jaya Farm is one of broiler producing company conducting the main-plasma partnership with local breeders in the Sub-district of Kalawat. The objective is to accelerate income, improve breeders' resources, and develop better business scale from, either parental company or breeders itself. To respond such facts, there have been previously many researches observing financial profit of broiler husbandry (Nursinah *et al.*, 2012; Mappigau and Jusni, 2012; Noonari *et al.*, 2015). However, there is none of study analyzing financial profit business feasibility, and cultivation management of broiler under partnership scheme in the Sub-district of Kalawat, District of North Minahasa, Province of North Sulawesi, Indonesia. Therefore, this research is purposively aimed to know financial profit, business feasibility, and cultivation management of broiler husbandry under partnership scheme performed in the Sub-district of Kalwat, District of North

Minahasa.

Research Method

Base Method

The method used in this research was descriptive analysis, a method employed to observe status, object, condition, mindset, a series of events of human groups in present situation or a systematic, actual, and accurate description of facts, characteristics of inter-phenomena relation being investigated. Thus, the result of descriptive analysis is presented in information or remark (Sugiyono, 2009).

Application Method

In this research, application method was case study, examining individual or unit of certain social comprehensively. The design of case study provides possibility to researcher in obtaining in-depth insights concerning on basic aspects of human's behavior since case study attempts to perform comprehensive, intensive, detailed and thorough investigation (Idrus, 2007).

Sampling Method

Site

The sampling method of site performed by purposive, a sampling based on intentionality. It was considered that the Sub-district of Kalawat, District of North Minahasa had the most densely broiler population under the main-plasma partnership of PT Charoen Pokphan Jaya Farm and breeders.

Respondent

Also, the sampling method of respondent utilized purposive sampling, or deliberately selected, where data collection of respondent was taken in plasma husbandry located in the Sub-district of Kalawat, District of North Minahasa. Then, there were 15 respondents as sample of breeders according to census sampling. It is sampling method where each element of existing population is recorded and given opportunity to be selected as sample.

Data Collecting Technique

The data of this research was collected using survey technique based on list of

questions. Further, recording and field observation were performed in the research’s site in order to complete information obtained from interview.

Type and Source of Data

Data utilized in this research was primary and secondary data. Primary data was obtained from direct sources (direct information) specifically containing any information or data concerning on the research. While, secondary data was gained from second sources (third person, not main person) having information or data related to this research.

Findings and Discussion

Financial Profit and Business Feasibility of Broiler Partnership

a. Analysis of Total Cost

Total cost is cost derived from calculation of Fixed Cost (FC) and Variable Cost (VC) utilized during production process. According to research’s finding performed in the Sub-district of Kalawat, District of North Minahasa, average population of broiler was 3,865 broilers, and the rate of harvest age was 40 days. In detail, the result is presented in following Table 1.

Table 1. Total Cost Rate of Broiler Husbandry from Respondent within One Period

Cost (IDR/period)	Total
Fixed Cost	3,123,316
Variable Cost	107,335,852
Total Cost	110,479,168

According above table, expenses for broiler cultivation comprises of fixed and variable cost. During the research, fixed cost consisted of depreciation cost of cages and tools and temporary tax depreciation, while variable cost was cost of DOC, feed, OVK and operational.

Breeders under partnership scheme with PT. Charoen Pokphan Jaya Farm, in the Sub-district of Kalawat, expensed fixed cost of Rp. 3,123,316 per period (for ± 40 days) and variable cost of Rp. 107,335,852. Overall, total cost was Rp. 110,479,168 for one time period (Table 1). Similarly, this finding is in accordance

with previous research, stating that production cost of poultry business in the West Papua was Rp. 112,685,543 per production period (Widayati *et al.*, 2017).

b. Income Analysis

Income gained by breeders is multiplying result of broiler’s weight produced within one period in kilogram (kg) and contract price in Rupiah (IDR). Below is table of income from broiler production in the Sub-district of Kalawat

Table 2. Production Rate and Total of Income of Respondents within One Period

Cost	Total
Production (kg/period)	8,275
Contract Price (IDR/kg)	17,822
Income (IDR/period)	147,477,050

Based on above Table 2, total of income gained by breeders within one period is Rp. 147,477,050, derived from multiplication of production (8,275) and contract price (17,822).

c. Profit Analysis

Profit is difference of income and expenses (total cost). Table 3 below shows breeder’s profit rate observed from the research’s finding in the Sub-district of Kalawat, District of North Minahasa, as follows:

Table 3. Profit Rate of Respondents in the Sub-district of Kalawat within One Period

Description	Result (IDR/period)
Total of income	147,477,050
Total cost	110,479,168
Profit	36,997,882

In this research, total of income was gained by multiplying total of broiler production with broiler price, prevailed during the research conducted, which was Rp. 17,822 per kg of broiler. Thus, according to above Table 3, it can be concluded that profit rate of breeders per period in the Sub-district of Kalawat, District of North Minahasa was Rp. 36,997,882.

d. Gross Benefit Cost Ratio (Gross B/C)

The calculation of Gross B/C was aimed to know business feasibility of partnership husbandry in the Sub-district of Kalwat, District of North Minahasa, that was a comparison of present value benefit and present value cost. Whereas Gross B/C was > 1 , the business was feasibly performed. Contrastingly, if Gross B/C was < 1 , the business was not feasibly performed.

$$\begin{aligned}\text{Gross B/C} &= \text{total of income rate/production cost rate} \\ &= \text{Rp. } 147,477,050/\text{Rp. } 110,479,168 \\ &= 1,32\end{aligned}$$

From above calculation of Gross B/C Ratio value, breeders under partnership of PT Charoen Pokphan in the Sub-district of Kalawat depicted 1,32. Consequently, this husbandry under partnership scheme was feasibly performed since its Gross B/C Ratio value was more than 1.

e. Break Even Point (BEP)

BEP (Break Even Point) is result of production sales within certain period, which its amount is equal with expenses. Therefore, businessman neither suffers from loss, nor profit during that period, or breakeven point.

$$\begin{aligned}\text{BEP of Unit} &= \text{Total cost/Selling price per kg} \\ &= 110,479,168/ 17,822 \\ &= 6,599,03 \text{ kg} \\ \text{BEP of Price} &= \text{Total cost/Total of production} \\ &= 110.479.168/8.275 \\ &= \text{Rp.}14,350\end{aligned}$$

The result of production rate of broiler's breeders partnered with PT. Charoen Pokphan Jaya Farm, in the Sub-district of Kalawat, District of North Minahasa was 8,275 kilograms and its BEP value (unit) was 6,599,03 kilograms, so, by its production of 6,599,03 kilograms, breakeven point was achieved. Then, broiler husbandry under partnership was feasibly performed.

Moreover, BEP value (IDR/Rp) from broiler husbandry within main-plasma

partnership program with PT. Charoen Pokphan, in the Sub-district of Kalawat, District of North Minahasa touched Rp. 14,350/kg and its selling price in breeders was averagely Rp. 17,822/kg. Hence, with its selling price of Rp. 14,350/kg, breakeven point was occurred. Significantly, broiler husbandry in the Sub-district of Kalawat was feasibly performed, viewed from its BEP value according to Rupiah (IDR). Average total cost of broiler under main-plasma partnership program was Rp. 110,479,168. In addition, by population rate of 3.865 broilers, profit rate obtained was Rp. 36,997,882 with one cultivation during \pm 40 days. Likewise, this finding is similarly in accordance with Firdaus and Komalasari (2010), reporting that integration of broiler production and food crops provided beneficially profit for breeders. In contrast, this finding is against with Raut *et al.* (2017) stating that investment in broiler husbandry served big-scale profit, yet its profit was relatively small experienced in small-scale business, lower than 4500 broilers.

f. Cultivation Management of Broiler

Cultivation management stipulated from the company comprised of 1:700 ratio (one heater for 700 broilers), 1:50 ratio (one feed box for 50 DOC), and 1:50 ratio (one drinking container for 50 DOC). Specifically, for feeding box and drinking container aimed to mature broiler, its ratio was 1:30-40 broilers. Heater operated for 24 hours during 3-4 days, under feeding frequency of the first one week for 6-8 times/day. For paddy husk, total of post-brooding was maximally for 7 days, and external curtain and plafond were mandatorily available to sustain optimal temperature target during brooding phase.

DOC given to breeders was 2-3 days of age and its cultivation was 36 days. The harvest age of company's broilers was determined by company following market price, by its maximal cultivation of 40 days. Thus, the broiler's weight during harvest time was between 1,80-2,50 kg. During cultivation management process of broiler, the company provided counseling via field counseling officer (PPL), frequently once in three days, or as breeders dealt with issues, they mandatorily reported directly to PPL (Al Sharafat and Al Fawwaz., 2013).

Plasma, then, was responsible to carefully cultivate broilers, supplied by the parental company, supervised and counseled by PPL. In addition, plasma was obliged to clean and spray disinfectant along cages in order to be free from diseases derived from harvested broilers, inspect unhealthy broilers, and provide clean water for drinking. Unfortunately, the local government had not participated during

cultivation phase since all tasks were fully assigned to the company.

High mortality level of broiler was resulted from insufficient ratio used. If ratio was stipulated by the company and followed carefully by breeders and breeders could not, in contrast, supervise overweight broilers, it would affect on broiler's feeding need. Subsequently, narrow area for DOC also affected on high mortality of broiler. It was due to narrow movement of broiler and competing ability to feed with other broilers (Oloyo, 2018; Bose *et al.*, 2015)

The DOC quality supplied from the company provided adverse effect on mortality level. There were various DOCs derived from breeders. As breeders obtained better and healthy DOC, mortality could be decreasingly suppressed, and *vice versa*.

At last, it suggests that since all types of DOC can enter the parental company, and the company did not select such DOC, there should be supervisory from local government to provide criteria of better DOC given to breeders in order to minimize high mortality of broilers (Rana *et al.*, 2012)

Conclusion

Cultivation management performed by plasma breeders uses standard management stipulated by the company. It comprises of 1:700 ratio for heater and broilers, and 1:50 ratio for feeding and drinking container and DOC, respectively. While, for mature broiler, its ratio is 1:30-40 broilers. Moreover, there is PPL counseling from company in supervising broiler progress once in three days. Finally, partnership scheme of broiler performed by local breeders and PT Charoen Pokphan, located in the Sub-district of Kalawat, District of North Minahasa is financially feasible and better to be developed by other breeders.

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