MANAGEMENT OF IMPROVEMENT OF LOCAL POULTRY CULTIVATION

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ARTICLEINFO	ABSTRACT
Keywords: *Analysis,* *Business Feasibility,* *Local Chicken,* *Promotion 12.*	The purpose of this study was to determine the feasibility analysis of local chicken farming by giving a promol 12. The experimental method provides a treatment of the research object and then examines how the consequences of the treatment given. Descriptive analysis takes the problem or focuses attention on the problem as it is. The parameters observed were production costs, income, profit and loss analysis and r/c rasio analysis. Local chickensmaintenanceis a fairly efficient business based on a total r/c ratio of 1.13, P0 treatment is a more efficient business category with an arc/c ratio of 1.16 and higher than treatment using promol 12, and is feasible to develop. Local chicken smaintenancebusiness with promol 12 is not recommended because it does not provide a decent income marked by a low r/c ratio (P1 1.01, P2 1.05, P3 1.13) while P0 (1.16).
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1. INTRODUCTION

Indonesia has much high-potential poultry livestock development of national livestock. One type of poultry that has the potential big enough is the local chicken. The contribution of local chickens in donating to national meat production is not small. This indicates that the chicken Local communities have a significant role in the development of livestock in Indonesia

Indonesia and at the same time as the economic base of rural farmers to achieve advanced agriculture. Poultry farming is one of the businesses that has been had long been carried out by breeders in Indonesia. The prospect of this farming has a pretty good opportunity in the future, considering the demand for poultry meat both laying and broiler continues to increase in line with the increase income and education as well as public knowledge about the fulfillment of nutrition in increasing the need for animal protein for the family.

Local chickens have a fairly high adaptability and has a good efficiency value. In general, local chickens are kept as egg-producing chickens, both as hatching eggs and as egg consumption. Male local chickens are kept as meat-producing chickens. Chicken local meat has characteristics that are liked by the community, so promising to develop. Male local chickens are generally slaughtered on period *grower or* 3 months old and have reached more body weight from 1 kg.

Maintenance of poultry livestock is increasing not only among only entrepreneurs in the field of animal husbandry but the wider community also started fond of this livestock, in which case the local chicken farm is a part which is inseparable from the development of the livestock sector, this can be seen with the increasing demand for chicken meat year to year. Local chicken is one of the poultry whose life already attached to society. Local chickens have advantages in power high adaptability because they can adapt to various situations, conditions environment and climate change, and local weather. Local chickens have compact body shapes and good muscle composition.

The role of local chickens in people's lives, especially rural farmers, is quite prominent to improve the standard of living in general. Associated existing conditions with the main problem in the development of local chickens are low local chicken productivity.

In connection with the low productivity of local chickens, it is necessary efforts have been made to overcome this. Apart from additions *to feeds addictive* the feed one of the efforts that can be done is a manipulation of feed by using other probiotics as feed additives. Probiotics is a feed ingredient that provides benefits and can not be digested by host animal, as well as selectively stimulates bacterial growth and activity non-pathogenic digestive tract (Roberfroid, 2007). Based on the description above, the writer is interested in doing feasibility analysis research on local chicken farming by giving= promo 12.

2. LITERATURE REVIEW.

Local Chicken (free-range chicken)

Local chicken is the result of domestication of the red jungle fowl (*red jungle fowl/gallus-gallus*) which has been preserved by their ancestors for generations and spread almost throughout the Indonesian archipelago. According to Fumihito*et all.,* (1996) and Pramual*et all.,* (2013) Indonesian local chickens come from subspecies *gallus-gallus bankiva*originating from Lampung, Java and Bali. Study with molecular technology it can be proven that local chickens have kinship (genetic distance) that is close to the red jungle fowl. Thereby as for Creswell*et all.,* (1982) suggested that the chicken contained in rural Indonesia are descendants of the jungle fowl (*gallus-gallus*) which is partially has been domesticated, known as local/kampung chicken or vegetable chicken.

Chicken green forest (*gallusvarius*) did not contribute to domestication Indonesian local chicken (Sulandari*et all.,* 2007). It is proved that Crossing green jungle fowl with local chickens produces infertile F1 presumably caused by*chromosomal mismatches*. Most of the local chickens found in Indonesia are shaped compact body with relatively good body growth, hair growth perfect and there are also quite a lot of color variations (Editor of Agromedia, 2005). Widodo, W. (2002) added that the color variations of local chickens range from black, white, yellowish, brownish, dark red and combinations of colors that.

Classification of Local Chickens

Classification is a system of grouping types of livestock based on similarities and differences in characteristics. Suprijatna, et al (2005) put forward the taxonomy of local chickens in the animal world as follows:

kingdom   : Animalia
Phylum   : Chordata
Subphylum   : Vertebrates
Class   : Aves
Subclass   : Neornithes
Order   : Galliformes
Genus   : Gallus
Species   : Gallus domesticus

Hardjosubroto (1994) stated that the chickens raised by the community.

Production cost

Production costs are all expenses necessary for produce the valued product or in another sense the cost of production is the value of expenditure (Suherman, 1991). Production cost divided by 2 i.e. fixed costs *(fixed cost)*and variable costs*(variable cost)*. Fixed costs are costs that are incurred several times the production process even has to be issued even though the process does not take place production. Fixed costs consist of the cost of building the cage, purchasing equipment, and housing depreciation costs. Variable costs are operational costs meaning costs that change depending on the size of the production produced. Variable costs are costs for feed, purchase of seeds, vitamins and medicines, labor wages, litter, fuel and others (Prawirokusumo, 1990).

Income

Income is the amount of money obtained from production a business or in other words the total money obtained from the sale product. Revenue is influenced by several factors including business scale, ownership of business branches, efficient use of labor, level of production produced, capital, marketing results and the level of knowledge of farmers in handling livestock business (Amir and Knipscheer, 1999). According to Noegroho, et al (1991), stated that livestock business income represents rewards obtained by the farming family from the use of the factors of labor production, management and capital invested in the business. Income net business is the difference between income and total expenses without taking into account the labor of the farmer's family, interest on own capital and loan.

3. METHOD

Before using the instrument in data collection, the instrument test was carried out with a normality test to prove that the data obtained was normal. The design used was Completely Randomized Design (CRD). with 4 treatments and 5 replications so that there were 20 experimental units Consists of 5 birds per unit. The linear model to explain each value observations namely (Zakaria., 2011):

$$Yij = \mu + \tau i + \varepsilon ij$$

Information:
Yij   = Observations from the ith treatment with the jth repetition
μ   = Average of observations
τi   = The effect of the i-th treatment
εij   = The effect of the experimental error of the i-th treatment error on the observations jth repetition, where:

i   = Number of treatments giving promotion 12
j   = Number of repetitions of each treatment.
    Chickens were divided into 20 cage units without sex separation *(straight run)*and each chicken is labeled for easy record keeping. There are 4 treatments that will be applied with the following feed composition: P0 : Basal feed (Control)
P1 : Basal feed (0.5 gr promol)
P2 : Basal feed (1.0 gr promol)
P3 : Basal feed (1.5 gr promol)
Deuteronomy obtained comes from the following formula (Zakaria., 2011):
t(n - 1) ≥ 15
4(n - 1) ≥ 15
4 n – 5 ≥ 15
4n ≥ 15 + 5
4n ≥ 20
n ≥ 20/4 n ≥ 5
    The randomization chart was performed as follows:

Table 1. Randomization Chart

Treatment	Test				
	I	II	III	IV	V
P0	P2	P3	P0	P2	P2
P1	P3	P1	P2	P1	P1
P2	P0	P0	P3	P3	P3
P3	P1	P2	P1	P0	P0

    The purpose of experimental design is to get information maximally relevant to the research problem, with material, minimal cost and time so that research becomes more effective and efficient in terms of time, cost, effort and statistical analysis. Experimental method giving a treatment to the object of research then examined what are the consequences of the treatment given. Experimental data includes feed consumption data which is the difference from the amount of feed given with the remaining feed, feed conversion is calculated by comparing the amount feed consumed with the resulting body weight and growth Body weight is calculated based on the difference from the final body weight minus the initial body weight divided by the number of days of observation.

4. RESULT AND DISCUSSION

    Business analysis is an effort to determine the level of business feasibility to run by looking at some parameters or eligibility criteria certain. The results of the analysis of the feasibility of local chicken farming include costs production, revenue, profit and loss analysis, r/c ratio presented in table 5 as in Appendix 10, detailed data for each parameter is presented in the sub next chapter.
    Production costs are all expenses necessary for produce the valued product or the amount of the expenditure value removed during production. Production costs used in business analysis The feasibility of local chicken farming includes fixed costs and variable costs (variable costs). Fixed costs include details of depreciation costs such as expenses manufacture of cages along with the cost of equipment in the analysis of the cage feasibility of local chicken farming business. Fixed costs or variable costs depending on the size of the production produced. No cost details fixed costs include the cost of feed, purchase of seeds and variable costs (electricity, vitamins, medicines, vaccines, rice husks) and promotions 12.
    Total production costs used for 8 weeks of raising chickens The local ones that were given promol 12 were: P0 Rp.625,176, P1 Rp.626,384, P2 Rp.642,385 and P3 Rp.648,236 with a fixed fee of Rp.98,264.

As for the highest production costs were in the P3 treatment of Rp.648,236 and production costs the lowest was in treatment P0 Rp.625,176. The high cost of production issued in P3 treatment (Rp. 648,236) due to doing business maintenance of these chickens using promol 12 on feed in quantity larger (1.5 grams). The largest costs incurred in total production costs are ration costs or feed costs. This is appropriate opinion (Aritonang, 2010) states that the cost of feed has the largest percentage of the total production cost is 60-80%. Simon Pardede, (2015) adds that variable costs or are called with variable costs are usually defined as costs incurred or borne by the breeder during the production period, the size of which is affected by the scale or amount of production, that the higher the scale of production then it will be the increasing variable costs that must be borne by breeders during the production period.

Revenue is the amount of money obtained from the sale local chicken reared for 8 weeks. Income is affected by Several factors include business scale, ownership of business branches, efficiency use of labor, level of production produced, capital, marketing results and the level of knowledge of breeders in handling livestock business (Amir and Knipscheer, 1999). According to Noegroho et al (1991), states that Livestock business income reflects the rewards received by farming families from the use of the factors of production work, management and capital invested in the business.

The size of the income is influenced by how much or how little production costs incurred, the size of the income earned and also the small or large number of livestock populations kept. This matter supported by the opinion (Soekartawi, 2003), that livestock business income greatly influenced by the number of livestock sold by the breeder himself plus the ability of breeders to manage the quality of animal feed so that the more the number of livestock and the higher the quality of the feed but the price can pressed cheaper, the higher the net income earned breeder.

Total income earned for 8 weeks of raising chickens given locale promol 12 is as follows: P0 Rp.725,535, P1 Rp. 635,985, P2 Rp. 678,150 and P3 Rp. 734,400. As for the highest income namely in the P3 treatment Rp. 734,400 and the lowest income is at treatment P1 IDR 635,985. The high income earned on the treatment P3 (Rp. 734,400) due to the large number of livestock being sold and the value livestock sold is high enough so that income also increases. This matter agrees with Simon Pardede, (2015) who states income on Livestock business is affected by sales and changes in the value of livestock, meanwhile the total value of the sale and changes in the value of livestock is determined by the number ownership of livestock.

Profit and loss analysis is an analytical tool used to find out business development in a certain period of time, the components contained in the profit and loss analysis are receipts, operational costs, depreciation. Calculation of profit is very important for business management decisions run. The main purpose of profit and loss analysis is to assess capabilities business in generating profit from the main activity of a business.

Profit and loss analysis obtained in each treatment of chicken rearing local promol 12 for 8 weeks are as follows: P0 Rp. 100,359, P1 Rp. 9,600.59, P2 Rp. 35,765.5 and P3 Rp. 86,164.1, profit the highest was obtained from the P0 treatment of 100,359 and the lowest profit obtained from treatment P1 of Rp. 9600.59. These results show that maintenance of local chickens without the use of promol 12 (P0) is the result has a positive value when compared with maintenance with using promol 12 (P1, P2, P3), in other words chicken rearing business locally without giving promol 12 can be sustainable. This is appropriate opinion (Prawirokusumo, 1990) if profits are consistently positive, the company can remain in business, but if the company goes into decline production entrepreneurs can process other products to be able to bring in profit.

5. CONCLUSION

Based on the results of research that has been carried out in Village Hilir II, Hamparan Perak District, Deli Serdang Regency for 8 weeks it can be concluded that the business of maintaining local chickens by giving promol 12 is not recommended because it does not provide good income worthy of being marked*r/c ratio value*low (P1 1.01, P2 1.05, P3 1.13) while P0 (1.16).

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