INCOME ANALYSIS OF LAYER CHICKEN FARMER WITH PARTNERSHIP SYSTEM AT FARMER GROUP LAMONGGEDO JAYA IN SUB-DISTRICT BARUGA KENDARI CITY

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ABSTRACT

This study aimed to analyze the income of layer chicken farmer with partnership system at Lamonggdedo Jaya farmer group. This study was conducted in Sub-district Baruga, Kendari City on January 2017. Materials used in this study were layer chicken. Location of this research was determined by purposive sampling based on consideration that farmer group Lamonggdedo Jaya has population of layer chicken in laying phase as many as 4,609 chickens. Research variables were production cost (cage, breed, feed, medicine, vaccine, employee, electric, and water) and income source (egg and natural fertilizer). Data were collected and tabulated, then analyzed qualitatively and quantitatively by using the formula = TR-TC. Result of the study showed that income of layer chicken farmer at farmer group Lamonggdedo Jaya was Rp. 9,215.

Keywords: Layer chicken, farmer partnership, income, partnership system, farmer group

INTRODUCTION

The commodity layer hens as the development of the livestock sub-sector plays an important role as a source of family income from the sale of the main products, namely eggs, abandoned laying hens and chicken manure as well as providing employment. Workers who contribute in running the business of laying hens are the breeder family and outside the breeder family. In general, laying hens in Indonesia are smallholder farms in collaboration with companies in the form of partnerships. The company acts as a breeder partner who is expected to be able to guarantee the supply of production facilities, product selling prices and good marketing. The partnership pattern aims to solve the problem of smallholder livestock, especially those with relatively small capital ownership.

The population of laying hens in Kendari City for the last 3 years starting in 2013, 2014, 2015 was 33,450, 20,910 and 27,670, respectively. This shows that the population of laying hens in Kendari City tends to fluctuate. One of the areas for developing a partnership farm for laying breed chickens in Kendari City is in Baruga District. The population of laying hens in Baruga District since 2013, 2014, 2015 has also fluctuated with 32,000, 20,500 and 23,650 birds, respectively. These results indicate that Baruga District is an area that has the largest population of laying hens in Kendari City with a percentage of 95%, 98% and 85% (BPS Kota Kendari 2014, 2015 and 2016). Based on the population of laying hens in 2016, Kendari City is only able to produce 250 tons of eggs, while the need for eggs for residents in Kendari City reaches 2,140 tons per year. In order to meet the needs of these eggs, the government supplies eggs from South Sulawesi reaching 1,890 tons per year (Anonymous, 2016).

Laying hen farmer groups that apply a partnership pattern are farmer groups Lamonggdedo Jaya in Baruga Village. Breeder group Lamonggdedo Jaya is implementing a partnership pattern with CV Bintani with a population of 8,609 laying hens, consisting of 2,000 in the starter phase, 2,000 in the grower phase and 4,609 in the layer phase. The main objective of farmer groups through partnership schemes is to overcome limited
capital, increase income, improve the quality of breeders' resources, and increase the scale of livestock business. In this regard, breeders need to know the income from managed livestock businesses and determine which production factors are the main priority to increase productivity and support business development. Based on the background description, it is necessary to conduct research on "Analysis of Business Income of Laying Chickens for Partnership Patterns in Farmer Groups Lamonggedo Jaya, Baruga Village, Baruga District, Kendari City. The purpose of this research is to analyze income from the business of laying hens with a partnership pattern in the farmer group Lamonggedo Jaya, Baruga Village, Baruga District, Kendari City.

**METHODOLOGY**

The research was conducted in January 2017 in a group of laying hens in Lamonggedo Jaya, Baruga Village, Baruga District, Kendari City. The materials used in this study were layer hens in the layer farm group of Lamonggedo Jaya, Baruga Village, Baruga District, as well as all aspects related to the income sources of laying hens such as egg production, cages, feed, equipment and others. The location of the study was determined by purposive sampling based on the consideration that the Lamonggedo Jaya farmer group had a population of 4,609 layers of layer chickens in production. The variables taken or traced in this study include: (1) general description of the business, (2) production costs and (3) sources of income from laying hens.

Data regarding the general description of the laying hens business in the Lamonggedo Jaya farmer group was tabulated and described descriptively. The income of laying hens in Lamonggedo Jaya was analyzed using the formula (Soekartawi, 2005) as follows:

a. Production cost : 
   \[ TC = FC + VC \]
   Information : 
   \[ TC = \text{Total cost or total cost (IDR / month)} \]
   \[ FC = \text{Fixed cost (Rp / month)} \]
   \[ VC = \text{Variable cost or variable cost (IDR / month)} \]

b. Receipt of business results: 
   \[ TR = P \times Q \]
   Information : 
   \[ TR = \text{Total revenue or total revenue from laying hens} \]
   \[ P = \text{Price or selling price (Rp)} \]
   \[ Q = \text{Quantity or level of production (Kg)} \]

c. The income from the layer farm business is all revenues minus the total costs with the formula: 
   \[ \pi = TR - TC \]
   Information : 
   \[ \pi = \text{income from laying hens (Rp / month)} \]
   \[ TR = \text{Total revenue from peternak's laying hens (Rp / month)} \]
   \[ TC = \text{Total cost of laying hens (Rp / month)} \]

**RESULTS AND DISCUSSION**

**Production cost**

Production costs can be classified into fixed costs and variable costs. Fixed costs are costs that are fixed in number and do not depend on the size of the production amount, such as the cost of depreciation of the cage and cage equipment, while variable costs are costs that always change according to the size of the production volume, such as the cost of production chickens, feed, vaccines, medicines, labor, water and electricity (Rasyaf, 2005). The production costs for raising laying hens in the Lamonggedo Jaya farmer group are presented in Table 1.

Table 1 shows that the total production cost of laying hens in the Lamonggedo Jaya farmer group is Rp. 94,602,593 / month. The total production cost incurred by the partner company is Rp. 63,617,963 / month and partner breeders of Rp. 30,984,630 / month. This total cost is obtained from the total fixed costs and the total variable costs that are borne by each. The largest production costs incurred by partner companies and partner breeders, namely the cost of feed of Rp. 60,562,800, the cost of chicken production is Rp. 23,045,000 and labor costs of Rp. 8,500,000, while other costs such as depreciation of cages, vaccines and medicines, water, electricity and depreciation of cage equipment only reached Rp. 2,495,333.
Table 1. Production Costs of Laying Chickens at Farmer Group in Lamonggedo Jaya

<table>
<thead>
<tr>
<th>No.</th>
<th>Description of Costs</th>
<th>Volume</th>
<th>Average Cost (IDR / Month)</th>
<th>Total Cost (IDR / Month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shrinkage of the cage (unit)</td>
<td>3</td>
<td>416,667</td>
<td>1,250,000</td>
</tr>
<tr>
<td>2</td>
<td>Shrinkage of cage equipment (unit)</td>
<td>3</td>
<td>41,111</td>
<td>123,333</td>
</tr>
<tr>
<td>3</td>
<td>Broodstock (tail)</td>
<td>4,609</td>
<td>60,000</td>
<td>23,045,000</td>
</tr>
<tr>
<td>4</td>
<td>Feed (kg)</td>
<td>16,592.4</td>
<td>3,650</td>
<td>60,562,260</td>
</tr>
<tr>
<td>5</td>
<td>Vaccines and drugs (set)</td>
<td>1</td>
<td>837,000</td>
<td>837,000</td>
</tr>
<tr>
<td>6</td>
<td>Labor cost (person)</td>
<td>4</td>
<td>2,125,000</td>
<td>8,500,000</td>
</tr>
<tr>
<td>7</td>
<td>Water (month)</td>
<td>1</td>
<td>150,000</td>
<td>150,000</td>
</tr>
<tr>
<td>8</td>
<td>Electricity (month)</td>
<td>1</td>
<td>135,000</td>
<td>135,000</td>
</tr>
<tr>
<td></td>
<td><strong>Total Cost (Rp)</strong></td>
<td></td>
<td></td>
<td><strong>94,602,593</strong></td>
</tr>
</tbody>
</table>

Reception

Revenue from laying hens is obtained from selling eggs, selling chicken feces, selling culled chickens and selling sacks of feed. Revenue is the product of price and total production (Himawati, 2006). The source of income for the laying hens in the Lamonggedo Jaya farmer group comes from three components, namely the sale of eggs, chicken feces and culled chickens. Because the laying hens are still 12 months old while the chickens will be rejected at the age of 24 months (2 years), so the source of revenue calculated is only from selling eggs and chicken feces. As for the acceptance of partner companies and partner breeders in the layer chicken farm in the Lamonggedo Jaya farmer group is presented in Table 2.

Table 2. Business Revenues for Layer Farming in the Lamonggedo Jaya Farmer Group

<table>
<thead>
<tr>
<th>Description of Acceptance</th>
<th>Production (/ Month)</th>
<th>Unit Price (Rp)</th>
<th>Total Revenue (IDR / Month)</th>
<th>Profit Sharing (IDR / Month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales of eggs</td>
<td>3,240 shelves</td>
<td>35,000</td>
<td>113,400,000</td>
<td>73,710,000</td>
</tr>
<tr>
<td>Sales of chicken feces</td>
<td>3,000 kg</td>
<td>425</td>
<td>1,275,000</td>
<td>765,000</td>
</tr>
<tr>
<td>Reception</td>
<td></td>
<td></td>
<td>114,675,000</td>
<td>74,475,000</td>
</tr>
</tbody>
</table>

Table 2 shows that the total revenue from selling eggs and chicken feces for one month is Rp. 114,675,000. This revenue was received by the partner company for Rp74,475,000 and partner breeders of IDR 40,200,000. The business of laying hens in the Lamonggedo Jaya farmer group produces 3,240 racks of eggs or 97,200 eggs for one month with a total production of 4,609 chickens. One shelf of eggs is sold for Rp. 35,000, so the proceeds from selling eggs for one month reach Rp113,400,000. The selling price of these eggs is proportioned to partner companies of 73,710,000 (65%) and partner breeders of 39,690,000 (35%). Based on these results, the percentage of egg production in the Lamonggedo Jaya farm group reached 70.3% per day. This result is in accordance with the opinion of Mc Donald, et al. (2002) stated that the average hen day egg production of laying hens was 70%.

The revenue from the sale of chicken feces produced by laying hens in the Lamonggedo Jaya Farmer Group for one month is Rp. 1,275,000. This revenue is proportioned to partner companies of 765,000 (60%) and breeders of 510,000 (40%). The revenue per day from the sale of fertilizer is obtained from dividing the total revenue in one month divided by 30 days, so the value is Rp. 42,500 / day. The amount of manure produced in one month reaches 3,000 kg or 75 sacks (40 kg / sack) with a selling price of IDR 425 / kg or IDR 17,000 / sack. Based on these results, the revenue from laying hens is Rp. 3,822,500 / day.
Income

Income or profit is the goal of every type of business. Profits can be achieved if the amount of revenue obtained from the results of the business is greater than the total expenditure. Making high the difference, semaking increases the profits that can be obtained. This is in accordance with the opinion Parawansa (2006), which states that revenue (profit) is the difference between revenue and all costs. The income of partner companies and partner breeders in the layer chicken farm in the Lamonggedo Jaya farmer group is presented in Table 3.

Table 3. Income of Partner and Partner Breeder Companies in Layer Farming in the Lamonggedo Jaya Farmer Group

<table>
<thead>
<tr>
<th>Income Description</th>
<th>Total Income (IDR / Month)</th>
<th>Profit sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Receipts 114,675,000</td>
<td>74,475,000</td>
</tr>
<tr>
<td></td>
<td>Total Production Costs 94,602,593</td>
<td>63,617,963</td>
</tr>
<tr>
<td></td>
<td>Income 20,072,407</td>
<td>10,857,037</td>
</tr>
</tbody>
</table>

Table 5 shows that the income from the laying hens farm in the Lamonggedo Jaya farmer group that the partner companies earn is Rp 10,857,037/month. This amount is obtained from the total revenue of Rp74,475,000 reduced by the total cost of Rp 63,617,963. The income earned by partner breeders is Rp9,215,370/month. This income is obtained from the total revenue of Rp 40,200,000 reduced by the total cost of Rp 30,984,630. The result of this income is higher than the opinion of Abadi (2012), that the average income of layer breeders in one production cycle is Rp. 5,879,437 / month. This difference in income occurs due to differences in business scale and differences in the amount of costs incurred. These results indicate that economically the effortlaying hens in the farmer group in Lamonggedo Jayaworth continuing as a business venture. This business income will be greater if the scale of the business being run gets bigger. Triana et al. (2007), the average income in a livestock business provides a clear picture of the importance of breeders in developing their business even though this business requires large production costs. The production costs are large and balanced with the scale of the business, so the income level of farmers will be even greater if the management system is carried out optimally.

CONCLUSIONS

Based on the results of the study, it was concluded that the income of laying hens in the Lamonggedo Jaya farmer group was Rp. 9,215,370 / month from the profit sharing of 35% with firms, with an average egg production of 3,240 racks / month.

Suggestions given in the research are:
1. Partner companies should provide work performance bonuses to breeders so that they are motivated to work, increase income and strengthen mutually beneficial partnerships.
2. It is recommended that the contract for egg prices varies based on the size of the egg (grid).

REFERENCES
