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FINANCIAL ANALYSIS OF LAYER CHICKEN FARMS IN SUB-DISTRICT KEDUNGPRING OF LAMONGAN

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ABSTRACT

An attempt to gain a large and sustained a major target for all business activities included therein business of layer chicken farms, which in turn will improve the welfare of the farmers layer chickens. To achieve this target mitigation efforts have, one of them by knowing feasibility of layer chicken farms. The method used is the method of survey of layer chicken farms undertaken in Sub-district Kedungpring of Lamongan. The farmers layer chicken in the Sub-district Kedungpring of Lamongan as many as 9 persons, with chickens ownership from 500 up to 9000 head. The result of research show that average of result in one year at production cost equal to Rp 269,079,998 and obtained revenue equal to Rp 348,038,897 and also net profit which obtained equal to Rp 78,958,899. The result of financial analysis of this research show that Average Rate of Return (ARR) with results of 39.75%; the Net Present Value (NPV) with a value of Rp 293,633,235; Benefit Cost Ratio (B / C Ratio) with results of 2.75; Payback Period (PP) in the period of 1 year 6 months 10 days and the Internal Rate of Return (IRR) of 61.56%. In general, layer chicken farms in the Sub-district Kedungpring of Lamongan feasible to be developed. So we need a support from various parties including the government in order to further develop the business centers, especially livestock farming of layer chickens in the area are still not very large population when compared with other areas in East Java.

Key words : layer chicken farms, Sub-district Kedungpring, financial analysis

CASE DESCRIPTION

The farmers layer chicken in the Sub-district Kedungpring as many as 9 people consisting of 8 men and 1 woman, and spread in the village Gunungrejo, Kalen and Sumberagung. The farmers age varies from age 25 years to 54 years with a major work from civil servants, farmers, village head and pure private farming. The population of layer chickens in the Sub-district Kedungpring at least 500 head and at most 9000 head, with varied experience as a farmer there are also 3 years, 6 years, 7 years and 8 years. The most experienced farmer is Suparto, DVM., He was 8 years as well as a driving force farmers in the region as a provider of livestock facilities from DOC, feed, vaccines, medicines and vitamins as well as farm equipments.

Determining the location of the research done on purpose (purposive sampling) on the basis that the

business layer chicken farms in the Sub-district Kedungpring because the day of record a relatively complete on farm business and have not been studied previously and has developed a pretty good effort. The method used is survey method in this research. Singarimbun and Effendi (1995) stated that the survey method is a method of research that takes a sample of some populations and the use of questionnaires as the main data collection tool (primary). In addition to the primary data collection is also done through direct observation and in-depth interviews (Sumardjono, 1996). While the secondary data obtained from scientific reports, or literature references relevant to this study.

Based on the observation that the farms in the region Kedungpring tend to develop their business, so it is necessary of financial analysis. Feasibility study (project) is an in-

depth investigation on a series of activities that will be implemented in the future so as to know the fairness and usefulness (Ichsan, 1997). Meanwhile, according to Ibrahim (1998) that a feasibility study or feasibility study is a material consideration in making a decision, whether to accept or reject the idea of a planned effort. Understanding this is feasible in the assessment of the possibility of knowing the business ideas that will be implemented will be of benefit both in terms of financial benefits as well in terms of social benefit. Like a business in the sense of social benefit is not always feasible in the sense of describing the financial benefits. It depends in terms of assessment.

The projects being assessed in terms of social benefit analysis was projects implemented by governments and social organizations that have a positive impact on the economy as a whole such as roads, bridges, hospitals, schools and so on. While the projects being assessed in terms of financial analysis in general benefit projects implemented by individual entrepreneurs who invest in the project or directly interested in the project. Targets to be achieved in the financial analysis is the result of the share capital of which is planted in the business, such as setting up industries, plantings, farm development, trade and so on. Based on these descriptions, the business activity that is more than a social benefit assessment is often referred to as the financial benefit analysis and project evaluation business activity that promotes financial benefits rather than social benefit analysis is often referred to as business feasibility study (Suharto, 2003).

Findings and Result

Structure Analysis of Costs, Revenues and Benefits

Analysis of farm businesses generally performed to determine the benefits. Profits earned in a farm business is the difference between revenues with expenditures or expenses. To produce a product needed some item costs. Production costs consist of fixed costs and variable costs. Fixed costs are all costs that do not depend on the magnitude of the resulting production, which include the cost of rent and depreciation. While the variable cost is the cost of changing the amount of which depends on the amount of production that will be produced or in other words the costs used for something, which goods are used up in a single production process. On the maintenance of layer chickens by early maintenance of Pullet, the variable cost of the purchase cost of feed, drugs and vaccines, electricity and water, labors and others. Fixed costs of layer chickens on the farm in the Sub-district Kedungpring Lamongan include rent of the land, depreciation of chickens, depreciation of cages, depreciation of equipments and capital interest. Depreciation of chickens on the use of fixed costs, which average reached 64.15% or Rp 19,555,778 of the total fixed costs. While the total cost of fixed expenses spent by 11.33% or Rp 30,484,580 from the overall total cost.

Variable cost is a component that requires a considerable cost, reaching 88.67% or Rp 238,595,418 of the overall total cost. Variable cost of layer chicken on the farms in the Sub-district Kedungpring Lamongan include : feed, drugs and vaccines, electricity and water, labors, and others. Procurement of feed requires a considerable cost that reached 91.08% or Rp 217,315,698 of all variable costs. By looking at the feed condition is one component that must be considered for successful layer chicken farms.

Table 1. The Average Cost Structure and Revenue Layer Chicken Farms in Sub-district Kedungpring of Lamongan Over One Year

Description	Amounts (Rp)	Percent		
		a	b	c
Fixed Cost Totals	30,484,580		100.00	11.33
1. Rent of the land	691,667	2.27		
2. Depreciation of chickens	19,555,778	64.15		
3. Depreciation of cages	2,569,483	8.43		
4. Depreciation of equipments	4,404,763	14.45		
5. Capital interest	3,262,889	10.70		
Variable Cost Totals	238,595,418		100.00	88.67
1. Feed	217,315,698	91.08		
2. Drugs & vaccines	6,320,278	2.65		
3. Electricity & water	1,062,389	0.45		
4. Labors	11,534,722	4.83		
5. Others	2,362,331	0.99		
Cost Totals	269,079,998			100.00
Revenue Totals	348,038,897			100.00
1. Eggs	345,500,564		99.27	
2. Compost and sacks	2,538,333		0.73	
Gross Income		109,443,479		
Net Income		78,958,899		

Is an egg layer chicken products as a major source of revenue for farmers. Acceptance of the eggs average of 99.27% or Rp 345,500,564 of total revenue. Based on the above facts, the number of egg production and egg prices are also a component that should also get serious consideration for successful layer chicken farms.

Profits are the main target in layer chicken farms at the farmer in the Sub-district Kedungpring of Lamongan average annual gross and net profit reached Rp 109,443,479 and Rp 78,958,899.

Financial Analysis

The purpose of financial analysis is to determine whether the business layer chicken farms in the subdistrict Kedungpring feasible to be developed or not. The whole capital employed in the layer chicken farm business is generally derived from the capital itself. The assumptions used include : 1) Farmers to pay rent for the land, 2)

Farmers start a business with a stuffed chicken pullet; 3) Tax is not taken into account; 4) Cost of marketing, livestock or material brings unexpected costs included in other expenses; 5) Farmers only owes money to feed a group leader along with drugs and vaccines; 5) The prevailing bank rate of 12% annually and deposit interest rate of 6% annually and the term loan over a period of 5 years.

Farm capital structure consists of fixed cost which includes land, chickens, cages as well crockery. While variable cost includes feed, drugs and vaccines, electricity and water, labor and others. Several indicators are used for financial analysis in the form of Average Rate of Return (ARR) with results of 39.75%; the Net Present Value (NPV) with a value of Rp 293,633,235; Benefit Cost Ratio (B / C Ratio) with results of 2.75; Payback Period (PP) within a period of 1 year 6 months 10 days and the Internal Rate of Return (IRR) of 61.56%.

Table 2. The Results ARR, NPV, B/C ratio, PP and IRR on Farmers in Sub-district Kedungpring of Lamongan

ARR	NPV	B/C Ratio	PP	IRR
39.75%	Rp 293,633,235	2.75	1,529 (1 year 6 months 10 days)	61.56 %

DISCUSSION

Based on Table 1 that in general, layer chicken farms in the Sub-district Kedungpring Lamongan beneficial when it is in normal condition, meaning that if no drastic changes in the components of the feed and eggs. Because the two components (feed and eggs) is a major factor affecting the rate of profit farmers. Average gross profit earned farmers in the region of Rp 109,443,479-and net profit of Rp 78,958,899 annually.

The table 2 shows that farm businesses in the Sub-district Kedungpring for layer chickens are still worth the effort or developed. ARR results of calculations for one-year production period is equal to 39.75%, which gives the sense that for every value of Rp 1,000,000 to be invested in the layer chicken farms will provide a flat rate - average profit of Rp 397,500 annually. NPV results layer chicken farm business in Kedungpring calculated using the social discount rate of 6% (6% on deposits equivalent annually) as shown in table 2 is Rp 293,633,235. Based on the above, the NPV value of farm business is worth to be developed, because the resulting NPV is greater than zero ($NPV > 0$). Based on the analysis of B/C ratio as shown in table 2, it can be seen that the layer chicken farm business in Kedungpring results obtained B/C ratio of 2.75. Means of any capital invested Rp 1 it will generate Rp 2.75. So farmers still make a profit of Rp 1.75. PP results of this study are 1 year 6 months 10 days. This means that the layer chicken farms will cover capital tied up for 1 year 6 months 10 days. In connection with the term loan in the bank for 5 years, while the PP results are still under 5 years, the farms are still worth to be

developed. IRR is a number between revenues and expenditures have been calculated by the present value equal to zero. IRR calculations performed with several trials with the social discount rate to generate a negative NPV. Based on the value of IRR of 61.56%, the layer chicken farms business can still be profitable until the maximum lending rate 61.56%. Means the layer chicken farm business is still worth to be developed because of the value of the resulting IRR is greater than the social discount rate of 6% or the prevailing lending rate is currently at 12%.

So based on the results of financial analysis as described above, then the layer chicken farms business in Kedungpring still worth to be developed in the future. This means the business is feasible to be developed rather than save money in bank deposits which yield only about 3-5% annually (not including taxes). So we need a support from various parties including the government in order to further develop the business centers, especially livestock farming of layer chickens in the area are still not very large population when compared with other areas in East Java.

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