

BUSINESS PROFILE OF DUCK HATCHING EGGS IN WEST JAVA

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Abstract

Field research in the area of duck production center at the northern coast of West Java Cirebon, and Subang Regency has been conducted to determine the characteristics of duck hatching eggs process by using a structured survey method. Survey conducted to a group of duck eggs hatching. Interviews with several actors hatching duck eggs with using a questionnaire. Technical and economic data collected includes germ eggs, original germ eggs number of hatching eggs and number of eggs hatch, egg price, hatching process and DOD sales, DOD prices, costs and the acceptance of the operations results. The data then tabulated and analyzed. The results showed that the hatching of DOD was sold to a group of farmers producing eggs and the farming system in breeders group of meat-producing farming system (drakes), field cultivation system from farmers' majority producing more eggs than male duck farming system. Ducks derived from the cultivation of male ducks were not found in duck farming depends on the season and mostly only exist around the hatchery. Results of the analysis show that the profile of hatching duck eggs business in the research area are still very profitable. Hatchery business profile based on the calculation Benefit Cost Ratio, Break Even Point the price of production and the business volume, gives the value of B/C 1.68, BEP DOD production price of Rp 4500, - / bird and BEP production volume DOD 44,661.- bird / year.

Key words: profile analysis, business hatcheries, duck eggs, DOD

INTRODUCTION

Duck has a huge potential to be developed in Indonesia, generally known duck rural communities as well as cows, goats and chickens. It was also explained that the duck exciting potential for rural communities is fairly easy maintenance, but resistant to diseases. Rural duck communities not only as a sideline with expectations for additional family income, besides the maintenance effort duck also contribute to supporting the economy and create employment opportunities for many rural communities [6], [2]

The duck farms region in West Java scattered in Cirebon, Indramayu and Subang. At Cirebon Regency Village Tract and Karanganyar, District Panguragan area the famous as a center for hatching duck eggs. Duck effort in the area generally directed for producing Day Old Ducks (DOD). Duck eggs hatched by using a simple incubator

which that machine fixed air (still water machine). Day Old Duck (DOD) produced generally sold to other areas likes Indramayu, Subang, Bandung, Jakarta, even down to Sumatra [2]

Business hatching duck eggs in the village and Village Tract of Karanganyar are independent business, where the farmer joined a group, one of the Farmers Rambon, who has got the first champion achievement Agribusiness National level in 2012. The effort hatching duck eggs which is managed by entrepreneurs in the Farmers Rambon in general is the main business, they try to keep they earn business huge profits with the use of a relatively small cost, relying on the supply of duck eggs Rambon (Race Society Cirebon) and from breeders around. DOD production (Day Old Duck) or from the region of ducklings hatching result is able to reach 9.5 million birds per year.

Ducks hatching eggs is one business that is quite important in a series of activities duck breeding. Duckling results are urgently needed to replace old ducks which that are no

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longer productive and enlargement of male ducks to produce meat, in order to maintain business continuity [3]. Hatching that all of activities requires human intervention and without any knowledge about hatchery called artificial hatching or Artificial Incubation [4]. Enterprises hatching duck eggs is generally a family business and mostly done by rural communities using a simple incubator.

Incubator that is widely used in rural areas are a simple-shaped incubator cabinets with heat from the light source outboard and an average capacity of 700 eggs, with the length of the production period is 28 days (Suharno and Amri, 2001). How to hatching by using incubator is a principle same manner chicken hatching eggs, both using the incubator simple or modern, good source of electricity or heat from lamps paste [5].

The purpose of this research is to study the process of hatching egg production systems become DOD ducks (ducklings aged one day) and how the development opportunities in the field. At the initial stage is expected to be known about a wide range of DOD supply pattern in the field, so it can be used as a basis in determining the direction of future business development duck.

METHOD

The study was conducted with a structured survey method at selected locations in duck production centers at the north coast of West Java (Cirebon, Indramayu and Subang). For completeness of data Questionnaires were made for collecting primary data both technical and economical from the breeders among others respondents, and include experience hatching duck eggs, which includes a production management system DOD marketing, input costs, revenues and earnings results

Stages of the activities carried out are as follows:

The location is determined through discussions with the local Animal Husbandry Department, to know the area as a potential source of hatching ducks eggs, than selected the location of the most dominant contribution to the DOD provision.

Respondents will be interviewed (through questionnaires and in-depth discussion) at the location of farmer groups. Data were collected through direct interviews with respondents who have been determined, with the help of a questions list that have been made. Excavation problem in depth by means of group discussions and collection of secondary data from the Department of Animal Husbandry and other related agencies.

Data collected include from duck eggs hatch experience, management production, DOD marketing, production cost, revenue and income. Data were analyzed descriptively by calculating the value of input-out according to Sukartawi et al. [1], [9].

RESULTS AND DISCUSSION

Respondents' experience will influence them in the decision making related to the business activities of hatching duck eggs. The experience of respondents calculated from the length of their business activities of hatching duck eggs. From the results in the field, the experience of the respondents ranged from 1-30 years. Meaning that businesses experience relatively high, but the education level of the respondents relatively low, it can be concluded that the business of hatching duck eggs are not overly influenced by education, but strongly influenced by the experience of effort and skill. According [7] [8], by longer experiences will make entrepreneurs can learn the possibilities that will happen and be careful in making decisions.

Scale ownership in a business incubator hatching duck eggs in Rambon groups are varies from 6 to 20 units incubator with average 9 incubators. The average capacity per incubator is 638 eggs. Respondents generally operate 2 to 3 units of hatching machine simultaneously, than within a span of 2 to 3 days, the respondents operate 2 to 3 units of the other incubators. DOD production generated by the efforts of hatching duck eggs in the Group amounted to 1,607,780 million birds Rambon/year, or the average production of 44,661 DOD/year in every respondent.

Hatching duck eggs done artificially are using in a simple hatching cabinets made of wood and plywood equipped with electricity use. Based on the materials used, the cabinet is expected to be used for 5 to 10 years. Box for a DOD can be used up to 5 years and outboard lamp can be used up to 3 years, it is based on the reality in the field.

The entrepreneurs hatching duck eggs at Farmers Rambon buy the hatching eggs from village hatching eggs which located Kroya and Karanganyar Villages, and normally they buy an existing hatching eggs or fertile egg. Hatching egg prices ranged between Rp 1,650 to Rp 1,900 / egg. The average price of eggs is Rp 1,819 / egg. In November until June hatching eggs prices ranged between Rp 1,800 to Rp 1,900 / egg. In July to October, the price of eggs decreased ranged Rp 1,650 to Rp 1,750 / egg. Under the existing circumstances in the field, in July to October is in dry season, generally a lot of duck farmers are reducing purchases DOD, and the price of duck hatch eggs decreased.

Analysis of Production Cost, Revenue and Income

Production costs on hatching duck eggs businesses made up the real costs and expenses disguised. The average number of incubator which produces in one year for each respondent is 93 incubators, and the average capacity of the incubator is 638 eggs.

The real cost is hatching eggs business of ducks consisting of a purchase of eggs, hatching machine depreciation, equipment depreciation, the cost of electricity, and tax costs. The average real costs incurred by each respondent per unit business in one year in the amount of Rp 104,513,833 or 75.68% of the total cost production. The purchase cost of hatching eggs is the largest real costs, which amounted to Rp 99,898,611 or 95.58% of the total real cost. The average price of eggs is Rp 1,700 / eggs and the average capacity of the incubator is 638 eggs per unit.

Table 1 Average cost of production of duck eggs hatching businesses during one year per respondent per unit business in the Unit of Rupiah

Explanation	Rp/Year	%	%
1. Real Cost			
a. hatch egg	99,898,611	95.58	
b. hatchery depreciation	1,488,889	1.42	
c. tools depreciation	223,333	0.21	
d. Electricity	2,780,000	2.66	
e. Tax	123,000	0.12	
Total Real Cost	104,573,833	100	75.68
2. Disguised Cost			
a. Family skill manpower	32,905,460	97.97	
b. Room rents	680,750	2.03	
Total Disguised Cost	33,586,210	100	24.32
Total Production Cost	138,100,043		100

The real cost is the second largest electricity cost amount to Rp 2.78 million or 2.66% of total real cost. The third largest real cost is depreciation cost of the incubator that is Rp 1,488,889 or 1.42% of total real cost, followed by equipment depreciation cost and tax charges that each of Rp 223,333 and Rp 123,000 or respectively 0.21% and 0.12% of total real cost. Tax cost is a represent cost incurred to pay property a room taxes' that is used for hatching in incubator effort. Tax cost calculation is to divide the cost of land

and building tax for one housing unit with the parts of the home which used for business hatching.

Disguised of total cost used in eggs ducks hatching business during one year Rp 33,586,210 or 24.32% of total cost production. Disguised efforts cost on duck eggs hatching consists of family labor and room rental. The cost of family labor is the largest covert costs incurred amount to Rp 32,905,460 or 97.97% of total cost camouflaged. Labor costs are costs incurred

to pay family labor devoted to the business of ducks hatching eggs. The outpouring of family labor in the business of duck hatching eggs Ranbon farmers never taken into account. However, the calculation cost of analysis in this study, labor costs are included in cost of camouflaged by labor costs prevailing in the research and be a part of the production costs are taken into account. Room rental costs incurred on the business of duck hatching eggs for one year in amount Rp 680,750 or 2.03% of the camouflaged total cost. Room rental costs are costs incurred to pay the rent rooms used for hatchery business. Calculation of the cost of room rental based on the room rental prices prevailing in the study area.

Analysis of Revenue

Acceptance is the amount of production multiplied by price per unit of production. In the business of duck hatching eggs, revenues generated from the sale of male DOD, DOD female, and invertil eggs used as egg consumption. Sex ratio between DOD males and females in the study area is 50: 50. Egg

candling invertil results I, II, and III with an average of 132 eggs or 20.78% of the eggs number in the incubator unit. Invertil egg prices were used as egg consumption ranged between Rp 1000 to Rp 1,400.

Average of duck eggs hatching business receipts for one year amounted to Rp 313,211,528 DOD acceptance of the female is the greatest acceptance of Rp 167,477,083 or 53% of total revenues. The average price is Rp 7,500 female DOD / bird. The amount of revenue from male DOD, Rp 133,981,667 or 43% of total revenues with an average price of is Rp 6,000 /bird. The amount of revenue derived from eggs for consumption invertil results (candling I - III or age incubation to 3, 6, and 9 day) the amount of Rp 11,752,778 or 4% of total revenues, with the average price of invertil eggs Rp 1,000 / egg. Generally employers provide hatching duck eggs invertil used as feed catfish (results candling IV-VI or incubation ages 12, 15, and 18 days) free of charge to farmers catfish, so employers do not gain the acceptance of invertil eggs.

Table 2 The average revenue on duck hatching eggs as longion one year/respondent/effect Unit in Rupiah

No	Explanation	Number (birds)	Price (Rp)	Revenue/Year (Rp)	%
1	Made DOD	22,330	6,000	133,981,667	43
2	Female DOD	22,330	7,500	167,477,083	53
3	Invertil Eggs	11,753	1,000	11,752,778	4
Total				313,211,528	100

Analysis of Income

Revenue in the business of duck hatching eggs was the difference between total revenue with total production costs. This income concept is also called Net Farm Income. The amount of revenue per year and earnings per period per incubator can be seen in Table 3.

The average income earned businessman of duck hatching eggs in farmer Rambon Sejati for one year is Rp 175,111,485. The average number of incubator that production for one year is 93 units, then the income received during the entrepreneur duck hatching eggs in one period per incubator is Rp 1,882,919.

Table 3 Average income per period per machine respondents

No	Explanation	Value
1	Acceptance (Rp / year)	313,211,528
2	Production Cost (Rp / year)	138,100,043
3	Income (Rp / year)	175,111,485
4	Total of Hatchery Which are Production (Unit/year)	93
5	Income/Periode/Hatcher (Rp)	1,882,919



CONCLUSION

Business profile analysis results indicate that the business of duck hatching eggs in the area of research is still very profitable. Hatchery business profile based on the calculation Benefit Cost Ratio, Break Even Point price of production and volume of business, provide value B/C 1.68 DOD production price BEP Rp 4,500 / bird and BEP production volume DOD 44,661 bird / year.

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