

## Strategy and Policy for Empowerment of Duck Farming Business in Brebes Sub-District, Brebes Regency

By:

Oke Setiarso<sup>1)</sup>, Sukiman<sup>2)</sup>, Nunik Kadarwati<sup>3)</sup>

<sup>1,2,3)</sup>Faculty of Economics and Business, Universitas Jenderal Soedirman

<sup>1)</sup>Email: okeetiarso@yahoo.com

### ABSTRACT

This study aimed to determine the appropriate strategies and policies for empowering duck farming business in Brebes Sub-District, Brebes Regency. We conducted survey using stratified random sampling with 52 sample size of laying duck farmers. Our research use primary and secondary data and analyzed using SWOT Analysis. The result indicated that duck farming business in Brebes Sub-District apparently did not have any economic institutions. It was an individual, dependent and unprofessional business. It was because they were depend on the role of middlemen. It can be said that duck farming business in Brebes Regency was a livestock labor business. Our study suggest some strategies and policies for empowering duck farming business in Brebes sub-district such as the provision of livestock area facility, waste management, capital, livestock management and development of marketing centers for processed duck meat and eggs products to be implemented soon.

**Keywords:** Duck Farming, Institution, Cooperation, SWOT Analysis.

### ABSTRAK

*Penelitian ini bertujuan untuk menentukan strategi dan kebijakan yang tepat untuk pemberdayaan usaha ternak bebek di Kecamatan Brebes, Kabupaten Brebes. Kami telah melakukan survey dan memilih secara acak dan bertingkat sebanyak 52 sampel peternak bebek petelur. Penelitian ini menggunakan data primer dan data sekunder, yang kemudian dianalisa menggunakan Analisis SWOT. Hasil dari penelitian ini mengindikasikan bahwa usaha peternakan bebek di Kecamatan Brebes ternyata tidak memiliki kelembagaan ekonomi. Usaha peternakan yang ada adalah usaha yang sifatnya pribadi, terikat dan tidak profesional. Hal ini dikarenakan para peternak banyak bergantung pada peranan makelar. Dengan demikian dapat dikatakan bahwa usaha peternakan bebek di Kecamatan Brebes adalah usaha buruh peternak bebek. Penelitian kami menyarankan agar strategi dan kebijakan pemberdayaan peternak bebek di Kecamatan Brebes seperti penyediaan fasilitas area peternakan, pengelolaan limbah, modal, manajemen ternak, dan pengembangan pusat pemasaran untuk produk olahan daging bebek untuk segera diimplementasikan.*

**Kata Kunci:** *Peternakan Bebek, Kelembagaanm Kerjasama, Analisis SWOT.*

### INTRODUCTION

Livestock is the main user of land and it is source of livelihood for 1 billion people and total meat production in the developing world has tripled between 1982 and 2002 from 45 million to 134 million tons (World Bank, 2009). According to Thornton (2010), this increased production was concentrated in countries that experienced rapid economic growth such as in East Asian countries whereas livestock production in developed countries experienced stagnation. This two combination of course become opportunities for developing countries to make expansion in agricultural business. However, according

to Thornton *et al.* (2009) livestock in developing countries are also changing rapidly due to some factors such as increasing in global population and climate change. This driving factors eventually affect the livestock system, the complex system where mix of technological, policy, and institutional are interrelated.

According to Saleh and Lumintang (2012), duck farming business in Indonesia act as alternative source of income especially for whom who lives in rural area. However, the development of livestock business in Indonesia has not been in accordance with the development of global livestock guided by the optimal level of business efficiency. It is an irony when Indonesia with vast areas and abundant local livestock resources still imports livestock product from abroad.

It is in Central Java, Brebes Regency particularly, that has the potential ability to develop duck farming. The duck farming in Brebes Regency, so to speak, is well developed. As seen in Table 1, this region have experienced an increase in both duck population and production.

Table 1. Duck Population and Duck Egg Production in Brebes Regency in 2009-2012

Year	Population (Duck)	Production (Egg)
2009	522,749	59,208,986
2010	560,832	65,859,046
2011	568,370	69,717,227

Source: Department of Animal Husbandry, 2014

According to Animal Husbandry Department in Brebes Regency, there are about 650 duck farmers spreading in 11 sub-districts in Brebes Regency. The number of duck population in Brebes Regency reaches about 612,000 ducks with egg production around 5.2 million eggs per month. In Brebes, there are about 200 duck egg outlets with turnover reach 12 million eggs per month or about IDR 2.4 billion per month. The salted egg industry, which Brebes Region is quite famous for this product, is still lacks about 6.2 million duck eggs per month, not to mention the demand from other businesses such as martabak (a stuffed pancake), bread and other culinary using duck eggs as raw materials in their business.

However, the demand is not well responded by the neighbor area such as from Banyumas Regency. Instead, the center production salted eggs in Brebes Region have to fill the lack of duck eggs by supplying raw materials from other regions, such as Tegal, Cirebon, Indramayu, Blitar and Mojokerto. This shows that the business opportunity of duck farming in Brebes is wide open particularly for Banyumas Region, which is close to Brebes Region.

It is profitable business for whom who want to engage in duck farming business in Brebes. As can be seen in Table 2, our survey shows that duck farmers who own less than 500 ducks have an average income of IDR 47,469,289.29 per year. Whereas duck farmers who own of more than 1000 ducks have an average income of IDR 117,945,900.00 per year.

Table 2. Average Net Income of Duck Farmers Per Year Per-Strata of The Number of Livestock Ownership

Relationship between Livestock Ownership and Net Income Per Year			
Numbers of Ducks Owned	Income/Year	Respondent	Percentage (%)
Less than 500	47,469,289.29	24	46.2
Between 500-1000	110,970,937.71	25	48.1
More than 1000	177,945,900.00	3	5.8

Source: Primary Data Processed

Duck Industry in Brebes Regency also operate efficiently, as we can see from the Table 3. The table shows that overall duck farmers were operate efficient because proportion of Revenue to Cost (R/C) value is more than one. The number of duck farmers who have R/C value of more than 1 is 33

farmers or 63.46%, while number of duck farmers who have R/C value of 1.5-2.0 is 19 farmers or 36.54%.

Table 3. Efficiency Analysis of Duck Farming Business Per-Strata of Livestock Ownership in Brebes Sub-District

Numbers of Ducks Owned	Efficiency (R/C)			Number of Farmers
	More Than 1	Between 1.5-2.0	More than 2.0	
Less than 500	15	9	-	24
Between 500-1000	15	10	-	25
More than 1000	3	-	-	3
Total	33	19	0	52
Percentage	63.46	36.54	0	100%

Source: Primary Data Processed, 2014

The result of economic analysis indicates that the duck farming business is not only highly profitable but also operates efficiently. However, there is an institutional problem of duck farming business in Brebes sub-district, Brebes Regency, that must be addressed. Duck farming business in Brebes generally establishes a business group. But this groups only used to get government assistance in form of grant and so on not for business expansion. The farmers still lack of knowledge about establishing a group of joint venture/cooperation that could benefit them. The existence of a good economic institution will greatly assist farmers to build a joint venture from production process to marketing. Therefore, the study on Strategy and Policies for Empowerment of Duck Farming Business in Brebes Sub-District, Brebes Regency is needed.

## RESEARCH METHOD

SWOT analysis is performed in our research to determine the appropriate strategy and policies in empowering duck farming business. SWOT analysis today is widely used in strategic management and assess alternatives and complex decision situation (Helms and Nixon, 2010). This analysis is based on the logic which can maximize strengths and opportunities, but simultaneously minimize weaknesses and threats.

SWOT analysis usually categorizing issues into strengths, weakness, opportunities, and threat using analysis matrix. However, some researcher also have different strategy in using SWOT analysis. Salar and Salar (2014) in order to identify pros and cons of franchising, he applied SWOT analysis by dividing it into two main discussion the advantages and the disadvantages. Scolozzi *et al.* (2014) uses a 4-step approach in using SWOT analysis, first step is make the decision on what has to be compared. Second step is to identify of internal and external key factors. Third step calculation and normalization of the performances. Step fourth is calculating SWOT coordinate values for internal and external assessment. Meanwhile, Marino *et al.* (2014) use two step in analyzing SWOT for management wildfire prevention in Spain. First is to identify relevant factors in each SWOT's category and second step is quantifying previously identified factors. Our study will apply commonly used SWOT analysis by identifying the internal and external factors of strength, weakness, opportunity and threat. Then, we conduct strategies based on those identification.

Definition of strength according to Chan (2011) is a characteristic that business has or have which give business advantages among others. We define Strength as all resources owned by farmers in terms of human resources, skills, soft skill, and other advantages in facing the company's competitors and market needs. It is special resource which provide the advantage to the farmers to be able to compete.

Weakness according to Bull *et al.* (2016) is all the attributes that can undermine the achievement of the goal. We employ Weakness as limitation and shortage of a farmer (in terms of resources, capability of labor, and skill mastery which in turn will hamper the performance of farmer's business

in facing competition. Other limitations that can hamper the business progress are: facilities, capital resources, management capabilities, and marketing development capabilities.

Opportunity according to Bull *et al.* (2016) include economic, technical, social, political, legal, and environmental condition. These opportunities are generally beneficial to farmers. However, these opportunities sometimes cannot be directly taken by the business due to certain constraints, such as the development of culinary tourism as a result of changes in consumption patterns, especially middle class group who likes to travel during holidays.

Threat according to Bohari *et al.* (2013) is the list of potential opportunities from outside that could damage the business or it is the opposite of good opportunity. Threat is an important situation which does not benefit the business. This is a disruption in running the company business and threatens the position of farmers in the market and future development of farmer's business. Example of threat often faced by farmers is the new rule of government which is very detrimental to the business owner, namely the business relocation.

## **RESULT AND DISCUSSION**

### **Institution of Duck Farming Business in Brebes Region**

In general, duck farming business in Brebes Sub-District, Brebes Regency is an individual duck farming business. There are some farmers establishing a business group aimed merely to get government assistance. Duck farming business is classified as a dependent business because it has not been managed professionally, both concerning the production technique of duck breeding and purchased feed. Moreover, the production has not been widely marketed, it still relies on the middlemen. It can be said that the duck farming business in Brebes Regency is "a livestock labor business". The Form of Economic Institution of Livestock Business Group has not been managed in the form of Livestock Cooperation. This affects the amount of business profits that should be enjoyed by both individual and grouped farmers.

Thus, the institution economically still has the potential to be developed to be better, in the sense of how they can make a joint feed and how they can process duck eggs together so as to increase future benefits.

### **Strategy and Policy for Empowerment of Duck Farming Business**

The analysis of strategy and policy for empowerment of duck farming business includes external environment consisting of opportunity and threat and internal environment consisting of strength and weakness.

### **Internal Factors Becoming the Strength of Duck Farming Business in Brebes Sub-District, Brebes Regency**

- (1) Duck eggs have advantages, such as free from chemicals because the maintenance does relatively not use chemicals, so that the eggs have a better nutritional content and the size is larger than chicken eggs.
- (2) The availability of strategic land can meet the farmer's needs and it has been occupied for generations.
- (3) Farmers prefer to use their own capital.
- (4) The business has the carrying capacity of abundant local feed raw materials.
- (5) The selling price of duck eggs is high and profitable.
- (6) The business scale and local duck productivity has been profitable and efficient.
- (7) The business has its own market segment.

### **Internal Factors Becoming the Weakness of Duck Farming Business in Brebes Sub-District, Brebes Regency**

- (1) The duck farm is not popular and its popularity is far behind the laying chicken farm.
- (2) The maintenance system mostly performs in traditional procedure due to the limited ability of farmers in duck farming.
- (3) Economical and applicable breeding technology is not available.
- (4) Duck breeding technology and disease control is low.
- (5) The feed raw materials still use fish fillet depending on the climate.
- (6) The livestock management system is simple.
- (7) There is no economic institution to support farmer activities from input/production to output/marketing.

### **External Factors Becoming the Opportunity of Duck Farming Business in Brebes Sub-District, Brebes Regency**

- (1) The potential of high demand for duck eggs along with the rapid population growth rate is an opportunity for the development of duck farming business.
- (2) The growing diversification of products that will expand the marketing of duck products.
- (3) Increased consumption of duck eggs and duck meat along with the development of culinary tourism.
- (4) Regional government policy support in order to increase and empower local duck farm.
- (5) Strategic duck farm location for generations sociologically affects the comfort of farmers.

### **External Factors Becoming the Threat of Duck Farming Business in Brebes Sub-District, Brebes Regency**

- (1) The price of raw duck eggs and rejected-duck meat are controlled by middlemen.
- (2) High loan interest rate (current interest rate is 35%).
- (3) The rumour of livestock relocation makes farmers uncomfortable.

Based on the condition of opportunities, threats, strengths and weaknesses, several alternative strategies in empowering duck farming business in Brebes sub-district are as follows:

#### **Strategies to Use Strengths to Seize Opportunities (S-O):**

- (1) Develop duck farming products, such as quality salted eggs, roasted eggs, and smoked eggs.
- (2) Establish and develop livestock feed business group to the collecting and marketing of livestock product to strengthen the bargaining power of farmers.
- (3) Develop partnership between business groups as feed providers and pioneer a business partnership network for marketing and product diversification.

#### **Strategies to Use Strengths to Overcome Threats (S-T):**

- (1) Develop and expand market share, such as by improving the quality and diversification of duck products.
- (2) Increase nutrition information of local feed raw materials and make feed formulation from local raw materials.
- (3) Improve cooperative relationship with investors who provide capital loans with credit schemes in accordance to duck farming business.
- (4) Cooperate with research institutions, breeding centers and other institutions to improve the development of duck farming business, including the provision of superior breeding stock (breeding technology), disease control, maintenance technology and so on.

#### **Strategies to Overcome Weaknesses by Exploiting Opportunities (W-O):**

- (1) Develop intensive maintenance business system in large scale business.
- (2) Conduct training for farmers, especially in intensive duck farming practices.
- (3) Increase duck productivity through the selection developed by R&D and universities.
- (4) Improve knowledge and skills of farmers.
- (5) Develop facility and infrastructure of duck waste disposal to be processed into fertilizer.

Strategies to Overcome Weaknesses to Avoid Threats (W-T):

- (1) Increase duck productivity through improvement of production management.
- (2) Conduct cooperation or partnership with various parties to improve commercial duck farming business.

## CONCLUSION AND POLICY STRATEGY

Based on the result and analysis of this study, it can be concluded that individual duck farming business and group duck farming business to fulfill the requirement to get government assistance are classified as dependent business because it has not been managed professionally, both concerning the production technique of duck breeding and purchased feed raw materials. Moreover, the production has not been widely marketed because it still relies on the middlemen. It can be said that the duck farming business in Brebes Regency is "a livestock labor business". The Form of Economic Institution of Livestock Business Group has not been managed in the form of Livestock Cooperation. This affects the amount of business profits that should be enjoyed by both individual and grouped farmers.

Our study suggest some strategies and policies that can be applied in empowering duck farming business in Brebes Sub-District, Brebes Regency. First, provide facilities and infrastructure, such as waste disposal in the location of duck farming business, so that the waste can be utilized as organic fertilizer. Second, develop diversified duck products, such as salted eggs, roasted eggs, smoked eggs and various quality of duck meat dishes. Third, establish and develop livestock feed business group to the collecting and marketing of livestock product to strengthen the bargaining power of farmers. Fourth, develop and expand market share by marketing processed duck meat products to the culinary center/supermarket, build a culinary center with various duck dishes at Brexit Rest Area and near Java's nothern coast (Pantura) highway and improve the quality and diversification of duck meat products. Fifth, improve nutrition information of local feed raw materials and make feed formulation using local raw materials. Sixth, develop partnership between business groups as feedstock providers and pioneer a business partnership network for marketing and product diversification. Seventh, cooperate with research institutions, breeding centers, and other institutions to improve the development of duck farming business, both in terms of providing superior breeding stock (breeding technology), disease control, and maintenance technology and so on.

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