



Development Strategy of Goat in Polinggona District

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Abstract

This research aims to identify the availability of input, effort and determine the feasibility of developing a business development of strategy of the District Polinggona. The method of this research was purposive sampling and was as many as 45 heads of household. Data collected consist of primary and secondary data. The result of this research showed the availability of inputs in the research area. Economically feasible to be developed because of the acceptance and the average obtained by the average total cost every goat breeder consecutively year of Rp. 10,120,888.89 and Rp. 9,733,614.43 with the value of R / C Ratio was 1.04. Obstacles encountered in the research area was the rainy season, still traditional inputs, using of care of livestock, lack of education and competition. Strategy needed to tackle the problem is to increase the production and quality of livestock as well as cooperating with the government Kolaka. The conclusion of this research were availability of the factors of production, encourage increased gains achieved so goats worthy effort in development and is supported by a development strategy that is effective in raising goats.

Keywords: development Strategy, feasibility analysis, SWOT matrix, and Mixed Nuts Ettawa goats.

A. Introduction

The livestock sector has an important role in providing animal protein, employment, poverty alleviation and development potential of the region. Demand for livestock products increased from year to year, in line with the improvement of people's nutrition awareness. Food and livestock products, especially meat, milk, and eggs are a source of animal protein that is needed for the quality of public nutrition (Sudrajat, 2000).

Commodity goat farm is the other side of some aspects of development are important and need serious attention coupled to appreciate the program's self-sufficiency in meat national level so that commodity this ranch is one of the important aspects that need to be considered as a source of meat that has quality and quantity in the global market competition.

The priority in improving the welfare of the community in the area of the farm is a very promising potential if supported by a maintenance management system that has a value of efficiency and effectiveness to improve the acceleration, the physical development of cattle that led to the increase in income and welfare of livestock farmers and their families.

Goats are growing in Sub Polinggona generally a goat types of Crossbreed Ettawa (PE) and goat nut, which has the ability to use quality feed is low, as the grass, weeds, agricultural waste (rice straw, corn straw, pod husks), cover crops (gliricidia, lamtoro gung, banana leaf) and others. Thus, the goats can be developed in paddy fields, plantations, forests, and even can be developed in the area of the yard.

District Polinggona has considerable potential for the development of goat. However, there are various issues that also need attention so that goats can thrive. Good potential for development and the problems that hamper the needs are well identified in order to develop

strategy development right goats in the District Polinggona. The purpose of this study was to identify the availability of input, effort and determine the feasibility of developing a business development strategy goat in the District Polinggona.

B. Methodology

1. Time and Research Location

This research was conducted in January to February 2015. The study was conducted in seven villages in the district Polinggona covering Village Polinggona, Village Pondouwae, Village Wulonggere, Village Puudongi, Village Plasma Jaya, Village Tanggeau, and Village Lamondape.

2. Data resources

The types and sources of data used in this study are primary data and secondary data. Primary data is data obtained from respondents by some farmers using a questionnaire that has been prepared and direct observations in the field. For secondary data is data obtained through the study of literature related to the potential data sub-district of offices and relevant agencies.

3. Population and Sample

The population in this study is the livestock farmers who raise goats. The research location 7 villages that were determined by purposive sampling based on the highest number of livestock reared livestock farmers each village. The number of respondents in rural areas taken is 15 people who were taken according to the number of cattle most, if certain villages not reached 15 people, hence census is applied.

4. Variables

The variables were observed in this study is:

- a) General description of the study area
- b) Availability of inputs that include goat raising goats population in each village, the availability of forage in the pasture, the land area that can be used for a population of goats, the availability of facilities and infrastructure development as well as systems and goat rearing.
- c) Feasibility goat rising based on the system and track marketing and benefits during the maintenance.
- d) The development strategy that should be applied in the goat raising, goat farming technology implementation and support of local government policies, related to livestock development

5. Data analysis

Hypothesis 1 was tested using descriptive analysis, i.e. by observing the extent to which the availability of inputs (seed, feed, cages, land, labor, capital) at the study site. Hypothesis 2 was tested using the formula:

$$Pd = TR - TC$$

Where: Pd = Revenue of goat breeders

TR = Total Revenue

TC = Total Cost

These calculations are used to determine the benefits of capital invested (Soekartawi, 2002). To determine the feasibility hence formulated:

$$R/C = \frac{TR}{TC}$$

Where : R/C = Ratio

TR = Total Revenue (Rp)

TC = Total Cost (Rp)

To see the feasibility in accordance with the results of the analysis, the criteria used is:

$R/C \text{ Ratio} > 1$, stated that the livestock farming profitable.

$R/C \text{ Ratio} = 1$, stated that livestock farming is experiencing a breakeven (*Break Event Point*).

$R/C \text{ Ratio} < 1$, stated that livestock farming is not profitable.

Hypothesis 3 tested with data retrieval using SWOT analysis (strengths, weaknesses, opportunities and threats). The data was then tabulated and analyzed descriptively. SWOT analysis is to identify the various factors systematically to formulate the company's strategy. This analysis is based on the logic that maximizes the strengths and opportunities, but at the same time minimizing weaknesses and threats strategic decision making process is always associated with the development of the mission, goals, strategic and corporate policy.

C. Result and Discussion

1. Description of District Polinggona

a. Geographic Location and Condition

- a) District Polinggona located 70 km from the district capital is Kolaka. Administratively, District Polinggona have boundaries as follows:
- b) North side adjacent to District Tanggetada
- c) South side is bordered by District Watubangga
- d) The western side is bordered by District Watubangga
- e) Easter with District Ladongi

District Polinggona extensively whole is 46.65 km², where most of the land is used for agriculture and livestock. Type of plant widely cultivated is the type of crop and livestock types are widely cultivated are cattle, goats, and some types of poultry such as chickens, ducks and other fowl.

b. Land Use

District Polinggona located in a mountainous area with an altitude of 75-300 m DPL, temperate and the highest rainfall occurs from August to December while the dry season occurs from May to July. Broad picture of land in District Polinggona according to their use can be seen in Table 1.

Table 1. Land Use at District Polinggona 2014

No.	Type	Area (Km ²)	Percentage (%)
1	Building / Surrounding	4.79	10.26
2	Agriculture	19.99	42.86
3	Plantation	20.34	43.59
4	Other	1.53	3.29
Total		46.65	100.00

Source: Secondary Data (Central District of Polinggona), 2013

Based on Table 1 it can be seen that the land use is the largest in the district Polinggona Plantation as many as 43.59% of the total land. Other land uses for the buildings as much as 10.26%, 42.86% and rice paddies as much more as much as 3.29%.

From the above we can know that the main livelihood in District Polinggona is from plantation sector. But some people have a goat farm livelihood as a sideline. This is supported by the opinion of Murtidjo (1993). In the countryside, the goat is quite popular as a sideline. Even goats are considered as family savings, because it can be sold at any time, especially in the midst of the pressing economic needs.

2. Business Development of Goat

a. Breeders Characteristics Sample

Characteristics of the sample breeder in question is the number of animals that are cultivated by breeders, age, formal education possessed, farming experience, and the number of dependents breeder. The characteristics of the sample farmers in the district can be seen in Table 2.

Table 2. Characteristics of Samples Breeders in Sub Polinggona 2015.

No	Description	Total	Mean
1	Number of Livestock (Tail)	495.00	11.00
2	Age (years old)	1,919.00	42.64
3	Education (years)	486.00	10.80
4	Breeding experience (Year)	325.00	7.22
5	The number of dependents (Person)	136.00	3.02

Source: Primary Data Analysis 2015

Based on Table 2 can be seen that the average number of livestock that are cultivated breeder is 11 head. This shows that the number of livestock breeder have enough to be able to develop goat rising in meeting the needs of family life. This was stated by Sarwono (2007) that is currently goat rearing not only in the countryside, but has spread in various places as more and more goat that appeared due to demand for meat and dairy goat which is constantly

increasing. The average age of breeder is 42 years, this shows that breeder belong to the productive age so we can say they have the potential workforce for goat rising.

Educational owned breeder sample is an average of 10 years showed that the average education level of the sample breeder with high school. Experience breeder sampled average is 7 years. Old farming for goat breeders influence on their knowledge and expertise in dealing with the problems that arise so that the possibility to increase production in the future. Number of dependents breeder sample average of 3 people, the number of dependents can be used as labor in the family to be able to assist in business activities include livestock goat.

b. Availability of Facilities / Infrastructure of Production

1) Availability of Seeds

In terms of the provision of seeds goats, the goat breeders in the district Polinggona prefer using natural mating; it is because more farmers find it easier livestock naturally mated. This is in contrast with Rochadi, et al (1993) that the way that can be taken by companies as well as small and medium-scale farms; first, introduce various types of goat by crossing with goats in the region. Second, having obtained a goat breed that can improve body weight gain and economical, then determined as an option to be developed further. In addition, farmers also do not understand the methods of other goats mating and hardly ever do any other method other than natural mating methods alone. To get the seeds of natural mating, breeders get it from other breeders by borrowing or renting goats from other breeders stud if a farmer does not have a stud goat. In this way farmers at District Polinggona can get the seeds they raise goats that will later.

2) Availability of the Cage

In Sub Polinggona enclosure built using simple materials that are widely available in the study area, the foundation of the enclosure is made of cement bricks or buffer of wood alone with poles made of wood or bamboo. The roof is made of thatch while the floor is made of boards or bamboo that have been split and mounted so slightly apart. The goal is for the easy flow and goat droppings fall directly onto the bottom of the cage, making it easier when cleaning the cage. Cages are generally only a few walls as a barrier. This is done so that the air circulation is maintained, in addition to let the sunlight in the mornings remain logged in and not so hot. This is in accordance with the opinion of Cahyono (2008) that the enclosure has a very vital function among others to protect livestock from predators such as tigers, wild dogs, jackals, and so on, to protect livestock from the sun, the rain, the cold, and the wind fast and easy to clean and are collected for agricultural fertilizers.

Based on the description above, it can be seen every breeder each have one cage, therefore the availability of the cage at District Polinggona reasonably available.

3) Availability of Forage

To meet the needs of livestock feed goats in the study area, the farmers acquire the grass and forage that grows wild in the surrounding rice fields or plantations are quite a lot in the area of research. In addition, farmers at District Polinggona also deliberately planted grass and forage needed by cattle around the house or enclosure cattle they have. So, the availability of forage for goats at District Polinggona is sufficiently available. This is in contrast to the opinion (Sajimin, et al., 2000) that the development of livestock, especially ruminants is still dependent on the availability of forage pretty good quantity, quality and continuity throughout the year. Forage used for ruminants are often deficient, especially in the dry season with low quality

4) The Availability of Capital

At District Polinggona, goat rising has been running long enough and raising goats were traditionally hereditary inherited by the parent breeder before. To run a goat raising, farmers at District Polinggona generally use their own capital. Polinggona goat breeders at District the capital gain from the sale of goats that they raise earlier. Based on the description above, it can be said that the availability of capital on a sample breeder at Polinggona District provided enough.

5) The Availability of Workers

In accordance with research, goat raising are not able to provide employment to a large number. Outpouring of labor is supporting the ongoing efforts of goats. According to Table 2 the number of residents at District Polinggona, an unknown number of largest residents at District Polinggona namely the productive age group (16-60) of 2750 people or 45.45% of the population at District Polinggona. Therefore, it can be said that employment at District Polinggona reasonably available.

6) The Availability of Tools

Equipment used goat rising at District Polinggona quite simple as a bucket, sickles and machetes, shovels, wheelbarrows, etc. Buckets used to lift water for livestock drink or to clean the cage, sickles and machetes used to cut forage, shovel used to retrieve the goat manure from underneath the cage when cleaning cages and wheelbarrows to remove the green feed and livestock manure. The equipment can be obtained at the store farm implements that are around the area of research at an affordable price.

Based on the explanation and description above, the factors of production / input for goats is available at District Polinggona. Thus, one hypothesis which says that the "Input for goat rising is available at District Polinggona" acceptable.

3. Analysis of Feasibility of Goat

In doing goat rising would not be separated from the advantages to be obtained farmers in maintaining the size of time or a certain period. To determine the amount of benefits obtained breeder for livestock raising goats, necessary economic analysis goat rising is done by calculating the total costs used during maintenance, such as the total cost is used, the total receipts breeder during maintenance and the amount of revenue generated during the maintenance of livestock goat. Thus, we get a big advantage in the can by a breeder so that it can be said that a decent profit businesses developed. The analysis of goat rising can be seen in Table 3.

Table 3. The average of Goat Business Economic Analysis Per Year

Description	Goat Business Economic Analysis Per Year
Seeds (USD)	1,466,666.66
Labor costs (US \$)	7,330,000
Additional feed costs (US \$)	4,600
Cost of medicines (USD)	131.970
Depreciation of equipment (USD)	94.600
Depreciation cage (USD)	705,777.77
Total cost (USD)	9,733,614.43
Receipts (IDR)	10,120,888.89
Revenue (USD)	387,274.46
R / C Ratio	1:04

Source: Primary Data Analysis 2015

Based on Table 3 above, may explain the average production costs incurred, receipts, revenue and R / C ratio on goat raising as follows:

a. Production cost

Production costs are all costs incurred in order to obtain absolute result, to produce a good or service is certainly no material, energy and other kinds of sacrifices that cannot be avoided (Waris, 1992). As for the cost of production incurred by goat breeders is the cost of seedlings, labour, feed costs, the cost of medicines, equipment depreciation costs and fees cage.

1) Seed cost

Costs used to obtain seeds adapted to the economic situation of the farmers in the District Polinggona. The total cost of the average use in obtaining seeds in one out of Rp. 1,466,666.66.

2) Workers' wages

The employment consists of three activities, namely repair cages do one a year, cleaning cages made 1 time a day and the supply / feed retrieval is done 1-2 times a day. Wages are given to each labour is based on daily wages. The costs depend on the number of workers and the type of activities carried out by labour. Labour costs for the repair / manufacture of cages per day Rp. 30,000 / person, for the cleaning activities cage per day Rp. 10,000 / person and for wage-taking operations / supply of feed per day Rp. 10,000 / person. The average labour costs incurred to labour for one year per breeder Rp. 7,330,000.

3) Additional Forage Cost

At District Polinggona, farmers do not provide additional feed in the form of concentrate on livestock, the farmers only provide additional feed in the form of minerals is given 1-2 times daily. The average costs incurred by farmers for the provision of minerals in cattle in one year are Rp. 4,600.

4) Medicines costs

At District Polinggona, there are two types of medications used the breeder-worming and flea control. Award-worming is done three times a year and the average total costs incurred by farmers for the use of worm medicine for a year of Rp. 106.800 lice drug delivery is done every

day which is 1 times a day by spraying into the cattle with the average total costs incurred by farmers Rp. 570 and the average total cost of the use of drugs during the year amounting to Rp. 131.970.

5) Cost of Depreciation Equipment and Cages

Equipment used in every stage of the goat rising is a spade, sickle or machete, wheelbarrows and buckets. Equipment depreciation Cost per farmer per year is Rp. 94.600 and depreciation costs per year amounting to Rp cage. 705,777.77 depreciation cost of each piece of equipment is determined by the amount of each of the tools used and its economic life.

b. Revenue

Acceptance is the total output produced and the total yield manure that assessed the rupiah in other words the multiplication of the total production of livestock manure and results obtained with the selling price. Based on Table 7 it can be seen that the average receipts per goat breeders in the district Polinggona for a year is Rp. 10,120,888.89.

c. Income

Revenue from goat rising is revenue that the breeder is reduced by the total cost (Soekartawi, 2002). Based on Table 7 it can be seen the average revenue per goat breeders in the district Polinggona for a year is Rp. 387,274.46

d. R/C Ratio

Based on the value of R / C ratio can be determined the feasibility of goats in the District Polinggona. From table 7 known the value of R / C ratio obtained from goat raising 1.04 or the value of R / C ratio > 1 so this shows that the goat raising in the District Polinggona is economically profitable and feasible to be developed. Thus the second hypothesis which states that "goat raising economically feasible to be developed in the District Polinggona" accepted.

4. Development Strategy of Goat

a. Determining External Factors

Goat raising development cannot be separated from several contributing factors. As for the external factors in the development of goats in the District Polinggona as follows:

1) Market Opportunities

a) Request for Goat Meat Market is on High

From interviews conducted on a sample of farmers in the field, it is known that they always get requests from agents or from consumers who come directly to goat breeders in the district Polinggona. Based on the interview can be seen that the market demand for goat meat is quite high.

b) Price of Meat Goat Relatively High

Goat meat is one type of food that is consumed by many layers of middle to high society. In addition to having good taste, goat meat is also a source of high-protein food so that it becomes one of the factors that caused the price of goats in the market is relatively high.

c) A good relationship between the farmer and Agent

Breeders are aware of the importance of the market and the importance of fostering good relations with the agent, because with a good relationship price offered by the agent is not too low on the selling price. This relationship can be evidenced by the farmers who sell their livestock with fixed agent (subscription).

2) Threat

a) Rainy Season

Goat is one of multiplied animals that is in their daily lives require food according to body weight. The rainy season may hamper the farmer to take the forage that is needed by goats which resulted portion feeding the goats is reduced. In addition, during the rainy season goats are also susceptible to disease, which is one threat to breeders because it can inhibit the growth of goats and reduce the quality of livestock.

b) The Absence Guidance

The absence of counselling to farmers resulted in farmers often make mistakes in the application of production inputs and farmers do not know the information about innovations in the field of livestock.

c) Competition

The existence of competition caused farmers trying to continue to maintain the quality of livestock in order to dominate the market goats. This resulted in the market for goat becomes narrow.

b. Determining Internal Factor

For success in business development activities of goats there are some important things that need to be held as the strength of a rancher. As for the internal factors in the development of goats in the District Polinggona as follows:

1. Strength

a. Self Capital

Livestock is a venture capital equity (private) issued goat livestock to run a business that is generated from the sale of livestock carried out previously. In addition, they also get the legacy of their parents before. By using its own capital, then the goat herders earn greater revenue.

b. Seed Easily Obtained

For goats seed stocks to be maintained in the future, in the District Polinggona goat farmers obtain seeds from natural mating animals. Breeders get from fellow breeders of goats in the District Polinggona.

c. Available Employment

Availability of labour then the job done faster and better.

d. Interests breeders High Enough

With the little experience that farmers have then their interest to make goat raising already high enough. With that interest, then problems will arise during the process of goat raising can be more easily overcome.

e. Provided Easy Forage

At District Polinggona there are still many land overgrown with grass and forage that is a source of fodder. The entire feed given comes from forage crops taken from the location of the breeder cultivation. Thus, farmers do not have difficulties in terms of providing fodder for their goats.

f. There are currently no Deadly Disease Virus Attacks

Absence of virus deadly disease against goats in the area of research led to farmers earns a greater income because you no longer incur the cost of tackling the deadly virus attack.

g. Easy marketing

At District Polinggona farmers sell their animals alive to agents and consumers directly. Thus, farmers do not need to spend money to do the cutting. Moreover, farmers do not need any transportation costs to markets for their livestock because of the agents or consumers who picked directly from farmers.

2. Weaknesses

a. Lack of Treatment of Livestock

The care of cattle is one important factor in improving the quality of livestock products. At District Polinggona, care of the cattle is still rarely carried out by farmers. It can be seen from the supplemental feeding and cleaning animals that are rarely performed by breeders.

b. Traditional Farming Technology

Technology is an important factor in increasing the production of goat rising. A job that is done will be more efficient in terms of time and labour. At District Polinggona, cultivation technology is still carried out simply (traditional) which can be seen from the inputs they use like a shovel, a sickle or machete, wheelbarrows and buckets that have not been replaced.

c. Strategy

Determining the appropriate strategy for the development of goat rising is to make the SWOT matrix. SWOT matrix is constructed based on external factors and internal consisting of opportunities, threats, strengths and weaknesses.

Based on the SWOT matrix can be composed of four main strategies SO, WO, ST and WT.

1. Strategy 'SO (Strength-Opportunity)'

Business development strategy goats in the district Polinggona with all the strength to take advantage of the opportunities that exist, namely:

a) Increase the number of population of goats (S1, S2, S3, S4, S5, O1, O2)

Aims to increase the production of goats to meet the high market demand for meat goats and supported by relatively high prices and production facilities available to allow for the holding of increasing the number of livestock population aimed at improving farmer incomes.

b) Maintaining a good relationship with agents (S5, O3)

Aims to provide agencies offer decent prices on goat so that mutual benefit between the two sides. The strategy for the development of goat rising can be seen in the following figure.

	Strength (S)	Weakness (W)
Internal	1. Available capital 2. Production features are easy and obtainable 3. Power work available 4. Interest breeder enough high 5. Easy Marketing	1. Lack of care of livestock 2. Cultivation Technology is still traditional
External	6. There is no deadly viral disease	
Opportunities (O)	Strategy 'SO'	Strategy 'WO'
1. High Demand 2. Price is relatively high 3. A good relationship with agent	1. Multiplying amount population of live stock goat (S1, S2, S3, S4, S5, O1, O2) 2. Keeping good relationship with agent (S5, O3)	1. Increasing care to livestock (W1, O1, O2) 2. Replacing tool sold production with tech (W2, O1, O2)
Threats (T)	Strategy 'ST'	Strategy 'WT'
1. Rain Season 2. Absence of counseling 3. Presence of competition	1. Increasing quality of live stock (S1, S3, S5, T3) 2. Powering counselling (S4, T3) 3. Providing or plant in source woof forage in around cage (S2, S3, T1)	1. Ask in government to empower counseling (W1, W3)

Figure 1. Determining the strategy with SWOT matrix

2. Strategy 'WO (Weakness-Opportunity)

Business development strategy goats in the District Polinggona can minimize weaknesses to exploit the opportunities that exist, namely:

- Improve the care of livestock (W1, O1, O2) By improving the treatment of livestock, the livestock quality will be better in order to keep supply and relatively high prices.
- Changing the means of production are old tech (W2, O1, O2)

The high demand and high prices need to be balanced with good technology to expedite the process of production which will increase the income of farmers' goat.

3. Strategy 'ST (Strength-Threats)'

Business development strategy Polinggona goats in the district can address existing threats using all the power.

- Improve the quality of livestock (S1, S3, S5, T3) Intended that the demand for goat meat is increasing, so the animals can breed.
- Powering counselling (S4, T3) Aims for farmers to obtain information and innovation in the farm so that farmers can be more skilled in performing goat raising and obtain maximum results. Therefore, the required counselling.
 - Provide a source of forage around the cage (S2, S3, T1) Aiming to facilitate the farmers take the necessary green feed cattle, in other words keeping inventories fodder occurs when the rainy season in order to avoid a reduction in the portion giving feed to livestock. With the supply of forage resources like that, the farmer no longer need to worry with their cattle will feed shortage during the rainy season arrives.

4. Strategy 'WT (Weakness-Threats)'

Business development strategy goats in the District Polinggona to minimize weaknesses and avoid the threats that exist, namely: *Asking the government to enable counselling (W1, T3)*

With the intervention of the government to enable PPL in District Polinggona, then the goat breeders will be able to know the information developed on how to care and maintenance of goats is good and true and very useful for farmers. Based on the SWOT matrix strategy it can be seen that a strategy is needed to be able to minimize the weaknesses and threats, which are:

- Improve the quality of livestock production and to keep prices and demand remain high.
- To collaborate with the government in Kolaka to enable the counsellor to breeders can better know the procedures for the care and maintenance of goat well.

D. Conclusion

The conclusion of this study are the availability of production factors, lead to greater gains achieved thus worthy of goat rising in development and is supported by an effective development strategy in the maintenance of goats.

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