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Strategy for Developing Dairy Farming for All-Business Cooperatives in Tandangsari, Sumedang Regency

Fitriana Dewi Sumaryana, Toufiq Agung Pratomo Sugito Putra, Abdul Hakim, Aina Athifa Rahmat

Abstract

The livestock sector has proven itself to be a crisis-resistant sector. The Ministry of Agriculture stated that the total national milk demand in 2019 reached 4,332.88 thousand tons. One of the dairy cattle center areas that has developed and become the focus of the Sumedang Regency Government is Tanjungsari District. The breeders joined the Tandangsari KSU. The supply and demand for pure milk has fluctuated at KSU Tandangsari in the last five years. The problems in the dairy cattle business at KSU Tanjungsari are currently related to production factors as inputs in the development of a dairy cattle business including livestock seeds, feed availability, land as living space for livestock, livestock production facilities (procurement of equipment and maintenance of livestock production), labor (breeders), as well as the cost of production.

The goal of preparing the RIP is to formulate alternative strategies for developing a dairy cattle business. By identifying strengths and weaknesses, as well as opportunities and threats based on internal and external factors that affect the dairy cattle business at KSU Tandangsari.

The strategy for developing a dairy cattle business is the S-O (1) strategy. Development of cattle population to increase production, (2). Building a place (factory) for processing dairy products, W-O strategy (1). Build a cow nursery, (2). Establishing cooperation with third parties in producing processed HPT, strategy S-T (1). Increasing the quality and quantity of beef cattle, (2). Moving the location of the fresh milk business activity center (MCU), W-T strategy (1). The application of appropriate technology is increased by breeders, (2). Establish cooperation with financial institutions in capital facilities.

Keywords

Cooperative, Agriculture, Dairy Farming, Business Strategy.

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Abdul Hakim

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Pengarang Aina Athifa Rahmat Fitriana Dewi S., Taufiq Agung PSP, Abdul Hakim

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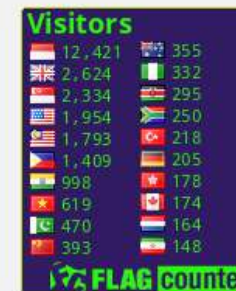
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Strategy for Developing Dairy Farming for All-Business Cooperatives in Tandangsari, Sumedang Regency

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Abstract

The livestock sector has proven itself to be a crisis-resistant sector. The Ministry of Agriculture stated that the total national milk demand in 2019 reached 4,332.88 thousand tons. One of the dairy cattle center areas that has developed and become the focus of the Sumedang Regency Government is Tanjungsari District. The breeders joined the Tandangsari KSU. The supply and demand for pure milk has fluctuated at KSU Tandangsari in the last five years. The problems in the dairy cattle business at KSU Tanjungsari are currently related to production factors as inputs in the development of a dairy cattle business including livestock seeds, feed availability, land as living space for livestock, livestock production facilities (procurement of equipment and maintenance of livestock production), labor (breeders), as well as the cost of production. The goal of preparing the RIP is to formulate alternative strategies for developing a dairy cattle business. By identifying strengths and weaknesses, as well as opportunities and threats based on internal and external factors that affect the dairy cattle business at KSU Tandangsari. The strategy for developing a dairy cattle business is the S-O (1) strategy. Development of cattle population to increase production, (2). Building a place (factory) for processing dairy products, W-O strategy (1). Build a cow nursery, (2). Establishing cooperation with third parties in producing processed HPT, strategy S-T (1). Increasing the quality and quantity of beef cattle, (2). Moving the location of the fresh milk business activity center (MCU), W-T strategy (1). The application of appropriate technology is increased by breeders, (2). Establish cooperation with financial institutions in capital facilities.

Keywords: Agriculture, Business strategy, Cooperative, Dairy farming

1. Introduction

The livestock sector is a part of the agricultural subsector which plays an important role in meeting the food needs of the community and regional and national development. The product of the livestock sector is milk as one of the sources of animal protein. Milk has good prospects for development because milk is needed by people of all ages. The livestock sector also has a fairly important role in regional and national economic development.

The dairy business received enough attention to be developed. The reason is, milk consumption in Indonesia is not comparable to its production considering the tendency to increase population, income, and increasing awareness of some people about the importance of nutrition. The Ministry of Agriculture (Directorate General of Livestock and Animal Health) stated that the total national milk needs in 2019 reached 4,332.88 thousand tons. The domestic fresh milk production is only able to meet 22% of national needs, so 78% of it comes from imports. This shows that there is a considerable gap between the supply and demand for milk in Indonesia. Therefore, dairy cattle businesses are increasingly required to play a role in meeting the nutritional needs of the community by increasing production through the cultivation development process.

Regional autonomy requires that each region must be able to empower all its potential to be used as a source of regional income for the welfare and mutual benefit. Sumedang Regency has a dairy cattle center located in the Cimanggung, Pamulihan, Rancakalong, Jatinangor, Sukasari, and Tanjungsari Districts which have great potential as milk producers. One of the dairy cattle centers that has developed and is the focus of the Sumedang Regency Government is Tanjungsari District. In addition to Lembang and Pangalengan, this region is a producer of cow's milk in West Java. The breeders joined the KSU (All-Business Cooperative) Tandangsari. This cooperative has an important role in developing milk-based businesses in the community as a provider of fresh milk raw materials.

The dairy industry should have bright enough prospects to develop considering the increasing population every year as a complement to people's nutritional intake. Based on data from KSU Tandang Sari, the development of whole milk production and sales in KSU Tandang Sari from 2015 to 2019 is as Table 1.

Table 1: Development of Whole Milk Production and Sales Year 2015-2019 at KSU Tandang Sari

No.	Year	Production (liters)	Sales (liters)	Up/Down (%)
1	2015	8,038,326.00	8,123,666.50	1.06
2	2016	7,619,458.50	7,667,611.00	0.63
3	2017	7,502,615.00	7,481,411.00	0.28
4	2018	7,047,290.00	6,995,559.50	0.73
5	2019	4,432,764.00	4,384,021.00	1.10

Source: KSU Tandang Sari, 2019

The table above shows the fluctuating supply and demand for whole milk in KSU Tandang Sari in the last five years (2015-2019). In 2015 the development of whole milk production and sales was 1.06%, in 2016 it fell to 0.63%, and in 2017 it fell back to 0.28%. However, in 2018 and 2019 there was an increase of 0.73% and 1.10%, respectively. This shows that the development of dairy farming is suspected to still have some obstacles in its productivity.

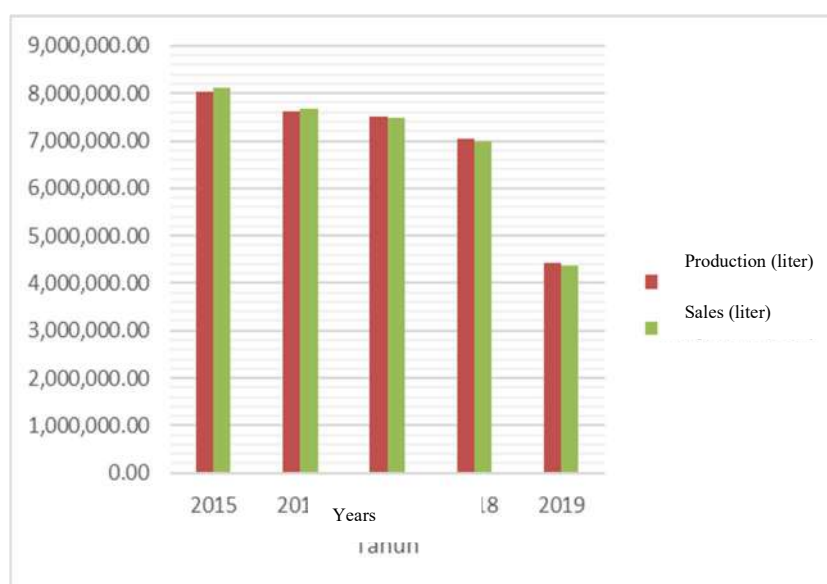


Figure 1: Graph of the Development of Whole Milk Production and Sales Year 2015-2019 at KSU Tandang Sari

The chart above shows that the production and sales of whole milk continued to decline from 2015-2019. All dairy farming businesses are basically inseparable from the goal of obtaining a large profit with the smallest possible expenses. This is in accordance with the economic principle of using all existing production factors to obtain optimal livestock production. The use of production factors is carried out as efficiently as possible in order to get the maximum profit. However, in reality, the dairy cattle center at KSU Tanjungsari has not utilized effective and efficient production factors as inputs in the development of livestock cultivation.

The problems that exist in the dairy cattle business at KSU Tanjungsari are currently related to production factors as inputs in the development of the dairy cattle business including livestock seeds, feed availability, land as a space for subsistence for livestock, livestock production facilities (procurement of equipment and maintenance of livestock production), labor (farmers), and cost of goods produced.

a. Breeds of cattle

The dairy cattle population currently numbers 3,864 heads consisting of 1,894 broodstock, 995 heifers, and 975 calves. In terms of health aspects, KSU Tanjungsari still encounters infectious diseases of livestock that require forced slaughter. In addition, breeders' awareness of the maintenance of calves as a substitute for brood is still lacking. This makes the dairy cattle population decrease. In addition, the scale of business feasibility in the farm is not yet feasible with an average parent ownership of 2-3 heads with a milk production of 20-30 liters / day. Meanwhile, the feasibility of ownership is 7 mothers with milk production of 70-100 liters / day, so it is still necessary to increase the availability of adequate dairy breeds through certain requirements.

b. Availability of animal feed

There are two types of feed needs in dairy cows, namely forage feed and concentrates. However, the need for forage feed is not sufficient for the needs of livestock in KSU Tanjungsari, so it is still looking for deficiencies from other places. Cooperatives have not been heavily involved in the provision of forage for the feed needs of farm animals. However, the need for concentrated feed in breeders is met by cooperatives.

c. Land availability

KSU Tanjungsari has a grass land area of 12 ha as a living space for livestock. However, the availability of HPT (animal feed forage) land is still insufficient to meet the feed needs of livestock due to the urgency of housing, resulting in a conflict of interest. Another problem, currently the farming system has not been optimally utilized in accordance with the capacity of livestock.

d. Means of livestock production

Livestock production facilities and infrastructure are quite good at KSU Tandangsari, including at the farmer level, the availability of cage equipment; at the group level there is already a Secretariat and Cooperative Service Place (TPK); at the cooperative level, there is already a Milk Cooling Unit (MCU), a transportation vehicle for picking up milk from the TPK, a transportation vehicle for milk distribution to the Milk Processing Industry (IPS), a milk quality inspection laboratory, a livestock / concentrate factory, human resources have a management system that already has the capacity and capability, protection of livestock of cooperative members through livestock insurance whose premiums are paid by the cooperative, there is already a milk price structure from the cooperative to the cooperative breeders, up to business partners and work partners. However, access to capital sources is still difficult to support the maintenance of livestock production. In addition, environmental sanitation at KSU Tanjungsari is still not well managed regarding the handling of animal waste. Environmental factors play an important role in the process of physiological development of the body of dairy cows, so that in turn it will affect milk production capacity.

e. Labor (breeders)

Most of the dairy cattle businesses in KSU Tanjungsari are cultivated by the local community (farmers) as permanent and side businesses. The problem of breeders is that the productivity of farmers is very low because 60% of the number of breeder members in KSU Tanjungsari are over 50 years old, so that the knowledge and skills of breeders in business management have not been maximized including aspects of reproduction, feeding, postharvest yield management, milking, environmental sanitation, and prevention of livestock diseases. The average breeder learns more from generation to generation and there is no new knowledge that they have learned from inherited science. In addition, the regeneration of farmers is not going well which affects the sustainability of the dairy business, and farmers' knowledge of the aspects of commerce still has to be improved so that the profits obtained are proportional to their maintenance.

f. Cost of goods produced.

Considering that people's dairy farms in KSU Tanjungsari still have limitations in running their business, including in terms of farmer productivity, the level of knowledge and skills of farmers, as well as the use of inappropriate livestock production inputs to make production operational costs still high. Farmers can reduce production operational costs if farmers have good management, namely increasing the scale of the business, increasing the frequency of milking, and providing sufficient and quality feed.

As for problems related to the processing of dairy products, namely milk, KSU Tanjungsari already has a milk processing chain and administration in the cooperative. Farmers deposit milk into the Cooperative Service Unit (TPK). The location of the cooperative office is exactly behind the market and the Milk Cooling Unit (MCU) is located close to the temporary landfill of the market, so the smell of garbage is often pungent, and the smell can be absorbed by milk.

Not yet managed properly results in low quality and quantity of fresh milk production, where the average milk production per mother is 8-12 liters/head/day. Meanwhile, the need for fresh milk is increasing along with the growth of the population from year to year. Regarding the marketing of fresh milk (post-output), the fresh milk marketing business network at KSU Tandangsari is permanent, namely from farmers – cooperatives – Milk Processing Industry (IPS). The price of milk from cooperatives to farmers is Rp. 5,362/liter and the price of milk from IPS is relatively stable at Rp. 6,700/kg. Seeing the complexity of the problems faced, it is necessary to have a strategy to develop the dairy farming business of KSU Tandangsari so that it can provide an increase in income for cooperative members, the surrounding community, and KSU Tandangsari itself.

2. Literature Review

2.1. Agribusiness Concept

Agribusiness comes from the word Agri (agriculture) meaning agriculture and business (commercial enterprise). Agribusiness is a business aimed at obtaining profits in agriculture (upstream agro-industry, product processing, marketing and supporting services) as well as fields related to agriculture in a broad sense. According to Saragih

(1998) agribusiness is an activity related to handling agricultural commodities in a broad sense, which includes one or all of the production chain, processing of production inputs and outputs (agro-industry), marketing of agricultural outputs and supporting institutional activities. These related activities include business activities that support agricultural activities and business activities that are supported by agricultural activities.

It can be concluded that agribusiness is a unity of business activities that includes one or all of the links of production, processing of products and marketing of products that have to be done with agriculture in a broad sense. The livestock agribusiness subsystem includes 4 (four) subsystems, namely:

- a. Upstream agribusiness subsystem
Is an economic activity that produces sapronak (breeding industry, feed, medicines/vaccines, equipment and others);
- b. On-farm agribusiness subsystem
It is an economic activity that uses sapronak to produce primary livestock commodities. Included in this subsystem of farming business are food crop businesses, horticultural plant businesses, medicinal plant businesses, plantation businesses, fisheries businesses, livestock businesses, and forestry.
- c. Downstream agribusiness subsystem
Is an economic activity that processes primary livestock commodities into processed products (processing industries: meat, milk, eggs, leather, restaurant and food service industries and their trade),
- d. Supporting institutions
It is an economic activity that provides services needed by the other three subsystems such as transportation, counseling and education, research and development, banking, government policies (development budget, input and output prices, marketing and trade, and human resources).

Among these agribusiness subsystems that have the smallest added value is the cultivation agribusiness subsystem. Therefore, folk breeders who are in the cultivation subsystem will always receive a relatively small income. So that his economic life does not undergo very significant changes.

2.2. Dairy Agribusiness

According to Prasetyo (2007), there are four ways that can be done to develop dairy agribusiness, namely:

- a. Business development
Business development on the upstream side (upstream subsystem) through the procurement of animal feed derived from forage and concentrates; veterinary medicines, milking equipment such as milk cans, breeding businesses and artificial insemination services. And also, product development (downstream subsystem).
- b. Population increase
To increase the cow population by accelerating the age of the first mating so that dairy cows will have offspring faster (the age of the first mating is about 2.5 years), shorten the lambing distance (lactation is only 7-8 months), import of ready-to-lactation broods or even those who have already been lactating;
- c. Increased productivity
Improvement of productivity carried out such as maintenance management (improvement of feed quality, selection of high-yielding lactation cattle, IB services with quality frozen semen and health services), feed management (manufacturing of concentrate feed in rural areas for the provision of cheap concentrate feed based on local resources, increasing forage production through the provision and use of land for pasture (superior grass and legumes) on sleeping land, displaced, terrace, under the auspices of plantations as well as the utilization of hay and agro-industrial waste to be processed into quality feed;
- d. Addition of business scale (in the cultivation subsystem).

2.3. The Needs of Farmers/Ranchers for Agribusiness System Factors

Farmers/ranchers need elements (factors) of the agribusiness system. The needs of farmers/breeders for the elements (factors) of the agribusiness system are divided into 4 subsystems, namely:

- a. Input subsector (Upstream Agribusiness Subsystem)
Subsystem of providing inputs or availability of means of production. According to the Ministry of Agriculture (2007) farmers' needs for elements or factors of the input subsystem are seeds (number of seeds, uniformity/age, nation, health, quality), medicines, equipment, technological innovation, availability of services for the commercial/distribution system, and 5 (five) appropriate: accuracy of place, time, quantity and type, quality and price of production facilities. The accuracy of implementing these four things is part of the very important role of agribusiness supporting institutions.

b. Farming Subsystem (Cultivation)

A cultivation subsystem is a subsystem that converts inputs into primary products. According to the Ministry of Agriculture (2007), in the cultivation subsystem needed by farmers are business location (agroclimatic), availability of labor, commodities (superior), technology (mastery of technology), business scale / area, individual business, groups, management, equipment, and 4 (four) rights, namely on time, right place, and right in quantity. To carry out activities in the cultivation subsystem requires factors driving business development.

The driving factors for the development of the dairy business are:

- Economic factors, because the dairy cattle business is quite profitable, the dairy cattle business provides follow-up results in the form of energy, fertilizer, and cow yields;
- Guidance and motivation (dairy business concerns breeding, feeding, and management, this business is not easy because it requires diligent handling, meticulousness, and adequate skills);
- Provision of food and seeds (agricultural waste such as food crop waste, plantations, and forage feed for livestock as well as superior seedlings, males and frozen cement).

In addition to the driving factors in aquaculture activities there are factors that hinder business development, such as: climate (high temperatures are contrary to the life of dairy cows); Capital; marketing; people's purchasing power is still low; hygienic milk production from the community is still low; Low yield of dairy products does not correspond to high production costs.

c. Yield Processing Subsystem

The processing of results is classified into four results of activities, namely: Grading / classification; Milling, mixing; ripening activities, canning, pasteurization; chemical and texture change activities. (Department of Agriculture, 2007). In the process, the elements or factors needed in the yield processing subsystem are:

- Location (close to raw materials, close to the market, labor climate or wages, productivity, availability of qualified labor, taxes and incentives);
- Factory layout (layout of machinery and equipment);
- Raw materials;
- Capital (equipment);
- Quality (quality) and competitive level of products;
- Information (technological accuracy);
- Business continuity;
- Management;
- Energy.

d. Result Marketing Subsystem

Fresh milk can be used as a variety of products. Multitude of product types is called product diversification. Diversified products of fresh dairy origin can be seen in the following Figure 2.

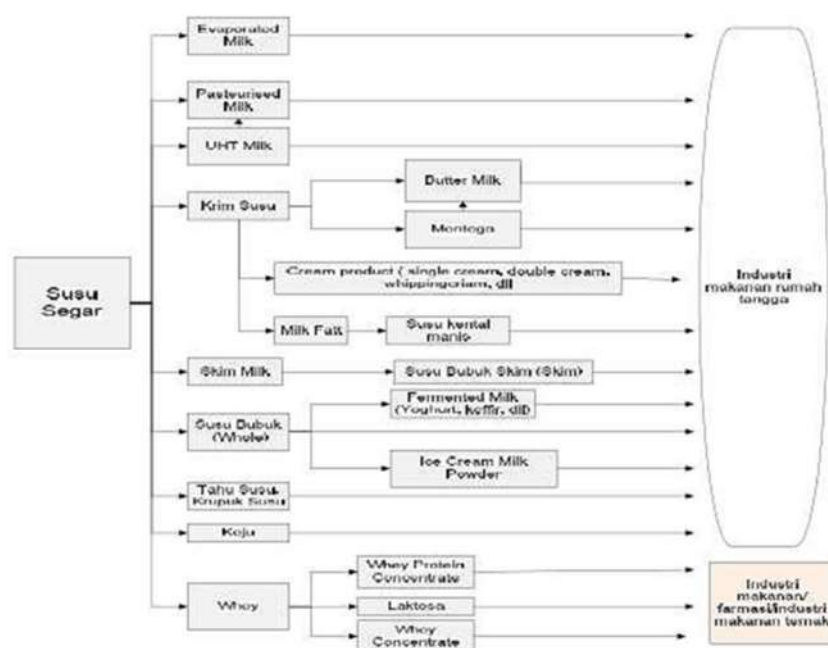


Figure 2: Dairy Industry Tree

e. Supporting Services Subsystem

In the subsystem of supporting services needed by farmers/breeders are the availability of transportation, counseling and education, research and development, credit/banking, government policies (development budget, input and output prices, marketing and trade, and increasing human resources). According to the Ministry of Agriculture (2007), what farmers/breeders need for agricultural extension is a learning process so that they (the main actors) are willing and able to access market information, technology, capital, and other resources.

2.4. Strategy Concept

Strategy is a tool to achieve a long-term goal. Strategy has 2 concepts, namely, 1) Distinctive Competence, that is, the company has strengths that are not easy for competitors to imitate, 2). Competitive advantage is a competitive advantage caused by the choice of strategy that the company makes when selecting business opportunities. There are 2 factors that cause the company to be superior to competitors, namely related to labor skills and resource capabilities.

According to Porter, there are 3 competitive advantage strategies that can be done, namely:

- Cos Leadership, by providing lower prices, because it utilizes economies of scale, product efficiency, technology use, easy access to raw materials, and so on
- Differentiation, applying certain values to consumers about the superior performance of products, excellent service, and so on
- Focus, focus on implementing the expected market segmentation

Wheelen and Hunger (2003), say that the formulation of a strategy is the development of a long-term plan for the effective management of environmental opportunities and threats, judging by the strengths and weaknesses. Strategic management is a managerial action to determine the company's performance in the long term based on the external and internal environment. The external environment consists of a working environment and a social environment. Elements of the working environment are shareholders, governments, suppliers, local communities, competitors, customers, creditors, trade unions, special interest groups, and trade associations. Meanwhile, the social environment is describing economic, sociocultural, technological, political and legal forces. The internal environment consists of variables that exist within the organization. Those variables include the structure, culture, and resources of the organization. Structure is the way in which a company is organized with regard to communication, authority, and workflow is graphically depicted. Culture is a pattern of beliefs, hopes, values shared by members of the organization. The norms that give rise to behavior, resources are assets that include people's skills, abilities, managerial talents.

Types of Strategies According to Rangkuti (1999), the strategy in its principle is divided into three types, namely:

- Management strategies that are oriented towards macro strategy development such as, product development strategy, price development strategy, market development strategy.
- Investment strategies i.e., investment-oriented strategies e.g., aggressive growth strategies, market penetration and rebuilding strategies.
- Business strategy is a strategy oriented towards the functions of management activities, for example marketing, organizational strategy, production or operational strategy, and distribution strategy.

Strategic Management Model The strategic management model includes:

- Formulation of a strategy consisting of vision, mission, objectives, strategy, and policy.
- Implementation of strategies that include programs, budgets, and procedures.
- Evaluation and control are evaluating performance and how it is controlled. More details can be seen in Figure 3.

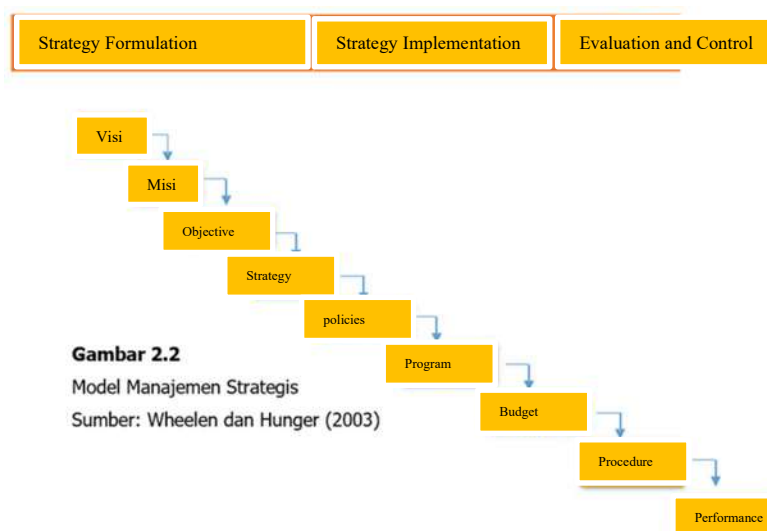


Figure 3: Strategic Management Model

3. Materials and Methods

This research was conducted at KSU Tandang Sari, Tanjungsari District, Kab. Sumedang, West Java. To review the business development strategy, it is carried out using a SWOT analysis. Before using a SWOT analysis, some data is needed both in the internal and external environment of KSU Tandang Sari. The data collection techniques are as follows;

a. Data Collection Techniques

The data collection techniques used to obtain information about the development of dairy cattle business in Tanjungsari District are as follows:

a) Primer Data

Primary data collection was carried out using surveys with direct observation in the field, with the following techniques:

- i. Observation is a way of collecting data by holding direct observations on the object of research. The data that can be collected from this data collection technique is in the form of existing conditions / current regional conditions,
- ii. Interviewing is a method of collecting data by conducting direct interviews with respondents based on a list of questions (questionnaires) that have been prepared.
- iii. Recording is a way of collecting data by recording existing data on agencies and other sources related to this study.
- iv. Documentation is used to find and obtain primary data through archival manuscripts in the form of prints, recaptures, image data, photos and so on.

b) Secondary Data

In conducting this study, secondary data was obtained from the results of research, articles, literature searches, and scientific journals related to the development of dairy cattle business.

After the data is collected, the next stage is to perform data analysis. The analytical methods used to develop strategies for developing dairy cattle business include:

- a. A descriptive analysis was carried out to determine the number of dairy farmers in KSU Tandangsari, population, distribution, cultivation system used, processing of livestock products, and marketing of cow's milk.
- b. Analysis of potential resources that can be developed as the main element or support for the development of dairy cattle business.
- c. Business analysis

a) Cost analysis of dairy cattle business

The cost of farming business used is the cost of working in the production process to produce products including: the cost of production facilities, (feed, medicine, artificial insemination, supplements, water), family labor costs, equipment depreciation costs, electricity costs, purchase of cows, transportation costs, and working capital interest. The business costs of dairy cattle can be formulated as follows:

$$BU = Bp + Bo + Bib + Btk + Bpk + Bpl + Bps + Bmk + Bsp + Ba + Bl + Btp$$

Information:

<i>BU</i>	: Dairy cattle business costs (IDR)
<i>Bp</i>	: Cost of feed (forage, concentrates, bran and cassava) (IDR)
<i>Bo</i>	: Cost of medicine (IDR)
<i>Bib</i>	: Cost of artificial insemination (IDR)
<i>Btk</i>	: Labor costs (IDR)
<i>Bpk</i>	: Cage depreciation fee (IDR)
<i>Bpl</i>	: Equipment depreciation fee (IDR)
<i>Bps</i>	: Cost of purchasing cattle (IDR)
<i>Bmk</i>	: Working capital costs (foraging, feeding, cleaning the pen and cows and milking) (IDR)
<i>Bsp</i>	: Supplement fee (IDR)
<i>Ba</i>	: Cost of purchasing water (IDR)
<i>Bl</i>	: Electricity cost (IDR)
<i>Btp</i>	: Transportation costs (IDR)

b) Dairy Cattle Business Revenue

Revenue from the dairy cattle business consists of the sale of milk, the sale of cows and calves that will not be used as rejuvenation, the value of livestock value, and the proceeds from the sale of manure. It can be systematically formulated as follows:

$$Pr U = Prs + Pra + Prnt + Prkt$$

Information:

- Pr U* : Receipt of dairy cattle business (IDR /yr)
Prs : Receipts from the sale of milk (IDR)
Pra : Receipts from the sale of cows and calves (IDR)
Prnt : Receipts from the results of livestock value added (IDR)
Prkt : Receipts from the sale of manure (IDR)

c) Net income of dairy cattle business

The net income of the dairy cattle business calculated is net income. Net income can be taken into account by subtracting gross income (receipts) by the cost of undertaking. Systematically it can be written as follows:

$$Pd U = Pr U - BU$$

Information:

- Pd U* : Net income of dairy cattle business (IDR)
Pr U : Receipt of dairy cattle business (IDR)
BU : Dairy cattle business costs (IDR)

d. Analysis of internal and external factors

Internal (strengths and weaknesses) and external (opportunities and threats) factors. Internal factors analyzed include dairy breeding, management, location and land, breeders, feed, finances, human resources, and production. External factors analyzed include political, governmental, and legal aspects, technological aspects, economic aspects, as well as social, cultural, demographic, and environmental aspects. Internal and external factors in the agrobical development of livestock businesses in Tanjungsari District were identified using a SWOT analysis. This SWOT analysis is based on logic that maximizes strengths, and opportunities, yet can simultaneously minimize weaknesses and threats.

e. Alternative Strategies

The SWOT matrix is used to implement strategies based on strengths, weaknesses, threats and opportunities. This matrix describes how external opportunities and threats facing the organization are adapted to existing internal strengths and weaknesses. This matrix produces 4 types of strategies. There are 8 stages in forming a SWOT matrix, namely:

- Determining the factors of external opportunities of a business.
- Determining the external threat factors of an undertaking.
- Determining the factors of internal strength of an undertaking.
- Determining the factors of internal weakness of an undertaking.
- Adjusting internal forces to external opportunities to obtain an S–O strategy.
- Adjusting internal weaknesses to external opportunities to obtain a W – O strategy.
- Adapting internal forces to external threats to obtain an S–T strategy.
- Adjusting internal weaknesses to external threats to obtain a W–T strategy.

Table 2: Matrix SWOT

Internal Factors External Factors	STRENGTH (S) Determine 5-10 internal strength factors	WEAKNESS (W) Determine 5-10 internal weakness factors
	STRATEGI S-O Create a strategy that uses strengths to capitalize on opportunities	STRATEGI W-O Create strategies that minimize weaknesses to take advantage of opportunities
OPPORTUNITIES (O) Determine 5-10 environmental opportunity	STRATEGI S-T Create strategies that use strengths to overcome threats	STRATEGI W-T Create strategies that minimize weaknesses to avoid threats
THREATS (T) Determine 5-10 environmental threat factors		

Sumber: Rangkuti, 2000

4. Results and Discussion

4.1. Identification Factor Strengths and Weaknesses

Based on results analysis the internal environment of KSU Tandangsari, then obtained several internal factors that become strengths and weaknesses for KSU Tandangsari. Following these details factor internal environment to be strengths and weaknesses for KSU Tandangsari as Table 3.

Table 3: Factors the Internal Environment of KSU Tandangsari

Internal Factors	Strength	Weakness
Nursery	1. Potency genetics cow dairy enough good	1. Quality brood stock cow not ideal so produce quality low cow and price _ more and more expensive 2. Not yet ability cooperative for maintaining stock of seeds and breeding good seeds _ 3. Rearing (effort enlargement) yet walk
Management	2. Form incorporated business _ law 3. Distribution duties and responsibilities answer employee clear 4. Loyalty level high employee _	4. RATs that haven't fully walk 5. Less bookkeeping _ good 6. System service cooperative to member not yet maximum
Location and Land	5. it's located enough strategic, easy affordable with vehicle, and easy in marketing 6. Potentially as the place development effort cow dairy seen from topography and climate	7. Location no support for operational milk processing 8. Limited land for cage
Breeder		9. Regeneration no walk good 10. Scale effort breeder still under standard appropriateness economical 11. Ability level Skills cultivation and management unfinished business _ equally
Feed	7. Feed concentrate provided by the cooperative	12. Forage Feed livestock (HPT no comparable population cattle
Finance		13. Access to difficult source of capital 14. Limited capital for addition population cows and activities effort other
Source Power Man	8. Communication walks good Among administrators and members administrator	15. Regeneration no walk with good (partially big age member already over 50 years) 16. Business scale breeder still under standard appropriateness

Internal Factors	Strength	Weakness
		economical
		17. Ability level Skills cultivation and management effort breeder still not yet equally
Production	9. Use modern technology	18. How difficult look for own market share 19. Average quantity of milk per head parent low 20. Cost milk production still tall

Source: Analysis Results, 2020

4.2. Identification Factor Opportunities and Threats

Based on results analysis environment external Cooperative All Business Signature, then obtained several factors external being's opportunities and threats for Cooperative All Business Signature. Details factor environment external being opportunities and threats for Cooperative All Business Signature could see in the Table 4.

Table 4: Factors Environment External KSU Tandangsari

Factor external	Opportunity	Threat
Economy	1. Development price milky increase	1. Competition with good milk collector individual nor group 2. Ascension price meat cow impact to decrease population cow dairy
Social	2. KSU Tandangsari is GKI members 3. Awareness society importance life healthy 4. Condition Supported geography	3. How difficult for HMT fulfillment
Technology	5. Development technology production 6. Development technology drugs for those affected disease	
Political	7. There is coaching and training for KSU Tandangsari 8. Policy supportive government the development of KSU	4. Policy government about import milk

Factor external	Opportunity	Threat
Tandangsari		

Source: Analysis Results, 2020

4.3. Analysis SWOT Matrix

IE matrix is used for producing strategic overview general can conducted without connect Among strengths and weaknesses as well as opportunities and threats encountered. To obtain more strategies Specific so used created SWOT matrix with see factor strengths, weaknesses, opportunities, and threats so the resulting strategy IE matrix can be customized with the internal and external conditions of KSU Tandangsari moment this. SWOT got used by organizations for complete matrix IE through more strategic alternatives specific. The SWOT matrix consists of from Four strategies were developed from merger between S (Strength), W (Weaknesses), O (Opportunities), T (Threats) organization. The four strategies namely SO, ST, WO, and WT strategies as Table 5.

Table 5: Cooperative SWOT Matrix All Business Signature

	Strengths _	Weaknesses _
Internal Factors	1. Potential genetics cow dairy enough good 2. Shape incorporated business law 3. Distribution duties and responsibilities answer employee clear 4. Level of loyalty high employee 5. Location enough strategic, easy affordable with vehicle, and easy in marketing	1. Quality broodstock cow not ideal so produce quality low cow and price more and more expensive 2. Not yet ability cooperative for maintaining stock of seeds and breeding good seeds _ 3. Rearing (effort enlargement) yet walk 4. RATs that haven't fully walk 5. Less bookkeeping _ good 6. System service cooperative to member not yet maximum 7. Location no support for operational milk processing
Factors external	6. Potential as the place development effort cow dairy seen from topography and climate 7. Feed concentrate provided by the cooperative 8. Communication walks good Among administrators and members administrator 9. Usage modern technology	8. Limited land for cage 9. Scale effort breeder still under standard appropriateness economical 10. Ability level Skills cultivation and management unfinished business _ equally 11. Forage Feed livestock (HPT no comparable population livestock) 12. Access to difficult source of capital 13. Limited capital for addition population cows and activities effort other 14. Regeneration no walk with good (partially big age member already over 50 years) 15. How difficult look for own market share 16. Average quantity of milk per head parent low 17. Cost milk production still tall

Opportunities _	SO strategy	WO strategy
1. Development rising milk prices 2. KSU Tandangsari is GKI members 3. Awareness Public importance life healthy 4. Condition Supported geography _ 5. Development technology production 6. Development technology drugs for those affected disease 7. There is coaching and training for KSU Tandangsari 8. Policy supportive government _ the development of KSU Tandangsari	1. Development population cow for increase production (S1, S2, S3, S5, S6, O1, O2, O3, O4, O6) 2. Build place (factory) processing product made from raw milk (S4, S7, S8, S9, O7, O8)	1. Build the place nursery cow (W1, W2, W3, W7, W8, W16, W18, O1, O2, O3, O4, O6, O8) 2. intertwine cooperation with party third in producing processed HPT (W11, W12, W13, O5) 3. Regeneration member breeder through activity training breeder young (W4, W5, W6, W9, W10, W14, W15, W17, O7)
Threats _	ST Strategy	WT Strategy
1. Competition with good milk collector individual nor group 2. Ascension price of cow's milk because quality seeds cow less milk good 3. Contaminated milk oleb smell no delicious because location cooperative close with the market 4. How difficult for HMT fulfillment 5. Policy government about import milk	1. Enhancement quality and quantity seeds cattle (W1, W3, W7, T1, T2) 2. Move the place center activity fresh milk business /MCU (W6, W7, T3, T4)	1. Application technology appropriate to use level breeder (W1, W2, W3, W9, W10, T2, T4) 2. intertwine cooperation with party institution finance in facility capital (W17, T1, T4)

Strategy So-O (Strength-Opportunities)

SO strategy is a strategy that uses the internal strength of KSU Tandangsari for take advantage the opportunities exist. The SO strategy applied to KSU Tandangsari are:

- a. Development population cow for increase production (S1, S2, S3, S5, S6, O1, O2, O3, O4, O6)
 With exists distribution duties and responsibilities answer clear employee, level loyalty clear employees, have source good capital, location strategic company and good communication Among administrators and members administrator is strength main can used company for catch opportunity breadth market share yet entered with more milk production big. This strategy enough effective for cooperative if has a marketing division alone in accordance with the strategies offered, additions population this still in accordance with management company. For add population and increase quality good milk production need noticed from nutrition feed cattle, hygiene cage and conditions geographical support, so that cows the no easily stressed, for resolve nature easy cattle sensitive could overcome with use tool tranquilizers, for example use technology music as already normal used by breeders.
- b. Build place (factory) processing product made from raw milk (S4, S7, S8, S9, O7, O8)
 In build a factory processing product made from raw milk, then needed more internal factors formerly for strengthen governance cooperative. Loyalty level high employee, there is coaching and training for KSU Tandangsari, the communication is running good Among administrators and members administrators and policies government for support the development of KSU Tandangsari. Forget quality and quantity ingredient the best raw milk so needed feed the best cattle. Moment this cooperative already provide feed concentrate as feed addition for cow milk Besides it's cooperative already use modern technology as example oh, already availability *Milk Cooling Unit* (MCU), laboratory inspection Milk quality and availability factory feed cattle concentrate.

ST Strategy (Strength -Threats)

ST strategy using strength for avoid or reduce influence threat.

- a. Enhancement quality and quantity seeds cattle (W1, W3, W7, T1, T2)
KSU Tandangsari in a manner geographical have potency for development effort cattle cow milk and have potency enough genetics ok. However, in Thing maintenance and care animal cattle not optimal. Factor most important production in enhancement quality and quantity seeds cow that is start from election seeds cow milk, gift feed, and maintenance. Effort this could conducted with good if exists distribution duties and responsibilities answer clear employees. Besides it's a gift feed must sufficiently needs nutrition animal cattle. So that production milk can compete with good milk collector individual or group.
- b. Move the place center activity fresh milk business /MCU (W6, W7, T3, T4)
Remember location office Cooperative All Business Signature is behind the market and *the Milk Cooling Unit* (MCU) is located meeting with TPA while the market has an impact on the damage the quality of milk therefore growth bacteria, then step yage carried out by cooperatives is move the place center activity fresh milk/MCU business. With condition location in a manner geographical support development activity effort cattle, location could Fulfill needs feed animal livestock, and availability supporting facilities and infrastructure effort cattle cow milk.

(Weakness-Opportunities) Strategy

WO strategy is a strategy that uses opportunity for repair Cooperative internal weaknesses All Business Signature.

WO strategy that can implemented by the cooperative All Business Signature namely:

- a. Build the place nursery cow (W1, W2, W3, W7, W8, W16, W17, O1, O2, O3, O4, O6, O8)
Seeds cow dairy is one determining factor and possess score strategic in effort development cow milk Effort for increased availability seeds cow dairy in a manner sustainable to use enhancement population and productivity cattle, and protect breeder in get seeds cow dairy with refers to supporting facilities and infrastructure effort nursery cow milk.
- b. Intertwine cooperation with party third in producing processed HPT (W11, W12, W13, O5)
Reason main production company reduce is factor willingness feed cattle. in season dry milk can reduce because deficiency feed for cattle. in season drought milk production can reduce because deficiency feed for cattle. Land green need expanded for sufficient needs feed population cattle so that could resolve season prolonged drought. Because it is necessary ensure cooperation with supplier feed grass for ensure availability feed. Another necessary factor breeders watch out for is disease invading anthrax cattle requires a cow unit milk at KSU Tandangsari for watch out for it. Cooperation with Service Farm through extension worker is step main must done by the company for get protection through the programs and assistance provided. this strategy could do because supported by the company's internal capabilities, i.e., capital security and resources finance, distribution duties and responsibilities clear employees.
- c. Regeneration member breeder through activity training breeder young (W4, W5, W6, W9, W10, W14, W15, W17, O7)
Cooperative All Business Signature have weakness in Thing source power man in the field system information and management , productivity source power low human in operate his efforts but Cooperative All Business Signature have opportunity for increase source power man that is in operate his efforts Cooperative All Business Signature not free from supporting organizations effort among them combined Cooperative All Indonesia (GKSI), office Cooperative Sumedang, Department Livestock , Financial and Banking Institutions , Private Companies as well as policy supportive government the development of KSU Tandangsari. Competition in the dairy industry is increasing strict compel company could compete. one method for win competition that is with have source power skilled and possessing human high productivity. Attempts made for increase Skills breeder Cooperative All Business Signature could give training, coaching as well as education about innovation for increase effort cattle dairy with cooperate to related agencies.

WT Strategy (Weakness-Threats)

WT strategy is directed for minimize internal weakness and avoid threat external.

- a. Application technology appropriate to use level breeder (W1, W2, W3, W9, W10, T2, T4)
How difficult get feed forage livestock because exists conflict interest with Public that is the place stay make availability land the more difficult, impact on availability HPT land (forage feed cattle) that have not Fulfill needs feed animal cattle. Besides it, not regularly replacement season rain and drought add problem alone for breeders. Ability and skill level cultivation and management unfinished business equally from breeder effort no enlargement yet walk and scale effort scale breeder still under standard appropriateness economical. Quality brood stock cow not ideal so produce quality low cow and price more and more expensive. Not yet ability cooperative for maintaining stock of seeds and breeding good seeds, because it is necessary there is effort application technology

appropriate to use to breeders and KSU Tandangsari in make sourced feed from forage and nurseries cow dairy superior.

- b. Collaborate with financial institutions in capital facilities (W17, T1, T4)
Availability of capital for perpetrator effort farm is necessity. The capital function is not only as one _ factor production, but also play a role in enhancement capacity breeder as well as KSU Tandangsari in adopt technology like seeds cow quality dairy, feed cattle, tools support breeder cow milk.
Existence institution finance be one solution in financing sector farm because have role strategic as liaison in activity economy society. Financial institutions also play a role strengthen KSU Tandangsari institution in development agribusiness that doesn't free to various source power productive, namely: capital, technology, and market information.

5. Conclusion

Based on the descriptions that have been submitted from the master plan for developing a dairy cattle business, it can be concluded as follows:

- a. Development of dairy cattle agribusiness areas through the development of more advanced farms with a regional approach, use of appropriate technology and implementation based on efficiency, production, and sustainability.
- b. Development of an integrated system through 3 main components, namely:
 - Cultivation is an input into the dairy farming business system as a production factor that has aspects or activities including members (breeders), cattle, feed (HPT and concentrate), cultivation technical skills, business facilities and infrastructure, business capital, environment, and regulations.
 - Handling is a process in achieving a dairy farming business carried out by the cooperative, the activities carried out include animal health and artificial insemination (AI), transporting milk, cooling milk (MCU), testing milk quality, procuring concentrates, handling animal disease outbreaks, technical guidance cultivation and business, and facilitation of capital.
 - Marketing processing is the expected output in the dairy farming business, carried out by cooperatives, farmer groups, members, GKSI, IPS, other business partners, and the government.

Acknowledgments

To support the development of an integrated dairy cattle business, the following things are needed:

- a. There is a need to be committed between stakeholders, especially local governments, in supporting the implementation of the development master plan using natural and financial resources based on democratic principles and governance, and in accordance with local wisdom.
- b. SKPD (village apparatus work unit) related to animal husbandry needs to carry out initiatives to support regional policies to provide conducive conditions for the development of dairy farming businesses.
- c. It is necessary to increase the capacity of the livestock community through integrated and sustainable assistance and training.

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