INDONESIA MILK INDUSTRY AND BUSINESS STRATEGY OF DAIRY COOPERATIVE IN BANYUMAS)

(Industri Susu di Indonesia dan Strategi Bisnis Koperasi Susu di Banyumas)

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ABSTRAK

Tujuan studi ini adalah memberikan gambaran tentang industri susu di Indonesia dan menganalisis pengaruh perubahan-perubahan kondisi eksternal industri susu terhadap perkembangan usaha sapi perah dan strategi bisnis koperasi sapi perah di Kabupaten Banyumas. Selanjutnya, studi ini bertujuan mengevaluasi strategi bisnis koperasi sapi perah "PESAT" dan memberikan rekomendasi tentang strategi bisnis baru yang sesuai dengan perkembangan industri susu di Indonesia. Studi ini dilaksanakan melalui studi pustaka dan survei lapangan di wilayah kerja koperasi "PESAT" (Banyumas). *SWOT Analysis* dan *Porter's Framework* digunakan untuk mengevaluasi industri susu dan merumuskan strategi bisnis bagi koperasi. Hasil penelitian menunjukkan bahwa persaingan di industri susu semakin ketat oleh karena pengaruh global maupun lokal. Studi ini merekomendasikan kepada Koperasi "PESAT" untuk mengeksplorasi pasar yang lebih luas dan menerapkan strategi baru dengan sasaran yang lebih luas berdasarkan pembedaan produk (*broad differentiation*). Strategi ini diharapkan dapat mengurangi ketergantungan koperasi terhadap konsumen besar yaitu PT.Sari Husada yang bertindak sebagai industri pengolahan susu (IPS).

Kata kunci : Industri susu, koperasi susu, strategi bisnis

INTRODUCTION

Dairy farmers still have been facing many challenges and difficulties even if the Indonesian dairy industry has been established for a long time. Most of those challenges and difficulties are low dairy productivity and also low increase of milk consumption. Low productivity of local dairy cattle in the Indonesia dairy industry is accompanied by high importation of milk. Meanwhile, the low consumption can be explained by the fact that in a number of developing countries, milk and dairy products are unaffordable for the majority of the population and consequently, milk is oftentimes absent from most people's diets.

The process for successful management of farm business and the risks associated with it, is defined as follows: know where you want to be, identify the best plans (strategy) to achieve it, then implement plans with precision. Rapid changing of the dairy business environment pushes the cooperative to consider not only circumstances locally but also nationally. It requires an understanding of the key influences on the present and future well-being of the farm business (Parker, 1999)

The PESAT cooperative is only one of the suppliers of fresh milk to Sari Husada Co, which means that there are some competitors in the industry. To strengthen its position, the cooperative must be more competitive. To become

competitive, the cooperative must consider several external and internal factors. Since there are changes in the external environment (political, social and economical aspects), the cooperative must position itself to take advantage of those changes connected with its strengths and weaknesses.

This paper analyzes the effect of changes in Indonesia dairy industry to the development of local dairy cooperatives. The business activities of the PESAT Dairy Cooperative in Banyumas, Central Java, Indonesia that are involved in the management of the dairy cattle enterprise, was taken as a case. Specifically, this paper would (1) show opportunities and threats for dairy industry that can be inferred from external environment, i.e., macro environment (political, social, economic, demographic, and technological) and industry (market size, competitor, bargaining power of supplier, bargaining power of buyer and threat of substitution), (2) evaluate the current agribusiness strategy of dairy cooperative (3) recommend a new or revised plan of action to the business strategy of dairy cooperative.

RESEARCH METHOD

SWOT analysis was used to describe and analyze current circumstances to generate a strategy for the PESAT cooperative. Fahy and Smeethe (1999). The starting point of strategic marketing analysis has been to begin by assessing the firm's strengths/weaknesses as part of a broader SWOT analysis

The Porter's Framework (Five Forces Model) was used to analyze the dairy industry and level of competition in the market. Porter (1980) stated that in any industry, the rules of competition are embodied in five competitive forces: the threat of new entrants, availability of substitutes, bargaining power of buyer, bargaining power of supplier, and intensity of rivalry among the existing competitors. Correlation and regression analysis were used to determine the relationships between Indonesia milk production and number of dairy cattle, and also to understand which of social and economic factors affect the business performance of farmers.

RESULT AND DISCUSSION

Industry Definition and Overview

The production of fresh milk in Indonesia is low. It is resulted by a fact that the Indonesian dairy cow produces an average of only 9 - 10 liters of fresh milk per day compared to 20 liters in developed countries. Uotila and Dhanapala (1998) stated that in Indonesia, farmers with an average of 3 - 4 cows per farmer own most of the dairy cows. They operate the business as family unit-based production. These farmers have other activities such as rice farming to take care of and they are not properly trained in dairy farming technologies especially in animal nutrition and breeding.

Low productivity of local dairy cattle in the Indonesia dairy industry is accompanied by high importation of milk. During the period 1990 – 1999, the Indonesian dairy industry suffered from low increase rate of local milk production. In 1999, local milk production increased to only 436,000 tons from 375,350 tons in 1998. This was because the national population of dairy cattle increased. According to the Central Bureau of Statistic (2000), the population of dairy cattle increased to 332,031 head in 1999 from only 321, 992 head in 1998 (Figure 1). This increase appeared slightly after the industry suffered from declining of dairy population in 1997-1998 caused adversely by economic crisis that start faced Indonesia in 1997.

There is a positive correlation between number of dairy cattle and domestic milk production (r = 0.93). This means that increasing the number of dairy cattle would result in increasing domestic milk production
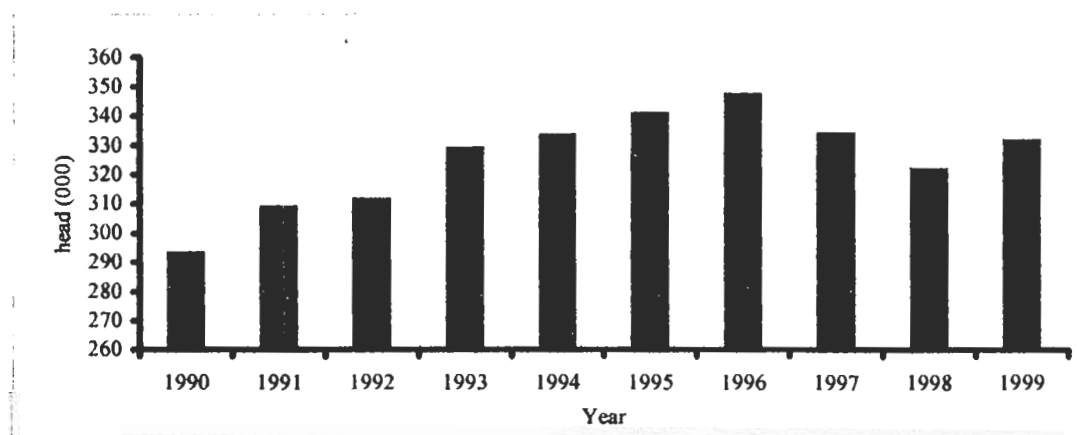

Figure 1. Number of Indonesian Dairy Cattle in 1990 – 1999

Table 1. Volume of Local Milk Production, Import Milk and Value ($) in 1990 – 1999

Year	Production in 000 tons	Import (Tons)	Value ($000)
1990	345.60	358,680	55,96
1991	360.20	543,440	74,48
1992	367.18	542,550	91,483.1
1993	387.52	543,290	96,517
1994	426.73	555,310	90,921.2
1995	433.44	819,350	144,026.5
1996	441.16	761,460	114,820.6
1997	423.67	697,780	94,372.2
1998	375.35	591,040	57,889.5
1999	436.00	599,260	83.602

Source: Central Bureau of Statistic, 2000

Connected with the total Indonesian population of 200 million people, and the estimated requirement of 7.2 kg/person/year, total demand for milk in 1999 was 1.4 million tons for national consumption. Local dairy milk production was only able to meet 31.1 percent of total demand. It implies the processing plants of dairy products in Indonesia still need and continue to be dependent on imported fresh milk. Flooding of imported milk is also due to low quality of local milk and unstable local milk production (Table 1).

Indonesia's commitment to the Uruguay Round Agreement (liberalizing agricultural market) has been forcing Indonesia to reduce tariff for the import of agricultural products. Besides, the agreement also encourages the Indonesian government to abolish non-tariff barriers such as mixing ratio policy between local and imported product. Local content rules that once required imported industrial dairy inputs to be blended with local product have been abolished and general importers are free to source and import basic materials. Griffin (1999) stated that this regulation would make it easier for importers to import raw milk from other countries. And eventually it will force local products to compete with imported products directly, which is cheaper and yet has higher quality.

The increase in local production still can not meet the amount of milk needed and also quality requirements such as fat percentage and density by milk processors. It still needs to import raw milk from New Zealand and Australia.

This importation dominates raw material of milk processing by 68.9 percent. And since 1999 when the government started to open importation of raw milk, the volume of importation has slightly increased and has a tendency to increase in the next future.

Based on that figure, increasing importation tends to be greater than local milk production. The amount of importation would go faster than increasing local milk production. It is supported by a situation that in 1998 milk consumption increased by 8.5 percent while local milk production only increased by 5.9 percent.

Traditionally, milk is not part of the Indonesian diet. Milk is regarded as a health food for babies, but is not yet widely popular with older children and adults. There also remains among consumers the perception that milk is a luxury product. Murphy and Tisdell (1996) stated that consumption of fresh milk in Indonesia is very low, at approximately 5 liters per capita compared to 58 liters in Singapore, 20 liters in Thailand and 18 liters in Malaysia. It is still far lower than the recommended dietary allowance of 7.2 kg milk per person per year.

The most popular type of milk locally manufactured is tinned, sweetened condensed milk. It represents approximately 70 percent of the total market of processed milk followed by powdered and liquid milk. Ease of distribution and storage has enabled this form of milk to gain popularity across the archipelago. Other types of milk available in the market include full cream and skim powdered milk (both instant and regular),

UHT and fresh milk. And also some dairy products consumed in Indonesia besides milk are butter and cheese (Table 2). There is a growing market for fresh milk and cream, while the demands for yogurt, butter and cheese appear to be decreasing over the past five years (1995-1999). This amount of importation is converted to Liquid Milk Equivalent (LME).

Industry Analysis Using The 5 Forces

1. Barriers to Entry

Barrier to entry for milk industry is low. It is indicated that most of dairy farmers are small farmers who have only 3 – 5 cows. With such a small-scale operation, they cannot lowering their production cost. It will make easier for new entrants to participate and compete in the milk business with larger scale. Besides, this industry also does not require a specific and high technology.

2. Bargaining Power of Suppliers

The bargaining power of the supplier is low. The dairy cooperatives have been producing feed concentrate themselves. They are trying to avoid dependence on feed from suppliers.
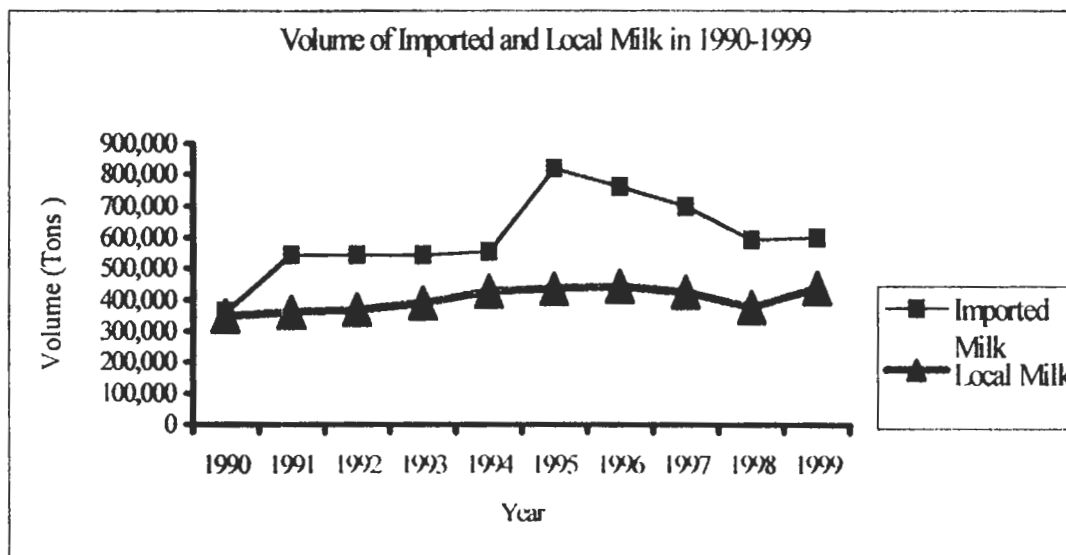

Figure 2. Volume of Imported Milk and Local Milk Production

Table 2. Import of Various Dairy Products in 1995-1999 (tons)

Year	Milk and cream	SMP (Powder)	Yogurt	Butter	Cheese
1995	24,140	529,630	105,530	113,150	46,900
1996	27,700	489,330	92,590	90,650	61,190
1997	31,020	456,810	111,870	51,160	46,920
1998	33,300	378,580	67,920	66,650	44,590
1999	33,970	404,540	66,670	60,170	33,910

Source: Central Bureau of Statistic, 2000

3. Bargaining Power of Buyers

The bargaining power of the buyer is high since milk is not daily needs for most of Indonesian people. There are many requirements that must be met in terms of quality (fat percentage, density, and microbe number) to sell milk to big consumers (milk processors). The big amounts purchased by recognized consumers (milk processors) also result in higher bargaining power of the buyer.

4. Intensity of Rivalry

The rivalry among competitor (dairy cooperatives) in Central Java is very high. The dairy cooperatives is competing in terms of milk quality in order to attract and convince milk processors to buy their milk. Besides, the dairy cooperatives are starting to expand their markets target into new geographic areas to serve independent consumers. It will make market become more competitive.

5. Availability of Substitutes

There are some substitute products for dairy products. Health drinks and also soft drinks are flooding the market. Tea and coffee as common drink for Indonesian people are also strong substitutes for the milk.

Business Profile Of The PESAT Cooperative

The PESAT Cooperative has been involved in the dairy industry, which produce raw/fresh milk for another purposes. The main business of the cooperative is selling raw/fresh milk to milk processors and also to end-users. Most of their fresh milk is sold to a big milk processor (PT. Sari Husada), but they also process a small quantity of their fresh milk into pasteurized milk irregularly. This business has a big risk since this form of milk is a highly perishable.

There are some strengths possessed by the PESAT Cooperative. Those strengths are (1) they have been producing high quality milk (with only a small volume of milk rejected by consumers) (2) they are located near a dairy research and training center (3) the cooperative is placed in an area/region that is appropriate for maintaining a dairy farm, e.g., favorable average daily temperature (having a more convenient geographic location) (4) they have good milk processing equipments (5) they have been supplying milk to and maintaining a good partnership with a milk processor (PT. Sari Husada) (6) the cooperative has been doing backward integration in terms of providing feed concentrate for the livestock of their members

Besides having some strengths, the cooperative also has some weaknesses. Those weaknesses are (1) they do not use their available equipment optimally especially for producing other milk products (2) they have no appropriate marketing plan (3) they lack market information and have high dependence on one milk processor (Sari Husada) (4) the education level of members is low (55% are elementary graduates only).

Current Strategy of The PESAT Cooperative

The objective of competitive strategy is to knock the sock off rival companies by doing a significantly better job of providing what buyers are looking for. There are three generic competitive approaches, are low cost leadership, differentiation and focus strategy (Thompson and Strickland, 1999).

Currently, the management adopts generic strategy of focus based on differentiation, believing that it can fully serve the narrow/specific market (PT. Sari Husada) through differentiating its product by delivering high-quality fresh milk. By producing high quality milk, the cooperative is one of the most preferred cooperatives by the milk processor. The cooperative produces only a small volume of pasteurized milk so that its equipment is not fully optimized. But this strategy just increases the level of its dependence on one specific consumer, only one market niche which is PT. Sari Husada.

Proposed Generic Strategy

Strategy formulation requires a clear definition of the farm's current position (internal strengths and weaknesses or strategic capability) ,an analysis of how farm level competition within the dairy industry may develop and an understanding of the external environment (how will future political, economic, social and technology factors affect dairy farming) (Porter, 1985).

To capture a bigger slice of the market and match increasing demand of local consumption (increased 1.5 percent from 1.89 liters/capita/year in 1998 to 1.92 liters/capita/year in 1999), the board of directors of the cooperative should implement a broad differentiation strategy, which implies to not rely only on a specific target market or a milk processor.

Differentiation (broad different-tiation) strategy is strongly recommended to the management of the PESAT Cooperative since the bargaining power of the feed supplier is low, and the cooperative is highly dependent on one customer, and rivalry among existing cooperative is high. A broad different-tiation strategy would try to differentiate the company's product that will appeal to a broad spectrum of buyers. And to be more competitive, the cooperative should protect its product leadership (with high-quality fresh milk) and attempt to add its product line.

To improve the quality of internal management, the cooperative must consider their members that will strengthen position of the cooperative in human capital aspect. Based on regression analysis, the cooperative should take attention on number of dairy owned by farmers, age of farmers and farmers education level. Those factors are significantly affect profit received by the dairy farmers (P<0.05). Prihatini (1997) stated that factors that contribute to the success of cooperatives are: (a) the entrepreneurship and innovative attitude of the management staff, (b) support given by respected leaders in the cooperative movement, (c) trained farmers, staff, and

workers, (4) an innovative program to improve milk quality, (5) hired skilled persons who take care of the technical aspects of their business, and (6) strict application of a quality control system.

CONCLUSION

Indonesia milk industry is going to be more competitive and attractive since barriers to entry in the milk industry is low and local consumption is going up gradually. Considering external environment (milk industry) and internal environment (PESAT Cooperative), the cooperative should not maintain current business strategy. Independent consumers is a key segment for the cooperative to reduce dependency to milk processor. Therefore, broad differentiation is an alternative strategy for the dairy cooperative to face changes of trends and development in Indonesia milk industry.

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