Factors Cause Reduction of Members of Fresh Milk Production Cooperative Dairy Cattle Breeder

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ABSTRACT

Development of dairy cattle production this time was necessary for the public consumption of dairy products can be fulfilled. The demand for milk was growing very fast, up 14.01% over the period between 2002 and 2007. However, on the other hand Indonesia's milk production grew only 2%. Until now, the consumption of cow's milk cannot be fulfilled due to the slow pace of development of dairy cattle production. Therefore, a dairy farm needed to be developed further so that milk production can meet your need for milk consumption society. The method used was descriptive by giving a description or clarification on a state of development of dairy cattle through empowerment Sintari Dairy Cooperative in Gunung Perak village of West Sinjai. The results showed that the factors causing the inability of milk production to meet the demand for milk consumption is due to the scale ownership of dairy cattle are small, the ability of milk production was low due to the age of the cattle are not productive, the selling price of milk is inadequate and high production costs so as to make income farmers become low. Efforts should be made to encourage farmers in production is utilizing their cooperatives. With the empowerment of cooperatives it was expected to spur the development of the production of dairy cows, can increase business scale, increasing milk production capabilities and reduce the cost of production. Enterprises in the dairy cooperative empowerment was done by the provision of capital by providing a source of female dairy cows, the provision of feed and concentrate quality at an affordable price, as well as the development of network marketing cow milk.

KEY WORDS

Development, Business, Cattle Farming, Empowerment, Cooperative

INTRODUCTION

Dairy cows commodity is a tool in empowerment because its product characteristic can be harvested every day, allow the breeders to earn sustainable income. The earned income is capable to employ labors, cover the opportunity cost from interest on loans and employ breeders to raise the livestock and manage the business. It cannot be separated from cooperative role that provides development and service to the dairy cow breeder as backbone of the dairy development [1]

Dairy farming is mostly dominated by farms with small-scale holdings from 1 until 3 productive cows. They mostly join the cooperative. Number of breeders is continuously increased from year to year but the image of business never develops [2]

Business development of dairy cattle industry in Indonesia, especially in South Sulawesi need to get the most attention because until now, cow milk production is still very low when compared to cow's milk needs of the community. Public awareness of the consumption of milk, making milk as an economic commodity that has
a strategic value. The demand for milk is growing very fast, which increased 14.01% over the period between 2002 and 2007. However, on the other hand Indonesia’s milk production grew only 2%[3].

Problems milk consumption patterns Indonesia is the national milk production is still very low and the Indonesian milk consumption is still very low even among Asean countries. National milk -producing plant we can only meet 30 % of the milk needs of 250 million people in Indonesia. So that 70 % of national milk supply is supplied from imports. Indonesia imports of milk mainly from New Zealand and Australia.

On farm level, farmers need technical assistance through government programs and Corporate Social Responsibility (CSR), facilitation grass fields, and import facilitation of cows. On marketing level, government plays a very important role in creating a captive spreading domestic market for fresh milk market, evaluating the possibility of milk processing industry to be obliged to purchase domestic fresh milk, improving capital access, and improving mutual cooperation Among farmers, and Among milk processing firm [4].

Total milk production in Indonesia is still low, and is estimated to have reached about 400,000 tons in 1996. The average growth in domestic milk production during the period 1993 to 1995 is less than 6% per year, while growth domestic milk consumption increased by about 35% per year. Therefore, Indonesia has to import milk to meet domestic demand [5].

National milk demand trend is expected to continue to rise. National milk requirement continues to rise due to population growth and further improvement in public awareness of nutrition, especially animal protein [6]. In addition, the increase in household income is likely to encourage milk consumption as a source of animal protein.

Domestic milk supply is not expected to meet the needs of national consumption in the next five years. National milk production is estimated at only able to meet 10 percent of the national needs in the next five years, if a dairy farm. Production of dairy cows decreased because of various problems, but the most impact is due to the government policy in 2012 prohibiting the import of dairy cattle beef cattle so many are slaughtered for meat consumption. Additionally you lack the capital for farmers are also a major problem that required the cooperative institution that can guarantee the production and marketing of dairy cattle production and provide reinforcement to the breeder.

Most cattle farmers are subsistence farmers as judged by the ownership status of cattle. They only raise cattle to obtain the benefit of having offspring and the increase in body weight when the animal is fattened. Theoretically, the number of feeder cattle produced from the offspring has the potential to support a long term fattening programmed in Indonesia. Therefore, it is expected that, given the opportunity, the economic development of villages could improve, because the type and characteristics of this business are closely linked to farmers’ daily life [7].

[8] shows that there has been excellent growth, by up to 5-6 percent per year, in the estate crop, livestock and fisheries sub-sectors. This development has given the government an incentive to develop these sub-sectors further. However, there are also negative issues that can hamper the approach. According to [9], any report that focuses on the development of livestock PIR generally arouses heated discussion on the relationship between the nucleus and partners, mainly in terms of investment and profit sharing. Some policies that were designed to help the farmer in financial and managerial matters in many cases have turned out to corner the farmer [10].

The existence of the group’s own dairy cows, including dynamics, in reality cannot be removed from the external influences that surrounded him, that of the cooperative, and in particular the extension assigned local animal husbandry department. Thus the dynamics of a group of dairy farmers will be affected by the cooperatives in the exercise of its functions and extension in his role as agent reformer. The element can include on their effective leadership group leader, the group's goals are clear, complete group structure, the functioning of the task group, the passage of coaching and group maintenance, group cohesiveness, pressure groups and efficiency group. Empowerment groups through cooperative farms as a means of supporting the development of livestock sub-sector have a very important role in improving the welfare of its members, with farmers/ranchers. In the province of South Sulawesi, cooperative farms only in Sinjai and Enrekang, both of which this area is the development of dairy cows and produce milk which is supported by the government and also the climatic conditions or the setting is good for dairy development. The fundamental problem faced by the cooperative is a lack of awareness in the use of the cooperative members in the cattle business development efforts so that the milk production can be increased.

As a result of the perishable nature of milk and the range of skills involved in its production and marketing, dairying requires a number of services that can best be provided by cooperative action. It is not surprising therefore that the cooperative movement has featured prominently in the development of the dairy industry worldwide. The cooperative principles as enunciated by the International Cooperative Alliance are voluntary and open membership; democratic control; limited interest on credit; equitable division of surplus; training of members; and cooperation among cooperatives [11].

The fundamental problem faced by the cooperative is a lack of awareness in the use of the cooperative members in the cattle business development efforts so that the milk production can be increased. Based on the previous description, then this paper aims to find out what the cause of the inability of the dairy cattle business
in Sinjai to meet the needs of the milk and how the business development efforts of dairy cows through the empowerment of cooperatives in order to meet the needs of the community milk.

**Method:**
This study was conducted in November until December 2014 in Sintari milk cooperative in the village of Gunung Perak, District of West Sinjai, Sinjai, South Sulawesi Province. The method used in this research is descriptive method that provides a picture or description on a production condition and causes decreased production of milk from farmer’s co-operative members. Types of data used are: (a) qualitative data, that is data that contains information in the form of sentences obtained from breeders who are members of cooperatives and the cooperative board Milk Sintari in Gunung Perak District of West Sinjai Sinjai, (b) quantitative data sourced from cooperative Milk Sintari. The data used in this study are: (a) Primary data is data obtained directly through interviews and observations with the board of Dairy Cooperative Sintari in Gunung Perak District of West Sinjai Sinjai, (b) Secondary data is data obtained from parties concerned. Data were analyzed using descriptive statistics

**RESULTS AND DISCUSSION**

The Indonesian dairy industry is based on smallholder farms grouped into co-operatives. Farm size is small, with most farms having no more than 3-4 head of milking cows. The dairy farms are based on confined rearing of cattle with forage grasses being gathered from outside the farm in a “cut and carry” system. This involves the farmer, or agricultural laborers (some of whom may be farmers), cutting and collecting grasses from the farmer’s land, or from along the sides of roads, irrigation ditches, forests or other such places. In the early to mid 1990s there were around 75 000 dairy farms in Indonesia grouped into approximately 200 co-operatives [12].

Sinjai is one area dairy development and processing of milk which is located in West Sinjai in the village of Gunung Perak. This village is a milk processing center by Cooperative Sintari. The production of milk processed in the cooperative came from Farmers Group members who are members of the Cooperative. Farmer groups who are members of the cooperative farmers’ groups Sintari namely BatuLeppa, Pattiroang, and Kalotoro. The three groups are in different places, ie farmer groups Kalotoro is a village located at an altitude of 1400 meters, Stone Leppa has an altitude of 1600 meters, while Pattiroang with a height of 1700 meters. Dairy farmers who are members of cooperative groups, including small farmers who have a limited number of livestock 2-4 birds per breeder. So that milk production is still very limited to 10 liters per day. All three farmers’ groups, each day produces fresh milk and then do the processing in Sintari Dairy Cooperative, better known by Susin. Susin is a mainstay of local products Sinjai which has been widely distributed outside of Sinjai, for example in Makassar.

The existence of dairy cooperatives in Sinjai has an important role in the development of cooperative milk because milk can undertake collection activities, improving milk marketing facilities, helping venture capital, the supply of feed, veterinary assistance, artificial insemination and cattle insurance. It is done to increase milk production, and provide motivation for farmers in conducting dairy cattle breeding business in Sinjai.

Sintari Dairy Cooperative was established in 2005 as the Government of Sinjai has seen their seriousness in Gunung Perak community in maintaining dairy cattle were able to supplement their income even though their principal income is farming. Sinjai regency government provides funding for the construction of Sintari Dairy Cooperative in four years, the government observed the development of the maintenance of dairy cows in the area, whether people are able to produce or not. However, you should join the government pay attention to the problems faced by farmers in pursuit of dairy cattle.

Capital Dairy Cooperative Sintari in its early backing from government funds especially on funding dairy processing machine is located exactly at the Dairy Cooperative Sintari and the rest of the members associated therewith are willing to pay the principal savings and mandatory savings in the amount specified in the bylaws and decisions of the meeting member. But the problems experienced capital Dairy Cooperative Sintari today is the lack of awareness of members of their responsibilities, that which has been determined at a meeting of members that are formally not yet fully complete the administrative requirements, have not signed the membership list and have not paid the entire principal included mandatory savings, and other. Other as stipulated in the bylaws status of candidate member. To overcome these problems, the cooperative continue to make efforts to strengthen the group and members of the group to dairy development efforts both in terms of increasing cattle population and milk production.

**Production of Dairy Cattle:**
Development of dairy cattle business in Sinjai decreasing population and declining production. It can be seen in Table 1 on the condition of cattle farming in Sinjai on Year 2010-2014 which shows the number of dairy cows and the production is declining.
Table 1: Population of Dairy Cattle and Milk Production in Sinjai Year 2010-2014

<table>
<thead>
<tr>
<th>No</th>
<th>Year</th>
<th>Dairy Cattle Population (Tail)</th>
<th>Cow Milk Production (Liter )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2010</td>
<td>251</td>
<td>130,954</td>
</tr>
<tr>
<td>2</td>
<td>2011</td>
<td>315</td>
<td>110,840</td>
</tr>
<tr>
<td>3</td>
<td>2012</td>
<td>237</td>
<td>122,400</td>
</tr>
<tr>
<td>4</td>
<td>2013</td>
<td>197</td>
<td>42,269</td>
</tr>
<tr>
<td>5</td>
<td>2014</td>
<td>182</td>
<td>14,726</td>
</tr>
</tbody>
</table>

Source : Statistics Ranch Sinjai , 2015

Table 1 show that the development of dairy cattle in Sinjai regency in 2010 through 2014 has decreased, so that the amount of milk production also decreased. This is due to several things, including the number of dairy cattle that are not productive and replacement dairy cows females spawn not optimal. By him that the existence of the cooperative is expected to facilitate the farmers who are members of the cooperative members for procurement of dairy cows through the assistance of the Directorate General of Animal Husbandry livestock by implementing a system of partnerships aimed at producing pasteurized milk for public consumption to Makassar.

Efforts should be made to the development of the cattle business is through the empowerment of cooperatives. In Sinjai District Milk Cooperative are named Sintari, which is one of the dairy farm is used as the centralization of maintenance of dairy cattle as a pilot for the farmers / ranchers in the District of West Sinjai, Sinjai. Therefore Sinjai District Veterinary Office opened a dairy farm. Sintari Dairy Cooperative is the only cooperative dairy farm located in the hamlet of Stone Leppa, Silver Mountain Village, District of West Sinjai, Sinjai which milk production is processed into typical drink or milk SusinSinjai. The following data on the number of milk received from the year 2008-2013 in the Village Dairy Cooperative Sintari, Gunung Perak District of West Sinjai in Table 2.

Table 2: Amount Accepted Milk in Milk Cooperative Sintari

<table>
<thead>
<tr>
<th>No</th>
<th>Month</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>January</td>
<td>2241.5</td>
<td>1495.5</td>
<td>1117</td>
<td>2753.5</td>
<td>1391</td>
<td>1003</td>
</tr>
<tr>
<td>2.</td>
<td>February</td>
<td>1908</td>
<td>2280.5</td>
<td>3506.5</td>
<td>1870.5</td>
<td>1280</td>
<td>1306</td>
</tr>
<tr>
<td>3.</td>
<td>March</td>
<td>2793.5</td>
<td>2249</td>
<td>4246.5</td>
<td>1902.5</td>
<td>1229</td>
<td>1236</td>
</tr>
<tr>
<td>4.</td>
<td>April</td>
<td>3531.5</td>
<td>3525</td>
<td>3761</td>
<td>1810.5</td>
<td>1352</td>
<td>1725.5</td>
</tr>
<tr>
<td>5.</td>
<td>May</td>
<td>4972.5</td>
<td>2631</td>
<td>2960</td>
<td>1571</td>
<td>1629</td>
<td>1917.5</td>
</tr>
<tr>
<td>6.</td>
<td>June</td>
<td>5694.5</td>
<td>1873</td>
<td>3329</td>
<td>1215</td>
<td>1825</td>
<td>1329.5</td>
</tr>
<tr>
<td>7.</td>
<td>July</td>
<td>5294</td>
<td>2118</td>
<td>3144.5</td>
<td>1113</td>
<td>1113</td>
<td>1134</td>
</tr>
<tr>
<td>8.</td>
<td>August</td>
<td>4253.5</td>
<td>1869</td>
<td>2325</td>
<td>1380</td>
<td>1269</td>
<td>1345</td>
</tr>
<tr>
<td>9.</td>
<td>September</td>
<td>3185</td>
<td>1849</td>
<td>1434</td>
<td>2770</td>
<td>1525</td>
<td>1424</td>
</tr>
<tr>
<td>10.</td>
<td>October</td>
<td>2796</td>
<td>2252</td>
<td>2092.5</td>
<td>1341</td>
<td>1235</td>
<td>1093.5</td>
</tr>
<tr>
<td>11.</td>
<td>November</td>
<td>2593</td>
<td>2535</td>
<td>1850</td>
<td>1850</td>
<td>1541</td>
<td>1670</td>
</tr>
<tr>
<td>12.</td>
<td>December</td>
<td>2417</td>
<td>4227</td>
<td>2305</td>
<td>1660</td>
<td>1223</td>
<td>1301.5</td>
</tr>
<tr>
<td></td>
<td>Total Annually</td>
<td>41,740</td>
<td>27,731</td>
<td>32,071</td>
<td>21,237</td>
<td>16,612</td>
<td>16,485.5</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>3478.33</td>
<td>2310.92</td>
<td>2672.58</td>
<td>1769.75</td>
<td>1384.33</td>
<td>1373.79</td>
</tr>
</tbody>
</table>

Source: Dairy CooperativeSintari West Sinjai, 2014

Table 2 shows that the quantity of milk received Sintari Dairy Cooperative in 2008 of reaching 41 740 liters / year, in the year 2009 decreased by the amount of 27 731 liters / year . In 2010 there was an increase in total production of 32 071 liters / year, but in 2011 to 2013 continued experiencing a drop in production only reached 16485.5 liter / year, and this is because there are several villages and villages that dairy cow milk production decline and with the death of the mother of dairy cattle, other areas that do not produce as many farmers switched to maintenance Bali cattle (beef cattle).

Dairy development in an effort to increase milk production in dairy cattle in Sinjai encountered some obstacles, such as the helplessness of farmers to develop their business, because of the low capital and income. The income they earn far allocated only enough to meet the needs of the family, so it is not able to develop agribusiness dairy cows. According to the requirement or demand is much greater than the supply of milk available. Under these conditions, the business of dairy cows to produce fresh milk is very prospective developed in Indonesia as well as in the province of South Sulawesi [13].

Efforts can be made in the development of dairy cattle is an increase in business scale. Scale dairy cattle business is defined as the number of dairy cows reared mother, both being lactation (breastfeeding) and who are not breastfeeding (which is known as a dry cow stables). Total parent who reared Dairy Cooperative members Sintari during this relatively small scale, with a scale of 3-5 tail ownership, and the ability to produce 10-12 liters / cow / day. Total parent who reared not all milk production throughout the year, but a few are dry cage. [14] suggested a dairy cooperative is one farm that aims to improve the welfare of its members by providing the business field of dairy cattle breeding. To that end, the cooperative dairy farm, especially in West Java to form a policy that is both top - down which get funding in the form of procurement of imported dairy cows were distributed to members as loans. Breeders repay their loans through dairy and must follow all rules of the
cooperative. Breeders who get help dairy cows required to sell all the products fresh milk to the cooperative at a price set Milk Processing Industry (IPS) and cooperatives. It is seen from the success of the cooperative and the views of the ability of capital accumulation, large numbers of members, and the success of the business. More and more member’s means higher milk production cooperatives and more revenue either through savings, membership fees, and selling milk.

In addition to the sale price of cow's milk does not guarantee the income levels of farmers due to low production of milk produced. The main reception dairy cattle business is from sales of milk daily. The size of this acceptance is determined by the amount of milk produced and the sales price of the milk. The amount of milk produced is also determined by the number of dairy cows which produce and production capabilities. The more the number of dairy cows is producing with high ability, the more milk that can be sold or marketed. Similarly, the high acceptance will be achieved if the price offered is too high. Prices were high in dairy cattle business is defined as the price that would benefit to the dairy cattle business. The selling price of milk is based on the cost of production; cost of production was greatest in concentrate feed

One cause of low incomes of dairy farmers during this time because of too many non-productive dairy cows maintains and are not comparable with the amount of maintenance lactating dairy cows. By him that takes quality dairy cows so that the cooperatives should play a role in the provision of capital by providing a source of female dairy cows, the provision of feed and concentrate quality at an affordable price.

Conclusion:
Factors that lead to decreased milk production of dairy cows by milk cooperative members Sintari namely the low-scale cattle holdings, the number of lactating cows low, high production costs that need to empower members of the cooperative effort, especially in the field of dairy cows and the result is fresh milk. Efforts to do in empowering members of this cooperative is to provide capital assistance in the form of providing a source of female dairy cows, the provision of feed and concentrate quality at an affordable price, as well as the development of network marketing milk

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