Analysis of Partnership Satisfaction Between Andini Luhur Cooperative and Dairy Farmers

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Abstract

The partnership program between dairy farmers in Getasan district and Andini Luhur Cooperative needs to be followed up because it is considered unfavorable for farmers during the period of partnership. This study aimed to analyze the partnership activities and satisfaction level of dairy farmers in Getasan District in implementing partnerships with Andini Luhur Cooperative. This research was conducted in December 2019 to January 2020 in Getasan District, Semarang Regency. The location of the study was determined purposively with the consideration that Getasan District is the center of dairy cows in Semarang Regency. The research method used was surveying method. Determination of respondents was done by taking all dairy farmers in Getasan District who were in partnership with Andini Luhur Cooperative. Data collection methods used were interviews, questionnaires, and observations. Data analysis methods used were descriptive and quantitative analysis using the Importance Performance Analysis (IPA) and Consumer Satisfaction Index (CSI) methods. Based on the results, it was found that the type of partnership is contract farming with core-plasma pattern. The results of IPA shows that there are 1 attribute that is classified in Quadrant I (top priority), 2 attributes are classified in Quadrant II (maintained), 4 attributes are classified in Quadrant III (low priority) and 3 attributes are classified in Quadrant IV (excessive). From CSI calculations, the result obtained is 54.84%, which means farmers are quite satisfied with the performance of services provided by Andini Luhur Cooperative.
INTRODUCTION

Livestock business consists of poultry, small livestock, and large livestock. Poultry consists of chickens and ducks, small livestock consists of goats, sheep, rabbits, and pigs, while large livestock consists of cows, buffaloes and horses (Maulidah 2012). One of the livestock businesses carried out by the community is dairy cows business. The result of this business is in the form of milk. Milk is needed by people because it is one of the high sources of protein. The majority of dairy farmers in Indonesia are smallholder farmers that, on average, have under 20 or even not more than 5 dairy cows (Harmini et al. 2012). The dairy farmers need a secure place to store their milk products before being distributed to the Milk Processing Industry.

Small farmers mostly do not rely too much on direct sales to the consumers because of the uncertain amount of consumer demand (Sawitri et al. 2018). Besides, farmers cannot reach a wide market without marketing strategies. The existence of partnership can guarantee the marketing of milk so that the productivity of farmers remains stable or even increased. One of the partnership institutions is the cooperative, either the Village Unit Cooperative, the Multi-Purpose Cooperative, or the milk cooperative (Farid and Sukesi 2011).

Andini Luhur Cooperative, located in Jetak Village, is a Multipurpose Cooperative which focuses on dairy farming. The role of the cooperative is as a provider and distributor of production facilities, namely concentrate feed, dairy cow business credit provider, counseling, as well as milk distribution and marketing. This cooperative aims to help the dairy cow farmers who have limited capital and marketing, especially for farmers around Getasan District, Ngablak District and Banyubiru District.

The aims of this study were to analyze the implementation of partnership activities between dairy farmers in Getasan district who partnered with Andini Luhur Cooperative, analyze the satisfaction level of dairy farmers in implementing the partnership with Andini Luhur Cooperative in Getasan District and analyze the attributes that determine the satisfaction level of farmers in the Getasan District in implementing the Andini Luhur Cooperative partnership programs.

RESEARCH METHODS

The study was conducted in December 2019 to January 2020 in Jetak Village, Ngrawan Village, and Nogosaren Village, Getasan District. The research method used in this study was the survey method. The survey method uses questionnaires as the main source and respondents provide answers as briefly as written in the questionnaire (Wibisono 2003). Respondents were determined by taking all members of the dairy farmer communities in Getasan district who partnered with Andini Luhur Cooperative in Jetak and Kendal Hamlet, Jetak Village, Ploso Hamlet, Ngrawan Village, Karangbawang Hamlet, Gejayan Hamlet, and Nogosaren Hamlet. The total
The number of respondents obtained was 86 people. One respondent was also taken from the management of Andini Luhur Cooperative to find out information about partnerships. Data collection was done by interviewing with the help of questionnaires and observations. The type of data collected included primary data and secondary data. Primary data was the field data obtained by direct interviews with farmers. Secondary data was supporting data obtained from the literature and previous research related to research.

Data analysis method used in this research was descriptive and quantitative methods using Importance Performance Analysis (IPA) and Customer Satisfaction Index (CSI) methods (Juherdi et al. 2016). This study had variables which were grouped in 5 dimensions measuring service quality assessment namely reliability, responsiveness, assurance, empathy, and tangibility where each variable has attributes taken based on Government Regulation No. 44 of 1997 concerning Partnerships. Each attribute was assessed using Likert scale 1-4 based on the literature:

### Table 1. Assessment of Importance and Performance of Partnerships

<table>
<thead>
<tr>
<th>Score</th>
<th>Importance level</th>
<th>Performance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very unimportant</td>
<td>Very unsatisfied</td>
</tr>
<tr>
<td>2</td>
<td>Unimportant</td>
<td>Unsatisfied</td>
</tr>
<tr>
<td>3</td>
<td>Important</td>
<td>Satisfied</td>
</tr>
<tr>
<td>4</td>
<td>Very important</td>
<td>Very satisfied</td>
</tr>
</tbody>
</table>

Source: Widyantoro 2012

The results of the study were analyzed using descriptive analysis to answer the objectives regarding the implementation of partnership activities between dairy farmer partners in Getasan District and Andini Luhur Cooperative. Meanwhile, the satisfaction level was determined using the IPA and CSI methods. The following are the steps in assessing satisfaction level using IPA method according to Juherdi et al. (2016):

The formula for calculating the level of concordance between performance and importance was as follows:

\[ T_{ki} = \frac{X_i}{Y_i} \times 100\% \]

Explanation:

\( T_{ki} \) = the suitability level of the respondents

\( X_i \) = Total score for i-attribute performance appraisal

\( Y_i \) = Total score for i-attribute importance appraisal

The formula for calculating the average assessment of the importance and performance of each attribute was as follows:

\[ \bar{x}_i = \frac{\sum X_i}{n}, \quad \bar{y}_i = \frac{\sum Y_i}{n} \]

Explanation:

\( \bar{x}_i \) = average rating of the i-attribute performance

\( \bar{y}_i \) = average rating of the i-attribute importance

\( n \) = amount of respondents
The formula for calculating the average level of importance and performance of overall attributes

$$\bar{X} = \frac{\sum X_i}{n}; \quad \bar{Y} = \frac{\sum Y_i}{n}$$

Explanation:

$\bar{X}$ = The average value of attribute performance
$\bar{Y}$ = The average value of attribute importance
$n$ = amount of attributes

The results of the calculation were used to determine the intersection points in the Cartesian diagram below:

<table>
<thead>
<tr>
<th>Quadrant I (Top Priority)</th>
<th>Quadrant II (Maintained achievement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quadrant III (Low Priority)</td>
<td>Quadrant IV (Exaggerated)</td>
</tr>
</tbody>
</table>

**Illustration 1. Quadrant sections of the Importance and Performance Analysis**

Source: (Rangkuti 2002).

The CSI method was calculated using the steps according to (Purnamasari et al. 2017) as follows:

Calculating the *Mean Importance Score* (MIS) and *Mean Performance Score* (MPS)

$$\text{MIS} = \frac{\sum \bar{X}_i}{n}; \quad \text{MPS} = \frac{\sum \bar{Y}_i}{n}$$

Explanation:

$X_i$ = performance value of the $i$ attribute
$Y_i$ = expectation value of the $i$ attribute
$n$ = amount of respondents

Calculating *Weight Factor* (WF)

$$\text{WF} = \frac{\text{nilai rata-rata kepentingan}}{\text{total rata-rata kepentingan}} \times 100\%$$

Calculating *Weight Score* (WS)

$$\text{WS} = \text{WF}_i \times \text{MPS}_i$$

Calculating the CSI score

$$\text{CSI} = \frac{\text{Weight Total (WT)}}{5} \times 100\%$$
Overall satisfaction level of respondents can be seen based on the following satisfaction criteria:

- $0.00 - 0.20 = \text{very unsatisfied}$
- $0.21 - 0.40 = \text{less satisfied}$
- $0.41 - 0.60 = \text{quite satisfied}$
- $0.61 - 0.80 = \text{satisfied}$
- $0.81 - 1.00 = \text{very satisfied}$

The attributes studied were as follows:

1. Provide coaching assistance to improve the quality of partners’ human resources
2. Guarantee the purchase of production in accordance with the agreed agreement
3. Ensure the marketing of partner farmers’ production
4. Paying for production with the mechanism and time of payment in accordance with the agreed agreement
5. Develop business plans with partners
6. Provide technology guidance to partners
7. Provide services and production facilities based on agreed agreements
8. Technology development to support business continuity
9. Responses to partner complaints
10. Give incentives or rewards to partners

**RESULT AND DISCUSSION**

**A Glimpse of Andini Luhur Cooperative**

Andini Luhur Cooperative is one of the cooperatives for dairy farmers’ milk distribution in Getasan District. This cooperative was established on November 24, 1998, initiated by three people with the aim of further increasing the profit and welfare of its members. This cooperative received a legal entity certificate on January 2, 1999 number 018 / BH / KWK / II.1 / 1/1999. The cooperative, which is located in Jetak Hamlet, RT 24 RW 29, Jetak Village, Getasan District, besides being an intermediary for milk processing before being distributed to the Milk Processing Industry, it also plays a role in helping partner farmers in developing their dairy cattle business, including being the provider of concentrate feed and credit for farmers. This cooperative is a Multipurpose Cooperative; in addition to being a dairy cooperative unit, it also serves savings and loans, transportation services, and reception tent rentals for members and non-members.

The Andini Luhur Cooperative is led by a cooperative chairman and is assisted by a joint secretary and a treasurer. These three are horizontally positioned. In addition to being assisted by a secretary and treasurer, the chairman is also assisted by 3 assistants and 1 administrator. This administrator supervises cooperative members and several cooperative business units including dairy unit, savings and loan unit, rental service unit, transportation unit, colony enclosure unit and concentrate unit where each unit is led by a manager.

Processed milk from the cooperative is distributed to CV. Cita Nasional, PT. Cisarua Mountain Dairy (Cimory), the Indonesian Dairy Cooperative Association (GKSI) in West Java, and PT. Indolakto. The milk distributed is as much as 15-25
tons liters per day. The large demand for milk is directly proportional to the number of partner farmers the cooperative has. Recently, the number of partner farmers of Andini Luhur Cooperative is more than 2,000 farmers scattered in Semarang Regency, which are around Getasan, Tengaran, and Banyubiru Districts, as well as Magelang and Boyolali Districts.

**Overview of Respondents**

Based on age groups, most of the respondents obtained were 41 - 50 years old. 29 people have their latest education in elementary school / equivalent, while 67 respondents made the dairy cow business as their main livelihood. Based on the number of lactation cows owned, 82 respondents had less than 5 lactation cows with an average milk production of 10-20 L.

**Implementation of the Partnership Pattern**

Juherdi et al. (2016) examined the level of satisfaction between broiler breeders and Mitra Anugerah Satwa, Ltd. (PT. MAS). The purpose of the study was to analyze the characteristics of PT. MAS, partnership implemented with PT. MAS, and satisfaction level of broiler breeders. The analysis used was the Customer Satisfaction Index (CSI) and Importance Performance Analysis (IPA). From the results, it can be concluded that the type of partnership carried out was contract plasma farming partnership where the CSI calculation result obtained was 80.74% which means that the farmers are satisfied with company performance.

Nursida (2017) conducted research on the satisfaction of plasma farmers in implementing chicken business partnerships in Samarinda. This study aimed to analyze the dimension attributes of service quality, namely tangibility, empathy, reliability, responsiveness and assurance (TERRA) in providing satisfaction to farmers. The analysis used was IPA (Importance Performance Analysis) and CSI (Customer Satisfaction Index). The results showed that plasma farmer satisfaction level on the attributes of TERRA service quality dimension was 73% on the Tangibility dimension, 56% on the Emphaty dimension, Responsiveness by 70%, while on the Reability and Assurance dimension at 63%. The level of satisfaction of plasma farmers in general was quite satisfied with the value of 65%.

Palmarudi and Kasim (2012) conducted research on the satisfaction of broiler breeders in implementing business partnerships in Maros Regency. The purpose of this study was to analyze the attributes of the service quality dimensions (reliability, responsiveness, confidence, empathy, and tangibility) that can provide satisfaction to broiler breeders in implementing partnership activities. The analysis used was descriptive analysis and IPA (Importance Performance Analysis). It was found that; overall, the breeders were quite satisfied (average suitability level of 77.04%) with the attributes of the core company services quality dimensions in the implementation of the business partnership of broiler farms.

Azmi et al. (2019) conducted a study regarding the satisfaction level of plasma farmers towards the partnerships with Mitratama Karya Abadi, Ltd. (PT. MKA). This study aimed to determine the level of plasma farmers’ satisfaction with the implementation of broiler chicken partnerships with PT. MKA. The analysis used was descriptive analysis, Customer Satisfaction Index (CSI), and Importance Performance Analysis (IPA). The results showed that the plasma breeders were satisfied with the
performance and services of the core party (PT. MKA), this was indicated by the CSI value acquisition of 66.75%. Based on the 15 partnership attributes analyzed, there were 6 partnership attributes that have a high level of importance, while the performance attributes were still considered low by the plasma farmers.

Compared with previous research, the analysis used is generally the same, namely descriptive and quantitative analysis. Quantitative analysis used was the Customer Satisfaction Index method and Importance Performance Analysis, while the type of partnership activities carried out from the above research is contract plasma farming in which the company acts as the nucleus party and breeder as the plasma party.

The partnership that was carried out by Andini Luhur Cooperative does not have any written contract between the cooperative and the farmers. The cooperative, which is usually represented by several people from the colony enclosure unit, will come to the partner farmers to inform the milk quality requirements that must be deposited. There are no special requirements for partner farmers who wish to join the Andini Luhur Cooperative. There is also no minimum possession of the number of cows; the most important is that farmers have the determination to always deliver milk according to the quality expected by the cooperative. The cooperative needs milk from partner farmers for the sustainability of the cooperative's economic condition. In addition to explaining the milk quality standards, the cooperative also explained other advantage such as lower price for high-quality concentrate feed from the cooperative. Quality feed determines the quality standards of milk produced by farmers. Dairy farmers who have confirmed themselves to be cooperative partners will be recorded, both individually and in groups. However, recently the members have been grouped into Animal Husbandry Groups (KTT) and ordinary groups. The purpose of combining farmers into groups is to facilitate the needs if the farmers ask for counseling and coaching.

Based on interviews conducted, there are several rights and obligations carried out by both parties as follows:

<table>
<thead>
<tr>
<th>Parties</th>
<th>Rights</th>
<th>Obligations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andini Luhur Cooperative</td>
<td>1. Receive milk from partners in accordance with established standards</td>
<td>1. Receive milk from partner farmers</td>
</tr>
<tr>
<td></td>
<td>2. Determine milk prices based on sample quality tests</td>
<td>2. Test the milk quality of the sample groups for each deposit in the morning or evening and share the results with partner farmers</td>
</tr>
<tr>
<td>Partner Farmers</td>
<td>1. Get the sample quality test report</td>
<td>3. Provides coaching and counseling for partners</td>
</tr>
<tr>
<td></td>
<td>2. Collect the payment according to milk</td>
<td></td>
</tr>
</tbody>
</table>

In addition to explaining the milk quality standards, the cooperative also explained other advantage such as lower price for high-quality concentrate feed from the cooperative. Quality feed determines the quality standards of milk produced by farmers. Dairy farmers who have confirmed themselves to be cooperative partners will be recorded, both individually and in groups. However, recently the members have been grouped into Animal Husbandry Groups (KTT) and ordinary groups. The purpose of combining farmers into groups is to facilitate the needs if the farmers ask for counseling and coaching.
quality standards on
time
3. Get counseling about
dairy farming
business

standards expected by
the cooperative
2. Maintain the standard
quality of the milk by
not adding any
substances or
ingredients
3. Selling milk to the
cooperative

Source: Processed from primary data (2020)

Based on the table, it can be concluded that the partnership between Andini Luhur Cooperative and partner farmers is a contract plasma pattern. The core party is Andini Luhur Cooperative, which plays the role in providing production facilities such as animal feed, providing guidance or counseling, providing other facilities such as savings, loans, and dairy cattle loans, and the most important is marketing milk production to the Milk Processing Industry. Partner farmers as plasma parties are carrying out breeding and milking activities in accordance with the agreement to produce high quality milk.

The obstacle that occurred at the beginning of the partnership was the existence of fraudulent partner farmers in producing milk according to the standards desired by the cooperative. This incident happened a long time ago, around 2008, there were several partner farmers who added water to increase milk volume, even worse, there were farmers who added milk with salt or urea to raise the total solid (TS) to conform to cooperative standards. The cooperative laboratory was able to distinguish the physical characteristics of milk and if there was any salt or urea in it, then the milk must be separated. The cooperative gave the farmers a one-time tolerance, followed by a notification that this incident would not be repeated. The cooperative was also not reluctant to impose sanctions in the form of a relationship breaker if the fraud is still happening. After that, there are no incidents of farmers cheating in improving milk quality.

Conformity Analysis of Interest and Company Performance

The level of conformity is the percentage obtained from the comparison between value of performance with value of importance. Utama (2014) stated that if the suitability value is close to, equal to, or more than 100%, it means that the attribute is in accordance with the expectations of the partner farmers. If the conformity value is less than 100%, the service and performance by the core party is not in line with the expectations of the plasma party. The conformity results obtained are as follows:

<table>
<thead>
<tr>
<th>No</th>
<th>Attributes</th>
<th>Conformity level %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Provide coaching assistance to improve the quality of partners’ human resources</td>
<td>66,28</td>
</tr>
<tr>
<td>2</td>
<td>Guarantee the purchase of production in accordance with the agreed agreement</td>
<td>118,02</td>
</tr>
</tbody>
</table>

Table 3. Percentage of Conformity Level Based on Performance Value and Importance Value
Based on the table, there are 3 attributes that are considered satisfactory because the conformity value is above 100%. The attributes referred to are guaranteeing the purchase of production results in accordance with the agreed agreement, ensuring the marketing of partner farmers' production, and production payment with the mechanism and time of payment in accordance with the agreed agreement. 2 attributes that are close to 100% are providing services and production facilities based on agreed agreements and Responsive to partners’ complaints. Andini Luhur Cooperative can improve its services by facilitating the administrative process on dairy savings and credit proposals and shorten the process of disbursing funds. In addition, the cooperative is also expected to not complicate the process of filing concentrated feed for partner farmers who are not registered in the animal husbandry groups (KTT).

There are 5 attributes which are far from 100%. These attributes include providing coaching assistance to improve the quality of partners’ human resources, developing business plans with partners, providing technology guidance to partners, developing technology to support business sustainability and providing incentives or rewards to partners. This happened because the services and performance of the Andini Luhur Cooperative are not in accordance with what is expected by the partner farmers. Partner farmers require information about technology such as milking machines that are still rarely used.

**Importance Performance Analysis (IPA)**

Based on the results of calculations using IPA method, the values used to classify service attributes into 4 quadrants are as follows:

<table>
<thead>
<tr>
<th>No</th>
<th>Attributes</th>
<th>Performance (X)</th>
<th>Importance (Y)</th>
<th>Quadrant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Provide coaching assistance to improve the quality of partners’ human resources</td>
<td>1,99</td>
<td>3</td>
<td>III</td>
</tr>
</tbody>
</table>

Source: Processed from primary data (2020)
Based on Table 4, it is known that the average value of performance level is 3.07 while the average value of importance level is 2.73. These two values were used as the middle value in the Cartesian diagram where the level of performance is on the X axis and the level of importance is on the Y axis. Each quadrant explains different conditions. The diagram can be seen in the illustration below:

### Figure 1. Cartesian Diagram of IPA Calculation

**Source:** Primary data (processed), 2020

**Quadrant I**

Giving incentives or rewards to partners is included in quadrant I which, according to Rangkuti (2002), explained that the attributes that are included in quadrant I are the top priority for immediate improvement. It would be better if there is a penalty in the form of milk prices reduction when the results of laboratory quality check obtained is below the quality standard (total solid value (TS) at less than 11%). In the other hand, it would also be nice of the cooperative give awards in the form of price increases if the partners can produce milk with a total solid value above the standard set by the cooperative (above 12%). Considering this bonus is very
meaningful for partners, it is no wonder that this is considered important, yet the performance of the cooperative is still unsatisfactory.

Quadrant II

Ensuring the purchase of production in accordance with the agreed agreement and guaranteeing the marketing of partner farmers’ production are classified in quadrant II which, according to Rangkuti (2002), explained that the attributes in this quadrant should be maintained by the Cooperative of Andini Luhur because they are considered as excellences by partner companies.

Quadrant III

Attributes included in quadrant III include providing coaching assistance to improve the quality of partners’ human resources, developing business plans with partners, providing technology guidance to partners and technology development to support business sustainability. Widodo and Sutopo (2018) explained that the performance of Andini Luhur Cooperative should be improved with certain considerations. In addition, the attributes in quadrant III need to be improved by the cooperative, so that during reassessment, these attributes do not move to quadrant I.

Quadrant IV

Attributes included in quadrant IV include: production payment with the mechanism and time of payment in accordance with the agreed agreement, providing services and production facilities based on the agreed agreement, and Responsive to partner’s complaints. According to Widodo and Sutopo (2018), this quadrant explained factors that were considered less important to partner farmers, yet the Andini Luhur Cooperative performed them well. Even though the attributes in this quadrant are considered excessive, there is no harm if Andini Luhur Cooperative decided to maintain them.

Customer Satisfaction Index (CSI)

Based on CSI calculations in Appendix 10, the results obtained were 54.84% which means that the partner farmers in Getasan District generally feel quite satisfied in establishing a partnership with Andini Luhur Cooperative. This is in accordance with the opinion of Khoiriyah (2018) that if the results of the CSI score are divided into 5 criteria, then 0 - 20% is very dissatisfied, 21 - 40% is less satisfied, 41 - 60% is quite satisfied, 61 - 80% is satisfied and 81 - 100% is very satisfied. This happen because there are 7 attributes that are considered to be not in accordance by the partners regarding services provided by Andini Luhur Cooperative in partnership activities. In addition, these 7 attributes have a suitability value below 100%, which means that the performance services of the Andini Luhur Cooperative are not in accordance with what is expected so the results are quite satisfied. The steps that should be taken by the cooperative are improving the attributes in quadrant I, then improving the attributes in quadrant III and lastly in quadrant IV.
CONCLUSION
The partnership pattern established between Andini Luhur Cooperative and the dairy farmers in Getasan District is a contract core-plasma partnership pattern. Based on the IPA calculation, the attribute that becomes the first priority (quadrant I) is to provide incentives or rewards to partners. Based on CSI calculations, the calculation result obtained is 54.84%, which means that partner farmers are quite satisfied with the services provided by Andini Luhur Cooperative.

RECOMMENDATION
Andini Luhur Cooperative is expected to further improve its performance for attributes in quadrants I, III and IV; especially in quadrant I, to maintain the loyalty of partner farmers. This is done to maintain the quantity of milk supply (for example, the milk sent to the Milk Processing Industry) by increasing the frequency of training.

REFERENCES
