Institutional transformation of cattle farmer association in Kebumen to increase their competitiveness in Indonesia

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Abstract. Ongole Grade Cattle (PO) in Kebumen has unique characteristics compared to other PO cattle in other regions. Therefore, it has given more benefits to farmers in Kebumen. To maintain its existence, since 2010, Central Java Assessment Institute for Agricultural Technology and local Government in Kebumen have assisted and encouraged cattle farmers to develop an association that will focus on breeding. After three periods, the problems have arisen related to its sustainability and competitiveness in the cattle market in Indonesia. The objective of this study is to formulate a strategy that could solve the problems of the association. This study used primary data obtained from the Focus Group Discussion and in-depth interview. Respondents were purposively selected from the Agricultural Office, extension workers, and other related agencies, as well as the association. Data were analyzed using SWOT analysis. The results show that the first strategy for the association to increase their sustainability and competitiveness is through institutional transformation. The association needs to be managed professionally, market, and benefit-oriented. Therefore, assistance from related agencies is a necessity. By transforming their institution, it is expected that it could increase the competitiveness of PO Cattle from Kebumen in the Indonesian cattle market, maintain the existence of Kebumen’s PO Cattle, as well as increase the income of cattle farmers.

1. Introduction

The livestock sub-sector is still one of the sub-sectors that have a crucial role in Indonesia's agricultural development. Along with the increasing public awareness of the importance of protein consumption, demand for animal foods such as beef is increasing. The demand for beef could not be fulfilled only from domestic production. Hence, beef imports have become one of the solutions in the short-term to meet domestic demand [1]. However, we could not depend only on beef imports in the long-run. The reliance on imported commodities has made Indonesia very susceptible to various external changes that are difficult to control. Therefore, the development of beef cattle farms is vital as a long-term solution for meeting domestic beef demand.

One of the efforts to develop beef cattle farms is by developing beef cattle breeding. Until recently, the development of beef cattle breeding is still considered to be less than optimal because: (1) it is still focused on improving management and feeding; (2) limited funds to develop recording activities; (3) there is no established institutions for recording and producing high quality of calves [2]. On the other hand, Permentan No. 36/2006 states that the development of livestock breeds can be carried out by the Government, legal entities, farmer groups, and or individuals in the form of Village Breeding Centers (VBC) [3].
Kebumen is one of the centers for local beef cattle breeding, especially Ongole Grade cattle (PO) in Central Java since 90% of the cattle population in Kebumen is PO cattle [4,5]. The population of PO Kebumen cattle is growing, and many farmers are raising their cattle in the area along the "urut sewu" of Kebumen Regency. The number of Ongole Grade Cattle in this region reaches more than 15,000 head. Breeders prefer PO cattle because they have better reproduction capability compared to that of Sub-Tropical breeds [4]. Kebumen PO cattle have higher linear body size and length compared to SNI standards and PO female cows in other areas [6]. Additionally, PO Kebumen cattle also have a 68% similarity to the original Ongole Grade [4].

Since 2010, the Government has given its efforts to conserve and maintain the quality of the Kebumen PO Cattle. The PO Kebumen cattle breeders are incorporated in an association called the PO Kebumen Breeder Groups (PERPOKEP). In their daily activities, farmers’ associations have volunteers, namely the recording officers who are responsible for recording the performance of livestock in their area. Hence, the existence of an association is vital to maintain the sustainability and quality of PO Kebumen cattle. In its development, PO Kebumen cattle have been certified through a Breeding Certificate (SKLB) and Product Certification Agency (LSPro). PO Kebumen cattle breeds that have SKLB or LSPro are guaranteed both in terms of qualitative and quantitative, health, production, and reproduction ability. Thus, it is not surprising that the Government later designated Kebumen as a source area for seedlings or VBC for PO Cows according to Decree of Ministry of Agriculture No. 47/Kpts/SR/120/1/2015 on January 16, 2015 [5].

The biggest challenge for the association recently is how to maintain the sustainability of the breeding program that has been successfully implemented. It has become a concern since the evaluation has shown a decreasing quality of PO Kebumen’s cows and bulls and a decline in the institutional breeding performance. According to these problems, this study was aimed to identify priority strategies that were appropriate to develop the PO Kebumen cow and efforts that could be made to implement the priority of the strategy.

2. Research Methods
SWOT analysis is a tool that is commonly used to develop strategic planning or strategic management of an organization [7]. SWOT analysis is used to study or evaluate the performance of an organization and its environment [7,8]. The SWOT analysis consists of internal factors (strengths and weaknesses) and external factors (opportunities and threats). Internal factors are the position of the organization from the perspective of actors, and external factors are environmental factors that affect organizational performance [9]. Differences between internal and external factors are the ability of the organization to influence or control the factors. Therefore, external factors consist of factors that could not be influenced by the organization, but its changes could influence the organization.

SWOT is the acronym for strengths, weaknesses, opportunities, and threats. Data collection for SWOT analysis is usually carried out in an integrated manner by combining secondary and primary data. [8] in his research on determining the transition strategy of the forestry sector to circular bio-economy, using in-depth literature review and interview using questionnaires. The interview is conducted to clarify the results of an in-depth literature review. Jaber et al. (2015) compiled a policy recommendation to accelerate the utilization of renewable energy in Jordan, conducted several interviews using a semi-structured questionnaire [9]. Thus, data collection for SWOT analysis in this paper also combines primary and secondary data collection.

Primary data collection in this study was conducted from April to May 2019. Primary data collection was conducted through several stages. The first stage is taking information from several related stakeholders, followed by a Focus Group Discussion (FGD) at the next meeting. FGD respondents consisted of representatives from the Office for Agricultural and Food Security of Kebumen District, extension staff, recording officers, PO Kebumen’s cattle agro-tourism, and PO Kebumen cattle association administrators. FGD results were reclarified by the management, members of the association, and the related officers at the Agricultural and Food Security Office of Kebumen. Meanwhile, secondary data in the form of association profile reports and others were obtained from related agencies and PO Kebumen cattle’s associations.
Primary data and secondary data obtained are then classified according to the SWOT component. The next step is to determine priorities based on their importance and seriousness of these factors. The determination of priorities is done by using ranking. Only the first ranking factor is used in the 2x2 SWOT matrix, as the objectives of this study are to identify strategies for the association to maintain the sustainability and competitiveness of PO Kebumen cattle in the future.

3. Results and discussion
3.1. SWOT analysis
Table 1 shows the results of SWOT analysis. Initially, there are some statements identified in the components of SWOT analysis. Every statement was then ranked according to its urgency and seriousness if the statements were not handled faster. After it is being ranked, the first rank of every component was then summarized in Table 2.

| Strengths | Rank | Weaknesses | Rank |
|-----------|------|------------|------|
| a. The existence of association for Ongole Grade Cattle to facilitate cattle breeders | 1 a. Limited capabilities of human resources in managing the association and marketing the cattle | 2 |
| b. Ongole Grade Cattle has been well known and registered as a potential strain for cattle breeding | 2 b. The traditional way of handling cattle | 3 |
| c. Group members prefer to raise livestock despite their losses | 3 c. Lack of capital | 1 |
| d. Lack of knowledge to produce better feed for cattle | | |

| Opportunities | Rank | Threats | Rank |
|---------------|------|---------|------|
| a. Increasing demand for Ongole Grade Cattle from other regions/other cities | 2 a. Some traders as market competitors | 2 |
| b. Increasing support from Government and other stakeholders in cattle breeding program | 3 b. The competition from other regions for supplying high-quality Ongole Grade Cattle | 3 |
| c. Available investor to support the association | 1 c. The fluctuating price of Ongole Grade Cattle (seasonal) | 4 |
| d. Lack of appreciation from traders for Ongole Grade Cattle with certificate (LSPro and SKLB) | | 1 |

In the strength component, the existence of the association has been ranked as the first compared to other factors. The potential strain of Ongole Grade Cattle and the preference of farmers to raise livestock could not maintain the quality of the cattle breed or raise the competitiveness of the cattle breed without the existence of the association or farmer groups. According to [2], the existence of farmer groups or associations to record cattle performance is essential in developing cattle breeding. In the weaknesses component, lack of capital has been perceived as the most crucial factor in supporting the development of Ongole Grade Cattle in Kebumen. It is reasonable since it takes a long period to produce a good quality breed. Cattle breeding farms usually need more money to pay the rearing expenses specifically for feed and other services. However, it is expected that by having sufficient funds or capital to raise their livestock or to fulfill their daily needs, farmers will hesitant to sell their productive female cattle. As a result, the quality of Ongole Grade Cattle breeder could be maintained. The feasibility study of Ongole Grade Cattle breeding in Gunung Kidul, D.I. Yogyakarta
supported the importance of capital in preventing farmers from selling their productive female cattle [10].

Despite their increasing demand for Ongole Grade Cattle and increasing support from the Government and other stakeholders, the availability of investors has been perceived as the most critical factor in the opportunities component. The association and other stakeholders involved in the development of Ongole Grade Cattle breeding expect that by having investors involved through “gaduhan” or share-beef cattle system, the quality of breed will be maintained and farmers will have more benefits or additional income. The share-beef cattle system is a sharing business between the owner of capital (cattle owner) and the rearing worker [11]. However, in the association perspective, the share-beef cattle system is the cooperation between the owner of cattle as a rearing worker and the investor or the owner of capital who could help cattle raiser in funding the cost of raising the livestock. The increasing demand for “gaduhan” system [11] in Kebumen is also motivated by the difficulty of farmers to get loans from formal institutions (bank). As a result, farmers usually sell their productive female, and this could reduce the opportunities for having better quality breeds.

In the threat component, the profound appreciation of traders toward the certificate produced by the Agricultural Office has been perceived as the highest rank compared to others. Traders will buy or sell the cattle with the certificate with a similar price to other cattle with no certificate. The certificate itself is another form of guarantee from the Veterinarian that the cattle have an excellent quality breed or strain, and the raiser cattle have to spend a lot of cost and time to obtain this certificate. The competition from other traders and the other regions in supplying good quality of cattle could be solved if the traders in Kebumen could appreciate more and understand the importance of the certificate in the cattle.

The first-rank priority factor in every component that has been identified could be seen in 2 x 2 SWOT matrix in Figure 1. There are at least four strategies that could be produced from the matrix, as follows: (1) utilizing the association to obtain supports from the investors; (2) cooperating with the investor to obtain capital; (3) the association could promote the benefits of the certificate to traders; and (4) increasing capital could increase the utilization of certificate, high-quality cattle would be sold, and it would increase traders’ appreciation to the certificate (Figure 1).

![Figure 1. The summary of SWOT analysis](image)

3.2. Discussion

The association for Ongole Grade Cattle of Kebumen (Perpokep) was initiated on November 13, 2013, in Tanggulangin Village, Klirong Subdistrict, Kebumen, Central Java. In 2015, the association focused their activity to livestock and Ongole Grade Cattle’s breeding. The association initiated to improve the welfare of the members and community surroundings and optimize the economic potential of the village. Recently, the members of the association are widespread in 29 villages in six subdistricts (Puring, Petanahan, Klirong, Buluspesantren, Ambal, and Mirit).
In the implementation of their daily activity, the association has been divided into four divisions as follows: production and animal health, recording and data entry, facilities, business, and marketing. The regional coordinator in every sub-district helped the association to distribute information and knowledge to other members in the respective sub-district. The regional coordinator has the responsibility to share the information and knowledge obtained from related agencies or external sources. After three years of implementation, the association starts to face problems related to the sustainability of the association. The group members who still participate in the activities and focus on producing good quality of breeds have decreased slowly. Some farmers have sold their productive female cattle to fulfill their needs and reduce the possibility of having good quality cattle breed in the future. It is reasonable because the cost of raising cattle for breeding is high, and it takes quite a long time to produce cattle breed with high quality. Most farmers (cattle raisers) in Indonesia live in rural areas with the traditional way of cattle rearing and limited capital and use cattle as their saving [12]. Therefore, they do not raise their livestock based on the production cycle, but their needs on cash income [10]. Changing the traditional pattern of cattle rearing and prevent farmers from selling their productive female cattle, there is a need for a transformation in the association.

The association needs to be managed professionally, market and benefit-oriented. There are examples of farmer groups or associations that are successfully transformed and increased their performance and competitiveness in the market. They could transform their groups to be professional, change their association or groups to become a company or a cooperative. By transforming their groups, they could obtain access to credit from banks and other assistance from the Government. By operating professionally, they could increase the quality of their products and market their products wider than before. By transforming their groups, they could increase the farmer members’ income, and the association could operate sustainably. The examples of groups or association that successfully transform and obtain the benefit from the transformation:

a. BUMP PT Pengayom Tani Sejagad in Wonogiri (Farmer-owned Business Enterprise of Pengayom Tani Sejagad in Wonogiri)

The enterprise was originated from organic farmer groups who are members of the Wono Agung Wonogiri Organic Agriculture Association (APOWW). The association was formed from the initiative of two young people who wanted to continue their father's aspirations to develop organic vegetable farming in Wonogiri. The two young men managed to bring together young and senior farmers to cooperate and develop organic vegetable farming. The association is able survive because it has competent human resources, supported by the local Government, and could produce high-quality agricultural input to support organic agricultural production in the area. The association was then assisted by an Advisory Team from one of the state universities to transform their association into corporate, namely, BUMP PT Pengayom Tani Sejagad in 2016. Their transformation has successfully given the opportunities to obtain credit from conventional banks (BRI), investors, business partners, and partners for product development (IPB, UNS). They could develop their products not only in agricultural input for organic farming (Octabacter such as liquid organic fertilizer, solid organic fertilizer, decomposers, and organic pest control), but also organic rice (brown, white, black). They are also able to market their products not only for the domestic market but also to other countries. Their success has attracted other farmers to join the corporation. Recently, the number of its members continues to increase to 1,566 people with a total land area of 371.9 ha.

b. KSU Citra Kinaraya (Primary Cooperatives of Citra Kinaraya)

Citra Kinaraya Cooperative was established in 2012 at the initiative of Mr. Ir. Hery Sugianto as the Head of the Village and Yoyo as the Head of Tegalombo Sub-Village in Mlatiharjo Village, Gajah District, Demak Regency. Initially, Citra Kinaraya was a group of rice farmers in Mlatiharjo Village, Demak Regency. The rice varieties planted are produced by Mr. Hery Sugianto as the breeder, namely Sultan dan Mlati varieties. After the rice produced was introduced to the market, they started to have an increasing demand for rice. Therefore, they need more land area, more farmer members included, and more capital to support its production.
For this reason, the farmer's group transformed into a cooperative and established a limited liability company (PT) as a subsidiary of the cooperative. The PT handled the marketing of rice products. Citra Kinaraya was assisted by the Ministry of Cooperatives and SMEs, and the Office for Agricultural and Food Security of Demak Regency, as well as from the Dutch NGO Agriterra. After the cooperative was established, assistance came from various parties. The Ministry of Agriculture also made it one of the Major Project Corporation in Central Java for the area of rice farming. Until recently, the members of Citra Kinaraya Cooperative has become 75 people with an area of 100 ha and harvested area of 30-35 ha/month. They are not only produced Sultan and Mlati rice but also brown rice, black rice, Genki rice, and brown rice (Inpari 24), which was the innovative technology introduced by the Ministry of Agriculture.

According to these two institutional examples, it is clear that the institutional transformation to a legal entity could bring benefits to the organization and its members. With the establishment of an enterprise in the form of a PT, CV, or cooperative, the institution could obtain more available access to banking facilities [13]. It has been proven in the two institutional cases that have been stated previously. Therefore, institutional transformation in Perpokep has become a necessity before implementing priority strategies that have been identified previously. By transforming Perpokep into a corporation, the organization could be handled professionally. The profits from the company could be used to provide compensation to Perpokep’s management and recording officers. Thus, it is expected that the management and recording officers will be able to develop the business of PO cattle breeding widely. Perpokep will be able to increase the competitiveness of Kebumen PO cattle in the Indonesian cattle market. The legal entity status is expected to attract more investors and assistance from other related stakeholders in carrying out activities. As in the case of BUMP PT Pengayom Tani Sejagad, they could obtain partners in developing its business after the association changed to BUMP in the form of PT. Additionally, the institutional transformation could help in maintaining PO cattle as well as increase the income of cattle raisers in Kebumen. In other words, by transforming the institution, Perpokep could implement the four priority strategies that have been identified previously.

4. Conclusion

Kebumen’s Ongole Grade Cattle has better characteristics compared to other Ongole Grade Cattle in Indonesia. There are four priority strategies identified to develop Ongole Grade Cattle breeding in Kebumen, namely: (1) utilizing the association to obtain supports from the investors; (2) cooperating with the investor to obtain capital; (3) the association could promote the benefits of the certificate to traders; and (4) increasing capital could increase the utilization of certificate, high-quality cattle would be sold, and it would increase traders’ appreciation to the certificate. The first effort to implement the priority strategies is through transforming the institution of Perpokep to an enterprise that is more professional, market, and benefit-oriented. By having institutional transformation, it is expected that the existence of PO Kebumen Cattle could be maintained and developed, and cattle raisers could increase their income.

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