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Establishing Food Business of Local State-Owned Enterprises in Agriculture and Agribusiness

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Abstract: The agricultural sector contributes positively to regional economic development. However, current government programs tend to prioritize only on the supply side. It can cause an imbalance between demand, supply, and market inefficiency. To overcome the problems, the regional government can establish a food BUMD, especially in East Java. This research aims to formulate a strategy for establishing a food BUMD as a step in developing agriculture and agribusiness in East Java. The analysis method used was SWOT by examining internal and external factors as the basis for efficient strategy formulation. The results showed that East Java's agricultural conditions were in quadrant I (aggressive strategy). Recommended strategies that can be done are mapping and prospecting agricultural production in each region, maximizing infrastructure and social capital to build a supply and value chain, maximizing the marketing of agricultural products through information and technology to reach a broader market. Besides, developing the potential areas to agropolitan area, assisting young agricultural entrepreneurs, and formulating policies to facilitate local agricultural product marketing are suggested. The establishment of the East Java Food BUMD is a strategic step with significant support for the East Java economy and can create strong cooperation with small farmers and strengthen social capital (trust, norm, and networking). Therefore, it will create a balance of supply and demand in the market, which increases the economic level of East Java people.

Keywords: Agriculture; Food BUMD; SWOT Analysis

JEL Classification: Q13, E02

Introduction

Regional economic development has a close relationship with each potential sector's role, such as the agricultural sector and government policies, to optimize and increase Original Local Revenue (PAD). It contributes to an increase in GDP, can be an imported product, provides raw materials, reduces poverty, and absorbs labor (Haryono, 2013; Rusliyadi & Libin, 2018). According to BPS (2013), East Java has become the most contributing province in the Indonesian agricultural sector due to the high level of agglomeration of agricultural products, as indicated by a contribution of 13% - 14% in the national economy (Arman, Achsan, & Fauz, 2016). It underlies that over the last few decades, East Java has been included in the second-largest contributing province to the Indonesian economy with a stable and moderate growth rate (World Bank, 2011).

Research results from Khairiyakh, Irham, and Mulyo (2015) revealed that the agricultural sector is essential in East Java because it can meet the national market needs. It can support national food needs due to a surplus on agriculture, livestock, and fishery commodities such as rice, maize, shallots, cattle, dairy cows, hens, and others. Also, commodities like meat, eggs, milk, fruits, vegetables, ornamental plants, and biopharmaceuticals have a considerable potential to develop in East Java. However, the comparative advantage that exists in East Java is not accompanied by a robust agricultural sector. It was indicated by the agricultural productivity's stagnation from 2012-2016, and in 2018, the agricultural sector's role in East Java was in the third rank and continued to decline from 2014 - 2018 by 1.66% (BPS East Java Province, 2018).

The central and local governments have planned and implemented many agricultural sector development programs in Indonesia. However, the program still prioritizes the production aspect only (supply), for example, UPSUS PAJALE (special efforts for rice, maize, and soybeans), fertilizer assistance, credit assistance, One Village One Product (OVOP), and others. These programs are too focused on the supply side without paying attention to the demand side, and it can lead to an imbalance between supply and demand, which can harm producers (in surplus) and consumers (in deficit). The large supply capacity of the agricultural sector can lead to an oversupply of agricultural products. With inelastic demand conditions, it can result in a decline and fluctuation in commodity prices. A study conducted by Sukesni, Rahayuningrum and Widyanti (2008) disclosed that the shallot oversupply in Brebes Regency impacted shallot farmers, where there was very low-price fluctuation at the consumer level. Besides, the study conducted by Wirabrata (2019) also explained that the oversupply of broilers had a significant impact on reducing the selling price to the lowest price (IDR. 8,000 - IDR. 10,000 per kilogram) from normal price (IDR. 18,000 – IDR. 21,000 per kilogram) in September 2018.

If this continues, it can decrease East Java's welfare, especially farmers who live in rural areas. It is the reason why many rural communities are trapped in poverty. Both nationally and locally (East Java), the agricultural sector has the same information asymmetry and unequal bargaining position problems. The next negative implication is the emergence of moral hazard in transactions that can harm economic growth and the achievement of equal opportunity and access. Previous research by Sukesni et al. (2008) stated that the steps to anticipate oversupply in agricultural products are to make trade arrangements, use the warehouse receipt system to obtain stable prices, carry out post-harvest management, and diversify and value-added on agricultural products by processing it into other valuable products. Trade regulation can be carried out by forming units present in the market and playing the role to neutralize market inefficiencies and increase regional economic development contributions through Regional Original Revenue (PAD).

The strategic step that government takes in the agricultural market is to establish a food information system for the community, which is then forwarded to the East Java Regional Regulation Number 2 of 2010 concerning Governance of Leading Agricultural and Fishery Products in East Java. In this regional regulation, the East Java government's steps are the Food BUMD as the leading market for agribusiness products and commodities. It is previously under East Java's regional government's institution, transformed into an

independent and broader economic and social institution. The establishment of the East Java Food BUMD is an effort taken by the regional government to respond to the slow progress in developing the agricultural sector. Therefore, it is expected that the agricultural sector can become a contributor that can provide sufficient PAD. It underlines the importance of establishing a Food BUMD. Previous research related to the establishment of BUMD was conducted by Yani (2012), affirming that the basis for establishing BUMD is a regional regulation with the consideration of a previous feasibility study that has been carried out on the prospects of the business sector and regional assets owned.

Moreover, one of East Java's policy formulations needed is government intervention to the market through Food BUMD. Its presence is expected to be a step for suppressing inefficiencies in the market because it can become a government business institution that brings the market closer to production activities and food producers. The goal is to reduce poverty, strengthen economic fundamentals, and increase competitiveness through the emergence of supply and value chains. This research aims to analyze the internal and external factors and formulate a strategy for establishing Food BUMD as a step for agricultural and agribusiness development in East Java. This research on strategies in the Food BUMD establishment is different from the previous research. It is because Food BUMD is one of the East Java Government's plans to address price fluctuations from the agricultural sector more optimally. The strategy is based on East Java's internal and external factors related to the agricultural sector, so the results can be used for considering the right steps to establish a more efficient and optimal Food BUMD.

Research Method

Study Site

This research was conducted from October to December 2019. This study's locations were Malang Regency, Jombang Regency, Nganjuk Regency, Kediri Regency, Blitar Regency, and Tulungagung Regency. The selection of sample locations was based on criterion-based selection to get information about producers' diversity in agricultural production of food crops, horticultural agriculture, plantations, livestock, and fisheries.

Data Collection

Primary data in this study included (1) data on the carrying capacity of farmers and agricultural institutions on food enterprises, (2) profitability on food commodities, and (3) food commodity market survey. In contrast, the secondary data needed were (1) data on food commodity prices between time and between regions in East-Java, (2) data on East-Java food commodity exports, (3) data on East-Java food commodity imports, (4) data on food commodity imports in various countries, and (5) other related data. The data collection technique was carried out with a survey to selected respondents in each area. The respondent's selection was based on criterion-based selection representing the food crops, horticulture, livestock, and fisheries. Thus, the total respondents in this study were

244 respondents divided into Batu City (48 respondents), Blitar Regency (45 respondents), Jombang Regency (20 respondents), Kediri Regency (20 respondents), Malang Regency (46 respondents), Nganjuk Regency (20 respondents), and Tulungagung Regency (45 respondents).

Data Analysis

The data were analyzed using descriptive analysis, and then for the strategy development, it used a SWOT analysis, consisting of Strength (S), Weakness (W), Opportunity (O), and Threat (T). The SWOT analysis model compared opportunities and threats as external factors with strengths and weaknesses as internal research factors. Internal factors were analyzed on the IFAS matrix (Internal Strategic Factor Analysis Summary), and external factors were investigated on the EFAS matrix (External Strategic Factor Analysis Summary) (Wasike, Magothe, Kahi, & Peters, 2011).

There were three stages in the SWOT analysis, i.e., (i) calculation of scores and weights of each component on the IFAS and EFAS matrix, (ii) prediction of strategies based on awareness, and (iii) finding the position of existing conditions in the SWOT quadrant. Hence, according to Rangkuti (2004), the SWOT analysis results would produce alternative strategies, as follows:

1. S-O Strategy (Strengths-Opportunities) is a strategy that maximizes the strength to take existing opportunities.
2. S-T Strategy (Strengths-Threats) is a strategy that maximizes the strength to overcome threats that are expected to be faced.
3. W-O Strategy (Weaknesses-Opportunities) is a strategy to take advantage of opportunities to minimize weaknesses.
4. W-T Strategy (Weaknesses-Threats) is a strategy to overcome threats and minimize weaknesses.

Result and Discussion

The results indicated that internal factors, consisting of strengths and weaknesses, and external factors, including opportunities and threats, could be displayed, as follows:

Table 1 IFAS Matrix

No	Aspect	Rating	Weight	Score
Strengths				
1	East-Java Province has a comparative advantage in supporting Food BUMD.	4	0.10	0.4
2	Vast human resources to develop the agricultural sector	2	0.05	0.1
3	Potential local institutions supporting Food BUMD	2	0.03	0.06
4	There have been previous policies related to markets and agricultural institutions.	4	0.02	0.08
5	There are trading partners both at home and abroad.	3	0.02	0.06
6	Social capital that is good enough to be transformed into an economic capacity	3	0.03	0.09
7	The regional infrastructure is very good.	3	0.05	0.15
8	There is support for local government policy to form the Food BUMD.	4	0.15	0.6
9	The agricultural sector's human resources are relatively long-time experienced and have the resilience of working in agricultural production.	3	0.05	0.15
Total Strengths				1.69
Weaknesses				
1	A weak partnership was built before.	3	0.02	0.06
2	Weak levels of entrepreneurship in agricultural producers	2	0.02	0.04
3	Weak innovation and research in agriculture	3	0.01	0.03
4	The positioning of agricultural products from the community is still relatively low compared to imported products.	4	0.03	0.12
5	The pattern of agricultural business transactions, in general, is still transactional and tends to be exploitative.	2	0.03	0.06
6	Dispersal patterns in agribusiness systems	3	0.01	0.03
7	Share poverty occurs in many areas in East-Java Province due to the workforce's low structural transformation from the agricultural sector.	2	0.01	0.02
8	Resource degradation and decreased carrying capacity of land and water in agricultural production	4	0.04	0.16
9	Agricultural production planning is still very weak.	3	0.05	0.15
10	Agricultural producers are price takers in both the input and output markets.	3	0.04	0.12
11	The bargaining position is very weak from agricultural producers.	2	0.05	0.1
12	Production centers scattered in small volumes of information asymmetry in agricultural transactions.	2	0.05	0.1
13	Information asymmetry in agricultural transactions	3	0.04	0.12
14	There is no market for agricultural products that increases market reach and competitiveness.	3	0.10	0.3
TOTAL Weaknesses (B)				1.41
TOTAL Internal (A-B)				0,28

Source: Data analyzed, 2019

Table 1 shows that internal factors were strengths and weaknesses, with the total score on the strength element was 1.69, and the total score on the weakness was 1.41. Based on these values, the strengths of the agricultural sector in East Java were better than its weaknesses and could be considered to develop a suitable strategy for the Food BUMD establishment in East Java. The strategy can consider a comparative advantage of the agricultural sector in East Java. This advantage emerged because surplus and increased

agricultural production in East Java could meet Indonesia's food needs. Increased agricultural production occurred in several horticultural commodities such as garlic, paprika, cauliflower, cantaloupe, spinach, turnips, and cayenne pepper. It was supported by research results from Syaifullah (2013) and data from East Java Agricultural Service Annual Report (2012), which exposed that paddy production commodities, food crops, and horticultural crops have made East Java one of the food buffers in Indonesia and as a province that capable of contributing 13% - 14% of the national economy. Besides from comparative advantage, East Java infrastructure is considered as an essential in strength elements. According to the World Bank (2011), East Java infrastructure was classified as decent in urban areas but still lacking in rural areas. Agricultural Human Resources (HR) were classified as farmers and agricultural extension workers. Further, Azhar's (2010) research revealed a significant relationship between agricultural extension workers' and farmers' performance because they had a relatively good performance and could improve institutional programs (Sunartomo, 2016). Due to the existence of the 2019-2024 East Java RPJMD, plans for the development of primary human development capital are included. The plan consists of improving the quality of human resources and equitable development so that East Java's agricultural sector can become the Largest Agribusiness Center in Southeast Asia.

On the market weaknesses of agricultural products in East Java, the majority were still on a district or sub-district scale. The distribution and sale of agricultural products could not be optimal directly from production to consumers, and the majority were still through intermediaries (distributors). Agriculture in East Java was still classified as weak because most farmers still depended on the season to cultivate the land. This dependence could cause production fluctuations and become unstable. It could also decrease farmers' income. Besides, inefficient production planning could cause other problems, such as land degradation and decreased environmental carrying capacity. Also, due to the change in land use from forests to agricultural and residential areas, planting homogeneous plants with fewer quality seeds and excessive use of chemical pesticides could lead to unsustainable agricultural practices.

Table 2 EFAS Matrix

No	Aspect	Rating	Weight	Score
Opportunity				
1	Information technology that facilitates communication and transactions	4	0.06	0.24
2	Great potential for partnerships with research institutions for innovation and production technology improvement	4	0.03	0.12
3	Potential to establish LP2B linkage programs, <i>agropolitan</i> , cooperatives, and others	4	0.04	0.16
4	Potential to form economies of scale and competitiveness	3	0.06	0.18
5	High potential for downstream agricultural products	3	0.05	0.15
6	High potential to form value-added agricultural products	3	0.06	0.18
7	Potential to form a supply and value chain	4	0.07	0.28
8	The potential implementation of regional agriculture and precision agriculture	4	0.06	0.24
9	Potential for increasing community welfare (eliminating trade-off growth and inequality)	3	0.04	0.12
10	The emergence of young agricultural entrepreneurs	2	0.03	0.06
TOTAL Opportunity (C)				1.73

Table 2 EFAS Matrix (cont.)

No	Aspect	Rating	Weight	Score
Threats				
1	The threat of weather negatively affects agricultural production.	4	0.06	0.24
2	Relatively high market competition with other agricultural producing countries (China, Thailand, Vietnam, Malaysia, and others)	3	0.03	0.09
3	Public demand-pull for quality products is still relatively low.	3	0.05	0.15
4	Government policies are still scattered or not well integrated.	2	0.07	0.14
5	Government policies are oriented to production and are weak towards agricultural development from the market side.	4	0.07	0.28
6	Characteristics of the agricultural sector are low value-added and easily damaged.	3	0.07	0.21
7	The elasticity of demand for agricultural products is relatively low.	3	0.05	0.15
8	The elasticity of the supply of agricultural products is relatively low.	3	0.05	0.15
9	Land conversion from agriculture to non-agriculture is high.	4	0.03	0.12
10	Dirty and low agricultural stereotypes prevent superior human resources from working in agriculture.	3	0.02	0.06
TOTAL Threats (D)				1.59
TOTAL external (C-D)				0.14

Source: Data analyzed, 2019.

Table 2 presents that external factors included opportunities and threats, with the total score on the opportunity element was 1.73, and the total score on the weakness element was 1.59. These values indicated that the opportunity element was more dominant than the agricultural sector's threat element and was considered an appropriate strategy for the Food BUMD establishment. In the East Java supply chain, horticultural farm products have been evenly divided according to each actor's roles. However, conditions improvement around the supply chain needs to be completed to optimize the distribution system and develop agricultural products. Actions that can be taken for a better supply chain system are to integrate with the information technology. The goal is to meet the quantity demanded from the market and stabilize the current price. Technological innovations in the process of product storage and distribution can be carried out to optimize agricultural production, such as storing or freezing the agricultural products so that they are more durable and can be distributed in the remote area (Tayibnapi and Wuryaningsing, 2017). The considerable potential to build collaboration for the development and research of East Java's agricultural sector is one of the driving components in implementing regional agriculture and precision agriculture. The East Java region has already had five main agro-ecological zones with 30 sub-zones following agricultural commodity development conditions. In addition to applying regional agriculture, East Java can also apply precision agriculture. Precision agriculture uses inputs as efficiently as possible according to needs so a farmer can benefit from savings in financing, labor, time, and getting better results. (Gebbers & Adamchuck, 2010).

These opportunities aspects cannot be significantly optimized if the threat aspects are not resolved efficiently. The threat that impacted the government's policy was still limited to the production component. This one-sided policy could increase the product's price because of the importance of making a profit, increasing market reach, and reducing labor wages (Trail, 1984). Several central and local government programs prioritize supply

aspects, including UPSUS PAJALE, fertilizer assistance, credit assistance, One Village One Product (OVOP), and others. These policies' weakness that focuses only on supply could make farmers less ready to face the season's threat; even farmers in East Java still had a season dependence on obtaining more optimal agricultural products. Climate change's threat that currently occurs can impact agriculture, such as decreasing natural resources (biodiversity, land, and water) (FAO, 2019). Besides, the agricultural sector's value-added was still low because most producers could only sell raw goods that already have a definite value and could not add value by processing and processing them first (Ministry of Finance of the Republic of Indonesia, 2012).

Determining the Food BUMD establishment's suitable strategy based on internal and external factor components can be using a grand strategy matrix. In the grand strategy matrix, the X-axis value is obtained from the difference between strengths and weaknesses (0.28). Meanwhile, the Y-axis value is obtained from the difference between opportunity and threat (0.14). This coordinate point location will determine the right strategy to be implemented following the description of internal and external factors regarding the conditions of agriculture, plantations, and livestock in East Java, as a step in establishing Food BUMD. According to the grand strategy matrix, the strategy's position can be seen in Figure 1.

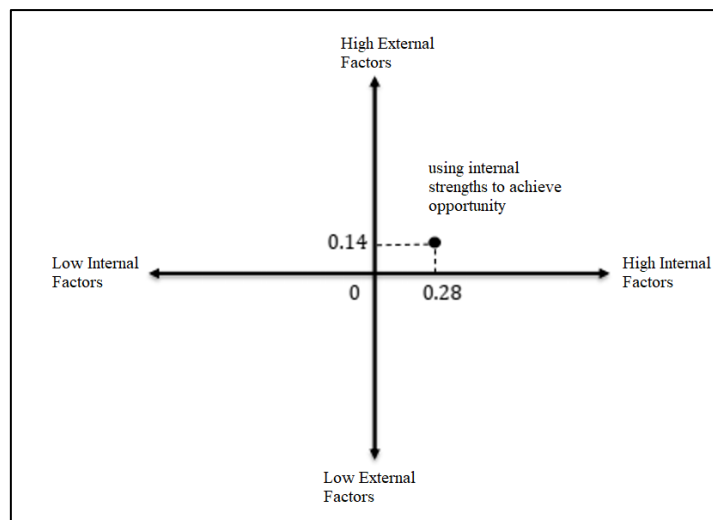


Figure 1 The strategic position of the formation of Food BUMD in East-Java Province
Source: Data Analyzed, 2019

The calculation result of internal and external factors in the grand strategy matrix revealed at quadrant one (I), and the recommended strategy to be implemented was aggressive. This strategy is an excellent situation development strategy because strengths can be used to seize profitable opportunities. It follows the IFAS and EFAS matrix calculations results, which displayed that the strength and opportunity elements had a higher total score. Research that has been conducted by Karyono and Agustina (2019) uncovered that this strategy could be used to implement e-Government programs because of its strength, which supports the opportunity to achieve the desired goals. Based on this, the chances of establishing the East Java Food BUMD are getting higher because of the dominant

strength and opportunity factors. It indicates that East Java Province has optimal support to establish Food BUMD in overcoming market imbalances. Several strategies that could be formulated based on internal and external factors can be seen in Table 3.

Table 3 The SWOT analysis results on the Grand Strategy matrix

<p>Internal</p> <p>External</p>	<p>Strength</p> <ol style="list-style-type: none"> 1. Having a comparative advantage 2. Availability of human resources for agricultural development 3. Potential of Local institutions to support BUMD 4. The existence of policies related to agricultural markets and institutions 5. The existence of domestic and foreign trade partners 6. Adequate social capital 7. Excellent regional infrastructure 8. There is support from local government policies. 9. Agricultural-human resources are relatively experienced. 	<p>Weakness</p> <ol style="list-style-type: none"> 1. Weak cooperation 2. Weak producer entrepreneurship 3. Weak innovation and research in agriculture 4. The low positioning of local agricultural products 5. Transactional and exploitative patterns of transactions 6. Dispersal patterns in the agribusiness system 7. Share poverty in East Java 8. Damage to resources 9. Agricultural production planning is very weak. 10. Price takers in markets only agricultural producers 11. The bargaining position is fragile. 12. Production centers are scattered. 13. Information asymmetry in agricultural transactions 14. There is no market for agricultural products.
	<p>Opportunities</p> <ol style="list-style-type: none"> 1. The existence of technology for communication and transactions 2. Potential for forming partnerships with research institutions 3. Potential to establish linkage program for LP2B, <i>agropolitan</i>, cooperative, and others 4. The potential forms economies of scale and competitiveness 5. The downstream potential of agricultural products 6. Potential to form the added value of agricultural products 7. Potential to form supply and value chain 8. The potential implementation of regional agriculture and precision agriculture 9. Potential for increasing community welfare 10. The emergence of young agricultural entrepreneurs 	<p>Strength – Opportunities</p> <ul style="list-style-type: none"> • Mapping and prospecting the agricultural potential of each region for valuable products development • Maximizing infrastructure and social capital to be able to form a supply and value chain also adding value to agricultural products • Maximizing the marketing of superior agricultural comparative products by using information technology in order to reach a broader market (local and foreign) • Directing the development of potential areas to become <i>Agropolitan Areas</i> • Assisting young entrepreneurs in the agricultural sector • Proposing government policies to make it easier to market local agricultural products
<p>Threats</p> <ol style="list-style-type: none"> 1. Weather threat 2. Relatively high market competition with other countries 3. Low public demand 4. Government policy is scattered in nature. 5. Government policies are production-oriented and weak towards agricultural development from the market side. 6. Agricultural characteristics are low added value and perishable. 7. The elasticity of product demand is relatively low. 8. Relatively low product supply elasticity 9. Change of land function 10. Dirty and low farm stereotypes 	<p>Strength – Threat</p> <ul style="list-style-type: none"> • Creating a better agricultural irrigation system • Proposing cooperation contracts with abroad partners • Formulating regional policies that has an advantage for the development of local agricultural products • Reviewing regional policies related to the agricultural sector by taking consideration into social, infrastructure, and human resources capital. 	<p>Weakness – Threat</p> <ul style="list-style-type: none"> • Branding on qualified local agricultural products to increase positioning, bargaining, and demand • Directing local government policies to that support sustainable agricultural production systems • Designing the production and marketing process of agricultural products from upstream to downstream

Source: Data analyzed, 2019

Table 4 shows several alternative strategies that could be used to establish a Food BUMD in East Java based on the grand strategy matrix's calculation, which was in quadrant I or the aggressive strategy. This strategy used strength to maximize opportunities. Strategies that can be used are as follows:

Strength – Opportunities Strategy:

1. Mapping and prospecting the agricultural potential of each region for valuable products development
2. Maximizing infrastructure and social capital to be able to form a supply and value chain also adding value to agricultural products
3. Maximizing the marketing of superior agricultural comparative products by using information technology to reach a broader market (local and foreign market)
4. Directing the development of a potential site to become Agropolitan Areas
5. Assisting young entrepreneurs in the agricultural sector
6. Proposing government policies to make it easier to market local agricultural products

Weakness – Opportunities Strategy:

1. Building collaborative works with research and academic institutions to increase agricultural innovation.
2. Implementing an integrated agriculture area to concentrate the agricultural production center
3. Creating applications that facilitate information access between farmers, government, and partners
4. Increasing entrepreneurship from producers by working with government programs

Strength – Threat Strategy:

1. Creating a better agricultural irrigation system
2. Proposing cooperation contracts with abroad partners
3. Formulating regional policies that has an advantage for the development of local agricultural products
4. Reviewing regional policies related to the agricultural sector by considering social, infrastructure, and human resources capital

Weakness – Threat Strategy:

1. Branding on qualified local agricultural products to increase positioning, bargaining, and demand
2. Directing local government policies to that support sustainable agricultural production systems
3. Designing the production and marketing process of agricultural products from upstream to downstream

Internal strengths, such as comparative advantage, infrastructure, and adequately valuable human resources, can be aligned with opportunities to achieve the goal of establishing a Food BUMD in East Java. It can also increase agricultural products' competitiveness in East Java, which has implications for the quality and economies of scale. The quality of agricultural products in East Java results from good collaboration between Food BUMD, which has market information, and East Java producers' ability to adopt product attributes according to the market's qualifications. Besides, it is in line with information and communication technology opportunities that can be utilized to market agricultural products and support for regional infrastructure that has begun to develop. Moreover, creating a distribution channel with consumers can directly increase the

marketing area, and the use of renewable technology can provide efficiency in the production process and marketing process (Budiman, Tarigan, Mardhatillah, Sembiring, & Teddy, 2018). In developing this strategy, local governments must also pay attention to the surrounding environmental conditions so that opportunities can be maximized and can support the leading forces in forming food businesses in East Java (Ingaldi & Skurkova, 2014).

In establishing the Food BUMD, the existing strengths' characteristics can be added to the opportunity from several aspects of agriculture, infrastructure, and technology that can strengthen the economy of East-Java. The establishment of East-Java Food BUMD is a strategic step with significant economic leverage for East-Java, especially in agribusiness development. Food BUMD also positively impacts production activities with the communication that develops into a strong partnership with small scale farmers and strengthens social capital, including trust, norms, and networking both in the context of relationships in the future with a broader market and backward relations with its suppliers. Therefore, a balanced market between supply and demand will be created, which increases the economic level of the citizen in East-Java.

Conclusion

Based on internal and external analysis of the establishment of Food BUMD, it showed that the strength was higher than the weaknesses, and the opportunities were higher than the threats. Thus, the suitable strategy is Aggressive that utilizes the strengths and opportunities to achieve the goals. The establishment of Food BUMD can be developed using internal strengths to take advantage of opportunities, reduce weaknesses, and deal with threats. The significant potential influence in establishing Food BUMD is considering the government's generous support in agribusiness development in East-Java Province. It is in line with the East-Java government's goals to be the largest agribusiness center in Southeast Asia, as explicitly appears in the document of medium-term development planning of East-Java Province (RPJMD). The other significant strength owned by the agriculture sector in East-Java is a comparative advantage, which can be transformed into a competitive advantage (competitiveness) with the induction of innovation, technology, transportation, and partnership support that can strengthen the development of East-Java Food BUMD.

The stages of recommendations to the establishment of Food BUMD in East Java are (1) Initiation and implementation of cooperation carried out by communication of BUMD business partners with producers, which can be then followed by making a functional design from upstream to downstream to be able to streamline and build market networking, (2) Development of cooperation, scale-up, and scope of a business undertaken by increasing the frequency of communication with business partners and developing larger-scale networking supported by the development of integrated IT-based agribusiness information, (3) Realizing independence and increasing financial, managerial, and innovation capacity by developing new divisions to facilitate business objectives and

empowerment of food enterprises and creating an integration between domestic and foreign markets by collaborating with multinational companies.

For further research, an important thing to do is benchmarking, finding out best practices and rational expectations in the future on the Food BUMD establishment, and conducting feasibility studies both in economic aspects, market as well as marketing aspects, financial aspects, and other needed, such as legislation aspects, technology availability aspects, and human resources aspects.

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References

- Arman, H.S., Achسانی, N. A., & Fauzi, A. (2016). Dampak Keterkaitan Ekonomi Pulau Sulawesi, Jawa Timur Dan Kalimantan Timur Terhadap Ekonomi Wilayah. *Jurnal Ekonomi dan Kebijakan Publik*, 7(1), 97-109. <http://dx.doi.org/10.22212/jekp.v7i1.406>
- Azhar. (2010). Kepuasan Kerja Penyuluh Pertanian di Kabupaten Bogor. *Jurnal Penyuluhan Pertanian*, 5(1), 36-46. Retrieved from <https://jurnal.polbangtan-bogor.ac.id/index.php/jpp/article/view/271>
- BPS East Java Province. (2018). *Indikator Pertanian Provinsi Jawa Timur*. Retrieved from BPS East Java Province. Available at <https://jatim.bps.go.id/publication/2019/12/10/94675658115c496e9d67ed9f/indikator-pertanian-provinsi-jawa-timur-2018.html>
- Budiman, I., Tarigan, U.P.P., Mardhatillah, A., Sembiring, A.C., & Teddy, W. (2018). Developing Business Strategies Using SWOT Analysis in a Color Crackers Industries. *Journal of Physics: Conf. Series*, 1007, 1-7. <https://doi.org/10.1088/1742-6596/1007/1/012023>
- FAO. (2019). *Agriculture and Climate Change - Challenges and opportunities at the global and local Level – Collaboration on Climate-Smart Agriculture*. Retrieved from Food and Agriculture Organization of the United Nations. Available at <http://www.fao.org/3/CA3204EN/ca3204en.pdf>
- Gebbers, R., & Adamchuck, V. I. (2010). Precision Agriculture and Food Security. *Science*, 327(5967), 828-31. <https://doi.org/10.1126/science.1183899>
- Haryono. (2013). *Strategi Kebijakan Kementerian Pertanian dalam Optimalisasi Lahan Dubeoptimal Mendukung Ketahanan Pangan Nasional*. Prosiding Seminar Nasional Lahan Suboptimal dalam Rangka Mendukung Kemandirian Pangan Nasional. Palembang.
- Ingaldi, M., & Skurkova, L. K. (2014). Company Strategy Determination in Food Company Using SWOT Method. *Acta Technologica Agriculture*, 17(3), 66-69. <https://doi.org/10.2478/ata-2014-0015>
- Karyono, O., & Agustina, K. (2019). Determining the Priority Strategy in the Implementation of E-Government Through SWOT Analysis Model. *Budapest International Research and Critics Institute (BIRCI-Journal) : Humanities and Social Sciences*, 2(2), 66-74. <https://doi.org/10.33258/birci.v2i2.238>

- Kementerian Keuangan Republik Indonesia. (2012). Laporan Nilai Tambah Produk Pertanian. Retrieved from Kementerian Keuangan. Available at <https://www.kemenkeu.go.id/sites/default/files/nilai%20tambah%20produk%20pertanian.pdf>
- Khairiyakh, R., Irham., & Mulyo, J.H. (2015). Contribution of Agricultural Sector and Sub Sectors on Indonesia Economy. *Ilmu Pertanian (Agricultural Science)*, 18(3), 150-159. <https://doi.org/10.22146/ipas.10616>
- Rangkuti, F. (2004). *Riset Pemasaran. Cetakan Kelima*. Jakarta: Gramedia Pustaka Utama.
- Rusliyadi, M., & Libin, W. (2018). Agriculture Development Programs for Poverty Reduction Evidences from Indonesia and China-Comparative Study Case. *Asia Journal of Agriculture and Rural Development*, 8(2), 104-118. Retrieved from <http://www.aessweb.com/journals/July2018/5005/4353>
- Sukei, H. Rahayuningrum, N., & Widyanti, T. (2008). Analisis Pemecahan Oversupply Bawang Merah: Kasus Brebes. *Buletin Ilmiah Litbang Perdagangan*, 2(1), 45-55. <https://doi.org/10.30908/bilp.v2i1.161>
- Sunartomo, A. F. (2016). Kapasitas Penyuluh Pertanian dalam Upaya Meningkatkan Produktivitas Pertanian di Jawa Timur. *Agriekonomika*, 5(2), 125-135. <https://doi.org/10.21107/agriekonomika.v5i2.1343>
- Syaifullah, Y. (2013). Ketahanan Pangan dan Pola Distribusi Beras di Propinsi Jawa Timur. *JEJAK: Jurnal Ekonomi dan Kebijakan*, 6(2), 103-213. <http://dx.doi.org/10.15294/jejak.v6i2.3881>
- Tayibnapi, A. Z., & Wuryaningsing, L. E. (2017). Evamping the Supply Chain of Fruit and Vegetable in East-Java Province Province, Indonesia. *IJMBS*, 7(2), 9-15. Retrieved from <http://www.ijmbs.com/Vol7/vol7.2/1-ahmad-zafrullah-tayibnapi.pdf>
- Trail, B. (1984). The Effect of Government Policies on Agricultural Input Market. *Food Policy*, 9(2), 111-120. [https://doi.org/10.1016/0306-9192\(84\)90045-9](https://doi.org/10.1016/0306-9192(84)90045-9)
- Wasike, C. B., Magothe, T. M., Kahi, A. K., & Peters, K. J. 2011. Factors that influence the efficiency of beef and dairy cattle recording system in Kenya: A SWOT–AHP analysis. *Tropical Animal Health and Production*, 43(1), 141-152. Retrieved from <https://link.springer.com/article/10.1007/s11250-010-9666-3>
- Wirabrata, A. 2019. Anjloknya Harga Ayam Broiler. *Pusat Penelitian Bidang Ekonomi dan Kebijakan Publik Badan Keahlian DPR RI*, 11(13), 19-23. Retrieved from http://berkas.dpr.go.id/puslit/files/info_singkat/Info%20Singkat-XI-13-I-P3DI-Juli-2019-226.pdf
- World Bank. (2011). Diagnosa Pertumbuhan Ekonomi Jawa Timur. Retrieved from World Bank. Available at <https://www.worldbank.org/in/news/press-release/2011/04/11/moving-towards-sustained-inclusive-growth-east-java>
- Yani, T. A. 2012. Peran badan Usaha Milik Daerah dalam Meningkatkan Kesejahteraan Masyarakat (Studi Pembentukan Perusahaan Daerah di Aceh). *Jurnal Ilmu Hukum*, 14(1), 119-137. Retrieved from <http://www.jurnal.unsyiah.ac.id/kanun/article/view/6202>