

DEVELOPMENT STRATEGY OF SOYBEAN AGRIBUSINESS IN PT LENTERA PANEN MANDIRI

Strategi Pengembangan Agribisnis Kedelai PT Lentera Panen Mandiri

Dewi Nurpitasari¹, Lestari Rahayu Waluyati², Jangkung Handoyo Mulyo²

¹ Master of Agribusiness Management, Universitas Gadjah Mada,

²Departement of Agricultural Socio-Economic, Universitas Gadjah Mada

Flora Street, Bulaksumur, Yogyakarta, Indonesia 55281

dewinurpitasari1@gmail.com

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ABSTRACT

The aims of this study are to identify both internal and external factors of agribusiness in PT Lentera Panen Mandiri (PT LPM), map the company's position, and determine its development strategy. Main data used in this study is primary data obtained from stakeholders of PT LPM by direct interview. Strength, Weakness, Opportunity and Threat (SWOT) of soybean agribusiness in PT LPM were identified in this study and followed by determining the company's position using SWOT diagram. Alternative strategies were derived from the SWOT matrix and prioritized using Quantitative Strategies Planning Matrix (QSPM) analysis. The results of this study identified 5 strengths, 7 weaknesses, 9 opportunities, and 6 threats with the highest factors consisted as "company's commitment to supervise and foster farmers and suppliers", "is time-consuming sorting process and potency of mixed between rice and soybean", "opportunity to increase the productivity of soybean at farmer level", and "uncommit suppliers to supply only from areas that have been approved by the company" respectively. Based on the SWOT diagram, soybean agribusiness in PT LPM positioned in Quadrant I, which mean that the company should apply Agressive Strategy or Strength – Opportunity (S-O) strategy. Based on the SWOT Matrix, 5 alternative of S-O strategies were derived. Based on the QSPM analysis, strategy for guarding and coaching farmers through patnership scheme is the first priority with Total Attarctive Score (TAS) is 12.9.

Keywords: *Soybean, Strategy, SWOT, QSPM*

INTISARI

Penelitian ini bertujuan untuk mengidentifikasi faktor internal dan eksternal agribisnis kedelai yang dilakukan PT Lentera Panen Mandiri, memetakan posisi perusahaan dan menentukan strategi pengembangan agribisnis kedelai PT Lentera Panen Mandiri. Data utama yang digunakan dalam penelitian ini adalah data primer yang diperoleh dari stakeholder PT Lentera Panen Mandiri. Penelitian dimulai dengan mengidentifikasi empat indikator SWOT yaitu kekuatan, kelemahan, peluang, dan ancaman. Kemudian dilakukan pemetaan posisi perusahaan dalam diagram SWOT dan dilanjutkan penyusunan strategi menggunakan matiks SWOT. Strategi yang didapatkan kemudian menjadi bahan untuk analisis QSPM untuk mendapatkan prioritas implementasi strateginya. Hasil penelitian

menunjukkan bahwa agribisnis kedelai PT Lentera Panen Mandiri memiliki 5 kekuatan, dengan kekuatan terbesar adalah komitmen PT LPM untuk melakukan pembinaan petani ; 7 kelemahan, dengan skor terbesar adalah proses sortasi yang membutuhkan waktu yang lama dan potensi bercampurnya beras dengan kedelai; 9 peluang dengan skor terbesar yaitu produktivitas kedelai yang dapat ditingkatkan dan 6 ancaman dengan skor terbesar yaitu tidak komitmennya suplier PT LPM untuk memasok kedelai dari area yang telah ditentukan. Berdasarkan diagram SWOT, posisi perusahaan ada di kuadran I dengan strategi yang tepat adalah strategi agresif atau strategi S-O. Didapatkan 5 strategi berdasarkan pencocokan faktor kekuatan dan peluang. Dari ke-5 strategi tersebut, berdasarkan analisis QSPM, strategi melakukan pengawalan dan pembinaan petani melalui skema kemitraan merupakan prioritas strategi dengan nilai TAS 12,9.

Kata Kunci : *Kedelai, strategi, SWOT, QSPM*

BACKGROUND

The Ministry Agriculture of Republic Indonesia in 2015 reported that the needs of soybean reached 2,9 million tons per year. According to the same report, this number was not supported with sufficient supply of domestic soybeans in which 69% of it still needed to be imported. The low rate of domestic soybean production is due to several reasons such as: (1) soybean farming business is considered as less profitable compared to other commodities *e.g.* rice and corn; (2) the area cultivation of soybean is limited; (3) the pricing does not benefit the farmers; and (4) the domestic soybean is less competitive with the imported one (Budiharti, Pratikno, Sudjito, & Budi, 2016; Herawan, Kurniawan, & Yuliarto, 2015; Ministry of Agriculture Republic Indonesia, 2015).

One of the recommendation given by the Ministry of Agriculture to increase the domestic soybean production is by encouraging local market-based soybean

segment through the collaboration among agribusiness competitors based on fairness. (Rante, 2013) also stated the needs to develop soy-based processing industries to boost domestic soybean production.

PT Lentera Panen Mandiri (PT LPM) is one of the companies engaged in rice agribusiness and yellow soybean. Due to a specific demand of soybean, in 2016, the company commercially produced yellow soybean for the first time. PT LPM becomes a new market segment for local soybeans because the company supplies soybeans for baby porridge that requires different specifications of soybean. PT LPM is located in Jl. Raya Kemusuk, Puluhan, Village Agromulyo, Sub District, District Bantul, Special Region of Yogyakarta. Their source area covered 2 provinces *i.e.* Special Region of Yogyakarta (DIY) Province and Central Java Province. Their soybean processing capacity is up to 500 MT/year.

In 2016, the compliance of soybean supply by the company was performed

by ordinary trading system. Some major obstacles encountered by the company during the production in 2016 were inconsistent quality of supplied soybean and no guarantee of quantity and continuity of supply. These problems need to be addressed considering there will be increase demand of soybean in 2017.

The opportunities and challenges in developing soybean agribusiness, whether caused by internal and external environment, need to be summarized in a description of the business development strategy. (Ommani, 2011) mentioned that the identification and analysis of strength, weakness, opportunity and challenge factors is a very helpful stage for managers or researchers to understand the business conditions of a company and furthermore to formulate the appropriate business development strategy.

Based on the description above, it is necessary to plan a good development strategy of soybean agribusiness in PT LPM. The aim of this study is to identify both internal and external factors of agribusiness in PT LPM, map the company's position, and determine its development strategy. This research is expected to contribute the company in developing yellow soybean agribusiness.

METHODS

The research data were obtained by performing survey and interview

using questionnaires to key respondents who deliberately determined (purposive sampling). These 5 key respondents are the heads of the company's division (Factory Manager, Field Manager, Head QA, Production planner and Agronomist), representative of suppliers and consumers. This research was conducted in April- May 2017.

This research is divided into three main stages of strategy development *i.e.* input stage, matching stage and decision-making stage (David, 2011). At the input stage, the Internal and External Factor Evaluation matrix (IFE & EFE matrix) were used. At this stage, respondents were asked to evaluate internal and external factors by assigning a score between 1 (very bad condition) to 4 (excellent condition). At the matching stage, the Strength-Weakness-Opportunity-Threat (SWOT) matrix analysis tool was used. At this stage, there was a matching between the factors identified in the IFE and EFE matrix. Before generating SWOT matrix alternative strategies, the company's agribusiness position was mapped in the SWOT diagram. At this stage, the x-value is the score of Strength subtracted by Weakness, while the y-value is the score of Opportunity subtracted by Threat. Ordinate x and y illustrate the position of agribusiness of LPM soybean in SWOT diagram.

Finally, at the decision-making stage, a Quantitative Strategy Planning Matrix (QSPM) analysis tool was used to prioritize

the alternative strategies generated previously. At this stage, the respondent was asked to assess their interest in the alternative strategies available. Attractive Scores is stated as 1 = very unattractive; 2 = unattractive; 3 = interesting enough; 4 = very interesting. Total Attractive Score (TAS) describes which strategy is the most attractive one. The growing value of TAS indicates the prior implementation of a strategy.

Proper use of SWOT matrices can be a good foundation for doing a strategy formulation. Although in some cases, the SWOT analysis application alone had proven to have some disadvantages, but it can be fixed by implementing the QSPM method (Shojaei *et al.*, 2010).

RESULT AND DISCUSSION

SWOT analysis

SWOT analysis was performed by identifying and evaluating internal and external factors of the company as the first stage. Internal factors are factors that exist within the control of the company while external factors are factors that can not be controlled by the company directly but will affect the company performance. Internal factors consist of strengths and weaknesses while external factors consist of opportunities and threats (Mirzakhani, Parsaamal, & Golzar, 2014; Setyowati, Rahayu, & Ishartani, 2016) Questionnaire instruments for SWOT analysis have been

tested for its reliability and variability. Three invalid questions were excluded from the questionnaire leaving 27 item questions. Cronbach's Alpha score is 0,948 and classified as highly reliable.

The internal and external factors of PT LPM in developing the soybean agribusiness were explained by the IFE (Internal Factor Evaluation) and EFE (External Factor Evaluation) matrices shown in Table 1 and Table 2. In these matrices, the values in the rating column are the respondent's assessments of the current state of the related factors, while the weighted value indicates the importance of the factors (Rangkuti, 2014).

Based on Table 1, it is known that the highest *Strength* of PTLPM is the company's commitment to supervise its suppliers and farmers (weighted score : 0.92). The realization of this company's commitment is visible on company's willingness to provide subsidized agricultural inputs and to form an agronomist team to provide assistance

The biggest *Weaknesses* are time-consuming on soy sorting process due to manually process and also potential of soybean mixed with rice due to production rotation on one machine (weighted score: 0.33). Average consumer demand per week is about 14 metric tonnes (MT). Current sorting capacity by manual means has an average of 2.5 MT/day so that in one week only able to produce 15 tons. Assuming

that there is an increase in consumer demand per week, PT LPM will not be able to accommodate the demand using the existing sorting patterns .

Based on Table 2, it can be seen that the greatest *Opportunity* is the opportunity to increase soybean productivity at farmer level (weighted score : 0.47). Since the last 15 years, more than 37 varieties have released potential yield >2 Tonnes / Ha. These varieties have color character and seed size which are more suitable

for industrial raw materials (Ginting, Antarlina, & Widowati, 2009). Since the average productivity of soybean in this study area is still around 1.2 Ton / Ha, there are still opportunities to increase soybean production.

As for the *Threat* factor, uncommitted supplier to supply only from areas that have been approved by the company gained the biggest score (weighted score : 0.50). PT LPM has mapped the areas of cultivation that can be developed. This mapping relates

Table 1. Strength and Weakness factors on soybean agribusiness development by PT LPM.

No	Factors	Rating	Weight	Rating x Weight
<i>Strength:</i>				
1	Sufficient factory production capacity to meet consumer demand.	3,13	0,18	0,57
2	The company's commitment to supervise and foster farmers and suppliers.	3,88	0,24	0,92
3	Production management (ranging from goods reception to goods delivery) goes well.	2,88	0,18	0,53
4	The company's ability to provide capital loans to suppliers to buy soybean from farmers.	3,75	0,19	0,72
5	Attractive prices based on clear standards of quality measurement.	3,63	0,21	0,75
Total				3,48
<i>Weakness :</i>				
1	Lack of manpower to control soybean production at farmer level to supplier level.	1,50	0,14	0,21
2	Decrease in soybean quality during the storage period.	1,50	0,15	0,22
3	Limited current soybean source areas.	2,13	0,15	0,31
4	Soy sorting process is time consuming and done manually.	2,00	0,16	0,33
5	Potential of soybean mixed with rice due to production rotation on the same machine.	2,88	0,12	0,33
6	Limited storage space at the factory.	1,75	0,15	0,27
7	Limited variation of market / consumer choice to sell soybeans.	2,00	0,13	0,26
Total				1,94
Strength – Weakness (3,48 – 1,94) = 1,54				

Source : Processed Primary Data, 2017

to the quality of the produced soybeans. Soybean suppliers are expected to only absorb soybeans from areas approved by PT LPM. Supplier’s commitment to supply soybean only from the approved area is a subject to change due to the dynamics in the field. Based on the identification, on the internal factors, the company has a dominant *Strength* with a total value of weighted score

Table 2. Opprtunity and Threat factors on soybean agribusiness development by PT LPM.

No	Factors	Rating	Weight	Rating x Weight
<i>Opportunity :</i>				
1	The high demand of soybean as the main ingredient for baby porridge is increase every year.	3,13	0,12	0,38
2	The opportunity to expand the soybean sourcing areas.	3,88	0,10	0,40
3	The productivity of soybean at farmer level can still be optimized.	3,88	0,12	0,47
4	Farmers experience in cultivating soybeans.	3,63	0,10	0,38
5	The opportunity to establish partnerships with the soybean farmers.	3,50	0,11	0,39
6	Commitment of supervision and control from consumers.	3,63	0,12	0,42
7	The opportunity to establish cooperation with the local government and the local agricultural service.	3,13	0,11	0,35
8	The opportunity to access credit capital from financial institutions, such as banks, that can be utilized by PT LPM to support its operational activities.	3,25	0,10	0,34
9	The opportunity to cooperate with the Assessment Institute for Agricultural Technology and/or educational institution for the application of technology in soybean cultivation.	3,75	0,10	0,39
Total				3,52
<i>Threat :</i>				
1	Seasonal changes and/or weather anomalies that trigger affects the soybean production.	1,88	0,17	0,32
2	Competition to plant with other commodities such as corn and melon in the current source area.	1,63	0,17	0,27
3	Limited soybean supply amid competition with tofitempeh and soybean seed entrepreneurs.	2,63	0,17	0,45
4	Suppliers are not committed to supply only from areas that have been approved by the company.	3,25	0,15	0,50
5	Changes in soybean quality specifications.	1,88	0,17	0,32
6	Long supply chain and uneven distribution of profit to farmer level.	2,00	0,17	0,33
Total				2,19
Opportunity – Threat (3,52 – 2,19) = 1,33				

Source : Processed Primary Data, 2017

of 3.48 while on the external factors the *Opportunity* is more dominant with the total value of the weighted score of 3.52.

Based on the values listed in the Table 1 & 2, then the company's position in the SWOT Diagram can be mapped. The difference between *Strength* and *Weakness* in the internal factor is 1.54 while the difference between *Opportunity* and *Threat* in the external factor is 1.33.

These values were used as x-axis and y-axis values in the SWOT diagram as shown in Figure 1. *Strength* is the (+) x-axis and *Weakness* is the (-) x-axis, while *Opportunity* is the (+) y-axis and *Threat* is the (-) y-axis.

The company positioned in Quadrant I could implement *Aggressive strategy*. Strategy which could be adopted in Quadrant

II is *Diversification strategy*. The company positioned in Quadrant III could adopt *Turn-Around strategi* and strategi for Quadrant IV is *Defensive strategy*. (Mirzakhani et al., 2014; Rangkuti, 2014)

Based on this mapping, it is known that the position of soybean agribusiness in PT LPM is in Q-I where in this quadrant, *Strength* and *Opportunity* are the most dominant factors. Thus, type of strategy that needs to be implemented for PT LPM was the *Aggressive Strategy*. This strategy is usually achieved by matching *Strength* with *Opportunity* or called the *Strength-Opportunity (SO)* strategy. Companies situated in this quadrant are able to continue to grow by leveraging the internal strengths to fulfill every available opportunities.

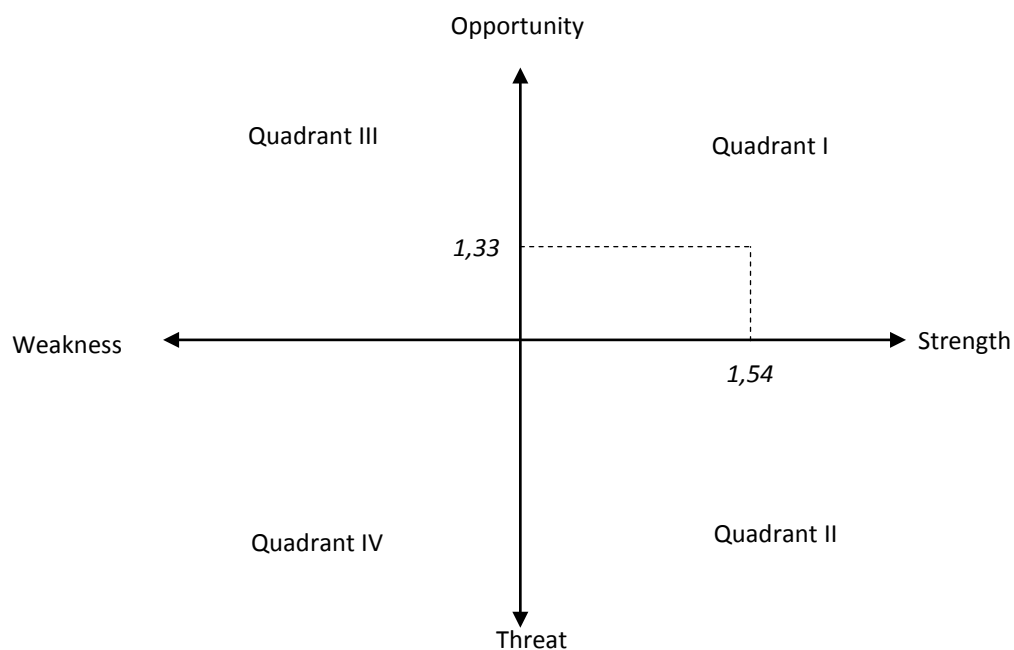


Figure 1. SWOT Diagram of soybean agribusiness in PT LPM

(Source: Primary Processed Data, 2017)

SWOT matrix comprises four strategic groups (Howara, 2013; Ahmad Reza Ommani, 2011)

(1) How strengths are used to take advantage of opportunities(SO strategy);

(2) How weaknesses are reduced by taking advantage of opportunities (WO strategy);

(3) How strengths are used to reduce the impact of threats (ST strategy);

Table 3. SWOT Matrix of soybean agribusiness in PT LPM (Source: Primary Processed Data, 2017)

IFE	<p>Strength (S)</p> <ol style="list-style-type: none"> 1. Production capacity of the factory sufficient to meet consumer demand (S1) 2. The company's commitment to supervise and foster farmers and suppliers (S2) 3. Production management of the company (ranging from goods reception to goods delivery) goes well (S3) 4. The company's ability to provide capital loans to suppliers to buy soybean from farmers (S4) 5. Attractive prices based on clear standards of quality measurement (S5)
EFE	<p>S-O Strategy</p> <ol style="list-style-type: none"> 1. Optimizing production capacity by ensuring raw material availability through expansion of soy absorption area and increasing productivity (S1,O1,O2,O3,O6) 2. Conducting guidance and coaching of farmers through a partnership scheme involving research institutions to support the improvement of quality and production of soybean (S2,O2,O3,O5,O6,O7O9) 3. Improving management performance at farmer and supplier level through coaching to improve the effectiveness and efficiency of soybean production performance (S3, O2,O3,O4,O5,O6) 4. Establishing a capital loan scheme by utilizing credit from financial institutions and improving the capital loan system (S4,O2,O3,O5,O6,O7,O8) 5. Establishing the price standards for partner farmers to ensure the transparency in partnership. (S5,O1,O2,O3,O5,O6,O9)
Opportunity (O)	<ol style="list-style-type: none"> 1. The high demand of soybeans as the main ingredient for baby porridge increases every year (O1) 2. The opportunity to expand the soybean source areas (O2) 3. The productivity of soybean at farmer level can still be optimized (O3) 4. Farmers experience in cultivating soybeans (O4) 5. The opportunity to establish partnerships with soybean farmers (O5) 6. Commitment of supervision and control from consumers (O6) 7. The opportunity to establish cooperation with the local government and the local agricultural service (O7) 8. The opportunity to access credit capital from financial institutions, such as banks, that can be utilized by PT LPM to support its operational activities (O8) 9. The opportunity to cooperate with the Assessment Institute for Agricultural Technology and or educational institution for the application of technology in soybean cultivation (O9)

- (4) How weaknesses that will make these threats a reality are addressed (WT strategy).

In this stage, every *Strength* and *Opportunity* factors were matched by each other. Based on the SWOT matrix, the following alternative strategies are derived:

1. Optimizing the production capacity by ensuring raw material availability through the expansion of soybean's absorption area and increase the productivity in existing areas. In this case, the production capacity can be increased if the supply of raw materials also increases. Soybean crop is a seasonal crop, meaning this plant can only be harvested once a year in most planting area. As a company that supplies specific soybean, PT LPM is required only to absorb in certain areas that have been agreed with the consumer. Short period and the limited soybean source area generate potential difficulties to get raw materials. Therefore, it is necessary to deal with consumers to expand the absorption area. Figure 2 shows potential soybean source in DIY & Central Java area. Yellow dots represent the current source areas of PT LPM and blue dots represent the potensial expansion areas. Current source area in DIY is Kulon Progo

Regency In Central Java, PT LPM have three sourcing areas: Kebumen Regency, Purworejo Regency and Klaten Regency. Expansion areas could help PT LPM to ensure soybean supply. Potential area that could be explored are Gunungkidul Regency in DIY. Other potential areas in Central Java are Grobogan and Wonogiri Regency. Grobogan is the largest soybean producer in Central Java. Unlike other areas, Gunungkidul and Grobogan Regency have two planting seasons *i.e.* July-August and October-November.

Increased availability of raw materials can also be pursued by improving the productivity in existing source area. Currently, the average productivity of soybean in the study area is 1.2 MT / Ha. Soybean productivity can be increased by several efforts, among others are: (1) Selection of national superior varieties such as Grobogan and Anjasmoro; (2) The use of wide plant spacing of 40 x 40 cm; (3) The use of balanced fertilizers: 75 kg Urea / Ha; 100 kg SP-36 / Ha; 50 kg KCl / Ha and 2,000 kg of dolomite / Ha (Marliah et al., 2012; Purnamasari & Munawwarah, 2016).

2. Conducting guidance and coaching of farmers through a partnership scheme involving research institutions to support the improvement of quality and production of soybean. Abdulfatah

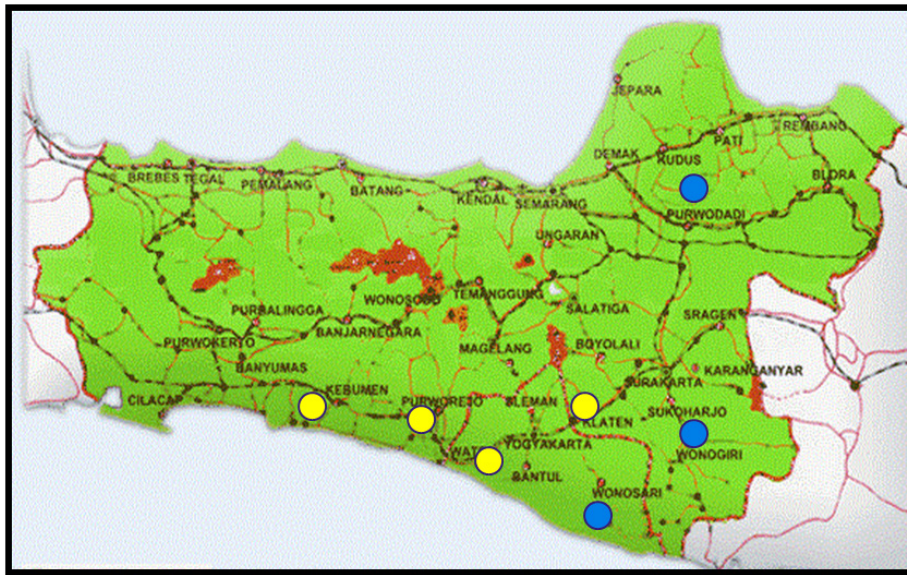


Figure 2. Map of potential soybean sourcing area in DIY and Central Java.

(Source:Ministry of Agriculture Republic Indonesia, 2015)

- (Abdulfatah, M Faris., Najib, M., & Sanim, 2017) formulated mentoring and education to farmers as one of the strategies in fulfilling the company's needs of raw material. Transfer of knowledge regarding the latest technology in soybean cultivation needs to involve the government through the role of field instructors. Through this strategy it is expected to increase the productivity and the quality of the yield.
3. Improving management performance at farmer and supplier level through coaching to improve effectiveness and efficiency of soybean production performance. Tedjalaksana and Aldianto (2013) mentioned several steps to improve the business management of

soybeans *i.e.* (1) establishing records at the production stage; (2) establishing system and schedule for receiving, producing and delivering goods; (3) establishing quality control system for receiving, producing and delivering goods; and (4) adopting mechanization in the production process.

4. Establishing a capital loan scheme by utilizing credit from financial institutions and improving the capital loan system. Farmers usually use "cash & carry" when they sell their crop. Farmers only sell to buyers who are able to conduct cash payments on the spot. This scheme complicates PT LPM in obtaining raw materials. PT LPM's suppliers are varied, from small to large capacity scale. Capital issue is

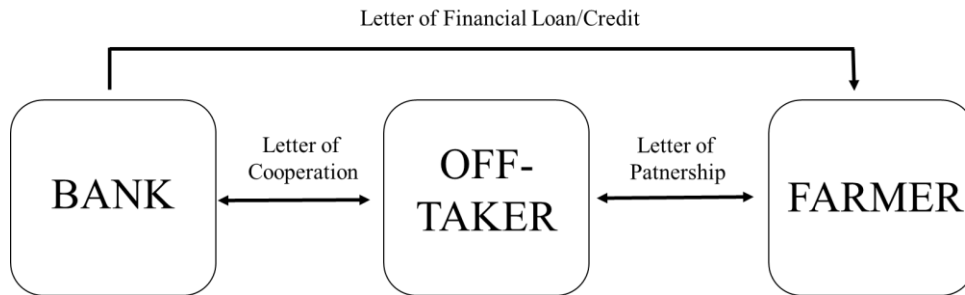


Figure 3. Financing in Partnership Scheme.

Source:Ministry of Agriculture Republic Indonesia, 2017

very important to note, especially for small scale supplier. Small suppliers do not have enough capital to make cash purchases to farmers. Therefore it is necessary to provide capital access from small supplier to companies or other formal financial institutions. In the first scheme, the company can act as a lender and the supplier / farmer group is responsible to the company. Down payment or capital loan could be adopted for this scheme. Supplier request to get down-payment / capital loan from company and responsible for returning by supplying the crop. For conducting this scheme, PT LPM could access capital loan from bank to increase their operational capital.

Another scheme that can be applied is a financing scheme with a partnership pattern between farmers, firms / off-taker and banks as stated in Figure 3.

In this financing scheme, there are three participants : banks, private

companies or off-takers and farmers/ farmer groups. The bank will distribute credits according to the prevailing regulations. Private companies will act as off-taker and avalist, buy farmers' crops, pay farmers loan installments to banks, conduct supervision to farmer, evaluate cost conformity, and recommend to banks. Meanwhile the farmers will conduct cultivation according to the direction of the agency / partner and sell the cultivation to the partner company.

In line with this scheme, Indoensian's government encourages Credit for Public Business or 'Kredit Usaha Rakyat' (KUR) program for all productive sector including the agricultural sector. KUR is a working capital and or an investment loan to a debtor that have productive and feasible business but have constrain in the provision of sufficient collateral. KUR's target for 2017 is 110 trillion rupiah with 40% allocated

for production sector (Ministry of Agriculture Republic Indonesia, 2017)

5. Establishing price standards for partner farmers to ensure the transparency in partnership. The application of transparent pricing formulas is crucial and the drafting of a clear pricing structure and the organization of a practical method of payment encourage confidence and goodwill. There are several ways prices offered to farmers can be calculated, including: fixed prices; flexible prices; prices calculated on spot-market values; prices on a consignment basis; and split pricing. Fixed prices are the most common method. The practice is usually intended to offer farmers with set prices at the beginning of each season. In almost all cases, fixed prices are related to grade specifications (Eaton & Shepherd, 2007). Table 4 shows pricing structure for black soybean “Malika” in East Java. Pricing structure based on several important quality parameters such as moisture content, broken bean and foreign material. This structure is an example of fixed pricing method

for soybean commodity. PT LPM could adopt this pricing method for yellow soybean due to similar quality parameter measured. In this scheme, farmer earn price and market assurance because they already know the basis price for their crop before planting.

QSPM Analysis

QSPM analysis was conducted to determine the priorities of the derived alternative strategies. An organization needs to evaluate alternative strategies by taking internal and external factors into account and weighing the strengths and weaknesses of each strategy to be able to objectively select the strategic priorities (Ommani, 2011)

In this analysis, respondents were asked to assess the level of attractiveness of alternative strategies by considering the internal and external factors. Internal and external factors are derived from the IFE and EFE matrices. The assessed strategy alternatives are derived from the SWOT matrix. Based on this QSPM analysis, the priority of each strategy is shown in Table 4.

Table 4. Pricing structure of black soybean “Malika” in East Java.

Grade	Seed Moisture (%)	Broken bean (%)	Foreign Material (%)	Pricing Structure (Rp/kg)
A	12 – 13	2	1	10.500
B	13 – 14	4	6	9.000
C	14 – 18	5	9	7.700

Source : Cooperation of Black Soybean Banyuwangi (2017)

Table 4. Priority Strategy based on QSPM Analysis.

Strategies	TAS	Priority
Optimizing production capacity by ensuring raw material availability through expansion of soy absorption area and increasing the productivity (S1,O1,O2,O3,O6)	11.21	2
Conducting guidance and coaching of farmers through a partnership scheme involving research institutions to support the improvement of quality and production of soybean (S2,O2,O3,O5,O6,O7,O9)	12.90	1
Improving management performance at farmer and supplier level through coaching to improve effectiveness and efficiency of soybean production performance (S3, O2,O3,O4,O5,O6)	11.12	3
Establishing a capital loan scheme by utilizing credit from financial institutions and improving the capital loan system (S4,O2,O3,O5,O6,O7,O8)	9.66	5
Establishing price standards for partner farmers to ensure the transparency in partnership (S5,O1,O2,O3,O5,O6,O9)	10.51	4

Source : Processed Primary Data, 2017

The first priority from QSPM analysis is conducting guidance and coaching of farmer through partnership scheme involving research institution to support the improvement of quality and production of soybean. This strategy gets the highest Total Attractive Score of 12.90.

Partnership with farmers and external parties, such as research institutions and / or local government, is also an alternative strategy formulated by Erfit, 2011 and Ilvira et al., 2014 in their study about strategy development of horticulture and dragon fruit commodity.

The presence of partnerships has a positive impact on both companies and farmers. Partnerships, *e.g* by contract farming, in many cases can be more efficient than plantation production, and will be more politically acceptable. It can give access to the market that can not be seen in the open market. Partnership also ensures supply for

company in terms of quality, quantity and sustainability (Eaton & Shepherd, 2007) Partnership development in contract-farming could have positive impacts *e.g.* increases planting area, increases yield/productivity, farmers get better prices in which eventually increases farmers' income and ensure market (Maertens & Vande, 2017; Purnaningsih, 2007; Yousnelly et al. , 2013).

The development of partnership scheme, contract farming for example, needs to be based on knowledge of farmer preference to a cooperation contract. Abebe *et al.* (2013) stated that in terms of cooperation contracts for the development of potato commodities, farmers tend to prefer the floating price and adjusted during the harvest, the contract is manifested in written documents. The needs for agricultural input is provided by the company, either by subsidy or loan system

and farmers prefer to have some grade of quality specification of goods than single specification. The success of the contract farming partnership scheme relies heavily on the extent to which the company is able to facilitate the farmers' preferences.

In a broader perspective, (Saptana et al., 2009) mentioned that success in establishing and implementing business partnerships is determined by the following matters (1) the existence of equal standing between partners; (2) the trust between partners; (3) the existence of transparency or openness in the partnership; (4) good accountability between partners; (5) the competence of farmers in producing goods which complies with the specifications set by companies; (6) companies' ability to penetrate and expand market network.

PT LPM could cooperate with research institute e.g. universities, Balai Pengkajian Teknologi Pertanian (BPTP), Balai Penelitian Kacang dan Umbi (BALITKABI) in this partnership program. This partnership program in line with BPTP's core function to conduct study, commodity review, and assembling specific location agriculture technology (Eaton & Shepherd, 2007). In this scheme, PT LPM will spread new innovation or technology to their partner farmer. The success of soybean production improvement need of related stakeholder's support. Atman (2009) also mentioned that government, especially through BPTP, should increase

dissemination and innovation adoption rate. Government should provide good quality seeds and cultivation guidance for farmer.

CONCLUSION AND SUGGESTION

Conclusion

Soybean agribusiness in PT LPM has 5 strengths (production capacity, commitment to give supervision, production management, ability to give capital loan and attractive price), 7 weaknesses (lack of field worker, quality degradation, limited source area, time consuming in sortation, mix contamination with rice, limited storage space, and single market), 9 opportunities (increasing the demand, expansion area, increasing the productivity, farmer experience, partnership with farmer, consumer's commitment on supervision, access financing to bank, and partnership with research institute) and 6 threats (seasonal changes, planting competition, sourcing competition, uncommitted supplier on approval area, changes in quality specification, and long supply chain). The *Strength* factor has a weighted total greater than the *Weakness* in the internal aspect, while the *Opportunity* has a weighted total greater than the *Threat* on the external aspect.

Based on the SWOT diagram, it is known that the position of PT LPM's soybean agribusiness is in the Quadrant I hence the Aggressive Strategy (S-O)

is suitable to be applied. Based on the SWOT matrix, five alternative strategy formulations were derived.

Based on QSPM, it can be concluded that strategy to supervise and develop farmers through partnership scheme by involving research institute to support quality improvement and soybean production become the highest priority with TAS value of 12,9.

Suggestion

Based on the findings of the study the following suggestions are made:

1. The company should increase their production capacity by ensuring raw material availability through the expansion of soy absorption area and increasing the soybean productivity;
2. The company should guide their supplier/farmer to improve their management on soybean production;
3. The company should establish pricing standard for partner farmer to ensure the transparency in partnership;
4. The company should improve their capital loan system for supplier/farmer to increase their source capacity;
5. Synergize the partnership activity along with the government programs, such as soy intensification program.

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