

Empowerment strategies for coffee farmers based on the SOAR Analysis: A case study in the Dieng Mountains

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Abstract

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This study aims to formulate empowerment strategies for coffee farmers in Tombo Village. This aim is essential to be researched because the ability of coffee farmers in Tombo Village is still low, especially in post-harvest processing and marketing of coffee products. This research is based on qualitative research with a case study as an approach. Data collection methods used in-depth interviews with selected informants, observation, documentation, and Focus Discussion Group. The data analysis technique employed SOAR analysis. Based on data and observation the natural resources in Tombo Village support coffee farming. However, human resources have not been able to utilize this potential properly. Thus, an empowerment program with the right strategy according to the needs, problems, and target environmental conditions is needed. The result showed that seven aspects need to be improved and enhanced to empower coffee farmers in Tombo Village: improving the quality of farmers' resources; facilitating coffee farmers in accessing agricultural facilities and infrastructure; helping farmers to access capital; increasing coffee farmer awareness to conduct proper post-harvest processing through farmer assistance activities; improving the coffee marketing system in Tombo Village; building and reorganizing institutions to support farmers in coffee farming; motivating farmers to do red picks on coffee cherries.

Keywords: empowerment; strategy; farmer; SOAR analysis; coffee cultivation

Introduction

Farming is an essential and critical factor for developing countries' economies (Bhattarcharjya et al., 2020). One of the agricultural commodities in Indonesia that have good prospects for development is coffee. Coffee is an export commodity that contributes much foreign exchange to Indonesia (Sarirahayu & Aprianingsih, 2018) because Indonesia is one of the world's largest coffee exporting countries (Martauli, 2018). The export volume of Indonesian coffee, especially Robusta, has good prospects because it always

increases (Chandra et al., 2013). From 2001 to 2018, most coffee planters in Indonesia planted Robusta coffee with 81.44% or an average area of 1.04 million hectares, while Arabica coffee only reached an average area of 235.840 hectares or 18.56% of the total area of Indonesian coffee. Therefore, coffee is made as one of the leading commodities by the Directorate General of Plantations. Although it has become a leading commodity, the increase in domestic coffee consumption and high export demand has not been fulfilled by Indonesian coffee producers (Sarirahayu & Aprianingsih, 2018) because of the scale of coffee farming in Indonesia. It

is still relatively small, and many coffee farmers in Indonesia have limited capital and insufficient knowledge and skill to cultivate coffee so that the quality and quantity of coffee produced tend to be low.

Batang Regency is one of Central Java districts with good coffee cultivation potential since the Dutch colonial era. Although it does not have the largest land area (970 ha), Batang Regency contributed to coffee production as much as 760 tons (3.4%) in Central Java Province (BPS, 2019). The amount of coffee production in the Batang District on average has increased every year. This data can be seen in Figure 1. Based on the graph in Figure 1, the amount of coffee production in the Batang Regency period 2013-2018 has increased, except in 2017 it experienced a decline. In 2013 the amount of coffee production in the Batang Regency was 252.53 tons, in 2014, it increased by 188.7%, so that the number

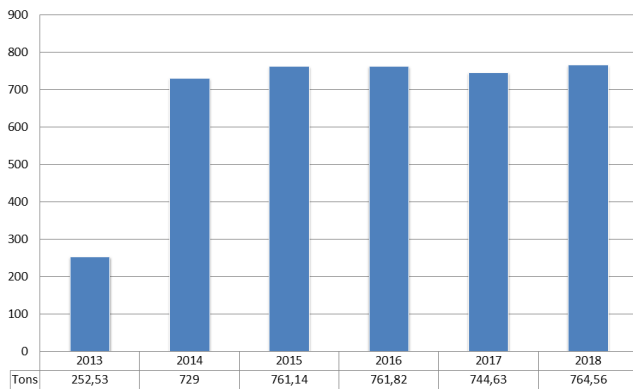


Figure 1. Graph of the amount of coffee production in Batang Regency, 2013-2018

reached 729 tons, in 2015 it increased by 4.41% so that the number reached 761.14 tons, in 2016 it experienced an increase of 0.09%, so that the number reached 761.82 tons, in 2017 the coffee production in Batang Regency decreased by 2.3%, bringing the number to 744.63 tons, but in 2018 the amount of coffee production in Batang Regency increased again by 0.14% so that the number reached 764.56 tons. A lot of coffee production is produced from several districts, one of which is the Bandar District.

The area of coffee plantations in Bandar District is 59 hectares, most of which are in the Tombo Village. Tombo Village is located in the Dieng Mountains area and has an altitude between 650-1900 meters above sea level (masl). The boundaries of the Tombo Village area based on data from Desa Tombo Dalam Angka Tahun 2015, Northside is bordered with Wonomerto Village, Bandar District; Eastside is bordered with Kambangan Village, Blado District; Southside is bordered with Kembanglangit Village, Blado District; Gerlang Village, Blado District; and Telogo Hendro Districts, Petung Kriyono District, Pekalongan Regency, and the west side is bordered by Silurah Village, Wonotunggal District. The location of Tombo Village can be seen in Figure 2.

Based on the location, the altitude Tombo Village is suitable for coffee cultivation, according to the opinion of Pujiasmanto (2016), the optimal elevation to produce good production is 800-1500 masl (high data), with a temperature of 17-21°C, while for robusta coffee the optimal elevation is at 400-800 masl and an average temperature of 21-24°C.

The coffee plantations in Tombo Village are spread across three hamlets: Centuko, Tampingan, and Tombo. Although coffee is not the only plantation crop cultivated in Tombo Vil-

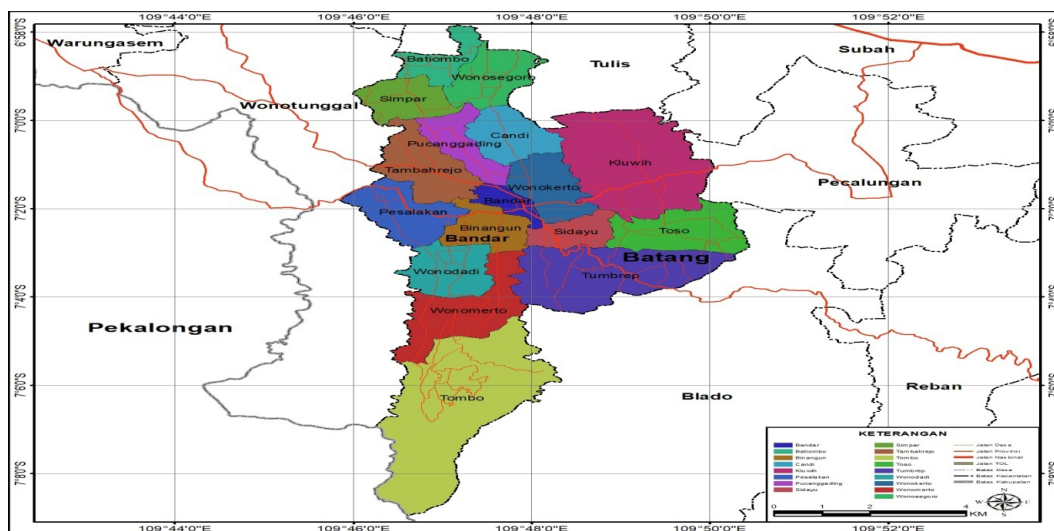


Figure 2. The Map of Bandar sub-district

Table 1. Data of coffee production in Tambo Village

Commodity	Number of Trees	The Amount Of Production Per Hamlet (Kg)			Total (Kg)
		Centuko	Tampingan	Tombo	
Clove	5.313	2.101	5.614	9.191	16.906
Coffee	52.294	20.028	21.137	42.252	83.417
Tea	202.085	1.749	5.283	42.111	49.143

Sources: Desa Tombo dalam Angka, 2015

lage, coffee has the highest production yield compared to other commodities. This data can be seen in Table 1. Unfortunately, at present, the coffee plantations in Tombo Village are all community-based plantations, which on average have small land areas. The largest coffee land area owned by farmers is 2 ha, with a total production of up to 1 ton, while the narrowest land area owned by coffee farmers is 0.2 ha, with a production yield of up to 1 quintal. Besides, farmers' accessibility to capital, technology, information, and markets is also low, so that farmers' capacity and competitiveness are also low. The community empowerment program is a solution to increasing coffee farmers' empowerment level in Tombo Village.

As a community that cares about coffee, ARC (Salwa Resources Center) has empowered coffee farmers in Tombo Village. The ARC aims to conduct an empowerment program to improve farmers' economy by applying innovations to Tombo coffee products. However, ARC's efforts to empower coffee farmers have not been optimal because the empowerment strategy implemented has not fully referred to the empowerment concept, including socialization stages considered less than optimal. The empowerment program was less effective; it did not reach all targets. Besides, the relationship between the organizers and participants of the empowerment program was also less harmonious, support from the government and academia was also considered lacking, the process of determining empowerment programs did not involve all targets, and the program also had limited funds and personnel owned by ARC.

As a result, the activities carried out are still not optimal and have not positively impacted all coffee farmers in Tombo Village. It can be proven by the data presented in Figure 3. Based on the graph in Figure 3, the number of coffee farmers who participated in empowerment activities carried out by ARC was 4% and those who had not participated were 96%. Although it has not been able to empower all coffee farmers in Tombo Village, the empowerment activities carried out by ARC have made Tombo coffee increasingly recognized by the community. Therefore, to achieve the expected empowerment goals, it is necessary to plan an empowerment strategy involving all stakeholders to be carried out more effectively and efficiently to empower all coffee farmers in Tombo Village.

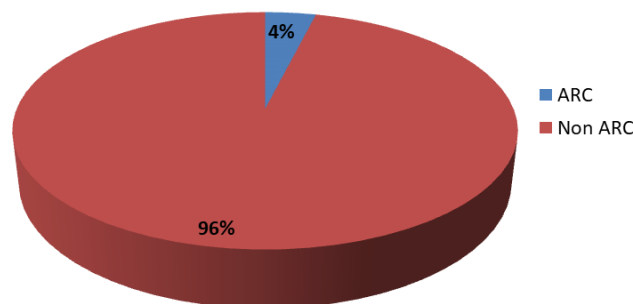


Figure 2. Comparison chart of ARC and non-ARC members

So far, agents of change in developing empowerment strategies have often focused more on the problems and threats faced by the target, but they do not attend to the aspirations of all stakeholders, as a result, there are still many cases of low stakeholder participation in the implementation of empowerment activities, which results in less successful of empowerment activities. Besides that, in the formulation of empowerment strategies, they often pay less attention to the results indicators that must be achieved in empowerment activities, so that the resulting empowerment strategy is less specific to achieving empowerment goals. In this study, the researchers used SOAR analysis to identify the aspirations of all stakeholders, in addition to producing an empowerment strategy that was following the target conditions as well as to create a synergistic relationship between the stakeholders. In the SOAR analysis, the authors also identify the results that will be used as indicators of the achievement of empowerment goals. This study's results are expected to be material for evaluation and input for empowerment stakeholders, and the goal of empowering coffee farmers in Tombo Village can be realized.

Materials and Methods

Coffee Cultivation

Coffee (*Coffea* sp.) is one of the leading national commodities (Prastowo et al., 2010). Four factors determine the success of coffee cultivation: (1) techniques for providing production facilities, (2) production/cultivation processes,

(3) post-harvest handling and processing techniques (agroindustry), and (4) marketing systems. The four are continuous activities that must be adequately implemented (Karya Tani Mandiri Team, 2010). The coffee cultivation process requires a complex system because it needs careful quality control at every step. Although careful control processes have been carried out, it does not guarantee that the coffee produced has good quality. It is because, in coffee cultivation, several factors affect the growth of coffee plants, including the variety used, soil, climate, and care process. According to Pujiasmanto (2016), climate significantly affects coffee production quality, especially concerning elevation, type of rainfall, and wind characteristics.

The most recommended picking pattern for coffee plants is red picking. However, there are still many coffee farmers who often pick faster. It is due to four factors: security, economy, habits, and climate. Picked raw coffee will reduce coffee's quality, including the weight of the beans becomes light, the color of the beans tends to be pale (turning white) in the condition of rice coffee, the shape of the beans will shrink if they have been dried, and if stored for a long time, the color will turn black (Panggabean, 2011). Good quality coffee can only be obtained from ripe fruit and through proper processing. The coffee cherries that have been harvested must be processed as soon as possible because they have perishable criteria and will experience a change in taste if not processed immediately.

The marketing factor is also an essential factor that must be considered in coffee farming. Therefore, information regarding market segments, types of commodity, market location, demand volume, and quality required by consumers is needed by farmers. However, this information is generally still difficult to obtain by farmers because no institution collects and disseminates it effectively to farmers (Budiharjo & Sasongko, 2015) and farmers' ability to access this information is still limited.

The Concept of Community Empowerment Strategy

Community empowerment is an effort to build local capacity to improve life quality and reduce poverty (Syakil & Nuraini, 2010). Empowerment can also be seen as an outcome (empowerment is a goal). Community empowerment has a very long time to show results. It should be an essential consideration in designing a development program (Lavrack, 2009). Ideal community empowerment must be designed with appropriate strategies to the community's needs, abilities, desires, and behaviors (Setiajiati et al., 2017). The empowerment concept must also be designed in a balanced manner between community resources and the sustainable development program goals (Arifudin et al., 2013).

Community empowerment programs with appropriate

strategic planning need to be carried out. Barbosa & Romero (2016) define strategic planning as determining long-term goals, determining actions, and allocating resources necessary to achieve expected goals. A good strategic planning process will produce an effective and efficient strategy. According to Kotler (2008), a strategy is a managerial process for developing and maintaining alignment between goals, available resources, and opportunities. This strategy can also be described as combining available resources with new resources to support sustainable organizational growth (Alden et al., 2017). Six strategic planning techniques must be carried out simultaneously according to Assauri (2013) communicating the vision to be achieved, taking advantage of the successes obtained, investigating new opportunities, producing more resources, coordinating, and directing organizational activities so that new conditions can be faced.

To design an effective empowerment strategy, the planning of community empowerment strategies must also consider empowerment principles and methods and be supported by leaders' role to learn the local community value (Zuliyah, 2010). Community empowerment programs must also be supported by all empowerment stakeholders because the lack of synergy between stakeholders (government, business actor, community, academician, and the media) can lead to less optimal movements in the economic sector (Aribowo et al., 2018).

SOAR

Stavros & Cole (2013) offer the concept of SOAR (Strengths, Opportunities, Aspirations, Results) as an alternative to SWOT analysis, which comes from the Appreciative Inquiry (AI) approach. This approach was popularized by David Cooperrider, in his book *Introduction to Appreciative Inquiry* (1995). He has previously written in his doctoral dissertation entitled *Appreciative Inquiry: Toward a Methodology for Understanding and Enhancing Organizational Innovation*, at Case Western Reserve University, Ohio. So, he was the pioneer and who popularized this approach. SOAR analysis enables organizational members to create their own desired future in the whole process, employing inquiry, imagination, innovation, and inspiration. SOAR's internal focus is organizational strength. SOAR starts from inquiry to learn the organization's core values, vision, strengths, and potential opportunities. Starting with the imagination phase, the next phase is the design and the action and implementation phase. SOAR is a strategic planning technique that helps the organization focus on their current strengths and opportunities, and create a vision of future aspiration, and the result they will bring (Khavarian et al., 2013) A SOAR analysis output is a set of actions that leverage strengths and opportunities to strive for shared aspiration with measurable results.

This analysis was chosen because the SOAR technique has its advantages. The approach applied focuses on opportunities and strengths rather than weaknesses and threats.

This research used a qualitative research type with a case study approach. The types of data employed were primary and secondary. Primary data were obtained from in-depth interviews and observations on informants. The secondary data was gained through previous research and documentation activities. The informants were selected purposely based on various considerations and rational reasons from the researcher. In this study, informants consisted of coffee farmers, ARC Community members, the Head of Tombo Village, the Subdivision Head of Plantation of Food and Agriculture Office, the Head of Trade, Industry, Cooperative, and MSME office, and several Tombo coffee consumers. The data analysis technique utilized SOAR analysis. SOAR analysis began with external and internal environment analysis to find out available opportunities. All the opportunities and strengths were incorporated into the SOAR analysis for later generating aspirations and results.

Results and Discussion

The vision of coffee development in Indonesia is developing systems, and a robust coffee agribusiness business, which is competitive, democratic, sustainable, and decentralized. According to this policy, a strategy is needed to speed up Indonesian coffee development so that coffee agribusiness can significantly contribute to the economy. It is carried out by increasing income, especially farmer income, creating employment, developing industries that generate highly added value by utilizing domestic raw materials, and preserving the environment. According to that vision, the vision of empowering coffee farmers in Tombo Village is to improve the quality, and standard of living of coffee farmers through the development of Tombo coffee farming, which has good potential to improve the quality, quantity, and competitiveness of Tombo coffee in the national and international markets.

Strategic planning with the SOAR method will produce a formulation of what the target is doing right, what skills should be improved, and what should be done. So identifying the situation and position faced by coffee farmers based on internal and external factors faced by coffee farmers need to be done.

Internal Environment Analysis

Based on the observation results of coffee farmers' internal environment in Tombo Village, found 10 strengths and 7 opportunities that are owned by coffee farmers in the village of Tombo.

Strengths

Strength is the things that are the greatest strength and assets owned by the target of the empowerment program, both tangible assets and intangible assets (Khavarianet al., 2013). The strengths possessed by farmers in Tombo Village include:

- Most people in Tombo Village were farmers
- Tombo Village has climatic and soil conditions suitable for coffee cultivation, especially Robusta, and it has a large area for coffee cultivation.
- Farmer have a long history of farming coffee (from generation to generation) to have basic knowledge and skills about coffee cultivation.
- Coffee was a commodity with the second-highest production amount in Tombo Village,
- Coffee of Tombo has a distinctive and unique taste.
- Tombo Coffee production, which was picked red and processed with the right technique, could produce premium quality coffee beans.
- The ARC community acted as a coffee business actor and an empowerment agent for coffee farmers in Tombo.
- Tombo Village has good tourism potential, which can be used to support the development of coffee farming, and Social media (Instagram) has proven to be quite effective in promoting Tombo Coffee.

Opportunities

Opportunities are the best condition that can be used to advance the goals of empowerment programs. The best opportunity can be identified by analyzing the external environment of the empowerment program target (Khavarian et al., 2013). 4 aspects of the external environment can be used to identify opportunities owned by coffee farmers in Tombo Village.

Economy

Coffee is a plantation commodity with a high economic value among other plantations crops and plays an essential role as a foreign exchange source. The development of coffee in Indonesia has experienced an increase for production, but the quality of the resulting coffee processing is generally still low. Therefore, getting good quality coffee requires proper post-harvest handling (Marhaenanto et al., 2015). Quality coffee beans and all are following the Indonesian National Standard and Export Standard, causing the selling price of coffee to be higher. Tombo Coffee production results processed with the right technique can produce coffee beans with premium quality. Unfortunately, not all farmers could carry out good post-harvest handling.

Sociocultural

The influence of globalization has changed people's behavior to become consumptive. Consumption in global capitalist society is not only to fulfill functional values, but to fulfill symbolic values. Items that were initially limited to secondary needs can become primary. Changes in public consumption here mean that public consumption is not only to meet needs, but also to fulfill needs by considering prestige. This consumptive behavior has become part of the lifestyle in today's society. One example of a consumptive behavior culture seen in the community is the consumption behavior of coffee drinkers. Initially, this coffee consumption culture was usually carried out by the community in coffee shops. However, along with a new term development, *warung kopi* is referred to as a coffee shop. Drinking coffee is not just a demand for taste, but it has become part of their lifestyle for some urban communities (Solikatun et al., 2015). Currently, there are coffee shops in both cities and villages. As coffee development becomes part of the people's lifestyle, it also causes many communities to be interested in coffee, which can be used to disseminate information, technology, knowledge, and experience.

Politics and Law

In Indonesia, political and law aspects also provide coffee farmers with opportunities to develop coffee farming because coffee is made one of the leading commodities by the Directorate General of Plantations. There are many programs from the government to support these programs, including the government's fertilizer subsidy program for farmers to make it easier for farmers to obtain fertilizer, and help farmers reduce farming costs; program from the government in the form of People's Business Credit (KUR) in collaboration with Bank Rakyat Indonesia to assist farmers in obtaining capital to run coffee farming; the existence of product branding assistance facilities and export guides from the Department of Industry, Trade, Cooperatives, and SMEs that can make it easier for farmers to market Tombo Coffee; one village one extension program from the Ministry of Agriculture to support agricultural development acceleration.

Technology

The results observing opportunities from the technological aspect to assist farmers in developing farming in Tombo Village included various social media that farmers could use to find information related to coffee cultivation and post-harvest technology. Post-harvest technology plays a vital role in increasing agricultural commodities' added value through agricultural products' processing. A good application of post-harvest technology makes farming become more effi-

cient from the micro side and can be an opportunity to increase production by reducing the rate of yield loss at harvest and the lower quality of yields. Production development of coffee, which is quite fast at this time, needs to be supported by the technology readiness and suitable post-harvest facilities for the farmers' condition to produce coffee beans with the quality required by Indonesian National Standard and the market at a more favorable price level.

External Environment Analysis

The next stage in this research is External Environmental Analysis. Based on the invitation to all stakeholders to enter the imagination phase and design the expected future, we found 7 aspirations and 5 results that were expected by coffee farmers in Tombo village.

Aspiration

Aspirations are future conditions that the target of empowerment hopes to create self-confidence and pride in ourselves, work, departments, and the organization as a whole (Khavarian et al. (2013). Based on the research results, the aspirations desired by the all stakeholder of empowering coffee farmer in Tombo Village include:

- Improving the quality of human resources for farmers.
- Farmers hope to have easy access to Agricultural Production Facilities, especially fertilizers promptly, quantity and quality.
- Coffee farmers in Tombo Village are expected to be able to practice red picking on coffee.
- Farmers are expected to be able to process coffee into various kinds of coffee-based processed products to increase the added value of coffee and farmers' income.
- Farmers hope that existing institutions can cooperate in developing coffee farming in Tombo Village.
- Farmers hope that they can easily access sources of capital so that they can be used to run farming.
- Farmers hope to sell coffee at a higher price

Results

Results are a measure of the results to be achieved (measurable results) in strategic planning, to find out the extent of achievement of mutually agreed goals (Khavarian et al., 2013). Measures of the results to be achieved in strategic planning for empowering coffee farmers in Tombo Village, including:

- Increase the ability of farmers in managing (seeking, obtaining, producing, and utilizing) Agricultural In-

formation from various sources to increased knowledge and skills of farmers in coffee cultivation (planting, maintaining, harvesting, post-harvest processing, storing and marketing coffee)

- Increase the ability of farmers to apply technological innovations in coffee farming.
- Agricultural facilities and infrastructure (fertilizers and post-harvest processing tools) can be easily accessed by coffee farmers.
- Increased opportunities to access sources of capital that is not detrimental to farmers.
- Increased the ability to market coffee agricultural products at competitive prices and expand the marketing network for Tombo Coffee.

To facilitate the identification process, a SOAR diagram can be used as shown in Table 2.

The final stage is to compile strategic factors that describe the strengths and opportunities that the target has, which can be compiled with the aspirations and results in a SOAR matrix, as shown in Table 3.

Based on Table 3, there are 24 strategic factors from the SOAR analysis results, to facilitate implementation; the strategic factors are grouped into 7 strategic alternatives:

Improving the Quality of Farmers' Resources

One of the obstacles faced in developing coffee farming in Tombo Village was that farmers' knowledge and skills in coffee cultivation were low. Therefore, it is crucial to increase the quality of farmer's resources to maximize Tombo Village's potential for coffee farming optimally. Based on SOAR analysis, four alternative strategies can improve the quality of coffee farmers' resources in Tombo Village: Increase the number of extension workers in Bandar District according to the government program of one village and one extension as an effort to improve the quality of human resources for farmers, Making the role of extension workers effective in assisting coffee farming, introducing social media that can be accessed by farmers, and holding discussions between farmers and people who are experts in the field of coffee (coffee communities) to advance farmers The ability to manage information (seek information, obtain information, produce and utilize agricultural information that can improve farmers' knowledge and skills in coffee cultivation (planting, maintaining, harvesting, post-harvest processing, storing and marketing coffee).

The importance of the effort to improve the quality of farmer's resources is by Andriati & Wigena (2011) opinion.

Table 2. SOAR diagram

<i>Strategic Inquiry</i>	<i>Strengths(S)</i> Most of the people in Tombo Village are farmers Tombo Village has climatic and soil conditions suitable for coffee cultivation, especially Robusta. Tombo has a large area for coffee cultivation. Farmers have a long history of farming coffee (from generation to generation), so they have basic knowledge and skills about coffee cultivation. Coffee is a commodity that has the second highest amount of production in Tombo Village Coffee of Tombo has a distinctive and unique taste. The production of Tombo Coffee which is picked red and processed with the right technique can produce coffee beans with premium quality. ARC community, has a role as a coffee business actor as well as a role as an empowerment agent for coffee farmers in Tombo Tombo Village has good tourism potential, which can be used to support the development of coffee farming. Social media (Instagram) has proven to be quite effective in promoting Tombo Coffee	<i>Opportunities(O)</i> Coffee has become part of the lifestyle of Indonesians and the world, which has led to more opening up of local, domestic and international markets. The results of Tombo Coffee production which are processed with the right technique can produce coffee beans with premium quality, in accordance with the Indonesian National Standard and Export, causing the selling price of coffee to be higher. The government's fertilizer subsidy program for farmers can be used to make it easier for farmers to obtain fertilizer and can help farmers reduce farming costs. There is a program from the government in the form of Kredit Usaha Rakyat (KUR) in collaboration with Bank Rakyat Indonesia to assist farmers in obtaining capital to run coffee farming. Development of coffee processing technology, which can make it easier and faster for farmers to process coffee beans to produce quality and varied coffee products. There are various social media that farmers can use to find information related to coffee cultivation, post-harvest coffee processing and to market coffee. The existence of product branding assistance facilities and export guides from the Department of Trade, Cooperatives and MSMEs can make it easier for farmers to market Tombo Coffee. There is a one village one extension program from the Ministry of Agriculture as an effort to support the acceleration of agricultural development. Many communities have an interest in coffee which can be used for the dissemination of information, technology, knowledge and experience.
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Table 2. Continued

<i>Appreciative</i>	<p><i>Aspiration(A)</i> Improving the quality of human resources for farmers. Farmers hope to have easy access to Agricultural Production Facilities, especially fertilizers in a timely manner, quantity and quality. Coffee farmers in Tombo Village are expected to be able to practice red picking on coffee. Farmers are expected to be able to process coffee into various kinds of coffee-based processed products as an effort to increase the added value of coffee and farmers' income. Farmers hope that existing institutions can cooperate with each other in developing coffee farming in Tombo Village. Farmers hope that they can easily access sources of capital so that they can be used to run farming Farmers hope to sell coffee at a higher price</p>	<p><i>Result (R)</i> Increased knowledge and skills of farmers in coffee cultivation (planting, maintaining, harvesting, post-harvest processing, storing and marketing coffee) and increase Increase the ability of farmersto apply technological innovations in coffee farming. Increase the ability of farmers in managing (seeking, obtaining, producing and utilizing) Agricultural Information from various sources. Agricultural facilities and infrastructure (fertilizers and post-harvest processing tools) can be easily accessed by coffee farmers. Increased opportunities to access sources of capital that are not detrimental to farmers. Increased the ability to market coffee agricultural products at competitive prices and expand the marketing network for Tombo coffee.</p>
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Table 3. The SOAR matrix

<u>Internal</u>	<p><u>Straight (S)</u> Most of the people in Tombo Village are farmers Tombo Village has climatic and soil conditions suitable for coffee cultivation, especially Robusta. Tombo has a large area for coffee cultivation. Farmers have a long history of farming coffee (from generation to generation), so they have basic knowledge and skills about coffee cultivation. Coffee is a commodity that has the second highest amount of production in Tombo Village Coffee of Tombo has a distinctive and unique taste. The production of Tombo Coffee which is picked red and processed with the right technique can produce coffee beans with premium quality. ARC community, has a role as a coffee business actor as well as a role as an empowerment agent for coffee farmers in Tombo Tombo Village has good tourism potential, which can be used to support the development of coffee farming. Social media (Instagram) has proven to be quite effective in promoting Tombo Coffee.</p>	<p><u>Opportunity (O)</u> Coffee has become part of the lifestyle of Indonesians and the world, which has led to more opening up of local, domestic and international markets. The results of Tombo Coffee production which are processed with the right technique can produce coffee beans with premium quality, in accordance with the Indonesian National Standard and Export, causing the selling price of coffee to be higher. The government's fertilizer subsidy program for farmers can be used to make it easier for farmers to obtain fertilizer and can help farmers reduce farming costs. There is a program from the government in the form of People's Business Credit (KUR) in collaboration with Bank Rakyat Indonesia to assist farmers in obtaining capital to run coffee farming. Development of coffee processing technology, which can make it easier and faster for farmers to process coffee beans to produce quality and varied coffee products. There are various social media that farmers can use to find information related to coffee cultivation, post-harvest coffee processing and to market coffee. The existence of product branding assistance facilities and export guides from the Department of Trade, Cooperatives and MSMEs can make it easier for farmers to market Tombo Coffee. There is a one village one extension program from the Ministry of Agriculture as an effort to support the acceleration of agricultural development. Many communities have an interest in coffee which can be used for the dissemination of information, technology, knowledge and experience.</p>
<u>External</u>		

Tabel 3. Continued

<p><u>Aspirations (A)</u> Improving the quality of human resources for farmers. Farmers hope to have easy access to Agricultural Production Facilities, especially fertilizers in a timely manner, quantity and quality. Coffee farmers in Tombo Village are expected to be able to practice red picking on coffee. Farmers are expected to be able to process coffee into various kinds of coffee-based processed products as an effort to increase the added value of coffee and farmers' income. Farmers hope that existing institutions can cooperate with each other in developing coffee farming in Tombo Village. Farmers hope that they can easily access sources of capital so that they can be used to run farming Farmers hope to sell coffee at a higher price.</p>	<p><u>SA</u> Assistance activities are needed to improve the quality of human resources for coffee farmers in Tombo Village in order to optimally utilize the potential of Tombo Village for coffee farming. (S3, 4; A1) To produce premium quality Tombo coffee, it is necessary to conduct extension activities to farmers so that farmers' awareness of red picking increases (S6, A3) Build a good network of cooperation and coordination between input production traders, government and farmers so that the availability of fertilizers is guaranteed so that they can meet farmers' needs, so that coffee productivity and quality can increase. (S5; A2) Collaboration with researchers / academics is needed to create distinctive and unique coffee-processed product innovations in an effort to increase the added value of coffee and farmers' income. (S6, 10; A4) Strengthening the position of farmers by making policies related to price protection and coffee trading (S1, A7) Building and reorganizing institutions that can support farmers in running coffee farming to have a more effective, efficient, productive and progressive function (S8; A5). In order for farmers to take advantage of natural potentials suitable for coffee cultivation, it is necessary to build partnerships with financial institutions (such as banks) to make it easier for farmers to access capital (S2; A6).</p>	<p><u>OA</u> Increase the number of extension workers in Bandar District according to the government program of one village and one extension as an effort to improve the quality of human resources for farmers. (O8; A1) Conduct monitoring and evaluation related to the fertilizer subsidy program and other agricultural production facilities, and it is necessary to re-map the need for saprots so that the number, time and target is correct, so that farmers do not experience difficulties in accessing the saprotan, especially fertilizer (O3; A2). Collaborating with the Department of Trade, Cooperatives and MSMEs to socialize branding and export assistance to increase the selling price of coffee and to promote tombo coffee, this can be done by increasing the frequency of participating in regional, national, international coffee competitions / festivals and holding a Tombo Coffee festival and event, so that Tombo Coffee products can be better known at the regional, national, but also known up to international level. (O1, O7; A7) Making regulations related to the red coffee picking system and providing incentives to farmers who do red picking as an effort to produce coffee beans with premium quality, in accordance with Indonesian National Standards and Export standart (O2; A3). Facilitating sophisticated coffee processing technology as an effort to facilitate farmers in processing coffee into various kinds of processed products which will have an impact on increasing coffee added value and farmers' income. (O5; A4) Inviting farmers to do comparative studies with communities that have an interest in coffee and introduce and help farmers to access information related to coffee cultivation, post-harvest coffee processing and to market coffee from various social media so that information and technology will be disseminated, which will result increasing knowledge and experience to develop coffee farming. (O9,6; A5) Disseminating sources of capital that can be accessed by farmers, one of which is KUR, and helps farmers to access these sources of capital so that farmers do not struggle with middlemen (O4; A6).</p>
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Tabel 3. Continued

Result (R)	SR	OR
<p>Increase the ability of farmers in managing (seeking, obtaining, producing and utilizing) Agricultural Information from various sources to increased knowledge and skills of farmers in coffee cultivation (planting, maintaining, harvesting, post-harvest processing, storing and marketing coffee).</p> <p>Increase the ability of farmers to apply technological innovations in coffee farming.</p> <p>Agricultural facilities and infrastructure (fertilizers and post-harvest processing tools) can be easily accessed by coffee farmers.</p> <p>Increased opportunities to access sources of capital that are not detrimental to farmers.</p> <p>Increased the ability to market coffee agricultural products at competitive prices and expand the marketing network for Tombo coffee</p>	<p>Increase farmers 'awareness to utilize natural resource potential and information technology optimally to increase farmers' knowledge and skills in coffee cultivation (planting, maintaining, harvesting, post-harvest processing, storing, and marketing coffee) (S2,S3,S4,S9; R1)</p> <p>Tombo coffee is a commodity that has a relatively high amount of production in Tombo Village and has a distinctive and unique taste, so to develop quality Tombo coffee products, training is needed to improve the ability of farmers to apply technological innovations in Tombo coffee processing (S6;R2)</p> <p>Developing the tourism sector in Tombo Village and collaborating with ARC to support the marketing of Tombo coffee (S1;R4)</p> <p>Disseminating the sources of capital that can be accessed by coffee farmers (SS7,S8;R5)</p>	<p>Making the role of extension workers effective in coffee farming assistance, introducing social media that can be accessed by farmers and holding discussions between farmers and people who are experts in the field of coffee (Communities that have a concern on coffee) to improve farmers' ability to manage information (seeking information, obtaining information, producing and utilizing information) agriculture that can be increased knowledge and skills of farmers in coffee cultivation (planting, maintaining, harvesting, post-harvest processing, storing and marketing coffee)(O6,O8,O9; R1,R2).</p> <p>Improve the fertilizer distribution system and provide post-harvest coffee processing facilities that can be used by coffee farmers to make it easier for farmers to access agricultural facilities and infrastructure (O3, O5; R3)</p> <p>Assisting farmers who have limited capital to take advantage of the people's business credit program from the government in collaboration with Bank Rakyat Indonesia. (O4; R4)</p> <p>Certification of the product, branding, and export assistance to maintain the quality of Tombo coffee, increase coffee selling prices and be able to compete in national and international markets, (O1, O2, O7; R5).</p>

They believe that increasing human resources is very important because human resources with adequate knowledge and skills will respond more quickly to technological innovations that lead to increased crop productivity and production quality.

Facilitating Coffee Farmers in Accessing Agricultural Facilities and Infrastructure

Agricultural facilities and infrastructure are needed by farmers to cultivating coffee. However, the reality is that farmers often experienced difficulties accessing agricultural facilities and infrastructure, especially fertilizers. As a result, coffee productivity was low. To solve these obstacles, there are 3 alternative strategies based on the SOAR analysis results. 1) A good network of cooperation and coordination between input production traders, government, and farmers can be built. It aims to ensure fertilizers' availability so that farmers' fertilizer needs can be met, increasing coffee productivity and quality. 2) Monitoring and evaluation related to the fertilizer subsidy program and other agricultural production facilities can be conducted. It is necessary to re-map the needs for agricultural facilities and infrastructure so that

the amount, time, and target is correct. 3) Improve the fertilizer distribution system and provide post-harvest coffee processing facilities that can be used by coffee farmers to make it easier for farmers to access agricultural facilities and infrastructure.

It will prevent farmers from experiencing difficulties in accessing the facilities and infrastructure, especially fertilizer. The strategy of facilitating coffee farmers in accessing agricultural facilities and infrastructure is supported by the results of Arnawa et al. (2010), stating that one of the main obstacles faced by farmers in coffee cultivation is the not optimal use of fertilizers so that it affects the low quantity, quality of taste, and aroma of coffee.

Helping Farmers to Access Capital Resources

Capital is one of the big obstacles in conducting farming. It is by the opinion of Pratiwiet al. (2019) that access to capital resources is still a major problem faced by farmers in Indonesia; most of them only have a narrow field considered not bankable by lending institutions. So far, to get capital, coffee farmers in Tombo Village had to borrow capital from the wholesaler, and as collateral, they had to sell their coffee

products to the wholesaler with a selling price determined by the wholesaler.

Based on the results of the SOAR analysis, alternative strategies that must be carried out to help farmers access capital in running their farms are: socializing again the source of capital from the government, namely Kredit Usaha Rakyat (KUR); Motivate farmers who have limited capital to take advantage of KUR and assist farmers to access KUR so that farmers do not depend on wholesalers. KUR is the government's priority program in supporting MSMEs, like a policy of providing credit and/or investment to individual/individual debtors, business entities, and/or business groups that are productive and feasible but do not yet have additional collateral or the additional collateral is not enough. The objectives of implementing the KUR program include increasing and expanding access to financing for productive businesses, increasing the capacity for the competitiveness of MSMEs, and promoting economic growth and employment. Based on the regulation from Coordinating Minister for Economic Affairs Number 11 of 2017 concerning guidelines for implementing people's business credit, one of the KUR recipients consists of the Association of Farmers and Fishermen Groups. The provision of capital assistance is expected to increase farmers' independence, characterized by developing coffee farming and more robust capital (Sumodiningrat, 1999). Based on the description above, the farmers and the government must coordinate well so that the government's programs for the agriculture, plantation, and livestock sectors can run well.

Motivating Farmers to Make Red Choices on Coffee Cherries

Good quality coffee can only be obtained from ripe fruit and through proper processing. This statement aligns with Panggabean (2011) that picked raw (green) coffee will reduce the coffee quality. Based on the research results, although the ARC community has provided an extension program regarding the importance of red picking for coffee cherries, coffee farmers' motivation in Tombo Village to harvest red picks was still low. It happened because so far, they felt that there was no significant price difference at the farm level between red, yellow, and green coffee. According to Herminingsih (2016), the low motivation of farmers to do red picking is that the coffee value chain in the market does not support them in prioritizing the practice of picking red coffee with high prices. The market still accepts green cherries because of their low price. Sorting fruit is not a priority because market demand does not require farmers to provide red coffee cherries. Based on these conditions, there are two strategies considered to increase farmers' awareness to prac-

tice red-picking coffee beans: 1) organizing agricultural extension activities to increase farmer awareness in the practice of red-picking coffee beans and 2) making regulations on the red coffee picking system and providing incentives to farmers who choose red coffee as an effort to produce premium quality coffee beans.

Increasing Coffee Farmer Awareness to Conduct Post-Harvest Processing

Coffee post-harvest processing is all activities carried out from the process of handling agricultural products to the process of producing semi-finished products. Post-harvest handling aims to reduce yield loss, reduce damage level, and increase the shelf life and use of commodities to obtain added value (Setyono et al., 2008). Based on the SOAR analysis, coffee beans processed with the right process will have a distinctive and unique taste, and the quality can be equivalent to premium coffee from other regions. However, farmers' awareness to carry out coffee post-harvest processing activities was still relatively low because their knowledge and skills to process post-harvest coffee were still relatively low. They thought that post-harvest coffee activities were strenuous and required a long time, while their daily needs had to be fulfilled immediately.

Therefore, awareness-raising activities for coffee farmers in Tombo Village to carry out post-harvest coffee processing activities need to be carried out with the following three strategies. 1) Facilitating training activities need to be carried out to improve farmers' ability to apply post-harvest processing technology innovations to process coffee more efficiently to produce Tombo coffee quality, distinctive, and unique tastes. 2) Collaboration with researchers/academics is needed to create innovative and distinctive coffee processed products to increase the added value of coffee and farmers' income. 3) Facilitating coffee processing technology as an effort to motivate farmers to process coffee into quality products to increase coffee added value and farmers' income. 4) Tombo coffee is a commodity that has a relatively high amount of production in Tombo Village and has a distinctive and unique taste, so to develop quality Tombo coffee products, training is needed to improve the ability of farmers to apply technological innovations in Tombo coffee processing. Technology and innovation are the main strengths of farming efficiently, which can be assessed by comparing the use of inputs and outputs produced (Mosher, 1996). Therefore, post-harvest processing equipment for coffee is needed by farmers because it has a vital role in increasing the added value of agricultural commodities (Mayrowani, 2013).

Based on the study results, most of the coffee farmers in Tombo Village did not have the tools to process post-har-

vest coffee. Post-harvest processing techniques still relied on traditional methods that required a long time and tended to damage the seeds. Assisting the pulper and huller that farmers can use jointly is the right solution to improve the quality of coffee products in Tombo Village and reduce Tombo coffee's damage level to increase its added value and sale value. Assisting with tools alone is considered not enough. The empowerment agency must assist the farmers until they can use the tools appropriately. The use of appropriate post-harvest technology can make farming more efficient from the micro side and can be an opportunity for increased production by reducing yield loss and low-quality yields (Mayrowani, 2013). Collaboration with researchers or academics is needed to make innovative and distinctive coffee processed products to increase the added value of coffee and farmers' income. Training on innovation and diversification of coffee needs to be conducted to develop Tombo coffee products.

In the era of globalization, competition for coffee products is getting tougher. Almost every region in Indonesia and other countries compete to produce quality and varied kinds of coffee products. According to Amir, Indah, and Widayanti (2017), the development of coffee product diversification is critical because it can make coffee a commodity with high competitiveness in the international market. This opinion is also conveyed by Sulistyaningtyas & Wilson (2018) that one of the efforts to expand the coffee market is product diversification.

Improving the Coffee Marketing System

The coffee farmers in Tombo Village had difficulty marketing their products. This difficulty was due to farmers' low ability to access market information sources. Farmers only referred to market information from collectors, including price information. The marketing network for Tombo coffee was also long: farmers-middlemen/collectors-wholesalers-consumers/exporters. Consequently, the coffee purchasing price at the farmer level was low, and farmers felt that their income was not sufficient for their daily needs, so that coffee farming was not a priority for farmers in Tombo Village. This condition is following the research results from Aderolu, Babalola & Anagbogu (2014), which stated that the main factors causing the abandonment of coffee plantations were low prices and marketing channels.

Based on the SOAR analysis, there are four alternative strategies to improve the marketing system for Tombo coffee:

Establishing policies about price protection and coffee trading systems

The policy aspect is one of the empowerment strategies

that must be considered because policies can affect people's economic conditions in Tombo Village, which are mostly coffee farmers. So far, the coffee price in Batang Regency has fluctuated; even the coffee price becomes very low at harvest time. As a result, many farmers lost money. Farmers hope that the government will provide protection, including establishing regulations on price protection and coffee trade, which are expected to provide a sense of security and profitability and maintain transparency in the coffee trade so that farmers do not lose money. According to Sihombing (2011), the trading system is said to be efficient if it meets two conditions: 1) able to deliver farmer products to consumers at the lowest possible cost and 2) able to share fairly from the total price paid by the final consumer to all parties involved in product production and trading systems.

Providing socialization about the importance of branding and technical guidance on coffee export

Branding is needed to develop Tombo coffee products. Brands can bind customer loyalty to provide business success, toughness, and product competitiveness (Nastain, 2017). Besides, a brand can make it easier for farmers to market coffee to national and international markets with legal protection, and the quality of the products produced can be well maintained. Based on data from the Department of Industry, Trade, Cooperatives, and SMEs, there were no coffee products from Tombo Village whose brand was officially registered. Due to the lack of understanding from farmers regarding the importance of brands, farmers also did not understand how to officially register. Therefore, the Department of Industry, Trade, Cooperatives, and SMEs' roles are needed to understand the importance of branding and increase farmers' awareness to make brands and register their coffee brands in the Office of Industry, Trade, Cooperatives, and SMEs in Batang District. These efforts can be done by holding branding socialization.

The Department of Industry, Trade, Cooperatives, and SMEs also must prepare and implement technical guidance for export and import. To expand Tombo coffee's marketing to the international market, farmers must also be equipped with knowledge about coffee exports. Therefore, branding socialization and technical coaching of coffee exports for coffee farmers in Tombo Village also need to be implemented.

Increasing promotion and advertising

The empowerment program carried out by the ARC community positively impacted Tombo coffee products. This impact was due to improved harvesting techniques, post-harvest processing, and changes to the marketing network. ARC

could increase the selling value of Tombo coffee. Although ARC's empowerment had a good impact, Tombo coffee's marketing coverage was still limited, not reaching all national and international markets. Therefore, promotional and advertising activities need to be enhanced further to introduce Tombo coffee products to national and international markets.

Alternative strategies that can be used to increase Tombo coffee's promotion and advertising include: 1) Increasing the frequency of farmers/farmer groups participating in competitions related to coffee products at national and international levels or in festivals. Festival events are the right place to introduce products and an arena to increase sales by attracting as many consumers as possible. Wulandari et al. (2015) affirmed that event marketing has tremendous power to create brand awareness for consumers so that it fosters fanaticism for specific products. If the event is carried out earnestly, event marketing has a powerful appeal to marketers to strengthen the brand awareness of a product in consumers' eyes (Ilhamdi, 2008). 2) Tourism potential in Tombo Village should be developed. (Soekadijo, 1997) formulate five positive impacts of tourism development: (a) contributing to the balance of payments, (b) spreading development to non-industrial areas, (c) creating job opportunities, (d) impacting development economics in general through a multiplier effect, and (e) influencing positively other sectors, in terms of the economy. Referring to this opinion, the tourism sector in Tombo Village (Tombo Peak, Eagle Hill, and Tombo Coffee Shop) can positively impact other economic sectors, in this case, the coffee farming sector. Therefore, the tourism sector in Tombo Village also needs to be developed. The relationship between tourism and coffee farms is that with the development of the tourism sector, more and more tourists will come to Tombo Village to enjoy the natural beauty and Tombo coffee, which is expected to increase coffee farmers' income.

Certification of Coffee Product

In Indonesia, coffee is an export commodity that requires a long marketing system to reach international traders (Novita et al., 2012). In the international market, the quality and continuity of coffee production are essential because it can increase competitiveness (Rosiana et al., 2018). Therefore, for coffee products to have competitiveness, coffee product certification is required. The coffee certification standard refers to Indonesian Nasional Standard 6729/2013 regarding the organic farming system. Apart from being competitive, the certification advantages will lead to higher coffee selling prices because certified coffee has good quality. Good coffee quality can be determined by the moisture content and the percentage of impurities (ash, bark, and logs).

Based on the research results, most coffee farmers in Tombo Village still tended to pay less attention to coffee quality. The most important thing is that the coffee produced could be sold even at a low price. As a result, the competitiveness of Tombo coffee tended to be low. Therefore, certification of Tombo coffee products needs to be done so that coffee production in Tombo Village can be sustainable and farmers can experience the economic benefits of coffee farming. According to Fatmalasari et al. (2016), certified farmers could experience economic benefits, especially fairness in the transaction process; for example, certified farmers' average income could reach IDR 10 290 999/ha, while non-certified farmers are only around IDR 8 962 978/ha.

Building and restructuring institutions that can support farmers in running coffee farming

Learning from the Ukraine, the Institutional relations in Ukraine's agricultural sector are formed in the process of interaction between economic agents and entities and are the primary mechanism for satisfying and harmonizing their diverse interests based on prevailing norms in society. The agreement between the participants of interaction is achieved with conciliation procedures, cooperation agreements, and the formation of balanced priorities in the development of economic relations in the agricultural sector (Putsenteilo et al., 2020).

Nevertheless, the results showed that coffee farmers' institutional function in Tombo Village was less than optimal. Farmers' institutions have not contributed to farmers' socio-economic development and have not become a forum for all coffee farmers in Tombo Village. Based on these problems, coffee business actors' institutional strengthening is an alternative strategy for empowering coffee farmers in Tombo Village. The goal is to increase the scale of farming economies. Indicators that can be achieved in implementing this strategy are integrating programs and institutional activities at all levels and increased partnerships and business networks. This issue is in line with Anantanyu (2011), stating that farmer institutions in rural areas contribute to the acceleration of farmer socio-economic development, accessibility of agricultural information, accessibility of capital, infrastructure, and markets, and innovation of agricultural adoption. Besides, a farmer institution's existence will facilitate the government and other stakeholders in facilitating and strengthening farmers. However, it should be noted that coordination between institutional members is necessary to carry out institutional functions properly. Institutional agriculture will not function well if awareness of the importance of togetherness in supporting group activities is low.

Another institution that needs to be developed in Tom-

bo Village is Badan Usaha Milik Desa (BUMDES). BUMDES needs to be developed in Tombo Village because it is considered capable of solving farmers' problems in Tombo Village. Based on the regulation of the Ministry of Villages, Development of Disadvantaged Areas, and Transmigration No.4 of 2015, the purpose of establishing BUMDES is to improve the village economy, optimize village assets to benefit village welfare, increase community efforts in managing village economic potential, compile plans for inter-village business cooperation and/or with third parties, create opportunities markets and networks that support public service needs, open employment opportunities, improve community welfare through increasing public services, growth and equitable distribution of the village economy, and increase the rural and rural communities' original income.

Conclusion

This research concludes that the empowerment carried out by ARC has not been optimal, so not all coffee farmers felt the positive impact of these empowerment activities. The use of SOAR analysis in this study has resulted in an empowerment strategy that does not only focus on problems and threats but focuses on the aspirations of all stakeholders and the outcome points that will be indicators of the success of empowerment activities. In the process of developing a strategy for the empowerment of coffee farmers in Tombo Village, the research identified the internal and external environment of coffee farmers in Tombo Village. Based on the internal environmental analysis, there are 10 strengths possessed by farmers, and 4 aspects used to identify opportunities for coffee farmers in Tombo Village: the economic aspect, the opportunity for coffee farming in Tombo Village is that coffee has a high selling value if farmers can process coffee beans properly to produce premium quality coffee following SNI and export standards; socio-cultural aspect, the opportunity for coffee farming in Tombo Village has become part of people's lifestyle, not only in urban areas but also in rural areas, so many coffee shops have sprung up in cities or villages, resulting in the demand for coffee in both domestic and international markets; politics and law aspect, the opportunities that can be maximized by coffee farmers are the many government programs that can assist farmers in developing coffee farming; and technological aspect, the opportunities that can be exploited are that many available sources of information can make it easier for farmers to find information related to coffee farming, and the development of post-harvest coffee processing technology can make it easier for farmers to process coffee into good quality products by minimizing damage.

The external environment analysis, we found 7 aspirations and 5 results that were expected by coffee farmers in Tombo village. Aspirations desired by all stakeholders, namely: Increase the ability of farmers in managing Agricultural Information from various sources to increased knowledge and skills of farmers in coffee cultivation; Increase the ability of farmers to apply technological innovations in coffee farming. Agricultural facilities and infrastructure can be easily accessed by coffee farmers, increase opportunities to access sources of capital that are not detrimental to farmers, and increase the ability to market coffee agricultural products at competitive prices and expand the marketing network for Tombo Coffee. Measures of the results to be achieved in strategic planning for empowering coffee farmers in Tombo Village, include: increase the ability of farmers in managing agricultural information from various sources to increase knowledge and skills of farmers in coffee cultivation; increase the ability of farmers to apply technological innovations in coffee farming. Agricultural facilities can be easily accessed by coffee farmers, increase opportunities to access sources of capital that are not detrimental to farmers, and increase the ability to market coffee agricultural products at competitive prices and expand the marketing network for Tombo Coffee. Some recommendations that can be conveyed to policymakers related to problems in the field and optimization of community empowerment programs are: increasing the quality of farmers' resources, facilitating coffee farmers in accessing agricultural facilities and infrastructure, helping farmers to access capital resources, motivating farmers to do red picks on coffee cherries, raising the awareness of coffee farmers to carry out proper post-harvest processing, improving the coffee marketing system in Tombo village. Building and restructuring institutions that can support farmers in running coffee farming. The author hopes that the results of this study can become material for evaluation and input, especially for the Tombo Village government and the Batang Regency agriculture and food office, to create policies that can encourage farmers to continue to develop coffee farming in Tombo Village and to realize coffee farmer welfare.

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