Empowering of Young Farmer for Arabica Coffee Farming Business in Simalungun

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Abstract. Arabica coffee is a global product, and Simalungun arabica coffee is able to compete internationally. The sustainability of the Arabica coffee business depends on young farmers. Young farmers as the next generation of agricultural businesses need special attention so that agricultural products can compete in the global era. The research method uses a qualitative approach with primary data types. The data collection technique was FGD 2 times each followed by 15 young coffee farmers and in-depth interviews with snow ball techniques of 11 young coffee farmers. The research subjects were young farmers who were involved in the coffee business. The results showed: the strategy of empowering young coffee farmers requires two components, namely driving and facilitating factors. The driving factors include: changes in non-market economic systems to markets, changes in client patron systems into markets; opening access to coffee processing tools, shaping the image of young farmers as active and critical agents, placing young coffee farmers as dynamic subjects in building leadership and entrepreneurial character. Facilitating factors include: building collectivity, organizing young coffee farmers by strengthening social capital, protecting the water and land resource base by implementing good agricultural practices (GAP), diversifying livelihoods, opening market access, counseling and mentoring coffee and information and technology-based coffee businesses. In the free market era (MEA), it is necessary to reposition young coffee farmers from producer farmers to supplier farmers.

1. Introduction

Arabica coffee is one of the plantation commodities that has an important role in supporting the increase of non-oil and gas exports in Indonesia. In its development, Indonesia is one of the best Arabica coffee producing countries to date. North Sumatra Province is one of the biggest Arabica coffee producing regions in Indonesia with good quality and has been recognized by the world. The high production of Arabica coffee in North Sumatra Province does not necessarily make North Sumatra Province the center of Arabica coffee agro-industry in Indonesia. This is due to the fact that most of the Arabica coffee production is exported in the form of arabica coffee beans and only a small portion is used to meet domestic needs. To progress in the coffee business depends on coffee farmers who have a good vision to maintain the quality and quantity of coffee. Young farmers as the next generation of agriculture, especially in the field of coffee need attention and training so that the results of agriculture can compete in this modern era.
Data from the Agricultural Data and Information System Center of Simalungun Regency 2016 shows that during the 2014-2016 period, the age structure of the plantation subsector's labor for the middle productive group was 43.12%, young productive was 41.92%, and old productive was 14.96%. Increasingly growing agricultural labor and plantation subsectors on the one hand, and on the other hand the slow increase in the number of workers in the middle productive classes and the relatively limited involvement of young productive people as workers requires serious efforts from the government. As a country with the fourth largest coffee producer in the world after Brazil, Vietnam and Colombia, Indonesian coffee production is highly dependent on smallholder plantations. Coffee production has reached approximately 650,000 tons per year from the community plantation sector (96.2%), the rest from the private plantation sector is approximately 10,000 tons (1.5%) and the state plantation sector contributes an average of 15,000 tons (2.3%) per year. North Sumatra Province is one of the producers of arabica coffee in Indonesia. The area of people's coffee plantations in North Sumatra is 79,181 hectares, with a production of 55,313 tons. One of the potential districts in coffee development is the Regency Simalungun (9,966 Ha). The sustainability of developing Arabica coffee in Simalungun Regency depends on young coffee farmers. This is in line with the results of research where sustainable agriculture will not be realized without the involvement of youth in agricultural activities, which include: land and seed preparation, maintenance, and harvesting.

The result show that youth involvement in agricultural activities has declined. Factors that make youth involvement low in sustainable agricultural activities are parental socialization and low peer cohesiveness. Agriculture is considered as a job that is not economically promising so it needs the attention of various parties to increase socialization about agriculture as well as a forum to facilitate youth in sharing information about agriculture. Based on the explanation of employment problems in the plantation subsector and the sustainability of the coffee business, it is relevant to conduct a research on strategies for empowering young entrepreneurial coffee farmers in Simalungun Regency. The concept of empowerment in this study refers to the concepts of stating that empowerment is a process and a goal. As a process, empowerment is and the empowerment of weak groups in society, including individuals who experience poverty problems. As a goal, empowerment refers to the circumstances or results achieved by a social change that is a society that is empowered, has the power or knowledge and the ability to understand their life needs.

Based on the description above, the questions in this study are: (1) What is the typology of young coffee farmers in Simalungun Regency? (2) What are the driving factors and facilitating strategies for empowering young entrepreneurial coffee farmers in Simalungun Regency? (3) In relation to the global market (AEC), what preparations do young coffee farmers need to make? With the formulation of these questions, the objectives of this research are: (1) Explain the typology of young coffee farmers; (2) Explain the driving and facilitating factors in the strategy of empowering young entrepreneurial coffee farmers; and (3) preparation that needs to be done by young coffee farmers in relation to the global market (AEC). From the formulation of this research, the focus of this study is the strategy of empowering young coffee farmers and the preparation of young coffee farmers in the MEA era. The focus of this research is important to do to limit qualitative studies and limit research to select relevant data.

2. Method
The research method uses a qualitative approach with primary data types. Primary data types were obtained through Focus Group Discussion (FGD) and in-depth interviews. FGDs were carried out twice each time followed by 15 young coffee farmers in NagoriSaitButtuSaribu and NagoriPamatangSidamanikPamatangSidamanikSubdistrict, Simalungun District, bringing the total number of young farmers who participated in the FGD to 30 people. The FGD was carried out deliberately namely Arabica coffee farmers with the age limit of young coffee farmers according to the local view (emic), i.e., aged 20 to 40 years. Research subjects in-depth interview were young coffee farmers who were involved in coffee businesses that were deliberately selected by the snowball technique. In-depth interviews with research subjects were conducted semi-structured using interview
guidelines. As a qualitative study, the data analyzed are in the form of words rather than a series of numbers.

Data that has been collected by means of FGDs and in-depth interviews are then recorded, typed and edited. Data analysis was performed using an interactive model following the opinion [7] In this model, data reduction, data presentation, and conclusion drawing are carried out, all of which are a cycle to strengthen the conclusions. This means that as a qualitative method, the data collected and analysis are also qualitative in nature. Data in the form of words intended not to attract generalizations, but rather emphasize the meaning, so this research is classified as descriptive research. The first step is to reduce data by summarizing the results of interviews and FGDs and focusing on important findings in the field, then looking for themes and patterns. With data reduction a clearer picture will be obtained making it easier for researchers to collect data that is still lacking. The second step is to present the data by compiling information to make it easier to draw conclusions. In qualitative research, data is presented in various forms, and in this study data is presented in the form of narrative texts. The final step is to draw conclusions made by answering the formulation of the problem that was set from the beginning. The drawing of conclusions in this study was carried out by dialoguing the findings data in the field with theories and the results of previous studies.

3. Results and Discussion

In this chapter the discussion is divided into 3 sub-chapters, namely typology of young coffee farmers, driving and facilitating factors in the strategy of empowering young coffee farmers and preparation of young coffee farmers in relation to the free market era (MEA) in accordance with the questions and research objectives. Explanation of each section is as follows.

3.1. Classification of Young coffee Farmers

Farmers' household livelihood strategies are divided into 3 (three) strategies namely survival, consolidation and accumulation strategies. Survival strategy is a strategy to meet the needs of life at a minimum level so that farmers can survive. The consolidation strategy is a farmer's strategy to meet the needs of life (both basic needs and social needs). The accumulation strategy is a strategy of meeting the needs of life both basic needs, social and capital accumulation (capital). Strategies undertaken by one community can vary depending on the economic conditions of the household. In this study, farmers' household livelihood strategies are used by the authors to determine the typology of young coffee farmers. Typology of young coffee farmers in PamatangSidamanik District can be divided into 3 (three), namely young farmers who are trying to grow coffee with the aim of still survival, consolidation to capital accumulation. Households that have not been able to meet their basic needs are included in the survival strategy group, households are able to meet basic needs and are able to cope with fluctuations in income changes at any time when entering the typology of consolidation strategies and households that are excessively able to invest in typology accumulation strategies. First, young coffee farmers with the philosophy of survival have all the characteristics of the sale of Arabica coffee used to meet the minimum living needs, namely food for survival purposes [10]. Even though Arabica coffee is produced for export purposes, the results are only sufficient to meet basic needs. The character of young typology young farmers is still living with parents, still relying on human resources (human capital) by working as wage laborers in coffee plantations and companies (PT. Toba Pulp Lestari) to get cash during the Arabica coffee period is not harvested (track). This means that young coffee farmers with a survival strategy only rely on labor (human capital) to survive, because ownership of other resources (assets) such as land is relatively limited, only managing the fields owned by their parents. The main capital in working is only labor, so to meet their daily needs young farmers must always be healthy, because being sick means losing their livelihood because they cannot work.

To meet their basic needs, young coffee farmers with a typology of survival undertake two strategies at once, namely to become wage laborers to increase sources of household funds and take actions to limit household consumption of goods and services. Efforts to adopt more than one strategy by young coffee farmers to maintain their lives. Second, typology of young coffee farmers for consolidation
purposes. According to White (1991), the typology of consolidation is generally applied by middle groups that prioritize the stability of income from processing their resources. Young coffee farmers in Simalungun consolidated typologies generally begin initiatives to maintain coffee by implementing Good Agricultural Practice (GAP) and SOP so that the coffee produced meets global market standards (MEA). The business of maintaining coffee with GAP principles and according to the SOP is obtained from various agronomists from exporters’ assistants, such as ECOM-Indocafco or from Sumatra Specialty Coffee (SSC) to Starbucks as buyers. The companion exporters generally have an agronomic force of 3 (three) people, 2 people of the cultivation section and a part of pests and diseases of the coffee plant. Young coffee farmers who apply GAP and SOP can ask the exporters' assistants directly to learn the right coffee cultivation techniques to get large and high quality yields. Coffee farmers with a consolidated strategy consider coffee as a savings crop. To meet the need for cash, young coffee farmers grow young plants such as cayenne pepper, red chili, tomatoes, corn which are shorter-lived so that they can harvest quickly between the coffee plants. Young coffee farmers with a consolidated strategy generally have jobs in the service sector (eg salons, motorbike repairs and drivers). The results of working in the service sector are saved as savings to develop businesses, including to buy coffee fields in stages.

3.2. Driving and Facilitating Factors

Driving and Facilitating Factors in the Structure of Empowerment of Young Coffee Farmers. [11]Empowerment is defined as giving "power" or power or strength or power to a weak group in order to have the power to act. [12]states that empowerment is a process and a goal. As a process, empowerment is a series of activities strengthening the power and empowerment of weak groups in society, including individuals who experience poverty problems. As a goal, empowerment refers to the circumstances or results achieved by a social change that is a society that is empowered, has the power or knowledge and the ability to understand their needs Furthermore, success in community empowerment can be seen from their empowerment regarding economic capacity, ability to access welfare benefits, and cultural and political capabilities. These three aspects are related to the four dimensions of power, namely: ‘power within’ (power within), ‘power to’ (power to), ‘power over’ (power over), and ‘power with’ (power with).

Power within is intended to increase awareness and desire to change. Power to is intended to increase the ability of individuals to change and increase opportunities for access. Power over is intended to change resource constraints and power at the household, community and macro level, the power or individual action to deal with these barriers and increase opportunities for gaining access. While power with (power with) is intended to increase solidarity or joint action with others to deal with resource and power constraints at the household, community and macro level. Referring to this, based on the synthesis of typology of young coffee farmers obtained through in-depth interviews and FGDs, young coffee entrepreneurs who are considered to be empowered are young farmers who have an entrepreneurial character, access and control to strong coffee businesses, and social positions that are recognized by the community.

[13] Revealed that empowerment efforts are an effort to foster participation and independence so that the community at the individual, group, institutional, and community level has a much better welfare level than before, has access to resources, has critical awareness, is able to organize and social control of all development activities carried out in the environment. Empowerment in the context of social science always shows partiality for the weak and powerless victims of development. The values contained in the concept of empowerment are awareness (consciousness), process, independence, responsibility and also sustainability because epistemologically empowerment (empowerment) is rooted in critical social theory (critical theory) or critical paradigm [14] as a critique of positivistic view.

In line with this, the strategy of empowering young entrepreneurial coffee farmers is carried out through the activities of developing entrepreneurial character, economic empowerment, and raising awareness of the recognition of young coffee farmers. In the entrepreneurial character development program, several activities were carried out: (1) Establishment of a reference group (successful young
farmers), (2) Entrepreneurship training; and (3) Internship. In the coffee economic empowerment program, activities are carried out: (1) Increasing access to coffee businesses; (2) Long-term land leases; (3) Increasing access to capital according to the season and the needs of young people; (4) Technology training (IT); (5) intercropping demonstration plots and processing of coffee products, (6) Pilot projects of coffee traders and coffee entrepreneurs. Thus the social development program of young coffee farmers, carried out activities: (1) Assistance of families of young coffee farmers through planting positive values of coffee; (2) Establishment of entrepreneurial young coffee farmers groups; (3) Involving young people in market networks; (4) Coordination of groups in the development of coffee. Efforts to empower the community can be seen from three sides. First, creating an atmosphere or climate that enables the potential of developing communities (enabling). Second, strengthen the potential or the power that the community has (empowering). Third, empowering also means protecting [15].

Thus, in an effort to empower young entrepreneurial coffee farmers, a driving and facilitating factor is needed. If in agricultural development requires major factors and facilitating factors (AT. Mosher, 1983), then the results of the FGD to empower young coffee farmers need a driving and facilitating factor. The driving factors include: (1) Changing business orientation from non-market to market; (2) Personal insurance / collateral, client patron becomes the market (cash reserves for savings); (3) Open access to production equipment; (4) Establishing the image of young farmers as active and critical agents; and (5) placing young coffee farmers as dynamic subjects in building leadership and entrepreneurial character.

The change in business orientation from non-market to market must be done because Arabica coffee and its processed products are export commodities so farmers must adapt to the demands. Social relations that were originally binded and patron-client in character have gradually eroded, replaced by contractual relationships. As a guarantee or insurance, coffee farmers need savings. Efforts to open access to means of production are carried out by strengthening social capital both vertically (district and provincial governments) and horizontally. Efforts to shape the image of young farmers as active and critical agents are carried out through various trainings to improve skills and be critical of changes and market demands. Efforts to build the character of leadership and entrepreneurship are carried out by giving trust to young farmers in the organization of young farmers groups (TarunaTani) and providing opportunities to start a business with full support from both parents and the government. Facilitating factors include: (1) Building collectivity through strengthening the institutions of young coffee farmers (farmer groups, cooperatives, farmer groups); (2) Strengthening social capital: trust, network, strong development; (3) Protect the resource base: springs, rivers, arable land for environmental sustainability (good agricultural practices); (4) Livelihood diversification (double income) by releasing dependency on money borrowers; (5) Open market access; and (6) Providing counseling and mentoring for coffee businesses based on Technology Innovation (IT). The application of technological innovation is important to do because the results of research by [16] also shows that the application of innovation technology plays a major role in increasing the productivity of farming, so that it has the opportunity to improve the welfare of farmers’ household lives with one indicator, namely the household food security of farmers. Efforts to accelerate the adoption of technological innovations are carried out in various ways. The results of [17] accelerating the adoption of innovations at the farm level for a continuous reminder of production through the Integrated Crop Management Field School (SL-PTT) program. But in the context of Arabica coffee farmers in Simalungun, the acceleration of technology adoption is done by providing Arabica coffee processing machines accompanied by a short training on the use of the equipment.

3.3. Preparation of young farmers

Demand farmers' readiness to enter the free market system of the countries which are members of ASEAN. In the previous discussion, it was discussed in the MEA era that it is necessary to strengthen farmer institutions, both through farmer groups, cooperatives and farmer groups in order to negotiate with outsiders and build networks. Network is one element of social capital. Social capital contributes to collective action or action [18]. Collective action in the form of institutions can achieve common
goals. The study of [19] shows that with collective action, farmers can access the global market, meaning that the market with all its demands is not avoided by farmers, but farmers are trying to meet all the demands of the global market.

Young farmers in PamatangSidamanikSubdistrict, Simalungun Regency can access technology (in the form of coffee processing equipment) in groups. This means that efforts to empower young farmers so far have been using farmer group institutions. The introduction of technology through groups makes it easy for aid providers to monitor the program. The results of this study are strengthened by the results of [20] research showing that a group approach facilitates credit management and can reduce risk so that overall credit services become more economical. The group approach also facilitates business assistance for program interventions. The effort to empower young coffee farmers is not only enough with the introduction of coffee processing technology. No less important is changing the paradigm of farmers. According to [21] to empower farmers requires a paradigm shift from the old paradigm that emphasizes technology transfer to a new paradigm that emphasizes human resources or the farmer first approach, namely by "changing farmers", not "changing the way of farming". In the MEA Era, the role of farmer institutions is very important because through institutional arrangements farmers can increase their bargaining position, negotiate, expand market networks by making memorandum of understanding (MoU) in marketing the results at agreed prices.

Institutional strengthening requires the role of instructors as mandated by Law Number 16 of 2006 concerning the Agricultural and Forestry Agricultural Extension Program (SP3K) which mentions counseling as a learning process for the main actors and business actors so that they are willing and able to help and organize themselves in accessing information, markets, technology, capital and other resources, as an effort to increase productivity, business efficiency, income and welfare and increase awareness in the preservation of environmental functions. [22] Show that the role, performance and innovation of the instructor directly and significantly influence the empowerment of farmers in Jember Regency. The role and innovation of the instructor also affects the performance of the instructor in the field. As the vanguard, the capacity of extension workers must continue to be improved both through training and providing motivation or encouragement for extension workers because the results of research by [23] show that the frequency of training and motivation of agricultural instructors positively influences the performance of instructors. Agricultural counseling by extension workers is a form of social influence that is realized, meaning that communication is done intentionally by extension agents to provide information to help farmers make correct decisions and change farmers' behavior for the better. That also explain the importance of technology that needs to be adopted by farmers to increase production to support Indonesian agricultural development. With technology it is expected to increase productivity, quality and diversification of processed products in the downstream sector, both on a small, medium and large scale. In the context of young coffee farmers, the technology accessed by young coffee farmers is classified as medium scale.

Strengthening the institutional role of farmers in the AEC era needs to be accompanied by efforts to reposition farmers not only as producer farmers but also supplier farmers. Farmer repositioning is an implementation of Law No. 19 of 2013 concerning Protection and Empowerment of Farmers by providing space to reposition farmers from producer farmers to supplier farmers. In contrast to the producer farmers that have been won by Indonesia during the green revolution, where farmers are able to produce agricultural products through farming technology. But in the era of the free market (AEC), it is not just the producer farmers that are needed but farmers who are able to respond and meet market demand or supplier farmers. Efforts to prepare Arabica coffee farmers not only as producers but also as suppliers are also carried out by coffee farmers in Simalungun, North Sumatra with the support of various parties, both government the second and private.

Private support in Simalungun is demonstrated by the presence of ECOM-Indocafco, largest exporter company from the port of Belawan, who participated in assisting young coffee farmers from cultivation to post-harvest. In an effort to assist young coffee farmers, exporters fielded agronomists to accompany the efforts of young coffee farmers to carry out production processes in accordance with the SOP and implement Good Agricultural Practice (GAP). Government support for young coffee farmers
is done by providing Arabica coffee seedlings to the help of coffee processing machines with the final result of grain, green bean and ground coffee.

4. Conclusion
There are three typologies of young coffee farmers, namely survival, consolidation and accumulation in a double reward strategy. The typology of young coffee farmers with an accumulated strategy has a large business scale, masters coffee processing technology, has positioned itself in a farmer group and is positioned as a producer and supplier farmer. Young coffee farmers with a survival or consolidation strategy are still focused on other businesses (not coffee business), the business scale is relatively small, has not been positioned in the farmer group, and as a producer farmer is not yet a supplier farmer. The strategy of empowering young entrepreneurial coffee farmers requires two components, namely: driving and facilitating factors.

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