Strategies of Coffee Farmer's Adaptation in Facing Commercial System

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Abstract: This study examined strategy of coffee farmer's adaptation in facing commercial system in Jember Regency. Adaptation strategies are imlpemented by coffee farmer for cutting the marketing channel that has been dominated by the mediator. The research design used descriptive of case study type. Data collection technique used observation, interview, and documentation. The technique of data analysis used an interactive model. The research result showed that there are five adaptation strategies carried out by coffee farmers in Jember Regency, namely the adaptation strategy of farmer resource development, adaptation strategies of online marketing, adaptation strategies of businesses independently, adaptation strategies of developing cooperation and partnership networks, and adaptation strategy of farmer institutional strengthening.

Keywords: Coffee Farmer, Commercial System, Adaptation Strategy

I. INTRODUCTION

The dynamics of coffee production have much polemic for coffee farmers. These are caused by various things, such as unproductive results received by farmers. This polemic can be resolved by rehabilitating coffee plants that are no longer productive and increasing intensive maintenance of coffee plants. Thus, coffee plants will be easier to maintain and are expected to increase national income (Retnandari and Tjokrowinoto, 1991). This condition is complex for coffee farmers because the income from coffee harvests is not commensurate with their operational costs, such as providing seeds, planting, maintaining, and harvesting processes (Guampe & Hengkeng, 2019). Indonesian coffee farmers do not have sufficient knowledge capacity and universe of insight to be able to understand their problems or choose the most appropriate problem solving for achieving their goals so that the knowledge of coffee farmers are only based on erroneous information due to lack of experience, education, or existing cultural value factors.

The problems faced coffee farmers are cultivation technique that are not following the recommendations of good agriculture practices, low plant productivity due to using random seeds, low value-added received by farmers because some of which are exported in the form of coffee beans, as well as limited capital (Titisari P, 2016). Coffee farmers in Jember Regency mainly sell coffee to collector and mediators. All coffee farmers sell coffee to collector who sell coffee through partners through a contract system where farmers must meet requirements such as quality. However, mediators' provide immediate which encourages farmers to prefer selling to mediators rather than partners (Rahmadianto, Ikhsan, and Apriyanto, 2019).

In addition, coffee farmers are dependent on middleman in the coffee chain and get low bargaining position. The profits obtained by coffee farmers have decreased drastically, even to 5% of the total coffee value (Lewin et al., 2014). At the same time, the demand for quality coffee is growing without certification through direct collaboration between roasteries and coffee farmers. This collaboration model is also known as the coffee relationship, part of the third wave of coffee segmentation (Manzo, 2010). Profitable marketing occurs when it does not involve many parties even though the total marketing margin received is lower than other marketing channels, but farmers' profits are more significant than other channels (Ridhawardani et al., 2017). This case based on the reality in Jember that collectors are very dominant and influence the determination of coffee prices because the network of cooperation between marketing agencies is not working well, and farmer groups are not functioning correctly. In these conditions, farmers tend to be price takers, so the bargaining position of farmers is weak in determining prices (Cristovao, 2015).

The existence of a substantial farmer organization will create benefits for every coffee farming household. One of the efforts to overcome these problems is institutional strengthening at the farmer level (Bray & Neilson, 2017) Farmer institutions significantly contribute to increasing the independence and welfare of farmers (Anantanyu, 2011) because institutions have potent ties to the technosocial conditions of farmers (Suradisastra, 2008). In the bonded system, the price of coffee does not match the market price, so the system is detrimental to farmers (Zainuddin et al., 2015).

The collectors are sold to wholesalers or processors and then marketed to exporters. It can be concluded that the reality of coffee supply chain management in Jember is still very complicated, which is still through several members of the supply chain or called middlemen. The supply chain members are farmers, collectors, wholesalers, exporters, and related institutions. The pattern of supply chain structure is found in the flow of products, information, finance, and services (Yulian, Kuswardhani, and Amilia, 2019).

In these condition, some coffee farmers must survive and adapt to give a proper life for their family. Traditional coffee farmers strengthen networks to address problems related to the world of farmers. The informal network that has been built has several functions, namely as a source of information on local farmers' agriculture; and become a place to help each other in every way (from finance and social issues). Coffee is a potential and superior product of Jember Regency but has not yet fully received assistance and policies that can break a reasonably long chain in the coffee trade system so that coffee farmers still do not get whole alignments and welfare. The problem of the coffee trade system that is still ongoing today needs to be re-examined as a forum to find ways and contribute to farmers so that they can survive and adapt so that the family economy can continue and be sustainable, so it is considered very interesting to research and review.

II. LITERATURE REVIEW

Overview of Agricultural Commercial System

Commercial system is a social and managerial process by which individuals and groups obtain what they need and want though creating and exchanging products and value with each other (Kotler, 1997).

Commercial system is a collection of institutions, directly and indirectly, involved in the marketing activities of goods and services, which influence each other intending to allocate resources efficiently to meet human needs as much as possible. The components of the commercial system are producers, distributors, and other institutions that are directly or indirectly involved in exchanging goods and services (Radiosunu, 1995).

In marketing agricultural commodities, economic actors are directly or indirectly involved in carrying out marketing functions. The commodities marketed also vary in quality with varying prices. The marketing functions performed by marketing institutions also vary (Sudiyono, 2001).

The View of Marketing Channels

Marketing channels are the particular set of marketing channels a firm employs and decisions about it are among the most critical ones management faces. Marketing channels contain agreements that follow a product or service after production and end at purchase and use by the end-user (Kotler and Keller, 2016).

Marketing channel can be seen as a collection of interdependent organizations involved in making a product or service available for use or consumption. The definition includes three elements: first, the existence of a marketing agency group. Second, there are activities or functions carried out by the institution. The third is the direction of movement and ownership of products from producers to consumers (Djaslim, 2004).

Marketing channels describe all activities that contribute to food production. Channels that emphasize the needs of companies involved in marketing agencies especially in the production of food and fiber. So that it creates use value or added value (form utility, time utility, place utility, and ownership utility (Bailey & Jason, 2007).

Adaptation Strategies in Agriculture

Adaptation in agriculture is closely related to climate change. Adaptation is a process that places humans trying to achieve goals or needs to face changing environmental and social conditions to survive (Robbins, 2003)

Adaptation has the understanding that is a process of sensitivity of organisms to a condition or situation, whether done or studied (Drever, 1952). Adaptation is a process by a population or individual to environmental conditions, resulting in the population or individual surviving or being eliminated (Howard et al., 1986)

Social and cultural adaptation has several aspects in common through inadaptation and psychological adaptation and corresponds to social integration and socialization concepts. Socialization requires an individual to have an interior and integrate environmental models, values, and symbols into the personality structure to communicate and develop efficiently. Social adaptation, however, does not mean "fitness," as an adaptation to the environment can introduce the idea of innovation or modification (Rocher, 1992).

The adaptation process consists of four stages: signal detection, a mechanism to determine which things to respond to and which things to ignore. Second, evaluation is the process of interpreting the signal and is a form of evaluation of the consequences that will arise in the future. The third decision and response is a process that results in observable behavioral changes, and the last is feedback, which involves monitoring the response that is the result of a decision to assess whether the decisions taken are in line with expectations or not (Risbey et al., 1999).

The types of individual adaptation in certain circumstances include; 1). *Conformity*, namely behavior following goals according to the conventional way of society, 2). *Innovation* is behavior following society's goals, but behavior that is included in the prohibition of society (including criminal acts), 3). *Ritualism* is behavior that leaves society's culture but still adheres to the ways that are still outlined by society. 4). *Retreatism* is an activity to leave both conventional goals and the means of achieving them as is done by addicts to high alcoholic drugs such as drunkards, drug addicts, drugs, alcohol, and including people who are frustrated in life. 5). *Rebellion* is an attempt to withdraw from the goals of conventional means accompanied by efforts to institutionalize goals in new ways (Merton, 1968).

The principles of good adaptation that have been established from practice to inform adaptation planning and processes and measure adaptation outcomes. These general principles include: 1) Work in partnership, is identify and involve our community and make sure they are well informed 2). Understand risks and thresholds, namely uncertainty, 3). Frame and communicate specific, measurable, achievable, results-oriented, and time-bound) objectives/outcomes before starting. 4). Manage climate and non-climate risks using a balanced approach to assess and apply our approach to adaptation in the context of overall sustainability and development goals that include managing climate and nonclimate risks, 5). Focus on actions to manage priority climate risks - identify key climate risks and opportunities and focus on actions to manage them, 6). Address risks associated with today's climate variability and extremes, namely as a starting point for taking anticipatory actions to address risks and opportunities associated with long-term climate change, 7). Use adaptive management to cope with uncertainty recognizing the value of a stepwise approach to dealing with uncertainty. 8) Recognizing the value of no/low regrets and win-win adaptation options, which are mutually beneficial in terms of cost-effectiveness and multiple benefits, 9). Avoid actions that foreclose or limit future adaptations, namely limiting the adaptive actions of others, 10) Review the continued effectiveness, efficiency, equity, and legitimacy of adaptation decisions, namely sustainable adaptation, by adopting a continuous improvement approach that includes monitoring re-evaluating risks (Brown et al., 2011).

Functional adaptation, epi/genetic adaptation, and cultural adaptation.

Functional adaptations involve changes in organ system function, morphology, biochemical composition, anatomy, and composition of the human body. *Epi genetic adaptation* is an adaptation that refers to certain hereditary characteristics that have tolerance and survival both individually and in populations. In comparison, cultural adaptation is a non-biological adaptation in behavior, social, and equipment, a non-biological response of humans to survive. Humans are the only creatures that live with the various cultures they created based on their thoughts (Cavalleri, 2012).

Adaptation strategies combine autonomy and participation from middle and lower managerial levels by proposing and supporting an adaptive model in which emergence driven by autonomous and participatory strategy making by lower and middle management levels facilitates adaptive behavior. This, mediated by strategic planning, leads to higher performance outcomes (Andersen & Nielsen, 2009). Andersen & Nielsen's model rests on cultural assumptions about the adaptive nature of behavior as, in fact, all literature on this issue, including Mintzberg's original work on the elaboration of the term. In this view, emerging strategy is a "bottom-up" process, in contrast to the deliberate emphasis of strategy on "central directions and hierarchies" (Mintzberg & Waters, 2007).

III. RESEARCH METHODOLOGY

The research design for this work using descriptive of case study type. In determining the research location, the researcher uses the purposive sampling method. This research

was conducted in four sub-districts that have coffee potential or that can be considered representative in describing the strategy coffee farmers' adaptation in dealing with commercial systems that are greatly disadvantaged by mediators and collectors, which include Sumberbaru District, Tanggul District, Sukorambi District, and Ledokombo District Jember Regency. The data obtained in this study are primary data and secondary data. Primary data was obtained from information from main informants and supporting informants, namely coffee farmer families and farmer groups in each sub-district. Then secondary data was obtained from archives and documents from the management of farmer groups, the Director General of Plantations, BPS Jember Regency, and the Jember Regency Industry and Trade Office. The reseacher determined twenty two coffee farmers to be key informants for describing the phenomenon comprehensively and in detail. Data collection technique used observation, interview, and documentation. Observations of participants were carried out by researchers intensely for seven months by living directly with the families of coffee farmers, farmer groups, and middlemen/collectors in each sub-district. The next technique is to conduct in-depth interviews, the researcher determines several key informants totaling twenty-two consisting of thirteen pure and modern coffee farmers in each sub-district. six collectors or middlemen, and three coffee activists. The next data collection technique is documentation. Based on the findings that have been made, the researchers found some field notes and conducted documentation in the form of photos with the informants in each sub-district. Then the researchers also obtained several archives owned by coffee farmers, farmer groups, BPS data, or the Jember Regency Industry and Trade Office. The data analysis technique used is an interactive model, which includes data reduction, data display, conclusion and verification. The data validity techniques used in this study include extension of participation, persistence of observati on, and triangulation.

IV. RESULTS AND DISCUSSION

The plantation sub-sector of the coffee commodity in Jember Regency, mostly has two different regions. The northern region of Jember Regency is the center of robusta, liberica, and arabica coffee so that almost all of the farmers grow these three types of coffee and the eastern region is the center of robusta and liberica coffee so that almost all of the farmers grow robusta and arabica varieties. This difference is caused by several factors, including; (1) land suitability factors, (2) capital/cost factors, (3) risk factors, and (4) social, economic, and cultural factors. These factors cause differences in the types of coffee grown by farmers in Jember Regency.

In the North Jember region, it is characterized by Madurese and Javanese ethnicity, based on the results of interviews with the Kramat Sukoharjo Tanggul Farmer Group, it was stated that the level of knowledge and ability of farmers was not good, it was difficult to motivate, and it was difficult to accept the knowledge provided by the service, researchers, and practitioners. coffee. Technical coffee farming is mostly obtained from the experience they have, usually they are more likely to imitate fellow farmers who have succeeded. On the other hand, a farmer group from Sukorambi District stated that the knowledge possessed by farmers was only limited to their daily experience of going directly to the field, although sometimes workshops or counseling were often given by related parties, most of the local farmers had difficulty understanding the material presented. has been given, so that the existence and presence of academics, practitioners, and parties from the institutions that oversee coffee are only used as a forum for discussion and questions and answers regarding regulations implemented by the government.

The coffee trade system is something that all coffee farmers and parties involved must focus on because this problem is difficult to solve in order to provide welfare for coffee farmers. This problem occurs because the gain position owned by farmers is low so that they find it difficult to get added value from coffee production. This makes coffee farmers tend to abandon coffee plants and replace coffee plants with other commodities, such as avocado, chili, cassava, and durian. Coffee farmers generally sell coffee with a log system, namely selling to middlemen in wet conditions or coffee that has just been picked from the tree. The price of coffee logs is around Rp. 20,000 per kilogram even in conditions of urgent or urgent need of funds, coffee farmers sell with the tree slashing system, which is selling coffee in a condition that has not been picked in packages. At that time, the coffee commodity was considered unable to bring the community's economy to the better.

Although coffee farmers control a large area of land, the life of coffee farmers from year to year does not show significant development. This is because smallholder coffee farmers do not have adequate market information so that the bargaining position of smallholder coffee farmers is very low due to limited market information. For this reason, marketing network engineering is needed to overcome the problems currently being faced by coffee farmers.

Quality standards are often the criteria for determining coffee prices, while farmers do not understand quality standards. This is due to the lack of knowledge possessed by genuine farmers in each sub-district who are less educated about proper coffee cultivation and it is also very difficult for genuine coffee farmers to understand the concept of modern cultivation that has been practiced by modern farmers. In practice, almost 90% of the cultivation techniques applied by genuine farmers are still not in accordance with the recommendations of good agriculture practice (GAP), so that crop productivity is low, the quality is not according to market demand. This happens because genuine farmers are also still consistent in using random seeds and also weak farmer institutions which still lack discussion between farmers so that knowledge about coffee cultivation owned by genuine coffee farmers does not develop. Lack of understanding of this quality standard, often in determining the price of coffee,

coffee farmers are only as price takers who have to enjoy price games carried out by wholesalers and middlemen. On the other hand, coffee farmers also want to immediately get results when the coffee harvest arrives by carrying out a cash economy with middlemen or collectors with low coffee prices because they are pressed by economic needs.

The position of the government in this case the agriculture and plantation service is very strategic to foster and regulate the people's coffee trade system. For this reason, local regulations regarding people's coffee are needed, so that there is no price gap at the exporter level with smallholder coffee farmers. Government intervention in the smallholder coffee trade system is very much needed by smallholder coffee farmers, especially in terms of providing market information so that smallholder coffee farmers know the quality of the desired product in terms of product quantity and quality, so that market prices can be predicted or at least the price of coffee is not far from expectations.

The central role of middlemen is a long-standing problem in rural coffee farming in Jember Regency. Middlemen not only solve farmers' marketing problems, but also reduce the welfare of coffee farmers through arbitrariness in determining prices. Various ways have been applied, both government regulations and active partnership programs, but the power of middlemen that is ingrained in coffee farmers is difficult to eradicate.

The problem of middlemen faced by coffee farmers in Jember is not only a problem of lack of facilities and infrastructure. The problem of middlemen is a mentality problem that was formed through a long historical process. The existence of middlemen is related to the minimal capitalist mentality of coffee farmers, so they need help to adapt to the market.

Coffee middlemen in Jember usually collect coffee products from several farmers at once, therefore they are often referred to as collectors. Middlemen can work in different ways. In Kramat Sukoharjo Village, Tanggul District, for example, there are two types of rice middlemen, namely middlemen and geckos. Middlemen usually lend money to farmers before harvesting. When harvesting, farmers sell their produce to middlemen to pay their debts and interest. Middlemen don't want to know about crop failures or other disturbances, because if the harvest is not enough to pay off debts, the farmers' debts will continue to grow. Meanwhile, the gecko buys the farmer's land before harvesting, so the harvesting process is the gecko's responsibility. Between farmers and pemjeg there is no long debt relationship like with middlemen.

The presence of middlemen in the coffee sector in Jember who are directly related to farmers has a reliable role. There are several types of middlemen's roles that are considered to be able to assist farmers in solving both economic and social problems for farmers. The presence of middlemen who can be reached by farmers at any time has a strong enough influence that even farmers cannot 'get out' of the social relations that have been built by the two. In the context of the socio-economic problems that plague farmers, middlemen are here to help solve these problems but by implementing a symbiotic and mutually beneficial relationship between the two parties.

The social relationship between coffee farmers and middlemen that lead to dependence has resulted in one of them being a long-lasting relationship. The length of time referred to as a personal relationship between coffee farmers and middlemen does not have a specific limit or specific time. Coffee farming activities that involve middlemen enter into the lives of farmers, inevitably bring their own influence. As a result, the bonds that have existed between farmers and middlemen are difficult to break.

The condition of coffee farmers in Jember, which is very pressed and even controlled by market conditions, makes them have to maintain sustainable trade relations with middlemen and collectors. However, this certainly becomes a burden for farmers because of their long-term dependence on middlemen and collectors. Based on these problems, farmers are actually aware that the relationship that has been established with the middlemen has a negative impact on themselves (farmers). Several adaptations have been made by coffee farmers in Jember Regency to maintain their survival in the future because the annual yield of coffee is sometimes not enough to cover the necessities of life for one year.

Production practices and trade systems in Jember Regency illustrate that there are still many genuine farmers, almost 80% of whom still carry out the same practice, which is still in contact with middlemen and collectors. This happens because of the limited knowledge and ability of genuine farmers to carry out modern production practices and trade systems as has been implemented by modern farmers who have tried to break the chain with middlemen/collectors to be independent in trading.

The ability of coffee farmers to adapt to the coffee commercial system deserves to be appreciated. Coffee farmers in Jember Regency have gone through various internal and external pressures, namely in terms of education, capital, and markets (trade system). In the past, the pressure came from the Dutch colonial occupation, and now is the entry of modernity values (capital infiltration). However, in this case, coffee farmers in Jember Regency adapt by passively resisting as a form of adaptation to continue to maintain and walk on the way of life that they have adhered to for a long time.

Based on the findings in the field, coffee farmers in Jember Regency implement an adaptation strategy through strengthening human resources through agricultural technology, education on modern coffee cultivation, and the development of alternative markets. The condition of the commercial system that is increasingly unfavorable to farmers makes farmers continue to strive to maintain their economy to get maximum results from coffee sales. Therefore, farmers in Jember Regency continue to look for a middle way and try to find strategies to adapt to the commercial system suitable for them so that the siding with the coffee they cultivate gets big profits.

Adaptation strategy is a method and effort made by coffee farmers in overcoming any obstacles faced and an effort to obtain a positive balance with the conditions of the cultural background and economic conditions of coffee farmers. This is in line with what Pelly (1994) stated that adaptation strategy refers to the relationships and activities of farmers in adjusting to the environment in which they live, and according to the needs they want to fulfill.

According to Vayda & Rappaport (1986) human adaptation can be functional and processual. Functional adaptation is the response of an organism or system that aims to maintain a stable (homostatic) condition. Inadequate natural resources of coffee farmers will affect their household income. This condition will cause a response for coffee farmers in Jember Regency to try to adapt themselves to the crisis. They can no longer only rely on sales to intermediaries or collectors. They can also transform into an independent trading process by daring to sell online and multiply information by building optimal relationships with partners or coffee activists who have coffee shops to stay. Maintain life.

While processual adaptation is a behavioral system formed due to human adjustment to changes in the surrounding environment, environmental changes that significantly affect the adaptation process are environmental changes in the form of disasters. This adaptation strategy is carried out by creating, developing, and maintaining social relationships that have formed a social network. The function of social networks is to make it easier for its members to gain access to economic resources available in their environment. Social networks can be formed based on relatives, neighbors, friends, or these elements.

Most of the coffee farmers in Jember Regency have very narrow agricultural land, so it impacts the low level of income of these farmers. On the other hand, they have to deal with economic actors with significant capital, both domestic and multinational, to compete with large capital owners. This tends to be monopolistic so that it suppresses the position of small farmers.

This unequal competitive atmosphere follows what Scott (1976) that this forces farmers to think and behave as survival farmers. One of the characteristics of farmers in adapting is risk-averse, especially short-term risks that are easy to see in plain sight. Similar with Risbey et al., (1999) explaining that the adaptation process needs to be carried out to survive in desperate economic conditions, the adaptation process consists of four stages: signal detection, evaluation, decision, and response then the last is feedback.

The first is a *signal detection*, a mechanism to determine which things to respond to and which things to ignore. In the

context of the coffee commercial system in Jember, at this stage, the detection signal was felt by coffee farmers long ago. They already knew which mechanism to take in the long term and which one to avoid not negatively impact their lives. However, this cannot be directly proportional to what the farmers feel because of ignorance, lack of information, and the lack of relationships owned by coffee farmers, so the shackles of dependence on mediators are still difficult to separate. The lack of access to sell coffee harvests is a crucial issue that must be resolved jointly by coffee farmers, farmer groups, coffee empowerment institutions, and the Jember district government. Responding to this, joint synergy must be carried out as a form of cooperation to realize a commercial system that can provide decent welfare for coffee farmers.

Second, *evaluation* is the process of interpreting the signal and is a form of evaluation of the consequences that will arise in the future. This stage is a form of joint reflection between coffee farmers and related parties from the actions that have been taken, namely using mediators (brokers) in the coffee commercial system. This must be taken seriously to improve so that the coffee trade system gets a decent portion in the trade sector. The coffee trade system in Jember needs to be evaluated to provide valuable results for further planning by correcting deficiencies and obstacles, both in the marketing process and in the sale of coffee harvests.

Third, *decisions and responses* are processes that produce observable behavioral changes. Productive adaptations must begin to be carried out gradually to build new cultures and habits for coffee farmers to continue to provide breakthroughs as a platform to break the very long coffee chain so that the profits obtained are minimal. These decisions and responses must be addressed and acted upon positively for the long-term prospects for coffee farmers, one of which is making changes in coffee marketing by looking for partners and MSME actors who have coffee shops, cafes, or marketplaces so that coffee farmers can directly meet with consumers without going through intermediaries or brokers.

Fourth, *feedback* is a process that involves monitoring the response, which is the result of a decision, to assess whether the decision taken is in line with expectations or not. In this case, from the process that has been carried out previously, it is necessary to reconsider and follow up on the program or process changes that have been made for more mature considerations. This monitoring and response is a way to control and compare the coffee farmer's trading process between the old sales method through mediators and the direct selling process through partners, whether it is effective or not, with various forms of measurable considerations. Suppose cutting the chain is considered adequate for the sustainability of coffee farmers in Jember. In that case, it can be studied more deeply more comprehensively by developing more efficient and measurable marketing relationships so that later farmers will be even more raised and the level of income received by farmers will increase. Moreover, if farmers dare to make coffee shops independently, this will also provide

outstanding profits in the long term.

The adaptation strategy carried out by coffee farmers in Jember Regency is a long-term effort projected to provide a substantial change to the shackles of the coffee trade system that mediators have played. Based on the findings that the researchers have described, there are five adaptation strategies that have been carried out by coffee farmers in Jember Regency in dealing with the coffee trade system, including:

Adaptation Strategy of Farmer Resource Development

This strategy emphasizes building human resources in the long term. The strategy accentuates the education for coffee farmers to transform on post-harvest handling practices. The strategy carried out by modern coffee farmers to traditional farmers continues to be carried out by holding activities such as training and interactive discussions as a forum for exchanging information related to more modern coffee management so that traditional farmers can practice independently and can create a modern coffee business according to their needs-market demand. This case similar with cultural adaptation which has been developed by Cavalleri (2012) that cultural adaptation is a non-biological adaptation in behavior, social and equipment which is a nonbiological response of humans to survive.

Education for coffee farmers is very needed because of the limited information and knowledge that farmers have regarding their mindset and how they do traditional cultivation. This culture must be changed with behavioral adaptations and more modern understanding. Based on the study results, strategy of coffee farmer's adaptation belongs to conformity adaptation. Following Merton (1968) that conformity to cultural goals and institutionalized means is the most common and widely diffused. The stability and continuity of the society could not be maintained. The mesh of expectancies constituting every social order is sustained by the modal behavior of its members, representing conformity to the established, though perhaps secularly changing, culture patterns. This adaptation strategy carried out by coffee farmers aims to provide an alignment of the mindset of traditional coffee farmers and modern coffee farmers in carrying out proper coffee cultivation in a modern way so that conformity adaptation is used as an individual tendency to change their perceptions, opinions, and behavior so that they are appropriate or appropriate.

Adaptation Strategy of Online Marketing

This strategy is a method used by modern coffee farmers to stay afloat in the coffee commercial system in Jember Regency. This is conducted to cut the long chain of mediators and collectors. The adaptation strategy of online marketing carried out by modern farmers is still at the learning stage because their knowledge and experience are still low in the practice. In this case, modern farmers also continue to learn digital marketing to explore their knowledge of digital marketing algorithms, namely by self-taught viewing Youtube or having discussions with fellow online coffee activists. The adaptation strategy of online marketing is a compelling adaptation because it is profitable for farmers. Therefore, they can directly meet consumers without any intermediaries.

Thas's way similar with Thuo et al. (2013) that the pattern of adaptation to new technologies in agriculture has a significant effect on providing new knowledge and guiding farmers in adapting using new technologies for their agriculture. Based on the study results, the adaptation strategy carried out by coffee farmers by doing online marketing is classified as innovation adaptation. In line with the opinion of Merton (1968) that the great cultural emphasizes on financial success and a social structure which unduly limits practical recourse to approved means for many set up attention toward innovative practices which depart from institutional norms. Nevertheless, this form of adaptation presupposes that individuals have been imperfectly socialized so that they abandon institutional means while retaining the successaspiration. The adaptation made by coffee farmers is an innovation or a new culture in terms of marketing. This strategy will previously change the marketing culture, to be avoid by mediators and collectors.

The statement above similar with the theory of crosscultural adaptation by Kim (2001) that adaptation in acculturation is carried out by adopting a new culture without leaving or eliminating the existing culture. This theory is very relevant to the adaptation practice carried out by modern coffee farmers; namely, they continue to sell their packaged products online, but farmers also continue to sell poor quality coffee harvests to mediators as containers for final sales if there are no other selling options. This online marketing adaptation strategy is very effective in its implementation because the profits obtained by modern coffee farmers can be significant because they can directly cut the chain from mediators. However, genuine coffee farmers do not use this strategy because of their limited understanding, and genuine farmers do not want to take risks. In this condition, the point is that genuine farmers adhere to the principle as stated by Scott (1989), namely "safety first." This principle excludes options that may be profitable, but these choices also carry a significant risk. Therefore, genuine coffee farmers decide to avoid risk in other ways. The principle of "safety first" according to Scott (1989) is also implied as a defensive parameter around the prevalence of subsistence, where risks are avoided, while outside that limit a bourgeois profit calculation applies.

Adaptation Strategy of Businesses Independently

Modern farmers developed this strategy to fight the partiality of the mediators to be free from the coffee trade system. In practice, the pioneering of the coffee business carried out by farmers is indeed only carried out by farmers who have comprehensive parts and farmers who have sufficient economic conditions, as well as farmers who have community networks that can be drawn to be able to come to coffee shops owned by farmers so that from the community that is built, farmers can increase their customer network.

Similar with those case above Scott (1989) explained farmers' efforts to survive by meeting their needs, namely the alternative subsistence theory, explains that self-help activities in the family can sell small businesses. Farmers will not depend on others, but they will benefit according to their abilities. Based on this, it is relevant to the adaptation practices carried out by modern farmers in Jember Regency that they open a coffee business independently based on their desire to be independent without being dependent on others so that they will be more flexible in their work. In addition, the motivation of modern coffee farmers to transform, in this case, is their determination to change the fate of their families and their desire for new experiences.

This is relevant to Fery (2014) that the activities of modern farmers are following commercial, economic principles, namely having a profit-oriented orientation so that with the resources they have, including relatively large capital and better access, innovations will tend to be more accessible to enter and develop in its implementation. Based on the research done, this adaptation strategy belongs to the rebellion adaptation, in line with Merton (1968) adaptation, which leads men outside the environment to envisage and seek to bring into being new, that is, to say, a significantly modified social structure.

Adaptation Strategy of Developing Cooperation and Partnership Networks

This strategy developed by modern farmers as a way to obtain information and relations related to the market. Modern farmers do *door to door* around the coffee shop and establish close relationships with coffee activists as a forum for trying to obtain information regarding the marketing of their coffee. There will sometimes be partnerships and collaborations between modern coffee farmers and coffee activists or coffee shop owners.

Similar with Pangerang (2014) that partnerships in agriculture benefit from an economic, moral, and sociopolitical point of view. The economic benefits obtained by modern coffee farmers include increasing productivity and efficiency, increasing quality, quantity, and continuity assurance, reducing the risk of loss, providing and increasing social benefits. From a moral point of view, it is hoped that the business partnerships established by modern coffee farmers with shop owners or coffee activists can demonstrate the efforts of togetherness and equality. From a socio-political point of view, it is hoped that the partnership can prevent inequality, social jealousy, and socio-political turmoil among fellow farmers.

This cooperation development activity is essential for farmers because by carrying out this activity, farmers can build cooperation and partnerships to directly meet with partners who already have coffee shops so that they no longer meet with mediators or collectors. This aligns with Brown et al (2011), that identifies and engages your community and ensures they are well informed. In this case, modern coffee farmers must be able to take a participatory approach to all stakeholders where the institution carries out its activities. Modern coffee farmers with partners should also be able to build and mobilize the capabilities or capacities of their stakeholders or members. The existence and role of modern coffee farmers in mobilizing the masses should be utilized to increase the synergy between the parties involved. In this case, modern coffee farmers maintain ethics in conducting partnerships following the partnership principles from Mardikanto (2011) that social exchange that gives each other (social rewards), reciprocal (dyadic), and accepts each other (reinforcement).

The practice of coffee farmer partnerships in Jember Regency has implemented the three principles so that in its implementation, it can run well, and goals can be achieved so that farmers and partners can complement each other and meet each other's needs. Based on the study results, based on Merton (1968) adaptation theory, this strategy belongs to conformity adaptation, namely to the extent that a society is stable, adaptation type I conformity to both cultural goals and institutionalized means is the most common and widely diffused. From this, it is clear that the importance of partnership and cooperation in the coffee trade system in Jember Regency is an effort to develop a coffee trade system that is more targeted and prioritizes innovation in the commercial system. However, this is not directly proportional to the government support provided by coffee farmers in Jember, which is still very minimal. In this case, the need for government policies to be able to provide a touch of alternative market policies so that modern farmers can continue to make breakthroughs because if in the future the government continues to not pay attention to the fate of coffee farmers, the welfare of coffee farmers will continue to be sad and their welfare will be challenging to raise.

Adaptation Strategy of Farmer Institutional Strengthening

Institutional strengthening needs to be done through several efforts, including; (1) encouraging and guide farmers to be able to cooperate in the economic field in groups, (2) developing farmer groups through increased facilitation of assistance and access to capital, increased bargaining position, increased facilitation and guidance to group organizations, and increased efficiency and effectiveness of farming, and (3) increasing the human resource capacity of farmers through various mentoring activities, and training specifically designed for administrators and members.

This is relevant to the theory of Binswanger & Ruttan (1978) calling institutions "... the set of behavioral rules that govern a particular pattern of section and relationship". Based on this statement, it is in line with Scott (2008) that there are three pillars of the institutional regulatory approach: the normative and cultural-cognitive pillars. The object of attention on the regulatory pillar is the existing rules and "what benefits" will each coffee farmer get, in practice the

coffee farmer institutions that have taken place as a vehicle to complement each other regarding information about the coffee world from upstream and downstream. The object of attention on the normative pillar is the norms that live and are agreed upon in the community.

V. CONCLUSION AND RECOMENDATIONS

Adaptation strategy carried out by coffee farmers in Jember Regency is an effort to survive in breaking the chain of mediators and collectors. This strategy separates the relationship between coffee farmers and mediators and collectors who have monopolized the commercial system for years. The practice adaptation comes from the desire of coffee farmers who want to gain freedom in managing their trade to survive and be independent without being dependent on mediators. Based on the results of research that has been carried out, there are five adaptation strategies carried out by coffee farmers in Jember Regency, namely adaptation strategy for developing coffee farmers' resources, adaptation strategy of selling online, adaptation strategy of opening a business independently, adaptation strategy of developing cooperation partnership networks, adaptation strategy and for strengthening farmer institutions. Based on this, the following recommendations were made.

- 1. Coffee farmers in Jember Regency are expected to be able to continue to increase knowledge about modern coffee cultivation methods in accordance with good agricultural practice (GAP) recommendations so that they are able to provide quality coffee products so that coffee farmers can transform into the commercial process with modern coffee marketing that packaged products in the form of Robusta, Lanang, and Arabica coffee so that they can determine the selling price independently and regardless of the dependence of middlemen and collectors.
- 2. Coffee farmer groups in Jember Regency are to further integrate and activate the activities of farmer groups. Farmer groups should be a place to accommodate aspirations and information needed for better coffee farming activities. Farmer groups will be more useful if there is regular monitoring and collaboration with experts to develop agricultural production and become a social business organization so that apart from having a socialization role, they can also carry out activities to achieve profit or to control prices. Of course, a good human resources and managerial system are needed to achieve optimal goals.
- 3. Village government are to participate in branding local coffee products so that the economy of coffee farmers can be lifted and be pro-active in supporting superior programs run by coffee farmer groups.
- 4. District government are that they are expected to be able to hear the aspirations of coffee farmers who really need access to capital for the production

process, education in the form of training or workshops, and provide the widest possible access to alternative markets for farmers so that farmers are not confused anymore when harvesting. This is expected to optimize agricultural products and guarantee farmers' income so that they can maintain the food conditions of coffee farmers.

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