
ECOTOURISM DEVELOPMENT OF JAMBI LIBERIKA COFFEE THROUGH STAKEHOLDERS PARTICIPATION APPROACH

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Abstract: Liberika coffee is one of leading commodities in Jambi Province and has been registered as a Geographical Indication for West Tanjung Jabung area. In general, Liberika coffee plant is attacked by white fungus, which causes a decrease in production. Its impact on productivity and low prices decreased motivation of farmers to maintain this commodity, and land conversion occurs. In recent years, coffee plants have been converted to areca nut and palm oil which, economically, considered more promising. Even so, Liberika coffee has its own uniqueness, so it needs to be continuously developed. Ecotourism is one of activities that support and maintain the existence of Liberika coffee as a rich biodiversity in Jambi. The key to success and sustainability of this ecotourism development is participation of all stakeholders. For this reason, strengthening farming community as the spearhead of Liberika coffee development, both in personal and institutional capacity.

Keywords : Participatory approach, institutional building, facilitation, ecotourism

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INTRODUCTION

The existence of Liberika coffee for West Tanjung Jabung people, especially Betara District, is not only one of special commodities of the region as a peat area, but also as one of the main livelihoods. Nearly 80 percent of households depend on their economy from agriculture and plantations-- oil palm, areca nut and coffee plantations. Regarding coffee, this plant has actually been developed since 1980s in this area with a land area of about 2,700 hectares.

Even so, coffee plants owned by farmers with type of Liberika are threatened with extinction. In 2015, Liberika coffee plant suffered from white fungus disease, almost 40% of the plantation was affected. Symptoms of the attack are that the coffee plant

leaves dry up and fall off, the plant also no longer produces fruit even though it has entered its productive age, which is 4-6 years.

This, in turn has an impact on relatively low prices, with a long chain of trade systems, causing the motivation of farmers to maintain this commodity is not so strong. It is not uncommon in the last few years, this coffee plant has been converted into areca and palm oil which are considered economically more promising.

Even though on the other hand, this Liberika Tungkal Komposit coffee in November 2015 has received the right to certification of geographic indications from the Ministry of Law and Human Rights, so it it can become a pride of West Tanjung Jabung people. Local governments are also aggressively introducing the existence of coffee and preserving it, so as to support regional economic development.

The private sector, in this case PetroChina, which operates in the area, since 2015 initiated the development of liberika coffee farming, especially in Sido Muncul Farmers Group, Mekar Jaya Village, Betara District-West Tanjung Jabung Regency, Jambi Province. The company's commitment, among others, is to maintain sustainability of Liberika Coffee while increasing its productivity to be a basis for improving community welfare. Community development program developed by the company in Mekar Jaya Village, Betara District and its surroundings is quite comprehensive because it starts from assessing the problems and potentials of developing Liberika coffee, developing field schools and strengthening groups to facilitating infrastructure and training in post-harvest coffee processing.

Sido Muncul Farmers Group is one of several farmer groups in Betara. This group has 46 members, each of whom owns a coffee plantation of about 2 hectares. The type of liberika coffee, that was developed, is now about 8-10 years old. Through Sido Muncul Farmer Group, hoping to be a "model" for other groups in developing Liberika coffee.

LITERATURE REVIEW

Among several types of tourism in Indonesia, natural tourism is one projected to generate foreign exchange. However, not all treated ecotourism seriously, which has had a good social, economic and environmental impact, as is the goal of ecotourism.

Not only traveling to enjoy the beauty of nature, principles promoted by ecotourism must have several benefits at the same time, such as conservation, empowerment of local economy, respecting beliefs of local communities, and environmental education. These things distinguish ecotourism from natural tourism in general. The term ecotourism only appeared in the mid-1980s. Although the idea of combining nature tourism and conservation had emerged and was offered by Budowski in 1976 (Orams, 1995).

The definition of ecotourism according to The International Ecotourism Society is all tourism activities that are responsible for nature, society and surrounding environment. Meanwhile, another definition of Ecotourism is a form of tourism that is responsible for

preservation of natural areas, provides economic benefits and maintains cultural integrity for local communities (Chocrane, 2002).

David Bruce Weaver, a lecturer at Faculty of Tourism and Hospitality Management at Griffith University (Weaver in Dowling and Fennell 2003: 3) calls ecotourism a form of tourism that emphasizes learning experiences and an appreciation of natural environment, or some of its components, in cultural context associated with it. Ecotourism has advantages (in best practice) in environmental and socio-cultural sustainability, particularly in enhancing the natural and cultural resource base of the destination and promoting growth.

The benefits of developing ecotourism include:

1. Conserving environment (preservation, enhancing biodiversity and protecting natural heritage);
2. Increasing welfare of local population: contributing to improving community welfare, and reducing unemployment and poverty;
3. Educational facilities for community, both with regard to environmental aspects and community development.
4. Development of local community institutions, both regarding organizational and community institutional aspects.

During its development, ecotourism in Indonesia is still faced with a number of challenges. Asmin (2018) states that there are at least four (4) challenges in developing ecotourism today: constraints on the supply side (product driven), lack of market understanding (market driven), weakness in institutions, and lack of policy support.

From supply side, ecotourism development depends on the availability of 3A (Accessibility, Amenities and Attractions). In this case, most of ecotourism objects have limited supporting infrastructure such as transportation routes, cleaning facilities, health services, information services, and so on. Some others are already accessible but still with inadequate quality infrastructure, such as health and hygiene facilities.

The next obstacle is understanding the target of ecotourism market will be developed. In this regard, a poor understanding of tourists causes diversification of tourism attractions to be less diverse (program packages tend to be monotonous) and there is no prominence of superiority compared to other destinations. The government, tourism managers and local communities are often trapped in the concept of mass tourism, thus ignoring a number of attractions that should be developed. For this reason, various attractions in the community must be explored to support the development of ecotourism.

Another thing cannot be ignored is institutional capacity of ecotourism management. Low institutional capacity is an inhibiting factor in development of ecotourism in Indonesia. Low capacity can be caused by various perceptions in interpreting ecotourism because according to Dowling and Fennell (2003: 3) notion of ecotourism is structured in 80 different senses from one another. The variety of interests and lack of

partnerships can also lead to less than optimal institutional capacity. According to Machnik (2013: 93), low capacity of ecotourism managers can hinder development of ecotourism and efforts to conserve environment which is the goal of ecotourism. It is necessary to strengthen institutional and personal capacity of ecotourism managers through a series of mentoring activities, training and facilitation of access to various parties needed to support ecotourism development.

Drumm and Moore (2005: 23) mention the need for partnerships between ecotourism managers, government, tourism industry, private sector, local communities, and other stakeholders to achieve ecotourism success. In the case of Indonesia, problem of networking and partnerships in developing ecotourism is still not optimal. Government policies haven't been optimal to support ecotourism development, it's also a challenge. Fonseca (2012: 5) states that an activity does not receive support from government policies can lead to development of ecotourism areas are not optimal. In practice, government (both central and regional) seems to be more inclined to provide a dominant space in developing mass tourism compared to ecotourism development, both in terms of policies, budgets, infrastructure provision and so on.

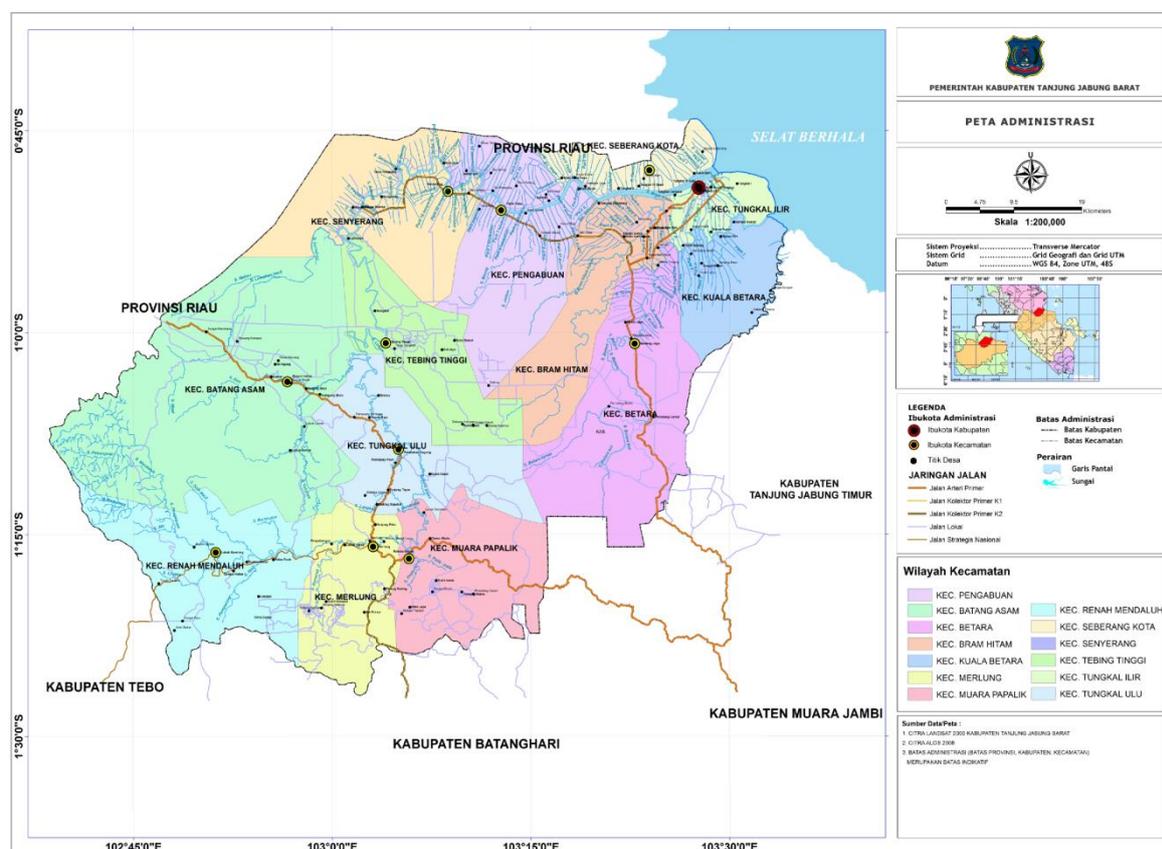


Figure 1. Location Map of Liberika Coffee Development in West Tanjung Jabung

Ecotourism Based on Potential of Liberika Coffee

Starting from this understanding, development of ecotourism based on liberika coffee has been initiated in Mekar Jaya Village, Betara District, West Tanjung Jabung Regency- Jambi Province--by a group of youth communities supported by PetroChina International Jabung Ltd, a company engaged in oil exploration and production and natural gas (oil and gas) in Jambi Province.

Ecotourism development program, which was initiated in 2017, cannot be separated from the previous program, namely "Sustainable Agriculture" of Liberika coffee which has been implemented by PetroChina since 2015-2016. In addition to participating in "preserving" the existence of Liberika coffee which is threatened with extinction due to pest attacks and land conversion to other commodity crops, development of ecotourism cannot be separated from the goal of increasingly popularizing the existence of Liberika coffee which is expected to have an impact on expansion of coffee marketing. Previously, UMKM (Micro Small and Medium Enterprises) outlets had also been developed in the area, as an integral part of the ecotourism development plan.

This ecotourism development takes the name of Ecotourism Sukorejo which refers to hamlet where the program is located-- Sukorejo. This tourism spot is not too far from Jambi City-- 97 km to the north from Jambi City. To get to Sukorejo area, it takes 2 hours 18 minutes by asphalt road trip. Meanwhile, the distance to Kuala Tungkal, the capital of West Tanjung Jabung Regency is approximately 34.4 km, with a distance of about 25 minutes. The position of Kuala Tungkal to Singapore is \pm 90 miles with a travel time of 5 - 6 hours by sea.

There are also several tourism spot (destinations) around Betara area, including Muara Jambi Temple tour in Muaro Jambi Regency, the road to the location through Muro Jambi district. In the capital city of West Tanjung Jabung, Kuala Tungkal, we can also find marine wealth-based tourism, because it is located on the beach as a port to Batam and Singapore. Kuala Tungkal is an area on the east coast of the north coast located in Jambi Province. Kuala Tungkal is a gateway to trade with a heterogeneous society that is rich in culture. So in terms of ecotourism access, Sukorejo is quite strategic and relatively easy to access from both Jambi City and Kuala Tungkal.

Specifically, there are several things that become the background for development of this Liberika coffee-based ecotourism, including;

1. 80% of households depend their economy on agriculture and plantations, namely in the form of oil palm, areca nut and coffee. Coffee has been cultivated in this region since the 1980s in an area of about 2,700 hectares. For that this program is also directed to be able to maintain coffee plant cultivation, even expand it;
2. Liberika Tungkal Komposit Coffee is the official name for Liberika coffee cultivated around Betara. This coffee by the Ministry of Law and Human Rights has received recognition as a distinctive commodity by holding the Geographical Indicative

Protection Society (MPIG) certificate, so it is expected to be the pride and "identity" of the West Tanjung Jabung Regency plantations and their uniqueness that grows in peat areas. Through this ecotourism, it is hoped that it can strengthen the branding of Liberika Coffee which of course will have an impact on increasing Liberika coffee marketing;

3. Agricultural and plantation development is the development priority of the West Tanjung Jabung district government, including the allocation of programs, fostering of farmer groups and cooperatives, so that ecotourism is inseparable from the development of the plantation sector.
4. The coffee business activities from upstream-downstream have been running well, starting from seeding, production, to post-harvest processing. This is interesting as an educational attraction for the public;
5. There have been initiatives for ecotourism development, Pokdarwis has been formed, the spirit of youth groups related to program plans, MSME outlets and so on;
6. Expanding the beneficiaries of previous programs related to the development of liberal coffee and post-harvest processing;
7. Optimizing multiplier effect programs, including through processed coffee derivative products, the formation of new socio-economic institutions / agencies and creating new opportunities, either in relation to creating jobs or as an effort to improve community welfare.

Liberika coffee (*Coffea liberika*) is known as a typical peat coffee because of its ability to adapt well to peat soils while other types of coffee (arabica and robusta) cannot grow (Hulupi 2014). Liberika coffee in its original land is usually planted intercropping with other crops except for oil palm trees. Liberika coffee plants require shade or shade plants to reduce the intensity of sunlight reaching the leaf canopy. Coffee cannot grow in fully open areas. Coffee plants are plants that are not greedy for water and do not damage the hydrological management of the peat. So it can be said, this ecotourism program also contains conservation, namely to protect the peatlands in this area along with other conservation functions.

METHOD

The research was conducted in West Tanjung Jabung Jambi Province from January to May 2020. The research method was carried out through a qualitative approach with descriptive analysis. Data collection methods are carried out, among others, through:

Observation

This observation can be done directly or indirectly. Direct observation is made through direct observation of the object in the place where the activity is taking place. while indirect observation is carried out through events as outlined in photos, writings and so on.

In-depth Interview

In-depth interview is an interview method aims to explore information needed from respondents. There are 2 (two) ways to conduct in-depth interviews: structured and open interview guides. Interview activities are carried out not only to seek answers, but also to construct them.

Survey

Survey is a method that aims to determine certain circumstances and obtain certainty of information. The survey used in this study consisted of several types of surveys: exploratory, explanatory and descriptive. Survey activities are aimed at obtaining data on persons with disabilities, regional potential, institutional analysis, and program effectiveness.

Document Study

This technique is carried out to obtain secondary data by collecting data from archives and relevant documents contained in institutions or managers directly related to the program.

FGD (Focus Group Discussion)

FGD is a participatory method that can be used in a qualitative approach. In conducting FGDs, data is obtained directly from the community in an interactive forum, where the opinions of one another are mutually reinforcing, so that they do not only see one aspect.

RESULT AND DISCUSSION

Field Schools and Laboratory of Biological Agencies

Some problems faced in development of this Liberika coffee include low capacity of coffee farmers' Human Resources (HR), inefficient cultivation patterns, relying on market access to middlemen / tauke who come and determine unilateral prices and low enthusiasm for innovation. For this reason, the "Field School" approach was developed. Field School scheme is designed to provide the widest possible learning space and time for farmers to interact with their realities directly, and discover for themselves new skills and knowledge and the principles contained therein. Thus, the learning pattern of farmers through Field Schools is not just "learning from experience", but a learning

process in which adult learners (andragogy) can master dynamic "discovery of knowledge" process and can be applied in agricultural land management and in life. their everyday. This is important, because rapid changes will make farmers fall behind the times and be able to crush their efforts to survive by relying on agricultural cultivation. It is hoped that with the implementation of this field school, farmers will be resilient in facing dynamics and challenges to build their future.

In implementing field schools, assistants apply several principles with several main characteristics as follows;

1. Coffee Plantation / Agricultural Land as the Main Learning Facility. Cultivation skills are applied skills, so about 80% of the time is spent directly on the ground, not in the classroom;
2. Experience Based Learning Method. Each activity begins with direct observation or observation, then experiences disclosure, results assessment, and results conclusions. This learning cycle is attempted in every field school activity;
3. Agro-ecosystem assessment.
4. Practical and Appropriate Methods and Materials. Each field school activity and its supporting materials are designed in such a way as to be directly applicable to farmers and villagers;
5. Curriculum Based on the Skills Needed. The curriculum is designed on the basis of an analysis of the field skills a farmer needs to have. In addition to agricultural technical skills and knowledge, participants also acquire skills in planning activities, building cooperation, group dynamics, developing learning materials, and developing effective communication, so that they can become facilitators who are able to stimulate and assist farmer groups effectively.

Related to this field school, pest management is one of the main concerns, one of the bad pests that destroy coffee plants is the White Root Fungus (JAP) *Rigidoporus lignosus*, which almost 40% - 50% attacks farmers' coffee plants. This fungus causes coffee plant leaves to dry out and fall off, the plant also no longer produces fruit even though it has entered the productive age of around 4-6 years. As the name implies, this fungus is characterized by a network of white threads (mycelium). Fungal mycelia are capable of penetrating directly into root tissue. Every coffee plant that is attacked by JAP will die if it is not immediately addressed.

To deal with JAP pests and develop their "cure", PetroChina has facilitated a simple building with wooden and plastic boards as a "House for Biological Agents" on a stretch of land belonging to a group member. In this place with the available tools, research on the condition of coffee plants and learning for groups was carried out, including the breeding of *Trichoderma conii*, a fungus that is used to fight white fungus. The use of the biological agent *Trichoderma spp* has the advantages of being easy to apply, cheap,

effective and safe and environmentally friendly. *Trichoderma* spp. is an antagonistic fungus that has the ability to suppress the development or spread of JAP disease. Cultivating *Trichoderma* and spreading it on coffee plants were the focus at the beginning of mentoring. Group members are also assisted in making biopesticides, solid fertilizers and organic liquid fertilizers, all of which are made from natural waste. After running for several months, the intensity of JAP attacks began to appear to decrease drastically, this shows that the provision of *Trichoderma* as a mechanism of antagonism, competition for space and food has been able to suppress the presence of white mushrooms.

Strengthening Groups and building Participation

To ensure the success and sustainability of the program's impact, the involvement of the community, especially the beneficiaries, is absolutely necessary. As stated by Conyers (1982) there are three main reasons why community participation is very important, namely:

1. Community participation is a measure to obtain information on the conditions and needs of local communities, without which development programs and projects will fail.
2. The community will have more confidence in development project or program if they feel involved in preparation and planning process, because they will know more about the project.
3. There is an assumption that it is a democratic right if community is involved in development of community itself (Supriatna, 2000).

In addition, Ndraha (1994) concluded that there are three important elements of participation:

1. Participation means mental and emotional involvement,
2. Motivates persons to contribute to the situation,
3. Encourage people to accept responsibility in activity.

Based on these opinions, it can be concluded that in community development program, community participation is conscious involvement and / or participation not only as a program target but also active and entitled to participate in decision making to achieve better conditions than before.

Likewise with this coffee development program. It is realized that one of the pillars of its success is strengthening farmer groups. Institutional strengthening of Sido Muncul Farmer Group is carried out by providing assistance to their cooperative institutions, such as facilitating making of Management Accountability Reports at Annual Member Meeting (RAT), managing cooperative permits, facilitating administrative equipment needs, such as computers and printers. To develop cooperative, addition of a

cooperative business unit was also carried out, namely the coffee business unit. Independently, the group has prepared a warehouse that can accommodate fresh-picked coffee (cherry), simple work equipment and various coffee processing machines. Apart from improving cultivation, groups were also assisted in improving quality of coffee processing to make it healthier and more qualified. So far, community in processing coffee is still conventional according to local habits and does not look for a comparison of better coffee processing from outside the area, so that quality of coffee produced is still of low quality and tastes bad, even thick with the smell of the soil. To improve quality of coffee produced, post-harvest processing training is provided with resource persons from coffee activists and entrepreneurs. The aim is to change the way of thinking, increase understanding and correct post-harvest processing skills so that high quality coffee products are obtained and are included in specialty coffee category. Post-harvest processing training brought in a number of resource persons, both for theory and practice. There are several methods in coffee processing introduced. In accordance with conditions in Mekar Jaya area, which is minimal peat soil with good water quality, types of coffee processing used are Fermented Honey Process and Natural Fermented Process.

In addition, this program also provides supporting facilities including a Huller machine, Pulper, dry bean sorting equipment, coffee storage warehouse and dome house with anti-ultra violet (UV) plastic hood for drying. With these various knowledge and skills, motivation of farmers to realize premium quality coffee is also getting stronger, it could increase selling price of their coffee.

Field schools and the existence of a biological agent laboratory implemented in this program have yielded results. Now, JAP attacks on coffee plants have drastically reduced to reach around 80%, so that growth process of Liberika coffee returns to normal. The previously dry leaves of the coffee plants turn green again. Not only that, the costs for fertilizing plants that previously had to buy chemical fertilizers can now be much more economical. "We feel helped by this program, belief in the future of coffee cultivation is back strong," said Pak Parlan, a member of Sido Muncul Farmers Group.

Regarding post-harvest coffee processing, according to Misludin, Chairman of Sido Muncul Group, now his group processes coffee using Natural process system (3 months of processing with drying with skin) and honey (10-15 days). This processing system is believed to be more efficient and effective according to characteristics of the region. The group sent samples of coffee beans (greenbeans) to Jember Coffee and Cocoa Research Center (Puslitkoka) for a cupping test in June 2016.

From the taste test at Puslitkoka Jember, the taste of Liberika coffee processed with 6 different treatments showed very good results with an average score above 8 or with excellent predicate. This value indicates that liberal coffee sample is specialty coffee. The results of this cupping test give farmers a sense of optimism because it shows that Liberika coffee they have is worthy of being marketed with special quality and even fit

for export. Of course all these improvements will lead to improvements in social, environmental, economic conditions of the group and society in general.

Table 1. Tabulation of the Impact of the Liberika Coffee Development Program from Environmental, Social and Economic Aspects

Indicator	Description	Estimated Values
Environmental Aspects		
Level of efficiency and effectiveness of machines modified by farmer groups compared to those of Kokao Research Center	<ul style="list-style-type: none"> - Level of efficiency and effectiveness of the engine: the engine from the center is only for a small capacity, using 1 liter / 10 kg of fuel (premium / pertalite) - The use of self-made machines can produce 400 kg per day, using 1 liter / 200 kg of fuel (diesel) 	In processing 200 kg, using a machine from PUSLIT requires a cost of 20 liters X @ Rp. 5,150, - = Rp. 103,000, -; meanwhile, if using a group modification machine it is only Rp. 25,75, -. It was obtained a large amount of savings of Rp. 102,974, - for each processing of 200 kg of coffee. This means that the use of fuel will be more efficient, namely 1:20 and also have an impact on the environment (smoke generated and so on).
The use of trichoderma whose ingredients are more organic and have no chemical substances	The use of biological agents through trichoderma to replace drugs / chemicals has been effective in reducing the attack of white root fungus on coffee plants by 80%	The use of biological agency for each 1 hectare of land is estimated to require the cost of making biological agency as much as Rp. 65-70 thousand (green beans, sugar, etc.), if compared to buying chemical drugs it can cost around Rp. 200 thousand - Rp. 250 thousand. Not to mention the impact on the sustainability of the ecosystem and soil ecology.
Maintain Liberika coffee varieties from extinction	One of problems at the beginning of the program was that the coffee plant experienced white fungus attack. No half-hearted, nearly 40% of plants infected with this disease. As a result, the leaves of the coffee plants dry out and fall off, the plants also no longer produce fruit even though they are already in their productive age, which is 4-6 years.	During 10 months of a series of actions, there was a reduction in attack of white root fungus on coffee plants by 80%
Use of organic fertilizers	Organic fertilizers used in this group have replaced 40% -60% of the use of chemical fertilizers that have been used by the farmer groups.	For 1 hectare land usually requires chemical fertilizers up to Rp. 300 thousand, with organic fertilizer it only takes about Rp. 120 thousand per hectare. Not to mention the impact on the sustainability of the ecosystem and soil ecology.
Social Aspects		
The formation of farmer groups and increased knowledge and skills through the field school approach	A farmer group has been formed with a group of 43 people who have improved in terms of knowledge and skills	If it is assumed that each training activity costs Rp. 17,500,000, - then within 10 months during the implementation of the program at least training is conducted once / month. This

		means that the economic value of the knowledge and skills obtained by the farmer groups is Rp. 175.00.000, -
A new group derived from Sido Muncul farmer group was formed	Sido Muncul cooperative has been formed which has obtained the legality of the Regency Government and is running a coffee selling / marketing business / business.	The existence of cooperatives has succeeded in cutting the chain of trade system during this time which was previously played by middlemen. So that prices can be increased by 30% -40% when compared to middlemen.
There is a sharing of knowledge and skills between farmer groups and other communities	There are various farmer groups including those who are members of MPIG of West Tanjung Jabung Regency who learn how to process Liberika coffee to Sido Muncul group. Likewise with campuses learn related to group and cooperative management and program management.	During a period of 10 months, about 125 people (data source: Kel and Koperasi Sidomuncul guestbook) came to Sido Muncul group to study.
Elimination of self-sufficiency and participation of group members in program implementation	Awareness group concerns; a) group meeting / training stage and field school (preparing food, place, etc.); b) manufacture of biological agency laboratory facilities; c) preparation of tools and materials used in the manufacture of biological agencies; d) building dome and warehouse; e) operational to build networks and communication with other parties.	<p>a) Participation in meetings and field schools is about 40% of the total cost, Rp. 175 million (10 months-10 times). This means that the group participation is Rp. 70 million.</p> <p>b) Making a laboratory, residents prepare wood and bamboo, land and manpower. This contribution has streamlined costs by up to 30% of the total Rp. 32,575,000, -. This means that the group's participation reaches Rp. 9,772,500, -</p> <p>c) Preparation of tools and materials, for biological agencies the group can help 20% of the total cost of Rp. 13,500,000. It means that the efficient one is Rp. 4,050,000, -</p> <p>d) Making Dom for drying coffee, residents preparing wood and bamboo, land and labor. This contribution has streamlined costs by up to 30% of the total Rp. 48,500,000, - (2 dom). This means that the group's participation reaches Rp. 14,550,000, -</p> <p>e) Operations build networks and communication with other parties, especially carried out by group leaders and cooperative leaders. In 1 month around Rp. 450,000, - (transportation and communication for 2 people). So in 10 months the amount of IDR 4,500,000</p>

		So during the implementation of the program the participation of group members was Rp. 102. 872,500, -
Networking of farmer groups with other parties-- directly / indirectly related to the development of Liberika coffee	The group has initiated to build networks with various parties related to the business run by the group, including the district government, business circles, the media, NGOs, campuses and so on.	The list of parties involved in the Sido Muncul group and cooperative network has been previously mentioned.
Economic Aspects		
Increase the selling value of Liberika coffee from farmers	Increase selling value of coffee, previously sold as regular coffee to become premium coffee	Previously, coffee sales to middlemen, the previous average price of coffee beans was around Rp. 14 thousand - Rp. 16 thousand per kilo, green bean form Rp. 30 thousand-Rp. 32 thousand per kilo. Now for the chery coffee Rp. 20 thousand / kg (up 30% -40%, ordinary green beans an average of Rp. 40 thousand (up 25%) and premium quality can even reach Rp. 80 thousand-Rp. 100 thousand / kilo.
Increase income level of farmers	In this case, especially from the sale of coffee owned by farmers, considering that there was an increase in prices before and after this program was implemented	The average farmer's income is Rp. 2.34 million / month (Indocita, 2015). Now with better coffee quality, trade system is getting shorter, there is an average price increase of 30%. So that the average farmer income is Rp. 3.042.000, - / month.
Provide economic benefits for the group	From processing and sales of Liberika coffee carried out by the group divided by profit sharing system 60% (for owners): 40% (for institutions)	Based on financial data (group buying and selling for a period of 5 months (January-May 2018), the profit for the group is Rp. 12,813,000, -

Program Development

The ultimate goal of a community development program is to spread broadest positive impact. This program must have a multiplier effect, both in terms of the growth of new socio-economic institutions, the emergence of new business opportunities, as well as a wider environmental impact and so on.

For this reason, various program opportunities have been simulated, including creation of a UMKM (Micro, Small and Medium Enterprise) Liberika coffee outlet as the center of coffee marketing, demonstration plotting (demonstration plot) for Liberika coffee nurseries, and assistance plans to make coffee derivative products. The company also carries out several programs related to strengthening capacity of coffee entrepreneurs, both in terms of improving the quality of coffee and its human resources. The program includes technical training on sorting defects in coffee beans, training in making organic fertilizers, post-harvest processing training, discussion forums that bring together

upstream and downstream coffee business actors as well as with the government and other coffee communities.

Hoped that development of ecotourism based on Liberika coffee will attract many parties involved and benefit from program and will inspire growth of new socio-economic institutions, so as to realize an increase in community welfare. The positive impact of programs based on local potential is expected to be sustainable and contribute to improving the standard of living of community, both socially, economically and environmentally.

Strength	Weakness
<ul style="list-style-type: none"> • Ministry of Law and Human Rights Patent: Composite Tungkal Liberika Coffee. • Specialty Coffee Category (test score above 80: excellence). • Coffee plants, including conservation plants • A lot of workforce is involved, including women. • A large population of coffee plants and a productive age. • Human resources with skills in cultivation and post-harvest techniques. • Liberika coffee: larger fruit, peatland adaptive, year round production, limited quantity. • Location of coffee plantations can be accessed by vehicle (distribution of production and tourism potential). 	<ul style="list-style-type: none"> • People who are not aware of tourism • The capabilities and skills of human resources are not evenly distributed. • Coffee management has not followed quality standards. • Coffee sales are carried out individually, not in synergy. • Fluctuating number of production. • Coffee nurseries have more careful treatment. • The marketing strategy is still weak. • Higher prices (when entering the public market). • Farmers' interest in cultivating has decreased. • Equipment is still simple.
Opportunity	Threat
<ul style="list-style-type: none"> • The marketing channels are very broad. • The trend of coffee is growing in the community. • There are many potential customers in Jambi (hotels, cafes, etc.). • Can use the forest for land expansion (conservation plants). • Attention from district governments, companies, educational institutions and other third parties: training, exhibitions, assistance, infrastructure, research and policies. 	<ul style="list-style-type: none"> • Difficult access to capital. • Out of sync between government programs and other third parties with the needs of farmers. • Invalid and reliable data regarding coffee productivity is available. • Land conversion (other commodities, industrial and residential areas). • Changes in extreme weather. • Local consumers haven't been interested in. • Collector traders (middlemen). • Pests and endemic diseases.

Figure 2. Results of SWOT Analysis for Ecotourism Program Development of Liberika Coffee in West Tanjung Jabung, Jambi Province

Another program development is provision of educational facilities for wider community regarding cultivation and processing of Liberika coffee, from seeding, planting, maintenance, post-harvest processing to marketing. For this reason, the attractions provided are also related to coffee management process from upstream to downstream.

From an economic aspect, in addition to improving welfare of community, both direct and indirect beneficiaries, ecotourism activities are projected to increase absorption of labor involved in ecotourism, and will generate new business opportunities, both from exploration of local resources and those arising from outside the area.

Development of ecotourism based on Liberika coffee has been discussed involving various elements--academics (Jambi University), local government through related agencies and communities in Mekar Jaya Village including farmer groups. Various elements of tourism were also involved in discussion and networking process including Jambi Province Indonesian Tour Guides Association (HPI), Jambi Province Indonesian Hotel and Restaurant Association (PHRI), Indonesian Travel Agent Industry Association (ASITA), Generasi Pesona Indonesia (GenPI) Jambi Province and West Tanjung Regency and others. The phases that have been designed in ecotourism development are:

Phase 1	Phase 2	Phase 3
<ul style="list-style-type: none"> • Forging partnerships • Providing understanding, raising awareness and mobilizing the community for "Tourism Awareness" • Increasing tourism capacity of community 	<ul style="list-style-type: none"> • Increasing capacity and productivity of coffee farmers • Renovation of supporting facilities and infrastructure 	<ul style="list-style-type: none"> • Increasing attractions, amenities and accessibility • Increase the capacity of tourism human resources – Certification • Study and evaluation for further development

Figure 3. Design Phase for Ecotourism Program Development of Liberika Coffee in West Tanjung Jabung, Jambi Province

Institutional strengthening, Pokdarwis (Tourism Concious Group) Ekowisata (Ecotourism) Sukorejo, is carried out by helping to obtain legality / permits from related agencies. Understanding and skills related to management of Pokdarwis organization, knowledge regarding tourism, both in terms of management, service, and marketing are also carried out in the Sukorejo Ecotourism Pokdarwis, which has 35 members (the numbers of men and women).

However, it is felt that the challenges ahead are not light. Community awareness, support and participation, especially Pokdarwis and farmer groups related to ecotourism, are key. Participation must provide opportunities, encourage willingness, and improve community capacity in developing ecotourism stakeholders (Mohan and Stokke 2000: 263).

Besides that, ecotourism designs with various attractions also need to be clearly and specifically formulated. On the other hand, this must be supported by an effective promotional and marketing strategy including the use of digital-based promotional media. If this can be properly prepared, the various challenges of ecotourism as previously described can be answered and the objectives of Sukorejo Ecotourism can be achieved, both for social, environmental and economic benefits.

THEME	ECOTOURISM ROUTE	ATTRACTIVENESS	COMPANION	CLARITY OF TARGETS
<ul style="list-style-type: none"> • Story line (story line about coffee) • Can be a tagline, for example: <u>Liberika</u> Coffee: What a Sensation • Location, <u>potential</u> and what knowledge / skills / feelings can be obtained 	<ul style="list-style-type: none"> • Determination of the path and aspects to be highlighted • Path identification must be adjusted to the purpose of interpretation Props are needed for the path; information boards, <u>brochures</u>, verbal explanations, etc. 	<ul style="list-style-type: none"> • Can be direct (physical, infrastructure, etc.) and can be indirect (story / history, etc.) • It is necessary to prepare supporting facilities, such as huts, photo booths (<u>selfies</u>), <u>toilets</u>, etc. • It is necessary to design events that can attract the attention of visitors / potential <u>visitors</u>, such as healthy walks, exercise, photo competitions for media, drawing competitions for school children, etc. 	<ul style="list-style-type: none"> • Those who have strong motivation, knowledge of objects, communication skills, understand visitor needs, etc. • It is necessary to carry out formal training / apprenticeship / education 	<ul style="list-style-type: none"> • Who will be the target of this ecotourism visitor; general / students / millennial / certain socio-economic class? The appropriate promotional media? Props needed?

Figure 4. Concept of Ecotourism Program Development of Liberika Coffee in West Tanjung Jabung, Jambi Province

The current position of Liberika coffee is squeezed: disease-prone Arabica, but its prices soar, and disease-resistant yet low-priced Robusta that always finds a place in the market. Liberika prices are below Arabica and above Robusta. In terms of taste, most of them think that Arabica is inferior to Robusta, and the rest think that the taste of Liberika is superior to Robusta. It is understandable if we reflect on Liberika's tightness in the coffee industry, the demand for coffee is not as big as Arabica and Robusta. (Anggraeni, 2016)

In Indonesia itself, after the replacement of Liberika with Robusta, the distribution of Liberika coffee was very limited. In terms of land elevation, Liberika coffee is grown 50 m above sea level (asl). The total production of Liberika is approximately 920 tons per year. In terms of price, the original Liberika coffee beans are priced from Rp. 25,000 to Rp. 28,000 per kilogram. Production products are mostly absorbed in Malaysia, the rest is absorbed a little in local market.

Pokdarwis (Tourism Concious Group) Ekowisata (Ecotourism) Sukorejo has prepared several strategies and tour packages, for example making UMKM (Micro Small and Medium Enterprises) outlets which have been operating as centers for ecotourism activities including information centers for processing of Liberika coffee and sale of derivative products. In addition, other tour packages that have been and will be developed include: trench / canal tours using a canoe or raft which is a means of transportation or a link between one garden and another. Next there is also Bonsai Tourism, which has been practiced by a member of Pokdarwis. This Bonsai tour is an opportunity to become one of the attractions considering that bonsai has its own peculiarities and enthusiasts.

Coffee and areca nut nurseries can also be packed into interesting attractions. In this case, several farmer groups have carried out the exploitation with the support of PetroChina and related agencies. This more agro-educational tour package can be in the form of activities to choose good parent plants and seeds to be used as seeds, treatment to prepare seeds, make planting media, and care for seeds so that they grow healthy and ready for sale, good seed selection, to transportation / transportation of seeds out of the area for further cultivation.

Furthermore, a tour package around the garden and post-harvest coffee processing. There are many things that can be offered in this activity, including seeing the animals and plants in the garden, planting methods, care to harvesting and transporting the picked coffee beans. Other things such as the selection of good coffee cherries, wet and dry coffee processing variants, roasting and brewing of coffee made by farmers from small seed Liberika coffee. The simulation of various tools used in each process can also be an attraction in itself.

One type of coffee that is exotic in the world and unique to Indonesia is civet coffee. Namely coffee, which the post-harvest process uses an "intermediate" animal mongoose or civet (*paradoxurus hermaphroditus*). In Betara area, there are no residents or coffee farmers who deliberately raise civets to become coffee predators. In this area, only the wild civet cat is the "co-worker" of coffee farmers to produce civet coffee. Wild civets hunt for coffee by choosing only ripe and delicious coffee as food. In mongoose stomach only skin of fruit dissolves in digestion process. Typical civet enzyme processes fermentation of coffee beans that are still protected by their hard shell. At the same time as excrement / faeces, the coffee beans that become civet droppings are still protected in their shells. The coffee in civet droppings is collected by residents (mostly women)

and sold to collectors or civet coffee producers. After going through the process of cleaning, drying and peeling, a whole, clean, and uniform rice or green bean will be produced. Tourists are not only treated to coffee with a high taste but also will see firsthand the processing process. There are several activities that can be presented in this tour package, including: a) introduction to the processing of wild civet coffee with a guide; b) making standard luwak coffee drinks with wild civet coffee with some tricks of making appropriate and delicious luwak coffee drinks and c) ordering luwak coffee drinks at tourist stops.

The next spot in Ekowisata Sukorejo is a painting gallery that uses media not only oil and acrylic paints, but also coffee powder. Here, things that can be offered include: viewing exhibitions and discussions about painting, joint painting using coffee media for both children and adults, practicing professional painting and buying and selling paintings.

Various creative ideas are also being explored in order to create a variety of attractions, for example processing coffee waste in the form of coffee fruit skins and coffee bean skins which have the potential to be used as biomass and for other industries. It is also simulated that derivative products of *Liberica* coffee such as coffee bags or skins of coffee bags whose packaging and serving process resemble teabags and coffee-flavored perfume.

Meanwhile, young people in Pokdarwis also keep on moving to organize events to introduce UMKM and Ecotourism Stores in Sukorejo. Among them are bicycle competitions or riding, live music on Sunday nights or at certain events in collaboration with musicians in Kuala Tungkal, storytelling technical workshops and cleaning competitions. The cleanliness competition that is held is a form of public awareness to care about cleanliness and environmental sustainability. The environmental cleanliness competition that will be conducted will focus on three aspects, including: residential environment, road cleanliness, and ditches. Hygiene competition assessment will involve Betara Subdistrict Health Center, Village Government, and Community Leaders.

Developing Networks to Build Support

Tourism development including ecotourism cannot be developed without building networks. This was conveyed by Bickerdyke (1996) who found that networks were very common in the service sector and many of the institutions in the network were involved in tourism. Other sources say tourism has been defined as a system that is fundamentally interdependent (Bjork & Virtanen, 2005). Then, cooperation and collaboration between different organizations in tourist destinations creates tourism products (Pechlaner et al., 2003; Tinsley & Lynch, 2001).

Lovelock (2001) stated the importance of networking in ecotourism management, which describes the importance of relationships between organizations, collaboration and cooperation. A network approach to sustainability is required in an industry such as tourism, where there are a relatively very large number of micro actors. The formation

of networks based on non-formal local alliances, formal cooperative agreements, local non-profit organizations, national or regional tourism organizations or other institutional structures, helps to compensate for the detached nature of tourism.

Pokdarwis Ekowisata Sukorejo then built networks with various parties, considering that the success and sustainability of ecotourism also depends on the support and involvement of these parties, both from government, private sector, academics, tourism industry players, the coffee community and so on. One of the ways in which Pokdarwis builds a network is through its involvement in various relevant forums, for example Focus Group Discussions (FGD) on both tourism and coffee. In addition, Pokdarwis also participated in several WhatsApp groups for tourism actors / industries both in Jambi Province and in West Tanjung Jabung Regency in order to continue to be able to get access to updated information.

CONCLUSION

It is realized that the key to the success of this ecotourism development program is the capacity of the group and its members, so group strengthening is a major need. In this case, the strengthening of the group, namely Pokdarwis Ekowisata Sukorejo, among others, is by completing the legality and permits issued by related parties. Currently Pokdarwis as a tourism manager has also been confirmed by the West Tanjung Jabung Regency Tourism and Sports Office (Disparpora).

Regarding capacity, ecotourism development is not only about knowledge and skills but also character. For this reason, character building is carried out through a series of activities both training, field simulations and mentoring. Training to increase knowledge and skills is also carried out through a number of trainings involving various elements, both the government (Provincial and district), academics, tourism practitioners and coffee managers and other tourism stakeholders, for example ASITA, PHRI, GenPI (Generasi Pesona Indonesia), communities tourism, coffee community and so on. This includes training on ecotourism development strategies and benchmarking, training on improving coffee quality and making coffee derivative products, as well as training in ecotourism management and marketing.

Strengthening capacity of managers is carried out, among others, by establishing an organizational structure, preparing the required Standard Operating Procedures and training and mentoring community organizations. This training involved the Head of the PM-PTSP Office of West Tanjung Jabung Regency and Chair of GenPI in Jambi Province. Not limited to training, mentoring is also carried out in order to strengthen capacity of this Pokdarwis.

Development of Ecotourism in Sukorejo is supported by a number of infrastructure, including: 1) manufacture and installation of signs for tourist locations in a number of places; 2) developing a Tourism Information Center (TIC); 3) Preparation of exposure / display of coffee processes and products at a number of points / destinations for

Ecotourism in Sukorejo; 4) Provision of a number of materials and toolkits for promotion, 5) A number of post-harvest coffee processing facilities such as roasters, drying facilities (dome houses with anti Ultra Violet plastic shields), coffee nurseries and 6) Provision of sanitary facilities and K3L (Health, Safety, Security and Environment).

The challenge faced in development of Ecotourism in Sukorejo is the need for diversification of tourist attractions, so that they are more diverse, but do not abandon the educational aspects. For this reason, creativity is needed in exploring various attractions based on the traditions and socio-culture of the community as the subject of developing this Sukorejo Ecotourism. The development of creativity by providing added value that is unique to the community's socio-culture is expected to create new opportunities and "markets" that are more diverse and can absorb job opportunities and opportunities for the welfare of the community while still paying attention to socio-cultural and environmental aspects.

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