Factors Affecting the Empowerment of Rosella Farmers to Realize Rural Agroecotourism

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Abstract—This paper aims to assess farmers’ responses to the tourism village program being introduced, the role of the apparatus (program implementers), as well as influential (driving and inhibiting) factors for the empowerment of rosella farmers as the main component of tourist villages in Cikondang. It is a case study using a descriptive qualitative approach. The subjects in this study are rosella farmers group in Cikondang. Primary data collection was done through in-depth interviews and group discussions. Secondary data was taken from the Cikondang Village Office, KWT (Woman Farmers Group) of Rosella, BUMDES (rural-owned enterprise) and PPL (Agriculture Field Extension). The results show the factors that influence the empowerment of rosella farmers to continue to develop are supporting factors in the form of environmental temperatures suitable for the cultivation of rosella (hot temperatures of 24 degrees Celsius), the existence of workers who cultivate rosella, long-term farming experiences (3 -20 years), and strong support from Cikondang village officials. The inhibiting factor is mainly from physical factors/structure of land ownership that are narrow, an average of less than 0.5 ha, economic and institutional factors in the form of a price policy that does not yet exist for rosella with the same quality, and social/cultural factors in the form and attitude and mentality of farmers who are more oriented towards the present benefit, and BUMDES administrators who have not yet begun to carry out promotional and distribution activities and product marketing. It requires cooperation, fast work, and quality of work, to implement rural tourism in Cikondang to meet West Java’s sustainable tourism indicators. A partnership approach can be carried out to encourage cooperation between the village community, the government and tourism business players to create an agro-tourism village in Cikondang.

Keywords—rosella farmers; empowerment; agro-tourism; driving factors; inhibiting factors

I. INTRODUCTION

Tourism has become a sector that is directed to become one of the driving forces of the Indonesian economy from national to rural scale. Especially in West Java, the regional government has set a target of tourist visits to West Java in 2018, amounting to 1.5 million foreign tourists and 48 million domestic tourists. In 2019 the target of tourist arrivals are 3 million for international visitors and 55 million of domestic tourists [1]. Today’s tourism villages have also become a program of activities that are growing throughout Indonesia to capture opportunities from economic activities and their derivatives from the growing trend of tourism.

The success of tourism is inseparable from the existence of good cooperation between the community as actors and the government with the support from policies and the private sector. At least there are many factors that contribute to this success. Rural communities need to be prepared, among others, through broad empowerment in order to participate and become a major player in tourist village activities. Empowerment of village communities aims to enable villages to carry out joint actions as a unit involving various stakeholders at the village government level, village communities and other parties to encourage participation and utilize the capabilities of rural communities in the village development process, develop development plans that are prosperous and increasing the capacity and quality of human resources in the village [2].

Communication is one of the important factors in empowerment because it determines the effectiveness of interaction and mutual understanding of a problem. There are three indicators to measure the success of communication variables in empowerment, they are transmission, distribution and implementation of good communication [3]. In the context of farmers empowerment is often also hampered due to communication factors. Communication is often a problem because of different abilities in sending and receiving the contents of communication messages [4]. There is often a misunderstanding that occurs in communication (miscommunication) caused by communication that has gone through several levels of bureaucracy, so that what is expected to be distorted in the middle of the road, and finally it becomes a limiting factor in the empowerment process.

From the experience of various development programs that go into rural area in the Indonesian context, a factor which most determine the success of a program is the target group, in this case they should be the main character. For example, research on the factors that influence the livestock farming community empowerment shows that programs which overly dictates and take over the role of the community show less optimal results [3]. The purpose of this paper is to find out the response of farmers Village Cikondang towards the development programs introduced to rural people, particularly the introduction of the new agricultural products in order to
assist the activities of the rural economy, the role of the apparatus (program managers), and the factors that influence (driving and inhibiting) to the empowerment of farming communities in rural areas.

II. LITERATURE REVIEW

Although not necessarily exist, rural communities in Indonesia are generally dominated by farmers as the main profession of village community activities. Thus, empowering the village community is identical or at least part of it is empowering the farming community. Farmers empowerment are all efforts to improve the ability of farmers to implement agricultural business better through education and training; counseling; mentoring the development of systems and means of marketing of agricultural products; consolidating and guaranteeing the extent of agricultural land, and access to knowledge, information technology; and strengthening farmer institutions [5]. From the contents of the Act, it appears that the government is aware that Indonesian farmers still need protection and assistance to continue to pursue their welfare.

Empowerment is the concept of economic development with a reference to social values that are “people centered, participatory, empowering, and sustainable” [6], [7]. So, in general, empowerment is an effort to increase the independence of the community and make people able to help themselves. Therefore, the implementation of empowerment must foster community participation. Participation is a component of independence centered in the hands of the community itself. This means empowerment as a concept of giving authority, autonomy or trust to individuals or groups to be more creative and improve their ability to complete their tasks [6].

Empowerment of farmers in this case means the empowerment carried out within the scope of farmers or agricultural practitioners in general. Farmers are the main actors in agricultural practices. There are several things that are important in empowering farmers, including developing the organizations/community groups related to farmers; developing strategic networks between organizations or groups of farmers; enhancing the ability of farmer groups in the form of inputs such as providing market information, capital, and technology and management needed, as well as economic lobbying capabilities; and finally providing technical capabilities, such as agricultural skills in the community that they can solve by themselves [8].

In essence, the meaning of empowerment includes three aspects, namely create a conducive climate that is able to develop the potential of the local community, strengthen the potential/social capital of the community to improve the quality of life, and protect and prevent the weakening of the community’s level of life [9]. In other words, the implementation of empowerment itself must be enabling, strengthening and protecting. Enabling means that we see society as having potential and power, but how that potential is consciously owned and encouraged by better self-confidence. Strengthening means that people became involved immediately, capable to have own decisions. Protecting means preventing exploitation or inequality and dependence on other parties [10].

There are many factors that determine the success of empowerment, namely the support of the community in every step of the implementation starting from the level of planning, implementation, distribution of assistance or input, to program reporting [11]. Beside that, institutional roles, both formal and informal, provide program facilitation [2]. No less important is that the facilitator also gives great assistance in the empowerment program. The function of the facilitator is giving assistance from the beginning to the end of the program even though the program has been completed.

In addition to the above factors, there are several factors that can be obstacles and factors that support the empowerment of farmers. The existence of internal and external factors on inhibiting factors such as human resource factors, environmental factors and infrastructure; and supporters such as government support, and external assistance in various forms [12]. Almost the same statement as the opinion above, the determining factors in empowering farmers are the mental attitude and the quality of human resources, capital, markets and institutions [8].

Tourist villages can be a vehicle for community empowerment because in the concept of tourist villages contain aspects of efforts to increase, participate, and have the capacity to develop themselves to be better. Rural tourism is a form of integration between attractions, accommodation and support facilities which are presented in a structure of a society that blends with the procedures and the prevailing tradition [9]. That definition clearly shows the connotation of community empowerment.

Tourist village usually has a tendency that rural region has a uniqueness and attractiveness as a tourist destination. Development of this tourist village can be done through the concept of agroecotourism. Agroecotourism is a niche tourist activity that evolved from the discipline of agroecology, where agroecotourists travel to learn about the ecological processes of agriculture [13]. Agro eco-tourism is part of a tourist attraction that utilizes an agricultural business (agro) as a tourist attraction with the aim of knowledge, recreational experience, and business relations at agriculture. Tourism activities in agro eco-tourism are different from agrotourism, where agro eco-tourism is an activity based on nature and focuses on learning related to natural resources and human interaction with natural resources, and contributes to conservation [14].

Agro-ecotourism can provide many benefits including job creation, education and capacity building, community involvement, business feasibility, more even distribution of income streams, sustainable supply chain relationships, habitat restoration, carbon sequestration, and decreased use of agrochemicals [13]. Through the development of agro-ecotourism that emphasizes the local culture in utilizing land, we can increase farmers' income while preserving land resources, and maintain local culture and technology that are generally in accordance with the conditions of their natural environment.
III. METHOD

The research method used is a case study with an interpretative qualitative approach. This is intended to obtain a thorough and complete understanding. This research is basically have been prepared for quite long time with the following steps. Firstly intensive contacts have been conducted for the last two years under community service program of Padjadjaran University. Secondly after having some basic understandings, a proposed program commonly agreed by all stakeholders was introduced and plan of implementation was set for the first year out of three years program. An assessment was conducted on the responses and factor identification of the program implementation.

The subject in this study was Cikondang farmer group. There are 25 people plus 5 informants who were determined by purposive sampling. The research was conducted in August 2018 for approximately two months. Primary data collection was done by in-depth interviews and group discussions and field observations that have been going on for a long time because the author has been actively interacting with this farmer group for 2 years. Secondary data were obtained from the office of the Cikondang Village, and the Rural-Owned Enterprise as well as of the agriculture extension report (PPL).

The variables observed in this study include responses of farmers on crop cultivation program of rosella, attitude and mentality, honesty and togetherness, responsibility to participate in the program, and the level of innovation adoption of rosella plant propagation techniques. The role of the authorities is related to the role and institutional support. The officers here are village heads and village officials, Woman Group, BUMDES (rural-owned corporation) and community leaders. The data were then analyzed using descriptive analysis techniques, with the aim to describe factors that influence the empowerment of farmers, both those that support and inhibit.

IV. RESULTS AND DISCUSSION

About 64% of the people of Cikondang Village’s livelihood are as farmers, while the rest seeks for other livelihood. Seasonally grown crops, but most often are onions and rice, and intercropping are green peppers, peanuts, kidney beans, and green mustard greens. Rice yields from a land area of 83.45 ha, amounting to 239.4 tons / year in 2008, while other food crops from a 12 ha area increased from 25 tons in 2008 to 29 tons in 2009. Likewise in land management when compared to the previous year, there was an increase, where in 2009, the majority of farmers managing it had used tractors, the number of which increased from 5 tractors in 2007 to 7 in 2010 [15]. Agricultural products are usually taken directly by middlemen from various regions. The main problems in the agricultural sector of Cikondang village are weeds and caterpillar pests.

In addition to the agricultural sector, people's livelihoods in Cikondang village are chicken farmer, civil servant, motorcycle taxi driver, traders, factory workers, entrepreneurs, broom sticks entrepreneurs, local orchestra, fisher, coolies, etc. The economic institution in the Cikondang village is the KUD or rural co-operative which is used not only for the agricultural sector but also for making houses, household furniture, etc. Besides KUD there are also 9 farmer groups and 1 forestry group. Nevertheless, it was acknowledged by the farmer group that the speed and added value of agricultural products in the welfare of farmers was felt to be quite slow so that there were still many members of farmer groups who had mediocre income only enough to meet basic needs. Therefore farmer groups are always thirsty with new information and knowledge that is expected to lift them to the level of better living than now.

Since last year, Cikondang village has been fixed to become a smart village based on local tension. Rosella plants are introduced by a university community service program to become a tourist attraction. They learn and see firsthand how to sow seeds and move seedlings of rosella, differentiate better nurseries between seeds and those multiplied by cuttings, with their respective advantages and disadvantages. After a year in intensive guidance of farmers, increasing capacity can even explain and make the best decisions for themselves.

Other study of this empowerment is the increasing cognitive abilities related to selection of varieties by rosella farmers according to agro-climatic characteristics of Cikondang village which is red rosella. Meanwhile, the Purple variety is not suitable because at the beginning of 3, it has been disrupted by the increasing attacks of pests and diseases which resulted in the growth of rosella stems into dwarfs and most of the leaves wrinkle or shrink, and also with the petals shrinking or in other words do not develop. This is also expected because the characteristics of rosella may be more suitable for hot areas above 35 degrees Celsius.

Technically agriculture rosella cultivation components include nurseries, seeds / cuttings rosella, soil, fertilizer, and polybags in need. At the age of 3 months if it grows from seed and a month old from cuttings, it can be transferred to the land. After being treated and given manure with sufficient watering depending on the weather (in the rainy season it does not need to be watered) at the age of 8 months the rosella can be harvested for the first time, and after that every 2 weeks it can be harvested until the production age at 2 years old. Activities laden with defenders, the process is interesting for tourists to enjoy.

For this reason farmers are currently, and agreed upon by other stakeholders, want to work on and polish it as an attraction which so far has it not even going well because of the lack of community empowerment. Because of it, through the process which is extended for quite long time, it proposed farmer groups and smart village to support government programs with the National Literacy Movement, particularly in Majalengka, West Java. There must be access, infrastructures and needs for community empowerment. Improving the access and infrastructure development continue to be gradual by aligning research from universities to government programs to promote tourism, from planning the program since last year, 2017. It often becomes a problematic in the empowerment of rural communities in the tourist area because of the absence of qualified person as resource.
In accordance with the initial identification from the people themselves, they want to implement and develop Agro-creative rural tourism-based. The main tourist attraction in the agro-creative package is Bukit Hunyur which processed rosella specialties, culinary Leupeut Cikondang, Batu Gede, Batu Gede panorama. The development of this tour package is supported by other locations that have the potential as a tourist attraction, namely the rosella cultivation area in the Citutut Situ and the location of the artesian well as an important infrastructure in agro-tourism irrigation. In addition to rosella farming, this tour package is also supported by the presence of vegetable farming (rice, onions, green chili, peanuts, kidney beans, green mustard greens) and horticulture plantations that are widespread and dominated the village area. The creativity of the cultural arts of the people who can support this tour package are traditional jaipong dance, calung music, and other traditional ceremonies.

The development of this tour package is also supported by infrastructure development in the form of road access to hilly areas, provision of information boards, interpretation boards, signage, structuring of each tourist attraction that is traveled, eating facilities, souvenir packaging, public toilets, trash bins, and provision workshop for workshops. In addition to physical needs, the implementation of this tour package also requires training for farmers such as rosella farmers, art performers, and other communities including youth clubs, tourism conscious groups, and others.

Responding to the idea and the plan to develop rural tourism on the basis of rosella cultivation program, people shows a positive value. The acceptance of society shows positive position seen from the enthusiasm of the entire age group, both young and advanced. B various classes both 70 years old, young people between the ages of 25 and 50 years, even those who are 17-24 years old are willing to attend and patiently follow the extension activities until they are finished. A senior lady of 65-year-old mother was very impressed with the creative idea of introducing rosella cultivation that has been perceived benefits. According to her and supported by other members, their health is better after consuming rosella because it is one of the sources of vitamin C. The response is very well shown from the attitude, oral and active actions involved and ready to contribute to the subsequent development of rosella plants. A good attitude is not independent of outside influences such as the disclosure of information, transparency and open communication system built by leader and apparatus to positively impact society in Cikondang and build trust among stakeholders.

However, to make rosella as a commercial crop, the farmer group has also made previous calculations. This shows that they are quite critical by questioning the extent to which they use the rosella farming plan compared to vegetables and food crops. If fertile land, maintained well with soil and enough fertilizer quite often, rosella plant can be harvested at the age between 3 to 4 months of age since it was planted. For every one hectare of land, under normal conditions, it can produce 2 to 3 tons of rosella flowers that are still fresh (heavy before drying). For the price itself, it ranges from Rp.50,000 to Rp.100,000 per kilogram of rosella in dry conditions. Prices in the market are influenced by the quality of the crop. In general, rosella cultivation is quite beneficial. Other benefits of maintenance are very easy and do not require special skills and tools. This business opportunity has been utilized by farmers in Bali. Rosella has become a typical drink served for tourists who come to some hotels in Bali. Rosella is in the increasing needs in the market, so agribusiness rosella right to be an option.

Looking at the success of the development of rosella plants as part of community empowerment, especially farmers, some of the supporting factors for this achievement can be examined. Factors driving force which include the physical condition of the soil is fertility, the ambient temperature suitable for farming rosella (24 to 30 degrees Celsius), the cooperatives which are ready for selling agricultural inputs, as well as considerable experience in the pro-farming activities (3-20 years). This is in line with other studies that show that cooperation between farmers and communities or the cooperatives is one of the supporting factors for agro-tourism development [13], [16]. Meanwhile, the inhibiting factors come from cultural factors in the form of attitudes and mentalities of farmers who lack confidence if there is no support or assistance, and orientation is more concerned with the present and less future-oriented or less visionary.

Supporting factors come from the support of the district government, which, although not yet explicit, is a commitment to help develop tourist villages that have begun to appear in Majalengka Regency as an encouragement to develop tourism villages. As other studies show that a government role is needed in the development of tourist villages [17],[14],[18]. The village government, working together with the university and also PPL, according to farmers is seen as very helpful in providing ideas, initiations and even assistance in empowerment activities. Agriculture Extension resources are also supporting factor in the empowerment process, because good human resources can convince the community in the empowerment process. Organizational support established by farmers can also increase the knowledge and capabilities of the community in processing agriculture. Support for Rosella's SAPROTAN (agricultural production facilities) is also a contribution of these parties so that rosella-based agriculture can begin to develop. Various parties contribute in supporting the empowerment and development of tourism villages. As in other studies indicate that the ability of communities to develop sustainable ecotourism business requires support from external stakeholders including governments and the private sector as well as internal stakeholders including the local community and, most important of community leaders [17],[19].

A workforce that has a long enough experience at the field of Rosella planting is also a supporting factor for this activity. The existing workforce has 3-10 years of experience in planting rosella, but so far it tends to be sober and there is no vision of further development due to the absence of adequate information. The temperature of the Cikondang Village, Cingambul District, Majalengka is very suitable for aquaculture activities (hot temperatures around 30 degrees Celsius).
The absence of structured cooperation in Rosella marketing has caused these plants to still have a small amount of interest from farmers who are members of farmer groups. The ownership of a narrow land (on average of less than 0.5 ha) in the cultivation of Rosella plants is also an obstacle because ideally it requires a large enough area for the development of this rosetta plant business. The absence of a fixed policy for pricing in rosetta plants is also an obstacle. The bureaucratic structure at a higher level that is less concerned with rosetta plants is one of the obstacles in the empowerment of Rosella plants into agro-ecotourism. However, along with the interest and prospects of the rosetta plant, it is expected that in the future, better attention can be obtained from the institutional marketing side.

Another thing that remains a concern is the attitude of the majority of farmers who want to instantly harvesting rosetta, so they preferred using short cut method because it is easier and faster. The disadvantage of this slash method is the loss of opportunities for re-harvesting because this plant can produce results for 2 years harvested every 2 weeks. The patience and thoroughness in the utilization and processing of rosetta is also continuously requiring guidance and direction to instill a consistent process of responsibility that is increasingly demanded by consumers in an era of openness. If all of that are done, there will be an increase in quality followed by a high selling price.

The communication factor turned out to show that there was a point in supporting the empowerment of the Cikondang village community. High curiosity about new things makes people more focused and responsive at the same time and ends up cooperating with ideas and innovations. The role of the rural leader as an effective communicator is also important in providing support for new ideas, in this case the introduction of rosetta agriculture. The success factor of communication has given rise to what Verhagen called as participation because it is a form of interaction and communication associated with a specific program in Cikondang case [20].

V. CONCLUSION

Since the last 3 years, the farmers' responses to rosetta pitch toward each rural empowerment from outside third parties is very positive, responsive, as well as quite critical about the sustainability of the program and the requirement of guidance and assistance that are long-term (90%). However, there are 10 percent of older women and groups which did not respond, but none of them responded negatively or refused. The role of the implementing apparatus and administrators in the institution which is quite open, solid, easy to be invited to coordinate, and responsive becomes a positive value in supporting Cikondang village to become a smart tourism-based village. The co-ordination is institutionally quite good in delegating tasks and responding the farmers’ aspiration between farmers, the Woman Group, as well as third party agencies such as PPL and university representatives.

Factors that affect the empowerment of farmers from the physical aspects are such as arable land, appropriate village temperatures, adequate experience and ability to farm, and their BUMDES that is ready to distribute agricultural inputs. The inhibiting actors include: physical factors / structure of ownership of narrow land (on the average of less than 0.5 ha) both for farming and business; and availability manure waste (chickens, goats and cows) that needs structuring in the area of settlements; cultural / social factors in the form of attitudes and mentality of farmers who still need direction and have a more open vision to advance. The attitude of the BUMDES management has not been fully aspirational and responsive especially in terms of cooperation with other parties, especially the private sector, in supporting tourist village programs. Understanding institution, risk management, as well as the need of broader regulatory associated with potential cooperation to similar business will open the insight of rural tourism stakeholders [21].

Therefore, it is necessary to increase cooperation through a partnership approach to encourage cooperation between rural communities, the government and tourism businesses to create agro-ecotourism in Cikondang. This collaboration is also expected to increase the attitude of openness and participation in empowering farmers. Recommendations for further research identify the influence of the role of each stakeholder in the development of rural agroecotourism. This is important to measure and overcome the problems of each stakeholder in carrying out the role optimally.

REFERENCES


