

Strengthening village community empowerment by optimizing ecotourism with participatory approach in Bumiaji

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Abstract. The development of tourism has brought many changes in economic activity. Region with tourism objects will create jobs opportunity and improve the quality of infrastructure to support it. Bumiaji is one of the areas in Batu City which has many natural tourist attractions. Development of tourism in Bumiaji leads to ecotourism which favored by local people and outsiders. The natural potential supporting ecotourism emerge to be developed. This study reveals how the community empowerment strategy implemented by the government for developing ecotourism villages and how community participation's level in the Ecology based Tourism Village in Bumiaji. The purpose of this study was to determine the strategy of strengthening empowerment and to determine community participation in the development of ecotourism village. This type of research is a field research using a qualitative approach with descriptive analysis. Sources of data in this study consisted of primer data and participants responses obtained through interviews, observation and documentation. Findings of the research stated that the strategy of increasing community empowerment which was accommodate by government to develop Bumiaji Ecological Tourism Village, was through a strategy with the stages of awareness, capacity, and empowerment. The local community in the Bumiaji Ecological Tourism Village also highly participates in supporting the optimization of ecotourism in all aspect.

1 Introduction

Tourism is an industrial sector that is engaged in providing services and services that are advantages in Indonesia in boosting economic growth. The development of tourism potential in Indonesia is very large and varied so that it can be developed into an attractive tourism destination and become the main destination for world tourism [1]. With the increasing development of the era and the digital era, unique and local tourism activities are increasingly interesting to promote. At the end of the day, tourists prefer nature tourism combined with community participation in culture and society. Social interaction in the world of tourism is a need that must be met as part of the development of the tourism world. Tourism development that is growing and is a promising means of regional investment, this creates an

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opportunity to advance the region to increase the income of local communities [1]. The concept of tourism which is now developing into ecotourism is very attractive to foreign and local tourists. This is certainly very beneficial for the preservation of the natural environment, introducing local wisdom to the benefits obtained by local communities. Ecotourism itself is environmentally oriented tourism to bridge the protection of natural resources or the environment in order to maintain its original condition [2]. Therefore, ecotourism is an alternative to the negative impacts of artificial tourism activities that can have an impact in the form of environmental degradation, uncontrolled local culture shift, and also the reduced local community's role in utilizing their environment [3].

Ecotourism, especially in Indonesia is growing rapidly, given its abundant natural resources. Various types of natural resources provide possibilities be used as ecotourism [2,4]. Among them are landscape ecotourism where ecotourism offers natural objects such as beaches, waterfalls, flora, fauna and plantations in the form of tea field, coffee, vegetable and fruit plantations. Adventure ecotourism also offers outdoor activities such as hiking, camping, and surfing. Cultural and historical ecotourism, offering attractions such as historical relics of past civilizations. Research ecotourism includes data collection on species, data on natural damage such as deforested land and environmental pollution, as well as conservation activities such as reforestation and preservation of flora and fauna. The development of ecotourism is an ideal tourism model that is being favored by local community [5,6]. Therefore, ecotourism can be a local community potential that can be utilized. That way the community can use the village to become a tourist village. A tourist village is a tourist destination that integrates tourist attractions and is presents the structure of community life hood with the customs and traditions that apply to the community [6].

Batu City is one of the cities in East Java which is located at an average altitude of 862 m above sea level. According to the height position, most of the areas in Batu City are located in hill and slopes area. Morphologically, Batu City is dominated by areas with mountainous and hilly topography. The altitude of the area reaches 700-2000 masl with an average air temperature of 11-19 degrees Celsius [7,8]. One of the land uses in Batu City is forest, the forest in Batu City is divided into three types including protected forest, conservation forest and production forest. The Bumiaji area is one of the areas in Batu City which is dominated by forest areas and green land, both for agriculture and green open spaces. There are also many natural tourist attractions that spread to almost every region in Bumiaji, such as waterfalls, conservation forests and cultural villages with their natural local wisdom.

Community empowerment can be realized in various programs, one of which is the tourism village program. The development of an Ecological Tourism Village as a community empowerment program is intended to provide power as well as an effort to reduce poverty in an area by cultivating local potential in the area and conserving natural resources, especially vegetation and forests [9]. With the existence of this ecological tourism village, the community will benefit from the large number of tourists who enter and provide education on the importance of nature conservation [10-12]. The tourism village program in particular will provide useful benefits to improve the standard of living of the people in the area. This is as stated in the Regulation of the Tourism Minister of Indonesia Number 29 on 2015 which states that the development of rural-based tourism will drive tourism economic activities in rural areas which will prevent the urbanization of rural communities to cities. The development of rural tourism will encourage nature conservation which will have an implication on reducing global warming. The tourism village program is expected to be able to make a positive contribution to developing rural community [10,12].

Local communities as the primary component in development have an important role in supporting regional growth aimed at developing local potential that comes from nature, socio-cultural or community economics [13-16]. The participation of the community in preserve the natural and cultural resources owned is a large contribution and able become a

tourist attraction [17-20]. Bumiaji with various tourism potentials, agricultural potentials and local cultural potentials that need to be developed into a community-based ecotourism area that leads to improving the community's economy. However, in reality the village potentials is not matched with optimal utilization by the local community, which is indicate by the limited knowledge and skills of the community in processing local products and tour packages that can be used as nature tourism packages have not match with society's expectations.

2 Method

The qualitative research conducted is a field study with a Participatory Action Research (PAR) approach. Preliminary research was conducted by looking for data regarding the development of tourist villages in Batu City. Based on the preliminary study, it is known that one of the villages that has implemented the development of a nature-based Tourism Village is Bumiaji Village, so that the Bumiaji Tourism Village was chosen as a place for analysis in this study. Furthermore, this research was conducted in the Bumiaji area, Batu City. Data sources used in this reserach are primary data and secondary data. Primary data sources were obtained through in-depth interviews with informants. In-depth interviews were conducted to obtain primary data with village government officials, home industry owners, and several communities involved in the development of tourist villages, as well as communities in the village. Meanwhile, second data sources are based on documentation and official archives of the tourism office agency that able to support the research results. To obtain secondary data, it is done by reviewing several documents related to the tourism village program in Bumiaji Village. Qualitative data analysis is an effort made by working with data, organizing data, sorting it out, looking for and finding patterns, finding what is important to report as research results.

This research was conducted using a PAR approach which aims to know and better understand the characteristics of local people who are active in ecotourism activities in Bumiaji. Participatory Action Research (PAR) is a way of building bridges to connect people [21,22]. This type of research is a process of seeking the development of practical insight in discovers social, political, environmental, or economic conditions. PAR is a participatory research and development method which was recognized social relationships and the value of the reality of experiences, thinking and feelings. This research is recognized connection of process in social enhancements. This study recognizes that the process of change is a topic that interesting to reveal. This research brings the research process within the circle of people's interests and finds empirical solutions to common problems and issues that require collaboration action and reflection, and contributes to practical theory [21,22].

Activities at the research site were carried out in 2 stages, namely the socialization stage and then the treatment stage. Capacity building carried out for stakeholders in the ecological tourism village of Bumiaji is mainly given to communities who are directly involved in ecotourism activities. This study also collects data and information from the activities of the Batu City tourism office as the party who has the authority to develop tourist sites there. A total of 20 people from the Amazing Bumiaji community as a tourism awareness group were involved to collaborate in research activities. The results of observations and input from respondents were then reviewed and assessed with research instruments. To collect field data and analyze it, PAR has a method of sharing experience, in-depth interviews and focus group discussions (FGD). In FGD participants are free to discussing in a sitting position and able to discuss in certain dynamics using certain instrument, such as mind mapping, trend lines, ranking matrices, priority scale (rank) and problem tree diagrams.

PAR involves conducting research to define a problem as well as applying information into action as a solution to a defined problem in this Bumiaji ecotourism area. PAR is “study

by, with, and for people” not “study of people”. PAR is participatory in a necessary condition when people play an important role in it and have relevant information about the social system (community) that is under observation, and that they participate in the design and implementation of the action plan based on the results study [21-23]. In this research PAR, there are three features, namely participatory, action, research. Participation takes the form of inquirer decision-making which uses 'the equity principle' (understood as co-existence and self-determination) to bring divergent contextual factors and divergent interpretations of the methodology into the task of generalizing the data (subscribing to the 'relativist' characteristic of the paradigms). Action is the direct experience of selected participants with issues as presented in their daily lives, and how participatory action research methods can involve participants directly with their live. Research is a process and form of generating knowledge in four knowledge domains: experiential, presentational, propositional, practical (John Heron 1996), and as directed by participants to serve the best interests of society. Knowledge is developed through reflective conversation and critical analysis was carried out by participants involved in the action process.

3 Result and Discussions

The Tourism Village development program is one form of community empowerment activity in order to increase the economic income of the community, especially farmers and small businesses in the village. The form of a tourist village is to develop a village model that becomes a complete tourist attraction in the area [24]. With a touch of tourism, it can benefit farmers, business actors and the surrounding community because it allows the emergence of infrastructure as a facility to support the activities of the tourist village. This has been started by the people of Bumiaji Village as one of the Tourism Villages in Batu City. The tourism village program is a form of community empowerment in order to increase their income from their economic activities, both in terms of agriculture and the provision of services. Through a tourism program initiated by the Batu City tourism office, Bumiaji Village is a potential village that has an agricultural area as well as a very supportive nature-based tourism area. The tourism village program in Bumiaji Village does not only depend on the agricultural and natural conditions of the village, but there are also cultural attractions which are local conditions of the community which are also seen as having more value in the context of cultural promotion to support tourist villages. This is used as one of the prerequisites for the existence of a tourist village which able to provide attractions not only from nature but also from cultural attractions in Bumiaji Village.

The development of nature-based tourism villages in the form of Ecological Tourism Villages has become one of the strategies carried out by the local village government by cooperating with local tourism aware communities with academics. The concept of an Ecological Tourism Village in the village is closely related to efforts to preserve landscapes and natural areas in the village which is the area at the foot of Mount Arjuno. Based on the results of the study, there has been a conversion of forest land into agricultural land which has begun to penetrate into forest vegetation in the northern area of the village. This condition has also caused various natural disasters such as landslides and floods that occurred some time ago. If this happens continuously in the long term, it will actually lead to a decrease in the welfare of the village community. Integrated ecotourism development is needed to build sustainable and community-based ecotourism. Efforts to foster community participation in the development of Ecological Tourism Villages need to create a conducive atmosphere, namely a situation that moves the community to attract attention and concern for ecotourism activities and a willingness to cooperate actively and sustainably as a step for the conservation of the natural environment [25,26]. An alternative strategy for developing an ecotourism village in Bumiaji is to use geographical potential to take advantage of the opportunities that

exist in the tourism sector, so in this case the direction of a collaborative strategy for developing an ecotourism village can be described as follows.

Community involvement in the planning and management of ecotourism village development are intensively arranged. This strategy was chosen to take advantage of opportunities by optimizing existing strengths. Community participation in ecotourism development is very important. This is in accordance with the research objectives which state the principle of involvement of rural communities as actors in tourism activities, being direct or indirect owners, not transferring land ownership, the principle of partnership to empower the community and benefit as much as possible for the community and the preservation of culture, traditions and the environment. Forms of participation in community-based ecotourism include: Participation in planning; Participation in decision-making and management; Participation in the implementation and course of the process; - Participation in the sharing of economic benefits. In the current tourism development in the village, the community is still not much involved in the planning stage to its management. Therefore, with the concept of ecotourism, the community must have an important role from planning to managing the development of the village into an ecological tourism village destination. Therefore, the management of ecotourism in the village is good for the Jati Mas tourism object and the agro tourism potential of the Jengkowang hill which must involve the community from planning to management. This is one of the characteristics of community-based ecotourism development, namely the existence of community responsibility for tourism potential and objects so that in managing ecotourism villages in the village, the community must be involved in the planning, implementation and evaluation process. With community involvement in the planning, implementation and evaluation processes, it will encourage a sense of belonging to the potential and tourism objects that will ensure the sustainability/sustainability of these potentials and objects [27,28].

Development of tourism potential management and tourist attraction objects throughout Batu City, including realizing an ecotourism village. This strategy is based on maximizing existing strengths and optimizing existing opportunities [29]. This strategy was taken because the development of ecotourism in Bumiaji Village has the power of accessibility, especially the relatively easy road and transportation conditions, the pull factors in the form of traditional arts and historical relics and the availability of community handicraft products /Small Household Industries as well as potential tourist attractions in Bumiaji Village there's still a lot going on. On the other hand, there is an opportunity that the location of this village is not too far away and can be reached in a relatively short time from the center of Batu City as a tourist center city in East Java Province. Overall tourism management in Batu City will increase the desire of tourists who come to Batu City to stay longer and be able to enjoy all the potential and tourist attraction objects, either artificial or artificial. Tourists who come to Batu City will be able to have many alternative choices to visit. With the increase in the length of stay of tourists, it will provide a multiplier effect on the economy of the people in Batu City.

Through the tourism agency authority, socialization and promotion of the Ecotourism Village program is carried out. This strategy is based on utilizing the strengths it has by optimizing existing opportunities. This strategy was taken because the development of an ecotourism village in Bumiaji has the strength of the openness of this village community in accepting tourists, easy accessibility to this village, the potential for natural tourism and small community-owned industries. On the other hand, there are opportunities that exist that the location of this village is easily accessible and there are also opportunities to take advantage of the role of local and national digital, print and television media. With these strengths and opportunities, a strategy can be taken to carry out socialization to increase the capacity and ability of the community to develop the tourism potential they have and manage forms of ecotourism in Bumiaji Village, while increasing promotion both nationally and

internationally about the development of ecological tourism villages in the region. Efforts to increase promotion of ecological tourism villages have an impact on increasing number of tourists who come and can understand the concept of ecotourism villages where some of the profits from tourism products and services must be returned as conservation efforts and increase the economic level of local communities [30].

Preparation of government policies that support the development of ecotourism villages. This strategy is based on utilizing the strengths possessed by optimizing the opportunities that exist in the development of Bumiaji Village as an ecotourism village. This strategy was chosen because government policies, especially Batu City authorities, will play a very important role in encouraging the implementation of the development of Bumiaji Village as an Ecological Tourism Village. This government policy will appear in the laws/regulations that are drawn up with the legislature or the Batu City DPRD (people representatives) whether the existing regulations support the development of ecotourism villages or vice versa. In addition, local government policies will appear in the budget policies contained in the APBD (government regional budgeting) which are expected to accommodate the development of ecotourism village infrastructure, development of supporting infrastructure and the establishment of ecotourism village community institutions. In addition, the most important policy is the implementation of the regional regulation on the Spatial and Regional Planning of Batu City for 2008 – 2028 where Bumiaji District is a protected area so that tourism development that is carried out or allowed is a sustainable tourism policy or ecotourism. If it is related to the description of the background of this research, the Batu City government should have changed the pattern of tourism sector development by limiting the development of artificial tourism objects which often cause environmental and social impacts. Therefore, one of the policies that must be prepared by the local government is to limit the development of manmade/artificial tourism objects and prioritize the development of ecotourism villages, especially in the Bumiaji area. In addition, not only tourism objects are regulated in the local government policy, but also supporting infrastructure and accommodation that must prioritize local community participation, such as increasing home stays, developing living with people tourism, building traditional stalls and improving traditional arts in Batu City tourism villages, especially in Bumiaji.

3.1 Cultivating awareness process

Increasing awareness and knowledge literacy about tourism, conservation and the socio-economic impact of ecotourism in the ecological tourism village program for community groups has become one of the targets in this research activity. Ecotourism is the options to promote a unique environment that maintains its authenticity as well as becoming an tourist attractions [27,28]. The existing potential is concepts of environmental development based on nature conservation and perseverance approach, forest areas have the potential for ecotourism development because of the very unique vegetation conditions and regional models that can be developed as tourism facilities while maintaining the authenticity of the vegetation and organisms that live in the area. forest. An area will be worth more and become a special attraction for people if there is something unique and unique to see and feel in it. This is the key to a natural tourism area development to carried out. The mountain slope forest ecosystem is used as an ecotourism object that is in great demand by tourists because apart from being a tourist attraction, it can also be a learning activity. The application of ecotourism in forest vegetation areas is expected to reduce the level of damage to village areas that have been used by humans and prevent natural degradation. Forest areas that have uniqueness can be used as natural resources that have the potential to be used as tourist areas. An effort to optimally utilize local resources is to develop tourism with the concept of an Ecological Tourism Village.

The application of the ecotourism village model in the forest vegetation ecosystem is an approach in utilizing the ecosystem in order to create sustainability. Ecotourism activities are an effective alternative to overcome environmental problems in this ecosystem such as the level of overexploitation by the community by creating economic alternatives for the community [29,30]. Ecotourism activities are never separated or inseparable from conservation efforts, local economic empowerment and mutual respect for the socio-cultural conditions that exist in the village [31-33]. The shift in the concept of world tourism to an ecotourism model is due to the saturation of tourists visiting artificial tourism objects. This opportunity can be utilized optimally to attract tourists to visit tourism objects based on the natural environment and culture of the population or local community. There are five elements that are considered the most decisive for building awareness of an ecotourism area:

1. Education and interpretation. The aspect of education is a major part in managing ecotourism because it carries a social aim to create people awareness of the existence of humans, the environment, and the possible consequences if there is an error or mistake in the management of environmental empowerment. The mission is not easy because to describe it in a tour package often clashes with interests between economic calculations and being trapped in a rigid conservative educational mission. Natural resources along with the cultural richness of an ecotourism destination are interpreted appropriately and professionally to tourists so that tourists are satisfied. A successful interpretation will give tourists a deeper experience and understanding of the nature and culture of the local area so that they can better appreciate the environment [34,35]. To achieve this requires its own expertise in the field of tour guide. The role of tourism awareness groups as guides for ecological tourism villages is also an added value that has been prepared and is not included in the manual, besides that they also explain something about the condition of the landscape and agrarian areas found in . The guides' familiarity with the forest and its contents has added to the experience for visitors through the delivery of both formal and informal conservation education messages.
2. Conservation. Ecotourism differs from other tourism in terms of its dependence on the ecosystems protection and the cultural elements contained therein. Local nature and people culture are absolute assets of ecotourism. The economic benefits derived from ecotourism must be used to preserve the environment, for example, it is used to provide facilities that can reduce environmental damage such as warning signs for tourists, campsites and others. Building a public awareness of the importance of environmental conservation, where biodiversity is an important issue in which it is very necessary [34]. Many experts argue that building conservation awareness through informal education can be done with the services of the tourism sector. if the tourism sector is specifically regulated, it can help finance environmental conservation, especially biodiversity conservation, which is increasingly under pressure.
3. Legal protection (Advocacy). Every ecotourism management requires strong integrity because sometimes the educational value of ecotourism is often misunderstood. Actions that build infrastructure excessively will actually disguise the protection (advocacy) of the interest. Supposedly, the infrastructure created should be able to provide environmentally friendly values and use materials around the object even though it looks very simple. In that way, authenticity can be maintained because with that simplicity the people around the area are able to manage and maintain natural sustainability by themselves without making things up. Through the draft of village regulations on ecological tourism villages, nature-based tourism activities will be more optimal.
4. Involvement of the local community (Community awareness) In the management of ecotourism areas, the participation of the local community cannot be ignored. They know more than migrants who have projects, therefore their involvement in the preparation and management of the area is very much needed. One of the factors that can encourage

community involvement is the creation of positive perceptions from the community, especially those related to the added value aspects that tourism can provide to the community's economy. For this reason, public awareness needs to be raised through various socializations, and followed up with efforts to prepare the community to seize opportunities for ecotourism development. The role of community leaders plays a key role in mobilizing community involvement in supporting ecological tourism villages in the village.

5. Supervisions (Monitoring). It is well realized that the culture that develops in the community around the ecotourism area may not be the same as the culture of tourism managers and visitors. In carrying out activities, there will be a shift that will gradually result in the loss of the original culture. Try not to let this happen. True ecotourism must be based on a system of view that includes the principle of sustainability and includes the participation of local communities in potential areas for ecotourism development [14,30,36]. Ecotourism should be seen as a joint effort between local communities and visitors in an effort to protect wildlands and cultural and biological assets through support for local community development. Community development here means efforts to strengthen local community groups to control and manage valuable resources in ways that not only conserve resources but are also able to meet the needs of these groups socially, culturally and economically. In ecotourism management, continuous monitoring is needed so that issues of integrity, loyalty, or quality and ability to manage will be decisive to reduce the impact that occurs.

3.2 Capacity building process

In an effort to develop the ecotourism potential of the region into an Ecological Tourism Village, the Village Government accompanied by the Batu City Tourism Office carried out a strategy of pioneering ecotourism activities in stages and also planned starting in 2010 with capacity building of all elements involved, both Village government apparatus, local organizations, local communities and entrepreneurs. The capacity building strategy initiated by the Village Government initiate with Human Resources development strategy. This strategy was realized by the Bumiaji Village Government through four program activities to increase the capacity of the Human Resources of local communities in the field of tourism. The concept of community-based tourism is an empowerment approach that involves the community as an important factor in the context of the new sustainable development paradigm. Building community human resources through community outreach, the purpose of this socialization is to provide an understanding to the community about ecotourism that will be developed in their village. This activity is programmed every two weeks through village meetings which take place in every house of the Dusun Head. In addition, this socialization was also carried out in various community activities such as tahlil (religion gathering), women's social gathering and posyandu(child care) .

Building Human Resources is also done through education, the low level of education of local communities is a challenge for the Village Government to develop an Ecological Tourism Village. The purpose of capacity building is to increase the literacy and knowledge of individuals to reduce ignorance. Building Human Resources through the formation of tour guides, this strategy is carried out to achieve standardization of ecotourism services. The ecotourism aware community was formed by the Village Government in collaboration with the tourism office in 2018 with ten members from youth organizations with the aim of promoting ecotourism. Building Human Resources through empowering local communities, various kinds of empowerment programs were initiated by the Village Government in order to develop community capabilities. Empowerment is classified from the fields of agriculture, animal husbandry, management fields to areas of special community expertise. The capacity

building for ecotourism business providers is carried out through service training activities, financial management and management of tourist destinations as well as digital-based marketing which is currently rampant.

The Organizational Strengthening Strategy is carried out by the Bumiaji Village Government in three main programs to improve the quality of its performance. Improvement of the structure and duties of the Village Government, which is a strategy to improve the quality of performance by revamping the structure and duties of five employees in the working area of the Village Government in 2018. Improvements to several of these positions are adjusted and considered with the expertise of the employees. Improving the working facilities and infrastructure of the Village Government, this is done by renovating the Village Head's office building and adding workspaces and computer facilities in 2019. Which aims to improve employee performance to be more effective and professional in providing services to the community. Fostering local community organizations, which is a coaching strategy for the community to be organized into organizational groups. There are three groups of organizations assisted by the Village Government that can help develop ecotourism. The village government is also trying to revive organizations that are already fam. Institutional Reform Strategy This is an institutional capacity development strategy carried out by the Bumiaji Village Government related to policy settings in achieving the pioneering and development of Ecological Tourism Villages. Improvement of the policies of the Bumiaji Village Government, by improving the policies used in achieving development, namely by changing the vision and mission that are more easily understood by the community.

Through the Amazing Bumiaji branding, the Village Government seeks to jointly invite the community to be more advanced and concerned with the natural tourism potential of the village. Establishing partnerships with other development organizations, this is done by the Bumiaji Village Government to create cooperation with various other stakeholders aimed at achieving ecotourism development. From cooperation with Non-Governmental Organizations (NGOs) engaged in the environment and law, collaboration with the public sector that supports the implementation of ecotourism activities, and collaboration with the private sector which contributes a lot in providing funds and investment opportunities. Efforts to develop the potential of ecotourism villages carried out by the Bumiaji Village Government are considered to be able to improve the economy and welfare of local communities. This is evidenced by the following three parameters of economic development:

1. Increasing the income of local communities, the development of ecotourism potential in Bumiaji Village can provide direct economic benefits that can increase people's income. The increase in income is obtained from ecotourism activities and tourist visits which are fully managed by the community. On average, people get income from apple picking ecotourism IDR 20,000/visitor, from tour guides IDR 100,000, Jatimas tourism IDR 150,000, from homestay rentals IDR 20,000/guest, tourists meals IDR 15,000/guest, and from weaving craftsmen. around IDR 500,000/day. From the results of the income also depends on the number of tourists who come. The increase in people's income is also felt by shop owners and stalls.
2. Increased development of village infrastructure, some physical development began in 2010 -until now it is increasingly being carried out in a sustainable manner, especially the improvement and addition of facilities and infrastructure to support Ecological Tourism Village activities such as roads, drainage, educational centers, tourist posts, and green areas . Tourism supporting infrastructure is the main agenda of the Bumiaji Village Government in achieving local community economic development.
3. The increase in new job opportunities for local communities occurs because of ecotourism activities that fully involve the role of local communities. The development of ecotourism in Bumiaji Village is a blessing for the community to get new jobs such as being a tour

guide, parking service, opening a food stall business, weaving craftsmen, souvenir traders, and kiosks whose results can reduce unemployment in Bumiaji Village.

3.3 Realizing Empowerment Process

With the existence of a tourist village, the community can participate in the success of the tourism village program. Community empowerment in the Bumiaji tourism village program is able to change most people to change. For instance, increasing knowledge about village management becoming a tourism attractions to provide income for the community itself. furthermore, with the community empowerment program, the community also has skills in processing fruits and providing a homestay. This has an impact for increasing income of the Bumiaji peoples. This capacity building is the goal of community empowerment, that is a process to elevate the dignity of a person or community group, through strengthening lifelong learning abilities as a process that can update knowledge [18,19,27]. , skills, and other abilities that are useful for life. With community empowerment in the Tourism Village program, the community gets additional income in addition to the main income, namely in the agricultural sector. Tourism village is a village development pattern that unites tourism with community empowerment. The location of community empowerment is to take advantage of what can actually be used in tourist villages. In addition, the community will maintain the harmonization of nature which will then result in plant productivity. In the Bumiaji tourism village, MSMEs are also developing which are also the use of the tourism village concept.

Bumiaji Tourism Village is a form of community empowerment based on local potential in the area or Bumiaji Village. The empowerment program is carried out with the aim of making the community independent through regional or regional development by making the area a tourist village. Tourist village which fully operation will lead the community to develop their potential so improvement of community welfare will be optimized. Community empowerment is known to be a process to strengthen the role of people who are less capable. There are several things that are done in the community empowerment program through the Ecological Tourism Village which is carried out in Bumiaji Village.

The initial step taken to start community empowerment activities was carried out by forming a team from the community that aimed as a group of officers in developing an environment-based Tourism Village as well as a community mobilizer. The need for a team in community empowerment aims to start a community empowerment process first by creating a motor team (group) from community representatives in the Bumiaji village. The team that has been formed then takes action for the development of environmental conservation programs that are linked to tourism activities. In addition, this team acts as a driving force for the community to be actively involved in all aspects of implementing the Tourism Village program. So that the existence of this team can also increase community participation and the existence of this team also facilitates community organizing. The mentoring process in the context of developing an Ecological Tourism Village is also carried out by the Tourism Village Team that was formed earlier. Assistance is provided so that the community can support program activities. For example, some people who own a vehicle can also be organized to become a vehicle rental place around the village in order to fulfill tourist village facilities and also provide homestays. Not only that, mentoring is also carried out to youth groups through art programs as artistic attractions that will be displayed in order to support the development of Ecological Tourism Villages. In addition, there is also special assistance by Field Extension Officers from the Batu City government service. The mentoring model is providing information and networking if there are activities related to agricultural activities or environmental conservation. The form of a joint business with the concept of a public private partnership involving all ecotourism stakeholders was also

initiated under the supervision of the Bumiaji village government. Village-owned enterprises are also planned to be able to engage in ecotourism to provide tourism needs and to increase income for Bumiaji Village.

The people of Bumiaji Village support the development of this Ecological Tourism Village program. This can be seen from the efforts of the community who participate in discussion activities that are members of the Tourism Village Team. In addition, in practice, the community also supports the development of land which was originally only used as apple farming land, now the land has also been used as one of the lands for apple picking tours. Community involvement for the development of this tourism village can also be seen from the establishment of a community-owned Home industry as one of the developments of apple production. In addition, the community is also able to take advantage of apples that are processed in various kinds of new food preparations which can also be used as souvenirs for visitors to the Bumiaji Tourism Village. What the community does is also provide Homestay for visitors. It was this involvement that made the development of the Bumiaji Tourism Village successful. In addition, community involvement is also carried out in terms of cultural arts attractions which also add to the attraction of visitors to the Bumiaji Tourism Village. So that Bumiaji does not only offer apple picking tours. Cultural attractions are also one of the special packages that visitors can enjoy as a form of developing a tourist village. The focus of community empowerment can be seen from various sides. If the tourist village can be seen from an economic point of view. This can be measured by the role of micro and small scale businesses. As one of the businesses that can provide economic improvement. Micro and small businesses play a role in providing opportunities for the Bumiaji village community in terms of improving the economy.

The principle of participation requires empowered people in community, given the opportunity and included role in bureaucratic processes from the planning of implementation, implementing action and supervision of public policy [2,6,30,32]. Community participation is the control of excess power so that it is more effectively aimed at the community as much as possible in the concept of good governance. The existence of a opportunity for people involvement and an appropriate institutional framework for participation also encourages equity development. With community participation, development planning is focused on main need, which allow development plans and programs are prepared are in accordance with community demand. There are three main reasons why community participation has a very important meaning [22,32], which was:

1. Community participation is an instrument to earn information about the conditions, situations and issues of the local community regarding the development project so that empowerment plans can run well.
2. The community will more understand the development program or project purpose if they involved in the preparation and planning process, because they know exactly about the inputs or outputs of the project and will have a sense of belonging of the carry out development project.
3. There is an assumption of democratic right if the community is involved in the development of their own society. It can be felt that they also have the right to participate in discussions (providing suggestions) in determining the type of development to be carried out in their circumstances.

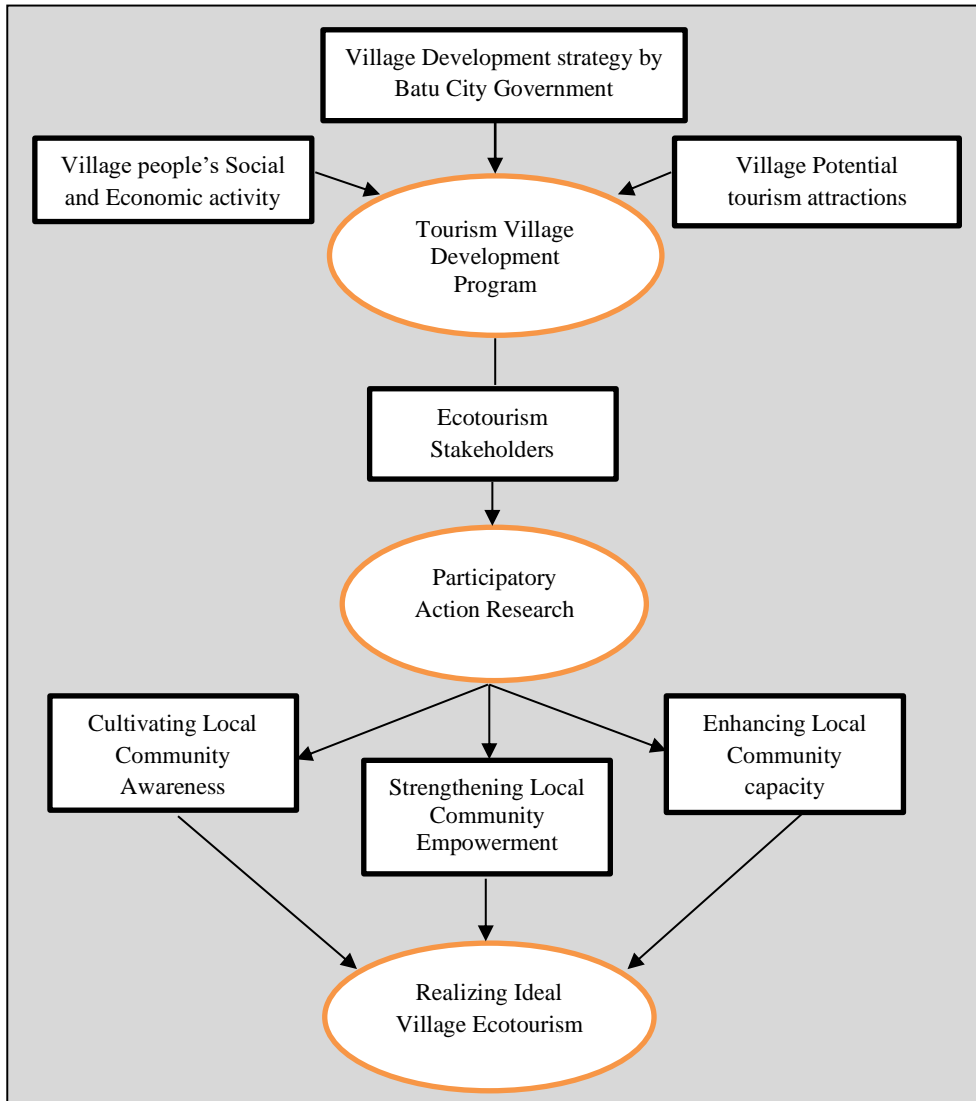


Fig. 1. PAR scheme for enabling ideal ecotourism village.

4 Conclusions

The results of the study indicate that the ability of the community in Bumiaji Ecotourism Village to develop a sustainable ecotourism business requires support from external stakeholders including the government through agencies and the private sector as well as internal stakeholders including local communities and most importantly community leaders. The PAR process is very appropriate to be carried out to provide awareness, increase capacity and strengthen community empowerment and needs to be carried out in stages so that the ability of the ecotourism stakeholder community can take place in a comprehensive and sustainable manner. The community also actively participates in efforts to support the realization of ecotourism locations into attractive ecological tourism villages that are very adequate. The results also show that empowered communities are able to obtain social and

economic benefits from the ecotourism business and make a positive contribution to the maintenance of natural conditions and the local environment in the Bumiaji ecotourism area.

References

1. M. T. Stone. Community-based ecotourism: a collaborative partnerships perspective, *Journal of Ecotourism*, **1423**, 166-184 (2015)
2. F. Ramírez and J. Santana. *Education and Ecotourism*, (2019)
3. Nantira Pookhao Sonjai, Robyn Bushell, Mary Hawkins & Russell Staiff . Community-based ecotourism: beyond authenticity and the commodification of local people, *Journal of Ecotourism*, **173**, 252-267 (2018)
4. Adrian Mendoza-Ramos & Bruce Prideaux. Assessing ecotourism in an Indigenous community: using, testing and proving the wheel of empowerment framework as a measurement tool, *Journal of Sustainable Tourism*, **262**, 277-291 (2018)
5. P. B. Cobbinah. Contextualising the meaning of ecotourism, *Tourism Management Perspectives*, **16**, 179-189 (2015)
6. M. Das and B. Chatterjee, Ecotourism: A panacea or a predicament?, *Tourism Management Perspectives*, **14** (2015)
7. Batu City Environment Agency. Book of Regional Environmental Status Report (SLHD) of Batu City in 2021. Batu City Government Environmental Office. Batu City. (2021)
8. Statistic Central Bureau Batu. Statistic Regional Report of Batu City, BPS (2019)
9. M.S. Grindle. Getting good government: capacity building the public sector of developing countries. Boston: Harvard Institute for International Development, (1997)
10. A. Górka. Landscape Rurality: New Challenge for the Sustainable Development of Rural Areas in Poland (S. C., A. M., & P. P. (eds.); **161**, 1373–1378 (2016).
11. D. A. Fennell, A content analysis of ecotourism definitions, *Curr. Issues Tour.*, **45**, 403–421 (2001)
12. H. M. Donohoe and R. D. Needham, Ecotourism: The evolving contemporary definition, *J. Ecotourism*, **53**, 192–210 (2006)
13. L. Ruhanen, “The prominence of eco in ecotourism experiences: An analysis of post-purchase online reviews,” *J. Hosp. Tour. Manag.*, **39**, 110–116 (2019)
14. E. Mondino and T. Beery, Ecotourism as a learning tool for sustainable development. The case of Monviso Transboundary Biosphere Reserve, Italy, *J. Ecotourism*, **182**, 107–121 (2019)
15. S. Chai-Arayalert, Smart application of learning ecotourism for young eco-tourists, *Cogent Soc. Sci.*, **61** (2020).
16. P. B. Cobbinah, Contextualising the meaning of ecotourism, *Tour. Manag. Perspect.*, **16**, 179–189 (2015)
17. S. Chai-Arayalert, “Smart application of learning ecotourism for young eco-tourists,” *Cogent Soc. Sci.*, **61** (2020)
18. K. K. Eluwole, C. Banga, T. T. Lasisi, A. Ozturen, and H. Kiliç, “Understanding residents’ empowerment and community attachment in festival tourism: The case of Victoria Falls,” *J. Destin. Mark. Manag.*, **23** (2022)
19. R. Ballantyne and J. Packer, *International Handbook on Ecotourism, Int. Handbook. Ecotourism*. (2013)

20. S. Marx, S. Flynn, and M. Kylänen, Digital transformation in tourism: Modes for continuing professional development in a virtual community of practice, *Proj. Leadersh. Soc.*, **2** (2021)
21. S. Kindon, R. Pain and M. Kesby. *Participatory Action Research Approaches and Methods*. Taylor & Francis e-Library, (2007)
22. J. Pathumporn and S. Nakapaksin. Participatory action research model for sustainable community based tourism development. *International Journal of Business and Administrative Studies*, **13**, 89- 93 (2015)
23. N. Tubtimcharoon. Participatory Action Research: a possible research method for developing Sustainable Tourism In Thailand. *Panyapiwat Journal*, **132** (2021)
24. A. Delbosc, N. McDonald, G. Stokes, K. Lucas, G. Circella, and Y. Lee, “Millennials in cities: Comparing travel behaviour trends across six case study regions,” *Cities*, **90**, 1–14 (2019)
25. M. Cheng, I. K. A. Wong, S. Wearing, and M. McDonald, Ecotourism social media initiatives in China, *J. Sustain. Tour.*, **253**, 416–432 (2017)
26. M. Clark, P. Clark, and M. Latta, Promoting Coastal Ecotourism To Millennials Through Social Media, *Coast. Bus. J.*, **171**, 2163–9280 (2019)
27. K. Walker and G. Moscardo, Encouraging sustainability beyond the tourist experience: Ecotourism, interpretation and values, *J. Sustain. Tour.*, **228**, 1175–1196 (2014)
28. U. Gretzel, M. Sigala, Z. Xiang, and C. Koo, Smart tourism: foundations and developments, *Electron. Mark.*, **253**, 179–188 (2015)
29. T. Um and N. Chung, Does smart tourism technology matter? Lessons from three smart tourism cities in South Korea, *Asia Pacific J. Tour. Res.*, **264**, 396–414 (2021)
30. S. Abrehe, A. Girma, and A. G. Nigusse, Potential ecotourism site suitability evaluation for sustainable natural resource management in Kafta Sheraro National Park (KSNP), north-western Tigray, Ethiopia, *J. Ecotourism*, **204**, 341–370 (2021)
31. W. C. Hunter, N. Chung, U. Gretzel, and C. Koo, “Constructivist Research in Smart Tourism,” *Asia Pacific J. Inf. Syst.*, **251**, 105–120 (2015)
32. V. Nisi, C. Silva, M. Dionísio, and N. J. Nunes, A participatory platform supporting awareness and empathy building between tourists and locals: The Há-vita case study, *ACM Int. Conf. Proceeding Ser.*, on January (2020)
33. A. Kontogianni and E. Alepis, Smart tourism: State of the art and literature review for the last six years, *Array*, **6** (2020)
34. J. Chatterjee and N. R. Dsilva, A study on the role of social media in promoting sustainable tourism in the states of Assam and Odisha, *Tour. Crit. Pract. Theory*, **21**, 74–90 (2021)
35. H. Go, M. Kang, and Y. Nam, The traces of ecotourism in a digital world: spatial and trend analysis of geotagged photographs on social media and Google search data for sustainable development, *J. Hosp. Tour. Technol.*, **112**, 183–202 (2020)
36. M. A. Ulfy, M. S. Hossin, M. W. Karim, and Z. Anis, The effects of social media advertising among eco-tourists in Malaysia: An empirical study on Malaysian ecotourism, *Geoj. Tour. Geosites*, **384**, 997–1004 (2021)
37. B. K. Mudzengi, E. Gandiwa, N. Muboko, and C. N. Mutanga, Innovative community ecotourism coping and recovery strategies to COVID-19 pandemic shocks: The case of Mahenye, *Dev. South. Afr.*, **391**, 68–83 (2022)