Development of Ecotourism based on Community Empowerment  
(a Case Study of Kebumen Regency)

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ABSTRACT

The main objective of this research is to formulate a participatory and inclusive model of economic development by optimizing the potential of local resources in Kebumen regency, Central Java, Indonesia by 1) identifying local resource-based economic potentials to be developed into pilot projects in regional development, 2) analyzing factors affecting the success of potential development, 3) analyzing the needs that influence the increase of community and stakeholders participation in regional development activities. This study uses Geographic Information System to map economic potential, Analytical Hierarchy Process to analyze factors that influence community participation, and ATLAS.ti to analyze needs and activities in developing leading sectors.

The analysis shows that the economic potential in Kebumen district is focused on the potential of natural resources which include forestry, agriculture, fisheries, plantations and livestock. The regional development needs to be carried out thoroughly from upstream to downstream. AHP analysis shows that the factors that influence the success of potential development are internal, institutional and external factors. Needs analysis shows that the community holds an important role but must be supported by other stakeholders, namely the government, business actors and academics.

This study recommends upstream-downstream development through nature-based ecotourism. The upstream sector that must be prepared is natural conservation combined with access to accessibility. The concept of back-to-nature developed in ecotourism must be supported by the provision of facilities and infrastructure that allows visitors to reach and enjoy the nature’s beauty. In the downstream sector, tourism support services such as culinary and souvenir typical of Kebumen regency become an important part and need to involve all elements of community, especially those around the tourism destinations.

Keywords: Community empowerment, Tourism regions, Participatory development
Introduction

National development is an effort that is carried out continuously and sustainably both at the national and regional levels with the main objective of achieving prosperity for the entire community. National development requires collaboration of four interrelated components, namely a) natural resources, b) capital or investment resources, c) human resources, and d) technology and expertise. Regional development in the context of increasing regional independence is a local manifestation of national development. One important element of regional development is participatory local economic development. The use of local resources basically includes physical, human and institutional resources. Local economic development is a development based on local capacity and the use of internal factors to develop the local economy.

The context of local economic development has changed radically in low-income countries. Structural adjustments and market liberalization have generally changed the context of the local economy. The central government is no longer the main regulatory actor. The business environment is changing and is run by public institutions and private sector investment (Helmsing, 2003). Local economic development is a process of economic development in which local governments and / or community groups play an active role in managing local natural resources through cooperation with private or other parties to create jobs and stimulate economic activities. Local economic development is the creation of opportunities for community businesses to enter the economic flow that rests on a network of partnerships between actors in both rural and urban areas.

Kebumen Regency has a relatively diverse natural potential, ranging from mountainous, land and coastal areas. The development of these three geographical and topographic elements must be carried out in an integrated and sustainable manner so as to improve the community welfare, and therefore the concept of EMAS, a collaboration between Ekologi (Ecology), Mina (Fisheries), and Agri Wisata (Agritourism) is introduced (Kebumen, 2016). The concept is based on leading potentials, namely agriculture, plantations, fisheries, small businesses and tourism especially natural tourism in the forms of mountains, waterfalls, beaches and caves.
The main potential is development in (1) Agriculture. With a total area of 128,111.50 hectares or 1,281,115 km², most of the Kebumen area is lowland with several coastal areas and hills. Based on the type of land use, 39,748.00 hectares or around 31.03% are paddy fields and 88,363.50 hectares or 68.97% dry land. With superior products such as rice, corn and soybeans, agriculture is one of the leading sectors in Kebumen. The next main potential is (2) Ecology. Kebumen has a protected area and a cultivation area with an area of 245 hectares located in the Wadaslintang Reservoir and Sempor Reservoir. Geological protected areas include Karangsambung Geological Reserve area, Karst Landscape Area, and Groundwater Balance Area of approximately 18,340 ha. Furthermore, Green Open Space reached around 4,478 hectares or 46.53% of the total settlement area. The next main potential is (3) Mina, or fisheries, both capture fisheries and aquaculture. The number of fisheries production reached 7618.06 tons per year with the number of fishermen and cultivation groups reaching 30 groups. The last major potential is (4) Tourism, because the number of tourists reached 1,117,136 people per year with an average annual growth of 16%.

The potential of natural tourism combined with fisheries and agriculture is expected to be a synergistic blend in the framework of economic activities, especially in Small Business Communities which will ultimately improve welfare. The concept of the EMAS area is one of the efforts to transform natural potential into an economic potential that is ready to be developed. In the concept of Participatory Development Program, inclusiveness becomes a key word, that is how development is carried out by involving the community from the beginning as the planner, implementer and supervisor of development.
activities. Participatory development models require community social capital, namely networks of cooperation, trust, relationships between actors, and social and institutional management.

There are three ways in which institutions are differentiated within the institutional-structure framework. First, institutions can be seen as structures that allow or limit agency choices. Second, institutions can be considered as attached to agents, for example through norms, which may be socially or culturally determined, ultimately responsible for behavioral differences. Third, institutions can develop as a result of the choice of both agents and the impact of the structure on the agency's preference for institutions (Rommel, 2015). Empowering and participatory are key words in endogenous economic development, namely direct involvement of local organizations or functional groups of citizens who are able to become active agents in their own development process. (Fernández-Moral et al., 2015). Community participation has long been linked to rural development. Regional developers believe that in order for a project to succeed, people need to actively take part in designing, implementing and maintaining projects that affect their living conditions. However, despite demands for a 'bottom-up' approach to rural development, project beneficiaries still lack participation in the identification, planning, implementation, monitoring and evaluation of projects intended to improve their welfare (E.D. Laah, Adefila and Yusof, 2014).

The Department of Agribusiness, Faculty of Economics and Management, Bogor Agricultural University (2002) conducted a study on Participatory Rural Appraisal (PRA) and stated that the approach to learning about rural conditions and life would be successful if it refers to the concept of from, with and by the village community itself. The main objective of the PRA method is to produce program designs that are more in line with the community desires and circumstances. Moreover, the PRA also aims to empower the community, by helping them assess their own situation, and then plan and implement the plan. (Agribisnis, 2002).

The basic principles of implementing PRA include 1) society is seen as a subject not an object; 2) practitioners place themselves as “insider” not "outsider"; 3) almost right is better than really wrong to determine standard parameters; 4) review / analyze, provide examples, identify and select priority issues, present results, review and plan action activities; 5) empowerment and community participation in determining social indicators (Pranadji, 2006).

Research by Anu Kasmel (2011) in Estonia found that the community empowerment approach is a powerful tool for solving local health problems. However, methods for measuring empowerment in the community remain unspecific and open to discussion. This study aims to illustrate how context-specific community empowerment tools are developed and changes made to three health promotion programs in Rapla, Estonia. The expansion of empowerment model is compiled and applied for three programs: Safe Community, Drug / HIV Prevention, and Quality of Elderly Life. Workshops were used to develop measurement tools and collect data about the Community Empowerment Organization Domain. (Kasmel and Andersen, 2011).
Research by Maria J Fernandez (2014) on rural communities in Cuenca, Spain, shows that the existence of citizens who want to become active agents in the empowerment process is an important aspect of community-based development. The Institute of Community Development of Cuenca (IDC), which has worked with various groups for 30 years focusing on empowering rural community organizations, stated that the main tool in this process was the evaluation of empowerment approaches and the role of critical friends when helping groups to achieve goals and strengthen them. Group work is very important to achieve capacities, skills and attitudes that allow them to become truly independent after the facilitator has left. To achieve this, the facilitator must be able to transfer capacity, skills and attitudes to individuals and the whole group. At the beginning of this process, the role of the leader is very important to ensure the development of the group. Then, as a group that continues to grow, members must learn to take the role of leader and they must make their own decisions. At this time, the facilitator is the group guide. Finally, when the facilitator has left, the group must be truly autonomous and members must be able to apply all the capacities built in this process. (Fernández-Moral et al., 2015).

Several studies conducted in several countries show that active community participation through empowerment can provide more value in the success of regional development. There are two important factors in the implementation of community empowerment: (1) Actualization: Self-expression of each member of the community in the decision making process, at the stage of dialogue and discovery and development for the next program and it becomes an important consideration in group decision making; and (2) Existence Co-actualization: Behavioral symptoms that show joint actualization in groups or communities that have implications on the existence of groups or communities in overcoming social and environmental problems (Agribisnis, 2002).

In developing countries, the realization of tourism form has various roots, principles and shareholders and are faced with difficulties and complexity due to fund management; limited institutional capacity; lack of funds; inefficient regulatory system; limited knowledge; and high levels of poverty and unemployment. In addition, true ecotourism requires the formation of meaningful, sustainable and fair relations between local people and tourists. Planners and policy makers must consider all the basic principles of ecotourism in planning, development, operations and marketing. Failure to meet broad requirements and adoption of approaches that are not in line with the concept of ecotourism, especially in developing countries, have not improved the welfare of local communities but instead have turned into a major source of economic inequality, social conflict and ecological sustainability problem (Mosammam et al., 2016).

Ecotourism is tourism that takes responsibility for the natural areas that are conserved and improves the welfare of local people. Based on the principles of sustainability, the main focus of ecotourism is on experience and learning about nature, ethical management, non-consumptive behavior, local orientation and contribution to conservation of the area (Ashok et al., 2017). Ecotourism has an impact on the environment, socio-economy and culture, as witnessed in many ecotourism destinations.
The objectives of this study are 1) to identify the economic potential based on local resources to be developed into a pilot project in the regional development; 2) to analyze the factors that influence the success of the potential development; and 3) to analyze the needs that influence the increase of community and stakeholders’ participation in regional development activities.

Methodology

This study uses a sequential mixed method, combining quantitative and qualitative methods in sequence. Geographic Information System (GIS) was used to answer the first goal. The standard procedure of GIS is collecting data, processing data, building databases, spatial analysis, and serving graphical data. The benefits of using GIS include 1) Natural Resource Inventory, identifying natural potentials spread in an area that will facilitate the management of natural resources. Analytical Hierarchy Process (AHP) was used to answer the second objective and is derived into the following factor tree:

![Figure 2 AHP analysis factor tree](image)

The third objective will be analyzed qualitatively with ATLAS.ti with a network of needs and activities.

This study uses (1) secondary data obtained from BPS, Agriculture Office, Tourism Office, Environment Office and Bappeda; and (2) primary data obtained from in-depth interviews with the three stakeholders: the government, business actors and the community.

Results and Discussion
The results of the GIS analysis to answer the first goal indicate that economic potential in Kebumen Regency is focused on the potential of natural resources which include forestry, agriculture, fisheries, plantations and livestock, described in detail as follows:

1. Forestry is dominated by mangrove forests located along the coastal areas, although some of them are in the form of protected forests. Forestry areas include Mangrove Forest Areas; beach areas of Ayah, Menganti, Pasir, Karangbolong, Suwuk, Petanahan; and natural caves of Jatijajar, Petruk, and Barat.

2. Fisheries is one of the main sources of domestic products in Kebumen which consists of capture fisheries and marine fisheries. Marine fisheries areas include PPI Logending on the beaches of Ayah, Argopeni, Karangduwur, Srati, and Pasir, while inland fisheries are in Purwodadi, Kuwarasan (Catfish and Gourami) and Sidoluhur, Ambal (Sidat fish) areas as can be seen in the Figure 3 below.

![Fisheries Potensial Map](image)

**Figure 3. Geographic Information System of Fisheries Potential in Kebumen Regency**

*Source: Raw data processed, Kebumen Regency Bappeda 2017*

The potential map shows that capture fisheries are dominated by largehead hairtail, pomfret and shrimp. The product is superior to Kebumen which, in addition to being sold in the form of fresh fish, is also sold in preserved salted fish.

Agriculture in Kebumen is dominated by horticultural, fruit and coconut plants. Kebumen is the largest coconut producer in Central Java so its coconut sugar production is also well known. Geographically, the agricultural area includes the Puring Tambakmulyo Coast for the development
of horticultural fruit and vegetable crops such as corn, chili, bitter melon, squash, eggplant, papaya, watermelon and Cavendish banana with a land area of up to 10 ha. Fruit Agro Tourism such as Longan and Durian are situated in Sadang and Karangsambung Subdistricts.

Coconut crop data is shown in detail in Figure 2.

![Potential of Coconut Plants](image)

**Figure 4. Potential of Coconut Plants in Kebumen Regency**

*Source: Data processed, Bappeda 2017*

Potential in each sub-district will be given a color sign according to their superior potential: yellow for the high potential of vegetable coconut, green for the high potential of vegetable and fruit coconut, light green for the high potential of vegetables and tobacco, and brown for complete potentials of vegetable coconut, fruit coconut and tobacco.

3. Livestock is dominated by goats, sheep and beef cattle, and there are few dairy cows. Farm potential data is shown in Figure 5.
The vision of 2025 in Kebumen Regency is "Independent and Prosperous Kebumen based on Agribusiness." One effort to realize this vision is the development of the EMAS Region, a development concept that integrates Ecology, Fisheries and Agribusiness with Tourism. EMAS Region must be integrated with public services that create clean and authoritative governance, in accordance with the concept of Good Governance which has principles such as open, accountable, effective and efficient and upholds the rule of law and opens up public participation as broadly as possible.

The following discussion is used to answer the second goal. The second objective of this study is the analysis of factors that influence the success of potential development. AHP processing shows that at the first level, the priority factor is the internal factors with a value of 0.41 followed by the institutional with 0.36 and the external with 0.23 (Table 1).

Table 1 priority factors that influence the success of potential development at level 1

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Priority Value</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional</td>
<td>0.36</td>
<td>2</td>
</tr>
<tr>
<td>Internal</td>
<td>0.41</td>
<td>1</td>
</tr>
<tr>
<td>External</td>
<td>0.23</td>
<td>3</td>
</tr>
</tbody>
</table>

*Source: processed data 2018*
At the second level, education ranks first for the internal factors followed by business owned, education, regional potential and motivation in doing business (Table 2).

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Priority Value</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>0.25</td>
<td>2</td>
</tr>
<tr>
<td>Regional potential</td>
<td>0.25</td>
<td>3</td>
</tr>
<tr>
<td>Business owned</td>
<td>0.27</td>
<td>1</td>
</tr>
<tr>
<td>Motivation</td>
<td>0.23</td>
<td>4</td>
</tr>
</tbody>
</table>

*Source: processed data 2018*

In the institutional factors, the first rank is permit followed by regency government support, networking, and community figures (Table 3).

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Priority Value</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit/Legality</td>
<td>0.30</td>
<td>1</td>
</tr>
<tr>
<td>government support</td>
<td>0.26</td>
<td>2</td>
</tr>
<tr>
<td>Community figures</td>
<td>0.21</td>
<td>4</td>
</tr>
<tr>
<td>Networking</td>
<td>0.23</td>
<td>3</td>
</tr>
</tbody>
</table>

*Source: processed data 2018*

On the external factors, the market becomes the first rank priority, followed by training, capital and production (Table 4).

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Priority Value</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>0.27</td>
<td>2</td>
</tr>
<tr>
<td>Capital</td>
<td>0.21</td>
<td>3</td>
</tr>
<tr>
<td>Production</td>
<td>0.21</td>
<td>4</td>
</tr>
<tr>
<td>Market</td>
<td>0.31</td>
<td>1</td>
</tr>
</tbody>
</table>

*Source: processed data 2018*

The AHP results above show that, at the first level, i.e. priority factors that influence the potential development success, the most influential factors are internal factors followed by institutional and external factors. At the second level of internal factors, business ownership is the first priority, which means
that the community considers that when they have a business, the empowerment process will run more smoothly. The second priority is education which is then followed by regional potential and motivation.

At the second level of institutional factors, the first priority is legal permit followed by government support and cooperation networks. Community leadership is the fourth priority for empowerment. AHP results at the second level of external factors are consistent with the main concepts in business development, namely the market. The market is the top priority followed by an increase in the quality indicated by production training, capital factors, and the amount of production to be made.

The third objective of this study is to analyze the needs that influence the increase of community and stakeholders’ participation in regional development activities. Ecotourism development requires community participation that can be arranged in the following needs and activities:

1. Prime Product Development namely (a) Production, (b) Management, (c) Marketing
2. Capital consist (a) Own capital, (b) Small Business Loans, Corporate Social Responsibility
3. Assistance ie (a) Networking improvement, (b) Institutional, (c) Establishment of Tourism Awareness Group
4. Improvement of Tourism Awareness consist (a) Tourism campaign at community level, (b) Community involvement in tourism development, (c) Soft skill training, (d) Hard skill training

The support of other stakeholders, namely the government, business actors and academics, is one of the main factors in community empowerment. The form of support for each stakeholder is:

1. Government which have program such as (a) Infrastructure improvement, (b) Ease of permit, (c) Event organization to attract tourists
2. Academics which have program like (a) Research and development, (b) Community service
3. Business actors are actor which have program such as (a) Support in tourism facilitation and tourism network cooperation, (b) Corporate social responsibility

Data processing results are shown in Figure 6 below.
Figure 6 Network analysis of needs and activities
The analysis of networks needed and activities in developing ecotourism. There are three main development needs, namely (1) The role of the government, which includes organizing events to increase tourist visits, infrastructure development and business licensing; (2) Business actors and Academics who have roles in facilitation and network development activities, community service, research and development, and corporate social responsibility; and (3) Community empowerment consisting of a) increasing awareness of tourism (b) assistance and (c) superior product development.

CONCLUSION

The results of the analysis show that the economic potential in Kebumen Regency is focused on the potential of natural resources which include forestry, agriculture, fisheries, plantations and livestock. The regional development needs to be comprehensive from upstream to downstream. AHP analysis shows that the factors that influence the success of potential development are internal, institutional, and external factors. Furthermore, needs analysis shows that the community plays a central role but must be supported by other stakeholders, namely the government, business actors and academics.

RECOMMENDATION

This study recommends upstream-downstream development through nature-based ecotourism. The upstream sector that must be prepared is natural conservation combined with access to reachability. The concept of back-to-nature developed in ecotourism must be supported by the provision of facilities and infrastructure that allows visitors to reach and enjoy the nature's beauty. In the downstream sector, tourism support services such as culinary and souvenir typical of Kebumen regency become an important part and need to involve all elements of community, especially those around the tourism destinations.
BIBLIOGRAPHY


