

The development of Tampusu agrotourism area in North Sulawesi, Indonesia

Henny Johanna Kambe¹, M. Sasmito Djati², Bobby Polii³, Luchman Hakim²

¹Graduate School for Environmental Science, Brawijaya University Jl. Veteran, Malang, East Java and Office of Agricultural and Animal Husbandry of North Sulawesi Province, Jl. Raya Manado Tanawangko, Komplek Pertanian, Kalasey 95041, Manado, North Sulawesi

²Department of Biologi, Faculty of Mathematic and Natural Sciences, Brawijaya University, Jl. Veteran, Malang, East Java

³Faculty of Agriculture, Sam Ratulangi University, Manado North Sulawesi

Abstract: Agrotourism is an important approach for rural development and it is especially important in Tampusu area in Minahasa Regency, North Sulawesi. This study aims to determine the role of provincial and stakeholder in Tampusu agrotourism development, identifying attraction, amenity and accessibility aspects, and developing strategy for agrotourism development. Field survey was done in Tampusu area in Minahasa Regency through field survey to identify the role of government and stakeholders, especially in the perspectives of its socio-political aspects. A questionnaire was distributed to 315 respondents to assess the attraction, amenity and accessibility of Tampusu agrotourism area. Developing strategy for agrotourism was done through evaluation of internal and external factor. Data was analyzed using Quantitative Strategy Planning Matrix (QSPM) technique. Result of the research confirms that provincial and local governments need to improve their role and involvement in agrotourism development. Basically attraction, amenity and accessibility are available to support agrotourism development. Surrounding Tampusu Animal Husbandry Research Centre as a main attraction in agrotourism area, there are abundance natural and cultural resources for agrotourism development. Some important strategy for agrotourism development are drawn, namely (1) increasing community active participation and ability to manage their own business in agrotourism, (2) increasing capacity and preservation of local culture to enhance development, (3) strengthening the governmental role to build business relationship and ability to create market for agrotourism development, and (4) increasing facility to increase tourist satisfaction and protect environmental degradation.

Keywords : rural development, conservation, cultural preservation, agrotourism strategy

I. Introduction

Recently tourism grows significantly in Indonesia. Statistics shows that international tourist arrivals increase significantly. In 2015, number of international tourist was recorded about 10.406.759 tourist. The contribution of tourism sector in national earning has been reported significant. Tourism is an important sector to promote local development in many area in Indonesia. Tourism is expected play a major role in local economic development in remote area in Indonesia. Recently, Indonesia government has implemented an ambitious programs to attract 20 million international tourist by 2020 [1] [2] [3] [4].

Tourism in rural area becomes more popular over the next half century. Tourism in rural area has been the subject of research in many countries, reflecting the potential role of tourism for rural economic development and resources conservation. In many countries, agro-tourism can be said as new agro-industry sectors developed by governments, NGO and local community. There are many report on the effect of agrotourism on the rural dwellers. Developing agrotourism has been reported to increase farmer income in developing countries. Most agrotourism practices were beneficial and contribute to local economic development [5] [6]. In Indonesia, agro-tourism was developed as part of the national program for rural economic development. There was visitation from the urban area to the rural area, leading to tourism grows in rural area. The main economical benefits arising from agrotourism includes a range of economical activity generated by local people [7].

There are large variety of agrotourism product, reflecting potential rich of tourism resources in rural area. Rural as an ecosystems rich in term of biodiversity. Basically, the majority of rural people in developing countries use the field for crops cultivation. In other perspectives, however, farm lands are important resources in agrotourism development [6]. Agroecosystem can yield a number of tourism product, including farm trip and tour, agriculture education, indigenous culinary, and festivals. Agrotourism should be an integrated part of programs to introduce and increase rural community prosperity [8] [9].

Human and its socio-cultural system are also resources for agrotourism development. The use of rural ecosystem as a recreational site will inevitably lead to changes in environmental. Tourism affect rural ecosystem in various ways. Another consequence of the increased number of tourist in rural area was the impact of cultural and social aspect of tourist to community. According to scholars, cultural aspects of rural dwellers are particularly vulnerable. Conflict often occurs between local people and tourist. The needs to local attractiveness of tourism destinations is another consideration. Local and traditional knowledge is important for destinations authenticity [10] [11] [12]

In Indonesia, research on agrotourism development is underdeveloped. It seems likely that research in this area will continue to develop and grow; due to increasing interest in agrotourism benefits to agricultural and rural development. Research especially important to provides basic data and recommendation for agrotourism planning and development [13]. One resource are assessed and determined, the strategic development can be drawn systematically.

North Sulawesi is a biodiversity hot spot of Wallacea flora and animals, many of them area recognized endemic. Located approximately four hours away from Jakarta (the capital city of Indonesia) and two hour from Surabaya (the second largest city in Indonesia), North Sulawesi attract large number of domestic and international tourist. In North Sulawesi, tourist enjoys the natural resources, nature-based tourism product and facility offered by provincial tourism authority. National park and protected area is the main tourist attraction in North Sulawesi. The strong demand for nature-based tourism product has resulted in growing pressure on national park [10]. It can be observed in Bunaken national park. Present concentration of tourist in Bunaken has been identified as problems in sustainable tourism in North Sulawesi [14]. Providing alternative sources of income from tourism sectors is major management challenges, especially in regional tourism industry. Alternative areas that could provide similar benefits should be developed as tourism destinations. Rural area and agrotourism, are therefore relevant to be developed as one of the important strategy. Scholar point out that use of agroecosystem for tourism purposes has had positive impact, especially in economic aspect. In North Sulawesi, few studies conducted in agrotourism development [5] [6] [7] [8]. This study aims to determine the role of provincial and stakeholder in Tampusu agrotourism development, identifying attraction, amenity and accessibility aspects, and developing strategy for agrotourism development.

II. Methodology

Study area

The study was set up Minahasa Regency, North Sulawesi. Located within an easy access from Manado-the capital city of north Sulawesi, the Tampusu and it surrounding area in Minahasa highland provides a variety of famous recreational sites, such as Tomohon city, Mt. Mahawu, Lake Linow and Lake Tondano. The highland area of North Sulawesi is located in the centre of province and considered to be of highland agricultural area. There are several mountains within the area, namely Mt. Lokon, Mt. Mahawu, and Mt. Masarang. Lakes play an importance role in regulating water resources of the surrounding regions. A number of lakes are also found in this regions, including Lake Tondano, Lake Tampusu, Lake Linow, and Lake Pangolombian [14] [15]. The central part of the Tampusu agrotourism area was animal husbandry institution called Research Centre for Animal Husbandry, Reproduction and Feeds. This institution is a research centre for animal husbandry, owned and managed by central government of North Sulawesi in Manado.

Methods

Methods consist of several stages. Firstly, the field survey was conducted to identify the socio-political and natural aspects of Tampusu and its surrounding area. Secondly, a questionnaire was distributed at 315 respondents to assess the attraction, amenity and accessibility of Tampusu agrotourism area. Responses of question as provided following Likert scale, namely strongly disagree, disagree, neutral, agree, absolutely agree. Respondent's responses regarding question items in each aspect, namely attraction and amenities was calculated descriptively. Thirdly, the evaluation of internal and external factor was analyzed. Data was calculated using Quantitative Strategy Planning Matrix (QSPM) technique.

III. Result And Discussion

The socio-political aspect of development: the role of government and stakeholders

Recently, governments in North Sulawesi are beginning to identify and recognize the needs to designate some potential area as tourism destination, including rural area. Provincial and local governments play an important role in the policy aspect affecting agrotourism development in Tampusu. Perhaps the most important and crucial aspect in agrotourism development in Tampusu are planning and funding. This study found that politically provincial government has planning to increase the role of Research Centre for Animal Husbandry, Reproduction and Feed as agriculture science park. There is also potentiality to increase the role of research centre as principal component of agrotourism development in Tampusu area. There are however lack of

concept development. In case of Tampusu agrotourism area, planning is systematic and creative activity, and the successful planning means combining all of the aspect into one objective, the sustainable agrotourism area. Planning is a complex task that require a number of stakeholders. Agrotourism area without proper planning are often weak in one or more area, including continues support from funding [16].

A crucial issues in agrotourism development in Tampusu and its surrounding area is designing policy that benefits to local people. The agrotourism success is also directly influenced by public and stakeholder involvement [17]. In Tampusu agrotourism area, it is essential that public and stakeholder opinion should be involved during the planning process. Tourism in rural area, if not planned and managed, may create political risk, including social clash, and changes the cultural systems of local community. There are two form of local people involvement in tourism development: active and passive involvement. In the first types, local people involve in each part of the tourism development, ranging from planning, decision making, implementation and evaluation. Scholars point out that this involvement types give many benefits for local people, especially in term of economic development and prosperity [17] [18].

Preservation of traditional knowledge in agricultural systems has beneficial effect on agrotourism sustainability and competitiveness. It is also increase the attractiveness of destination. Traditional paddy field and gardens management, including its communal and voluntary works called *Mapalus*, are considered the common heritage of local people and it is the potential resources for cultural attractions. Such practices would not only increase destination attractiveness, but also increase the sustainability of community and its environment. The involvement of local culture attributes in agrotourism development, however, must be carefully considered since it will contribute to the community social aspect. Community development may be necessary to ensure sustainability of the community [19].

Attraction, Amenity and Accessibility aspects

Attraction is an important part of tourism. Field survey confirm that there are numerous potential attraction in Tampusu agrotourism area, including lakes, mountain and man-made attractions. Four lakes have been found in the Tampusu Agrotourism area, namely Lake Linow, Lake Pangolombian, Lake Tampusu and Lake Tondano. Two lakes, namely Lake Tondano and Lake Linow has been visited by tourist and intensively used as tourist destination in North Sulawesi [11].

The respondent's perspective to tourism attraction development and amenity are given in Table 1 and 2. In case of Tampusu agrotourism area, the development of Research Centre for Animal Husbandry, Reproduction and Feeds as national agro-technological park may be an attractive sources of tourism in Tampusu area.

Table 1. Community perception to the development of attraction and programs in Tampusu agrotourism

Attraction for Tampusu Agrotourism					
Natural and existing			Man-made		
Attractions	X	Notes	Attractions	X	Notes
Agriculture science park	4.5	Absolutely agree	Museum	4.1	Agree
Eco-farmland	4.4	Absolutely agree	culinary	4.7	Absolutely agree
Protected forest	4.6	Absolutely agree	Horse riding	4.5	Absolutely agree
lakes	4.5	Absolutely agree	Art complex	4.5	Absolutely agree
Landscape and natural acoustic	4.1	Agree	Local art	4.4	Absolutely agree

Amenity has an important role to increase destination attractiveness or value. In Tampusu agrotourism area, the main amenities which are important to increase destination performance include accommodation (i.e. guest rooms, home stay, eco-lodge), restaurant, swimming pool, parking area, health facility and media exhibition. There are, however, need improvement to meets recreation standart.

Table 2. The perception of respondents to the priority of tourism amenity Tampusu agrotourism

Amenity	X	perceptions	Notes
Praying room	4.3	Absolutely agree	Basic need of people, especially for domestic tourist
Playing ground	4.5	Absolutely agree	Needed to facilitate children needs
Swimming pools	4.3	Absolutely agree	Needed for relaxation
Lodge	4.4	Absolutely agree	Needed to stay in few days
Centre of souvenir	4.5	Absolutely agree	

The accessibility to Tampusu agrotourism area has been facilitated by national road from gateways systems, including road from Manado International airport and Bitung Port. The quality of road can be classified excellent, but in some point road was narrow. The accessibility system which are involve transportation system and entry gates facility was drawn in Fig. 1. Accessibility especially becomes the national and provincial responsibility. It is because the development of such infrastructure related to the funding which area politically depend on and become the commitment of central and provincial government. Attention to the accessibility is

the important issues in tourism development and accessibility become critical point for tourism satisfaction and destination competitiveness [20].

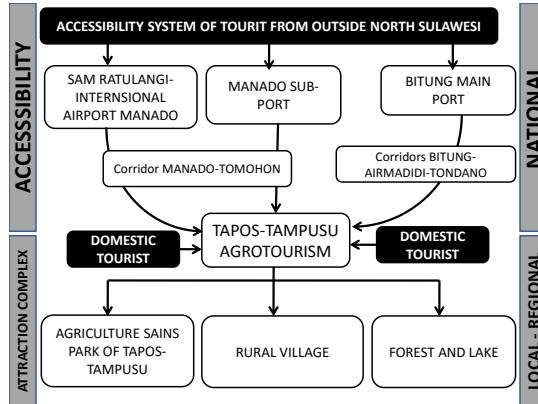


Fig. 1. The accessibility system of Tampusu agrotourism

The agrotourism development analysis

Identification of external and internal factors which are contributes to the agrotourism development are essential component in planning, including in Tampusu agrotourism area. The agrotourism development has identified some crucial aspect in term of strength and weaknesses as an important aspect of internal factor (IFAS) and opportunities and threats as an important external factor (EFAS). All of the potential list of such aspect is given in Table 3.

Table 3. The list of internal and external factor for agrotourism development in Tampusu

No.	Internal and External factor	Rating	Weight	Score
	Internal factors			
	<i>Strengths</i>			
1	Support of potential resources	5	0.10	0.000
2	Support of local culture and culinary	4	0.08	0.481
3	Local social relationship (<i>Mapalus</i>) was preserved	5	0.10	0.308
4	Local community hospitality	4	0.08	0.481
5	Traditional culture was preserved	4	0.08	0.308
6	Availability of communication system	4	0.08	0.308
7	Community respect to development	5	0.10	0.308
8	Availability of transportation system	4	0.08	0.481
	<i>Weaknesses</i>			
1	Lack of governmental support	3	0.06	0.000
2	Lack of coordination	3	0.06	0.180
3	Lack of community involvement in development	1	0.02	0.180
4	Lack of human resources with skill	2	0.04	0.000
5	Poor facility	2	0.04	0.080
6	Lack of accommodation	2	0.04	0.080
7	Lack of modality	2	0.04	0.080
		50	1.00	
	External factors			
	<i>Opportunities</i>			
1	Support for resources conservation	5	0.12	0.000
2	Needs of local culture and culinary attractions	4	0.09	0.581
3	Awareness and respect of indigenous knowledge	5	0.12	0.372
4	Hospitality	4	0.09	0.581
5	Awareness and respect traditional culture	4	0.09	0.372
6	Support of communication system	4	0.09	0.372
7	Community development	5	0.12	0.372
8	Support of transportation system	4	0.09	0.581
	<i>Threat</i>			
1	Lack of government support in modality	2	0.05	0.000
2	Introduction and impact of foreign culture	2	0.05	0.093
3	High criminality	2	0.05	0.093
4	Poor of safety systems	1	0.02	0.093
5	Increase of pollution and environmental problems	1	0.02	0.023
		43	1.00	

Based on the calculation of internal and external factors above, it is clear that internal factor has highest value than external factor. This means that there are opportunities for further development. Further analysis for further development shows that there are some strategy resulted from combination of factors, namely increasing strength aspect to respond opportunities, namely increasing community active participation as an entrepreneur which has ability to manage their own business in agrotourism. According to scholars, local people should be active as participant in tourism development [17] [18] [19].

The second important strategy is increasing strength aspect to reduce threats, namely increasing capacity and preservation of local culture to enhance development. External culture has been reported contribute to indigenous culture and systems disturbance. The threats and disturbance most often cited in small countries and developing countries [21].

The third strategy was reduce weaknesses to counterease threats. It includes strengthening the governmental role to build business relationship and ability to create market for agrotourism development. In many regions in developing countries, there is no governmental or less governmental involvements presence in tourism development, especially in term of entrepreneurship aspect. Funding for developing attraction, amenity and increase accessibility is the basic problems, especially in developing countries. Governments in developing countries are often paid low commitment and support for such important aspect of tourism. The lack of adequate financial support makes it difficult to accelerated tourism development. The problems for local governments are that they are lack of entrepreneurial skill to get support from stakeholders, especially private sectors. There are a number of alternative for provincial and local government to generate funding. The involvement of stakeholders through CSR programs may reduce such weaknesses [22] [23].

Fourth strategy is increasing facility to increase tourist satisfaction and protect environmental degradation. Funds are often reported as a crucial limitation and problems of agrotourism development, as shown in case of agrotourism development in Tampusu agrotourism. In such a case, provincial and local government need to be active in promotion, with the special objectives is generating public support. In many cases, the funding support from CSR programs can be used to increase the tourism facility. In North Sulawesi, some private sectors such as PERTAMINA may be able to support development of facility. Another possibility for funding is the formation of multi-stakeholder collaboration that would concentrate on funding agrotourism area development project. Numerous facility ideally related to the characteristics of agrotourism and sustainable tourism principles. In many countries, this approach has been reported success to initiate agrotourism development [22] [23] [24].

IV. Conclusion

This study confirm that there are potentiality for Tampusu agrotourism development. Animal Husbandry Research Centre in Tampusu can be addressed as a main attraction in agrotourism area. There are abundance natural for tourism development, ranging from lakes to mountain and man-made attractions. There are also cultural resources for tourism development. The role and improvement of provincial government and local stakeholders should be improved. Some important strategy for agrotourism development was drawn, namely (1) increasing community active participation as an entrepreneur which has ability to manage their own business in agrotourism, (2) increasing capacity and preservation of local culture to enhance development, (3) strengthening the governmental role to build business relationship and ability to create market for agrotourism development, and (4) increasing facility to increase tourist satisfaction and protect environmental degradation.

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