

# Sustainable Tourism Management Model in Bromo Tengger Semeru National Park

Sunardi<sup>1</sup>, Nanny Roedjinandari<sup>2</sup>, Estikowati<sup>3</sup>

<sup>123</sup>University of Merdeka Malang

## **Abstract**

Bromo Tengger Semeru area is a strategic area for national and world tourism, where there is natural and cultural potential. Sustainable tourism management is needed so that the Bromo Tengger Semeru National Park area becomes a useful destination for the community for a long time. In order to make the area a sustainable tourist attraction, it is necessary to prepare local stakeholders and communities. The purpose of this study is to examine the sustainable tourism management model with qualitative and quantitative research methods with descriptive analysis in order to identify and explore the socio-cultural aspects of society, the environment, economic growth, tourist satisfaction and community welfare. This study produces findings in the form of a tourism management model as the main objective of the National Tourism Development pattern based on natural and cultural beauty with the main pillars of environmental preservation, cultural preservation, tourist satisfaction, a healthy economy and community welfare.

**Keywords:** *Management, Sustainable Tourism, Bromo Tengger Semeru.*

## **I. Introduction**

In general, tourism is one of the businesses that has a significant contribution to the development of a country's economy, because it can have positive implications for new jobs, can increase income yields and increase the standard of living of people in the area and become a driver for the emergence of other businesses (Nuruddin et al., 2020). Tourism development in the current era is mostly directed at sustainable tourism development, because the sustainable tourism model can lead to the use of natural and human resources together in the long term (Sharpley, 2000). During the last few years, the number of foreign tourist arrivals has increased significantly, during 2019 the number was around 16,106,954 (Bps.go.id, 2020). However, due to the Covid-19 pandemic, the number of foreign tourist arrivals has decreased and that is also true in general in the world. The high number of foreign tourist visits to Indonesia is inseparable from the variety of tourist attractions that rely heavily on natural beauty, historical heritage and cultural diversity. Bromo Tengger Semeru area is a strategic area for national and world tourism (Kompas, 2012), which relies on its natural potential, so that its existence must be utilized by local governments that cover, including Malang, Lumajang, Pasuruan and Probolinggo Regencies. They must have creative ideas to develop this natural potential by involving various components of society in promoting potential that is not owned by many other districts in Indonesia. If it is managed professionally and with active community involvement, it is not impossible that it will be able to have a significant impact. According to Ing Wu cited in Putri & Manaf (2013: 173), tourism is

one of the fastest growing sectors, which is shown by the increase in state income from the tourism sector which supports the economic growth of a nation.

Referring to Government Regulation Number 50 of 2011 concerning the National Tourism Development Master Plan 2010-2015 (Yudhoyono, 2011). The three of them have the main function as a national tourist attraction which has a major influence on several aspects including economic, social and cultural, natural resource empowerment, environmental carrying capacity, and defense and security.

Bedugul Bali is one of the most famous natural tourist objects in the world, because of the formation of good relationships between tourism stakeholders and tourism actors in Lake Buyan, Tamblingan and Beratan in the Bedugul Caldera, where the three have formed a relationship pattern commonly called Tri Ning Danu (Sunarta et al., 2019). Nusa Penida as a natural tourist attraction has also been known to the world because it is able to explore all the tourism potential there and the involvement of the local community and its several cultures, both tangible and intangible (Nuruddin et al., 2020), so that a sustainable tourism model is created that is in harmony from the cultural aspect, human, economy and ecology.

Bromo Tengger Semeru National Tourism Development Area (NTDA) is part of the 10 Tourism Priority Destinations initiated by the Ministry of Tourism as sustainable tourism in Indonesia. The sustainability of tourism can be measured based on three criteria, namely: (1) there is no waste of natural resources use or depletion of natural resources; (2) no pollution and other environmental impacts; (3) its activities must be able to increase useable resources or replaceable resources (Kementrian Lingkungan Hidup, 1990).

Sustainable development is not only limited to the use of natural resources at that time, but also considers its continuity (Eko, 2019). Besides that, there must also be a balance between ecological, economic and social interests, the interest to develop must be in harmony with nature and humans, but still authentic and energy efficient (Andres, 2018). On the other hand, economic sustainability is interpreted as the existence of investment activities carried out today that must continue to function for future generations, in the long term (Paunović, 2017).

It needs to be watched out, although tourism development can provide great benefits for people's lives, tourism development can also be a source of damage to the natural environment, such as land use change and small-scale environmental pollution; changes in community livelihood sources; a change in work ethic; low use of typical regional architecture and trigger congestion; dependence on the accommodation sector; triggers for high product prices; and the welfare of workers in the non-accommodation sector has received less attention (Sumiati et al., 2018).

In addition, the impact of tourism on the emergence of various socio-cultural conditions which includes elements of coercion, dishonesty and fees that are not in accordance with the quality of service is very disturbing to tourists even though it seems simple (Abimanyu, 2010). In the end, it is feared that various symptoms of change will have a significant impact in the effort to increase tourism growth in East Java which is developing sustainable tourism.

Communities who experience a shift in cultural, social values and deteriorating environmental quality are certainly not prerequisites that support efforts to develop sustainable tourism in the Bromo Tengger Semeru National Tourism Development Area (NTDA). As a result of this,

Andres et al (2018) explained that it will have an impact on visitor satisfaction, because one of the things that affects visitor satisfaction is reflected in the culture of honesty from the local community.

Based on the explanation above, this study aims to test a sustainable tourism management model in the Bromo Tengger Semeru Tourism Development Area, East Java Province. In order to obtain maximum research results, this study uses some of Muller's concepts and their applications related to the readiness of stakeholders in realizing long-term tourism sustainability. The aspects that are focused in this study are environmental preservation, cultural preservation, tourist satisfaction, a healthy economy and the impact on community welfare.

Sani et al. (2020) study of Sirah Kencong Tourism Area in Blitar shows that the ideal model to design in order to increase tourist attraction similar to Bromo Tengger Semeru is to use the Destination Management Organization (DMO) model. Destination Management Organizations (DMOs) are professional managers whose members consist of local governments, the private sector and the community who support increased tourism, security and provide a positive image for tourist destinations.

## **II. RESEARCH METHOD AND THEORETICAL STUDY**

This research uses qualitative and quantitative methods with an emphasis on the search method by conducting interviews with several stakeholders related to the object of research. Another method of searching for data was also done by distributing questionnaires as many as 186 respondents. The primary data generated was obtained by conducting indepth interviews with stakeholders who were considered to have experience and knowledge about tourism development in Bromo Tengger Semeru area. The indepth interviews were conducted with 6 stakeholders including the tourism office, tourism awareness groups, community leaders, Bromo Tengger Semeru Center, and travel company associations. The questionnaire method is used to find data from tourists.

The sources were determined by purposive sampling and snowball sampling methods. As for obtaining internal validity from the speakers, the results of the interview were then transcribed according to the original and then shown back to the informants to confirm the validity of the answers and information that had been submitted. The method of analysis used in this research is Qualitative Content Analysis, which consists of emphasis on emerging categories and recognition of the significance for understanding the meanings. The 4 steps that will be taken to be able to analyze the data after the interview data are obtained are: (1) identifying initial themes and constructing an index; (2) labeling the data; (3) sorting the data; and (4) summarizing or synthesizing the data (Park and Kim, 2015).

The theoretical study in this research is to use the theory of sustainability. In general, this theory has been applied in various development sectors, one of which is the tourism industry. The purpose of applying the concept of sustainability in tourism is to have a positive impact or benefit on the environment and local economy, as well as a positive impact on the social and cultural environment in the region. It is hoped that sustainable tourism products can be carried out in harmony with the local environment, society and culture. Sustainable tourism

development policies focus on the use of natural resources and the use of human resources for a long period of time (Baskoro & Rukendi, 2008).

The sustainable model tourism community or society plays a very important role and must be used as the subject of development, because according to Muller (1994) in Cooper (2016), it explains that the indicators of sustainable tourism include 5 aspects that cannot be separated from each other, namely: a sustainable economy, healthy, community welfare, visitor satisfaction, environmental preservation and cultural preservation. Thus it can be stated that, sustainable tourism management can only be carried out with the readiness and synergy of stakeholders, where the active role of local communities and tourists is to preserve nature and culture.

Sustainable tourism is also expected to maintain a balance between the needs of the tourism industry, support for the environment and local communities. So, the principles of quality, continuity and balance must be applied in the development of sustainable tourism. In sustainable tourism management, it is necessary to always ensure that the tourism objects that are developed do not interfere with the existing environmental ecosystem. In addition, the local community is also not only an object for the sake of fulfilling the needs of a better life.

### **III. ANALYSIS AND DISCUSSION**

Bromo Tengger Semeru area is a national park which has been established through the Declaration of the Minister Agriculture No. 736 / Mentan / X / 82 dated October 14, 1982. Bromo Tengger Semeru National Park (BTSNP) is located in East Java Province and spans 4 districts, namely Pasuruan, Probolinggo, Lumajang and Malang. BTSNP is managed by Central Bromo Tengger Semeru National Park (CBTSNP) and has a land area of 50,276.3 hectares. Bromo Tengger Semeru National Park is visited by many domestic and international tourists (90% domestic tourists).

Bromo Tengger Semeru National Park Center opens 4 (four) lanes for accessibility to BTSNP. The route includes the entrance to Cemorolawang in Ngadisari Village, Probolinggo Regency, the Wonokitri entrance in Wonokitri Village, Pasuruan Regency, the Coban Trisula entrance in Ngadas Village, Malang Regency and the Ranupani entrance in Ranupani Village, Lumajang Regency. Most tourists use the Cemorolawang entrance route in Probolinggo Regency to get to BTSNP. The number of tourists who access BTSNP through the Coban Trisula entrance in Malang Regency is less than the other entrances (Khoirul, interview, 15 March 2020).

As an effort to attract tourists, readiness is needed between the government and other stakeholders to work together so that the Bromo Tengger Semeru National Park area can become a sustainable tourist destination, while the participation of each stakeholder is as follows: First, synergy between the Regional Government and the Central Government, Balai Conservation of Natural Resources in Malang area by involving all components of society as well as other stakeholders in the Bromo Tengger Semeru NTDA area to promote and preserve its potential in order to attract tourists to visit; Second, the development of tourism in the Bromo Tengger Semeru area to form integrated and synergistic tourism destinations by emphasizing the preservation of nature and culture, as well as the involvement of stakeholders in tourism activities; Third, commitment to implementing destination governance based on partnerships in equality towards sustainable tourism development (Ansori, interview, 15 March 2020).

The development of the Bromo Tengger Semeru area will increase East Java tourism assets and provide great opportunities for the Province of East Java, so that joint steps and synergies are needed between government agencies, the private sector, especially tourism industry entrepreneurs, the participation of the community and all stakeholders in supporting tourism development in Java. East. Breakthrough efforts need to be designed and it is necessary to formulate concrete and operational policy steps in order to achieve the stability of tourism destination management in the era of regional autonomy and globalization (Sunarprawiro, interview, 15 March 2020).

In order to increase tourism potential in TNBTS, all tourism offices in Malang, Pasuruan and Probolinggo Regencies have made various kinds of policies which include: First, developing tourism villages in Gubug Klakah Village, Poncokusumo District and providing guidance to people in these villages to be able to serve tourists directly by providing a decent and clean homestay, direct socialization to the community and organizing the best sanitation competition in Poncokusumo District, Malang Regency; Second, promoting other tourism potentials around TNBTS so that tourists are not only concentrated on Mount Bromo and Mount Semeru but also can enjoy other tourism potentials in Poncokusumo District which include camping ground, waterfalls, rafting and cultural tourism, religious tourism, hermitage and baths; Third, optimize the existence of the Court in Wonokitri Village, Tosari District, Pasuruan Regency as a new Jeep or Jeep Point post (Hari, interview, 19 March 2020).

Beside that, the relevant government has also made several breakthroughs which include: First, encouraging and increasing the standardization and certification of tourism businesses; Second, participation in capacity building and quality of function and service facilities to develop facilitation schemes to encourage the growth of tourism enterprises in micro, small and medium scale businesses; Third, encourage the provision of incentives to use products and themes that have local uniqueness and uniqueness; Fourth, improving the competitiveness of accessibility which is manifested in the form of capacity building and quality of transportation services that support the ease of travel for tourists to tourism destinations (Ansori, interview, 15 March 2020).

### **1. Culture and Environmental Sustainability**

Based on the conclusions of several informants in the BTSNP tourist attraction area, some information and data were obtained about the culture and environmental conditions in the area. The Tengger tribe in three villages in Malang, Pasuruan and Probolinggo districts recognize the concept of “anteng-seger” (Tengger) which means peace and prosperity. In addition, there are also concepts that underlie the three-way relationship, namely the human relationship with God, the human relationship with humans, and the human relationship with the natural environment. Tryadic relationshi (Supriyono, interview, 17 March 2020).

The form of participation in tourism development is reflected in the institution in a community which is a form of local wisdom, which acts as a social system that regulates the hierarchical structure of social and community groups, in the form of customary organizations consisting of several customary groups. This is the case in the three villages where there are traditional organizations in charge of managing community life, namely religious leaders and traditional shaman institutions. The concept of Hindu Tengger is that there is a grouping between religious systems that are derived



from the teachings of God based on Hinduism and customary systems derived from beliefs and traditions passed down from generation to generation from the ancestors of the Tengger Tribe (Yulianto, interview, 17 March 2020).

The attitude of life of *sesanti panca setia*, harmonious relationship, *sanjan-sinanjan* (visiting each other), *sayan* (mutual cooperation, helping each other to help) which is based on the slogan “*sepi ing pamrih, rame ing gawe*”, and *genten kuat* (mutual help) are the basic provisions which regulates human-human relations; and An attitude of life that considers the natural environment (water, land, forest, moor) as a *panguripan* resource that regulates human relationships with the natural environment. In addition, there is still a belief that the land or yard is “haunted” so that there is an attitude that you should not carelessly cut down trees, unless the trees disturb the environment (Indayani, interview, 17 March 2020).

The relationship between man and nature is manifested in a slogan which reads “cut one plant two”, meaning that if a community cuts one tree, then he must plant at least two trees of the same type. However, in the implementation stage, the teachings of 8 Hindu religions were carried out with the teachings of the customs/ beliefs of the Tengger Tribe. This is reflected in in addition to carrying out religious activities based on the teachings of Hinduism, the Tengger tribe also obediently carries out various traditional ceremonies. The existence of groupings of religious and customary activities has an effect on the division of duties and functions of each religious leader and traditional shaman institutions, which are still preserved until now, are an attraction for tourists (Indayani, interview, 17 March 2020).

## **2. Tourist Satisfaction**

In general, the more frequent tourists visit tourist attractions, the more opportunities for increased revenue from managers, so that tourist satisfaction is one of the important factors that must be considered by tourist destination because tourists are a source of income. The average tourist satisfaction in the Bromo Tengger Semeru area has a good level of satisfaction. The following is the perception of satisfaction during the visit of tourists, both foreign and domestic tourists in 2019, can be seen in Table 1.

Data regarding the level of tourist satisfaction from the aspects of attractiveness and image can be explained in Table 1. Attractiveness and image, the satisfaction of tourists at the tourist attraction of Bromo Tengger Semeru NTDA on average 3.67 percent or on the criteria of being satisfied. The indicator that has the highest level of satisfaction on the indicator of interest in natural beauty is 4.34 and 4.26 percent of interest in festival activities or traditional ceremonies. According to some visitors, the natural beauty and traditional words such as the Kasodo Ceremony or Yadya Kasada Day are the days of the offering ceremony carried out by the Tengger community by offering several offerings to Sang Hyang Widhi, are reasons for traveling to Bromo Tengger Semeru. The ceremony is held every 14th of Kasada Month and is always an attraction for tourists to come to witness the procession on Mount Bromo. The indicator that has a low level of satisfaction on this dimension is the affordability of the price / cost at tourist attractions compared to other tourist attractions by 2.59 percent or on the criteria of being quite satisfied.

According to most respondents, the price of food and transportation is quite expensive and there is no transparency in prices. Means have a value of 3.26 percent or the criteria are quite satisfied, the availability of roads to tourist objects is worth 3.41 percent, which is considered sufficient. The road conditions to the tourism objects and the availability of road directions along the tourist objects are quite adequate. However, the availability of public transportation along the tourism object, which has a score of 2.97 percent on the criterion of dissatisfaction, according to some visitors should get the attention of the tourist destination manager. Visitors complained about the availability of means of transportation which was only monopolized by the Jeep association, so the price was expensive.

Regarding infrastructure, the cleanliness of toilets in the tourist attraction area only has a score of 2.45 percent or the criteria are not satisfied. Respondents complained about the availability of water, available lighting and the cleanliness of the toilet.

From the various complaints that exist, it should be able to provide input to the manager to pay more attention to the cleanliness of the toilets in the tourist attraction area. Likewise, the indicator for the availability of places of worship is only worth 2.76 percent. According to most visitors, the availability of religious facilities was still insufficient. The availability of restaurants and drinks and the availability of souvenir shops and parking areas have been considered quite satisfied, but in the future the three infrastructures need to be paid attention by the tourism distribution manager.

Statement	Mean Value
Tourist Attraction and Image	
Attracted to the beauty of nature	4,34
Attracted to the festival activity or traditional ceremony	4,26
Cleanliness of tourist destination	3,21
Friendliness of tourism bussiness owner and employess	3,83
Price affordability compare to other tourist destination	2,59
Comfort and Safety	3,77
<b>Average</b>	<b>3,67</b>
Facilities	
The availability of access to tourist attraction	3,41
Road condition to tourist attraction	3,17
The availability of public transport	2,97
The availability of road mark	3,51

<b>Average</b>	<b>3,26</b>
Amenities	
Avalibility of accomodation	3,52
Availibility of praying facilities	2,76
Availibility of restaurant	3,42
Availability of souvenir shop	3,23
Availibility of parking lot	3.54
Availability and cleanliness of public toilet	2,45
<b>Average</b>	<b>3,15</b>

Table 1 Tourists' Satisfaction

### 3. Economic Growth

Economic growth in the three regions of the Bromo Tengger Semeru area for the period 2016 - 2019 grew 5.30 percent, an increase of 0.03 percent compared to 2018 of 5.27 percent and an increase of 0.10 percent in 2017 by 5.20 percent. The increase in economic growth in the three Bromo Tengger Semeru areas was achieved by the business field providing accommodation and food and drink. One of the causes is the increasing number of tourist visits to the Bromo Tengger Semeru area. Of the three existing regions, all experienced positive growth of around 5.30 percent.

Of the three Bromo Tennger Semeru areas, only Malang Regency experienced a growth slowdown of minus 0.06 percent, while the highest growth was in Probolinggo Regency at 0.09 percent. One of the causes of the high economic growth in Probolinggo Regency is the contribution from the tourism sector in the Bromo area which is the mainstay of the tourism sector in Probolinggo Regency and East Java. From the conditions of economic growth, it can be said that the tourism sector plays a role in increasing economic growth which also has an impact on the level of community welfare.

No	District	2017	2018	2019
1	Malang	5,43	5,56	5,50
2	Pasuruan	5,72	5,79	5,83
3	Probolinggo	4,46	4,47	4,56
	<b>Average</b>	<b>5,20</b>	<b>5,27</b>	<b>5,30</b>



Table 2 Economic Growth of Bromo Tengger Semeru Area from the year 2016-2019 (in %)

Source: BPS East Java 2019 data processed.

#### 4. The Wellbeing of The Society

Tourism is one of the people's economic efforts that need to be developed in order to improve the welfare of the community and the development of an area, so that there is a need for directed and sustainable guidance. The impact of tourism on society can provide welfare, the indicators can be seen from the aspects of education, housing and the environment, poverty, other social and employment aspects.

##### *Education*

The quality of reliable human resources is determined by education, because education is a window to knowledge, so education is considered to have a strategic role, namely the key to the progress of a nation. In the community around the Bromo Tengger Semeru tourist area, the value of formal or non-formal education participation is 3.58 percent. This indicates that the community's participation in pursuing the Senior High School level or equivalent is 3.45 percent, so that the desire of the community to pursue a higher level of education is getting better.

##### *Housing and Environment*

The 1945 Constitution (UUD) article 28 H paragraph 1 states that everyone has the right to live in physical and mental well-being, have a place to live and have a good and healthy living environment and have the right to obtain health services. The excerpt from the 1945 Constitution emphasizes that every resident in Indonesia has the right to live in and live in prosperity. The quality of housing and environment in the tourist area by 2.09 percent. This means that housing and the environment are problems that need more attention by local governments, especially on issues related to preserving springs.

Preservation of springs amounted to 4.32 percent, proving that the dependence of the community on the existence of protected springs for daily activities is quite high, so that efforts are needed to conserve water sources.

##### *Poverty*

Poverty is a condition in which people are unable to fulfill their basic rights to maintain and develop a decent life. These basic rights include, among others, the needs for clothing, food, health, education, health and work. The results of the study obtained an average figure of 3.20 percent. This indicates that the people there are quite prosperous, so that there are no significant obstacles to meet basic needs such as clothing, food and shelter. The highest level of community welfare in the Welfare Family II category was 4.34 percent, indicating a relatively small poverty rate, because most people have been able to meet the basic needs of a decent life.

##### *Other Social*

Individual comfort is an indicator of community welfare which is manifested in a comfortable and safe life. From other social indicators it is 3.66 percent. This shows that the level of satisfaction with social life is in the satisfied category. This shows that the feeling of satisfaction from the comfort and safety level is 4.46 percent. This indicates that the existence of tourism does not have an impact on increasing crime. Likewise with activities to fulfill tourism needs, receiving credit facilities and

guaranteeing health services, some people are satisfied. Thus it can be said from other social indicators, that the existence of tourism destination can improve welfare and control the level of security.

### *Employment*

Labor is the capital of the development movement. The number and composition of the workforce will continue to change in line with the demographic process. In the location of this study, the total workforce reached 3.74 percent, so that the level of the workforce can be categorized as high. The high workforce is seen by 4.46 percent people in Bromo Tengger Area. There are various types of work in the sand sea area, the Gubuk Klakah area in Malang Regency and Ngadiwono in Pasuruan Regency, such as Jeep rental, horse rental, food hawkers, hawkers, tour guides, motorcycle taxis and photo tour services. The workforce includes Jeep drivers, horse drivers, street food stall keepers, toilet guards, motorcycle custodians and volunteers. Most of the Jeep Drivers and street vendors do not work every day or only on weekends and public holidays. The welfare conditions of the people in the Tengger Bromo Semeru area can be seen in Table 3.

No	Statement	Mean Value
1	Education	
	Participation in formal and Non-fomal education	
	Elementary school graduate	3.74
	Junior high school graduate	3.56
	High school graduates	3,45
	<b>Average</b>	<b>3,58</b>
2	Housing and Environment	
	The house ownership status	
	Own	4,20
	Renting	3.23
	Free from renting fee	3,33
	The source of potable water	
	Branded gallon water	1,32
	Refill gallon water	1,11
	Pipe water	1,24
	Drill/ pump well	2,22
	Well	2,21
	Spring	4,32
	Rain water	1,12
	<b>Average</b>	<b>2,09</b>
3	Poverty Level	
	Pre welfare family (very poor)	3,11
	Welfare I family (poor),	3,12
	Welfare II family,	4,34
	Welfare III family	3,32
	Welfare III plus family	2,13
	<b>Average</b>	<b>3,20</b>
4	Other Social Indicator	
	Travelling for tourism activity	3,46
	Never become victim from criminality	4,46
	Ever receive credit to open a business	3,47
	Ever receive assurance for health access and facilities	3,24
	<b>Average</b>	<b>3,66</b>
5	Employment	
	Work Force	
	Working	4,46
	Not unemployed	3,37
	Not half unemployed	3,39
	<b>Average</b>	<b>3,74</b>

Table 3 the Wellbeing of the society  
 Source: Primary Data

### 5. Sustainable Management Model

In the end, sustainable tourism will return to society in the form of an increase based on the input generated by a tourism distribution along with the entire system of social and cultural values, its environment, tourist satisfaction, community welfare, a healthy economy, tourism and cultural products. One of the tourism products that support efforts to create sustainable tourism is ecotourism and culture. Ecotourism is one type of sustainable tourism that makes the community the main subject, while preserving socio-cultural values and environmental wisdom. So, overall with the existence of ecotourism as an implementation of welfare development. A brief description of this relationship can be seen in Figure 1.

This model is expected to be implemented as a policy for sustainable tourism development not only in the Bromo Tengger Semeru area, but in all regions in Indonesia. The Sustainable Tourism Management Model will be prepared based on the classification of five aspects, namely: 1). the main objective of the National Tourism Development pattern which is referred to as the aspect of the sustainable tourism management model as the main thing; 2). types of tourism based on natural and cultural beauty (ecotourism) as aspects of tourism products; 3. has the pillars of environmental preservation, cultural preservation, tourist satisfaction, a healthy economy, community welfare; 4. support the development of national tourism.

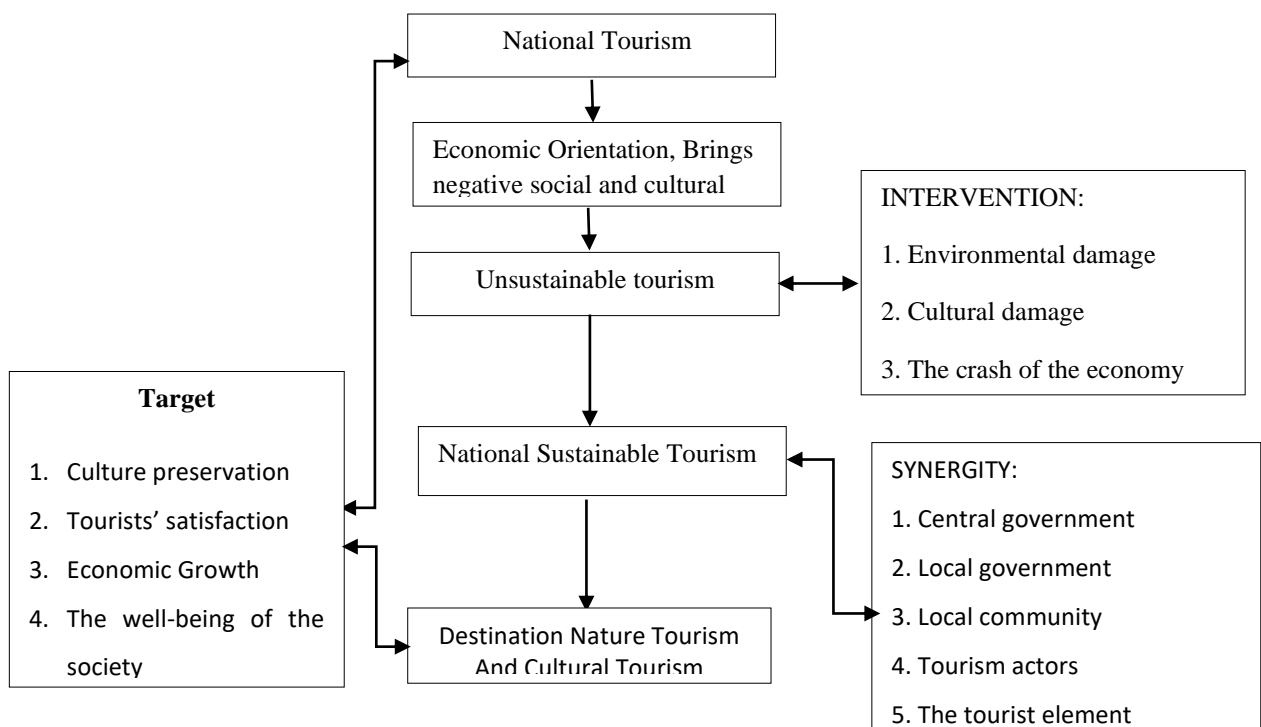


Fig 1 Sustainable Tourism Development Model

#### **IV. CONCLUSION**

Based on the results of the analysis described above, it can be concluded that the type of tourism based on culture and nature is a tourism product that can become a Sustainable Tourism Management Model in Bromo Tengger Semeru Area. This model can apply nationally to a Sustainable Tourism Development Model in each region, based on several aspects including: Sustainable Tourism Management model as the main objective of the National Tourism Development pattern; tourism development based on Nature and Culture as Aspects of Tourism Products; pillars of environmental preservation, cultural preservation, Tourist Satisfaction, Economic Growth, Community Welfare, enrichment of attractions to tourists, increasing community intimacy; fully supported by all stakeholders and shareholders, including the community, visitors, managers, universities, central government, local governments and tourism entrepreneurs as supporting elements.

The values that can be applied to support the creation of the Sustainable Tourism Management Model include: Non-physical cultural values such as *sesanti panca setia*, *guyub rukun*, *sanjan-sinanjan* (visiting each other), *sayan* (mutual cooperation, helping each other) which is based on the slogan “*sepi ing pamrih, rame ing gawe*”, and *genten kuat*; The relationship between humans and nature is manifested in a slogan which reads “*tebang satu tanam dua*”; The original social wisdom values of the community that are always preserved in each region; Cultural values, social and environmental wisdom are proven to have a relationship with tourists' perceptions.

Based on the results of the calculation of the structural equation model for tourism in Bromo Tengger Semeru area which is based on a sample of 186 respondents in 3 tourist locations, the socio-cultural aspects of society and natural beauty are proven to have a more dominant role in the perception of tourist satisfaction compared to the completeness of facilities and infrastructure. This must be the main basis for consideration for Bromo Tengger Semeru area in the management efforts to maintain cultural, social and environmental wisdom that support a sustainable tourism industry.

#### **V. RECOMMENDATION**

Based on field findings in the Bromo Tengger Semeru area related to a national sustainable tourism management model, this study produces several suggestions in the form of: 1) Recommendations for the Province of East Java: making the Sustainable Tourism Management Model consisting of these four aspects the main agenda for future tourism development in each region; 2) Recommendations for the Central Government: This Sustainable Tourism Management Model can be used as one of the inputs in the preparation of a national tourism development master plan; 3) Recommendations for tertiary institutions: to further enhance the pattern of cooperation between tourist sites and the tertiary institution, so that tourism can function as a participatory-based direct education medium for students, while tourist sites can receive benefits in the form of increased capacity and tourism management skills; 4) Recommendations for tourism actors: to better understand the indicators of tourism success which are not always economic in nature. However, it makes people more prosperous through tourism which is marked by sustainable economic activity.

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**List of Informants:**

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- [2] Ansori, a cultural and environmental activist for Bromo Tengger Semeru as well as the head of the Malang Regency Tourism Guides Association. Interview on 15 March 2020 in Malang.
- [3] Gaguk Sunarprawiro, as chairman of Asita East Java. Interview on 15 March 2020 in Malang.
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- [5] Supriyono, a community leader in Kabupaten, Sukapura District, Probolinggo Regency. Interview on 17 March 2020 in Probolinggo
- [6] Yulianto, a community leader in Kabupaten, Sukapura District, Probolinggo Regency. Interview on 17 March 2020 in Probolinggo.
- [7] Dewinta Indrayani, Bromo Tourism Manager. Interview on 17 March 2020 in Probolinggo.