

The Government's Role in the Forest Land Change Functions for Tourism in Sumenep, Indonesia

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Abstract Land conversion or commonly referred to as land conversion is a change in the function of part or all of the land area from its original function, as planned, into other functions that have a negative impact on the environment and the potential of the land itself. Article 33 of the 1945 Constitution of the Republic of Indonesia places the community as the main group for the purpose of prospering the results of natural resources. However, this does not close the community's access to natural resources, so that any control over natural resources including the forestry sector must involve the community in making decisions on the status of land rights to the scale of enjoying the results of processing natural resources in the forest. This research discusses the policy on the conversion of mangrove forests and the role of the government in the conversion of mangrove forests for tourism in Sumenep Regency. The government role in tourism development as a result from land-change use policy to manage both spatial planning and environment protection is discussed in this study. Practical suggestions are also elaborated.

Keywords Land Use Change, Mangrove, Environmental Protection, Tourism, Spatial Planning

1. Introduction

The conversion of forest functions or usually as land conversion is a change in the function of the entire land area from its original function. If it is not regulated in a

good and comprehensive policy, it will have a negative impact on the environment and the potential of the land itself. In Law No. 41 of 1999 concerning Forestry states that changes in the allocation and function of forest areas are determined by the government based on the results of integrated research. If the conversion of forest functions has an important impact and is broad in scope and has strategic value, it must be determined by the government and with the approval of the House of Representatives.

Article 19 paragraph (1) of the Law expressly states that in order to make changes, the allocation and function of forest areas must be based on integrated research whose operational procedures are regulated by the Decree of the Minister of Forestry No. 70/Kpts-II/2000. Meanwhile, the assessment was carried out by an integrated team in accordance with the Decree of the Minister of Forestry No. 1615/Kpts-VII/2001. Based on Law No. 41 of 1999, activities to change the allocation and function of forest areas are not easily implemented, considering that besides the changes are based on the criteria as stated in Government Regulation No. 23 of 2021 concerning Forestry Administration.

Related to the case of forest conversion in Indonesia, it was found that in Sumenep Regency, Madura, East Java, there had been damaged to mangrove forests, so that the function of mangrove forests was changed for tourism for the welfare of the community. In an agrarian country like Indonesia, land ownership is a necessity to fulfill the right to a decent life. In the concept of land tenure by individuals and communities, this is based on rights granted by the state based on applicable regulations [1, 2]. One of the

important factors to support development that favors the people is to change policies with all development bureaucracies that are considered important so that they become organizations that respect the rights of the people as implementers of development itself. Communities not only have their own forest land tenure system to support their lives, these communities have rules for managing natural resources, including clearing forest land for their businesses. As the concept of semi-autonomous social field was introduced, the community living in and around forests is a social arena that has the capacity to form self-regulation as a means to protect forest areas and maintain social order in their community areas [3, 4]. Fauzi [5] states that the law-making process can actually be controlled by any group, as long as they have the power or power, meaning that the people can control the law-making process to create rules that support and protect their own interests. The problem in this research is how is the policy on the conversion of mangrove forests and the role of the government in the conversion of mangrove forests for tourism in Sumenep Regency.

2. Literature Review

Forest is an area that has a lot of dense vegetation containing between trees, shrubs, ferns, grass, mushrooms and so on and occupies a large area. Forest resources have a very important role in maintaining the balance of nature in this universe. The conversion of forest functions has often occurred in Indonesia with the background of regional development and economic business. The various impacts of this forest conversion can be categorized into environmental impacts, namely hydrology, erosion and sedimentation, fires, extinction of flora and fauna, and impacts on the socio-economic community around the forest. Most of the forest land was turned into plantations and most of it for agriculture, aquaculture and tourism [6].

Forest resources have an important function as a support for human life. In order to support this function, the government has arranged forest areas with their respective main functions, namely: (1) conservation forests for the purpose of preserving plant and animal diversity and their ecosystems which also function as areas of life support systems, (2) protected forests for the purpose of regulating water management, preventing flooding, controlling erosion, preventing seawater intrusions and maintaining soil fertility and (3) production forests to produce forest products [7].

The condition of the conversion of forest functions in several areas is currently increasing and worrying for the ecological conditions and the surrounding ecosystem, especially mountainous areas where protected forest lands are turned into agricultural land, plantation land or have been converted into housing for residents which are legalized by the local government, central government or local government, the form of encroachment due to the

increasing population level factor. The process of land conversion can basically be seen as a form of logical consequence of the growth and transformation of changes in the socio-economic structure of a developing community. The development in question is reflected in the growth of natural resource utilization activities due to the increasing demand for land use as a result of the increase in population and per capita needs, manufacturing and tertiary or service sectors [8].

Moreover, tourism is the sum total of the symptoms caused by the travel and stay of foreigners and the provision of temporary housing and is not related to earning a living [9]. Meanwhile, according to Law No. 10/2009 concerning Tourism, what is meant by tourism is a variety of tourism activities and is supported by various facilities and services provided by the community, businessmen, government, and local governments [10, 11].

According to Pitana & Diarta [12], the positive impacts of tourism on the economy include foreign trade balance, income from tourism business or business, government revenue, labor absorption, multiplier effect, and utilization of tourism facilities by the community. According to Dewi [13], the negative impacts of the existence of the tourism economy include too much dependence on tourism, increasing inflation and skyrocketing land prices. In addition, it is also because the increasing tendency to import materials needed in tourism so that local products are not absorbed, the seasonal nature of tourism, which cannot be accurately predicted, causes investment capital to be taken with an uncertain time. This creates additional costs for the local economy.

Pizam & Milman [14], classify the socio-cultural impacts of tourism, including impact on demographic aspects (population, age, changes in the population pyramid), impacts on livelihoods (job change, job distribution), and impact on cultural aspects (tradition, religion, language). Furthermore, the impacts also include impact on norm transformation (values, morals, sex roles), impact on consumption pattern modification (infrastructure, commodities), and impact on the environment (pollution, traffic jams).

3. Method

The research was conducted using the Socio Legal method with a qualitative approach which is expected to find hidden meanings behind the objects and subjects to be studied. This approach remains in the realm of law, only the perspective is different. This study looks at the facts of the reality of the conversion of mangrove forests for tourism in Sumenep Regency, East Java (Figure 1).

The data in this study were obtained through observation, interviews, document interpretation (text), and personal experience. The researcher is the main instrument because the researcher himself directly conducts participatory observations in data collection. In-depth interviews were

conducted with open-ended questions, especially for informants who had a lot of information.

4. Results

4.1. Overview of Sumenep

Sumenep Regency is the easternmost district on the island of Madura, which is located between 113°03'54" - 116°01'48" East Longitude and between 4°05' - 7°02' South Latitude. The area of mangrove forests in Sumenep with an archipelago area reaches 12,095.4 hectares (80%). Of that amount, mangroves are in good condition with an area of 8,794.1 hectares (58.2%) and an area of 6,324.1 hectares (41.8%). Many beaches in Sumenep are experiencing abrasion and mangroves are degraded because many mangrove forests have been converted into shrimp ponds, salt ponds, and beach reclamation for residence and tourism. Around the mangrove is a place for fish to lay their eggs and where fish live, so that the conversion of the function of the mangrove forest has caused the mangrove ecosystem in Sumenep to be damaged.

At first in Sumenep Regency, coastal pollution was caused by marine debris in the mangrove forest area, where waste consisting of organic and inorganic waste caused the condition of the mangrove forest to be damaged and inhibited the growth of mangrove trees. The problem faced

by the coastal environment in Sumenep Regency is the amount of household waste that is not managed properly. Along the coast, Sumenep Regency does not have a landfill site with a location that is affordable by the villages as a whole, so that coastal communities with residences bordering the sea still throw a lot of garbage directly to the beach or sea. In addition, most residents in the coastal area of Sumenep Regency throw their garbage in the yard and vacant land. The largest amount of waste is generated from the market and many residents throw garbage in the mangrove forest area. This results in a reduction in the aesthetic value of the mangrove area and has an impact on the health of the mangrove forest.

Initially in 2017, environmental activists who were members of the tourism management community of *Reng Pasaser*, Saronggi District, aggressively carried out the action of planting mangrove seedlings in their environment. This is in order to preserve the river and marine ecosystems in its territory. The purpose of planting mangroves is to prevent the mud that falls to the bottom of the river from being restrained by mangrove roots. Mangrove planting activities have also received support from the Sumenep Regency Fisheries Service, which encourages people who live around the banks of rivers and the sea to participate in preserving mangroves, which are currently dying due to garbage. Plastic waste destroys the ecosystem, because the garbage in the sea harms humans or fishermen who are looking for fish [15].



Source: Google Maps

Figure 1. Sumenep Regency

4.2. Forest Function Transfer Policy in Sumenep Regency

In Sumenep Regency 2009-2029 spatial planning, the management of mangrove areas is planned as a tourism area and the development of mangrove forest area. Planning for the management of mangrove areas on the coast of Sumenep Regency in the 2020 spatial planning revision is expected to be able to collaborate between the district and provincial governments as a form of implementing Law No. 1 of 2014 and Law No. 23 of 2014 with the concept of sustainable development. The implementation of Law No. 1 of 2014 and Law No. 23 of 2014 can be seen in the management of mangrove forests which have been under the authority of the Province of East Java. The potential of natural resources in the mangrove area on the coast of Sumenep Regency can be used optimally for tourism for the prosperity of the community (Table 1). The Department of Tourism, Culture, Youth and Sports of Sumenep Regency continues to promote the development and formation of Tourism Awareness Groups in a number of villages in Sumenep Regency. The Head of the Tourism Department of Sumenep Regency, said that so far in Sumenep Regency there are 19 villages that have been formed and have a decree as tourism empowerment group.

Community development is very important in realizing a tourism village as a whole as well as for related organizational elements at the village level. Pokdarwis is an institution at the village level whose members are tourism actors who have care and responsibility and play a role in creating a conducive climate for the growth and development of tourism in the village. The Sumenep community's economy is increasing with the mangrove tourism of Kebun Dadap Timur (*Kedatim*) in Saronggi District with its beauty and its long jogging track through the Mangrove Forest towards Saroka River. Kedatim Mangrove Tourism has a Jogging Track with a total length of 850 meters with 250 meters each using wood and 600 meters using bamboo. On May 7, 2021, Mangrove Tourism received a grant to make a Jogging Track from the Governor of East Java Province so that visitors can freely walk through the Mangrove Forest, which has more than 30 types of Mangrove Trees, which we can learn from making a nameplate for each type of Mangrove. The idea of making Kedatim Mangrove Tourism itself has been planned since 2016 by the coastal community group and received direct support from the local village head and received assistance funds from the Sumenep Fisheries and Marine Service in the form of making a jogging track at that time. The unique thing about Kedatim mangrove tourism is that you can enjoy the calm of the Saroka River and the pounding of the waves by renting a boat to surround the Saroka River. This tour is a nature and educational tourism and is often used as research by students and students of the science study program in the field of biology.

Table 1. Mangrove conditions in each district in Sumenep

Classification	Measure	Frequency (in hectares)	Percentage
Dense	> 1500 trees/hectares	6,549.6	54.1
Medium	>1000-<1500 trees/hectares	958,8	7.9
Low	<1000 trees/hectares	4,587.0	37.9
Total		12,095.4	100.0

Source: [16, 17]

The development of tourism objects in Sumenep Regency, Madura continues to be improved in order to attract tourists to come to Sumenep Regency so that it has positive value for the local community. The Mangrove tourist attraction which is located in Kebundadap Timur Village, Saronggi District, Sumenep has various types of mangrove plants so that it becomes a special attraction for visitors (Table 2). Kebundadap Timur mangrove ecotourism was built in 2018 from the community nursery program "*Reng Paseser*", so that a jogging track of about 50 meters was built with a budget of more than IDR 15 million. The source of this tourism fund comes from self-help through a nursery program. Then in 2020, the village-owned enterprises funds were allocated IDR 145 million to build and renovate this tour.

Table 2. The Mangrove's Area in 2017

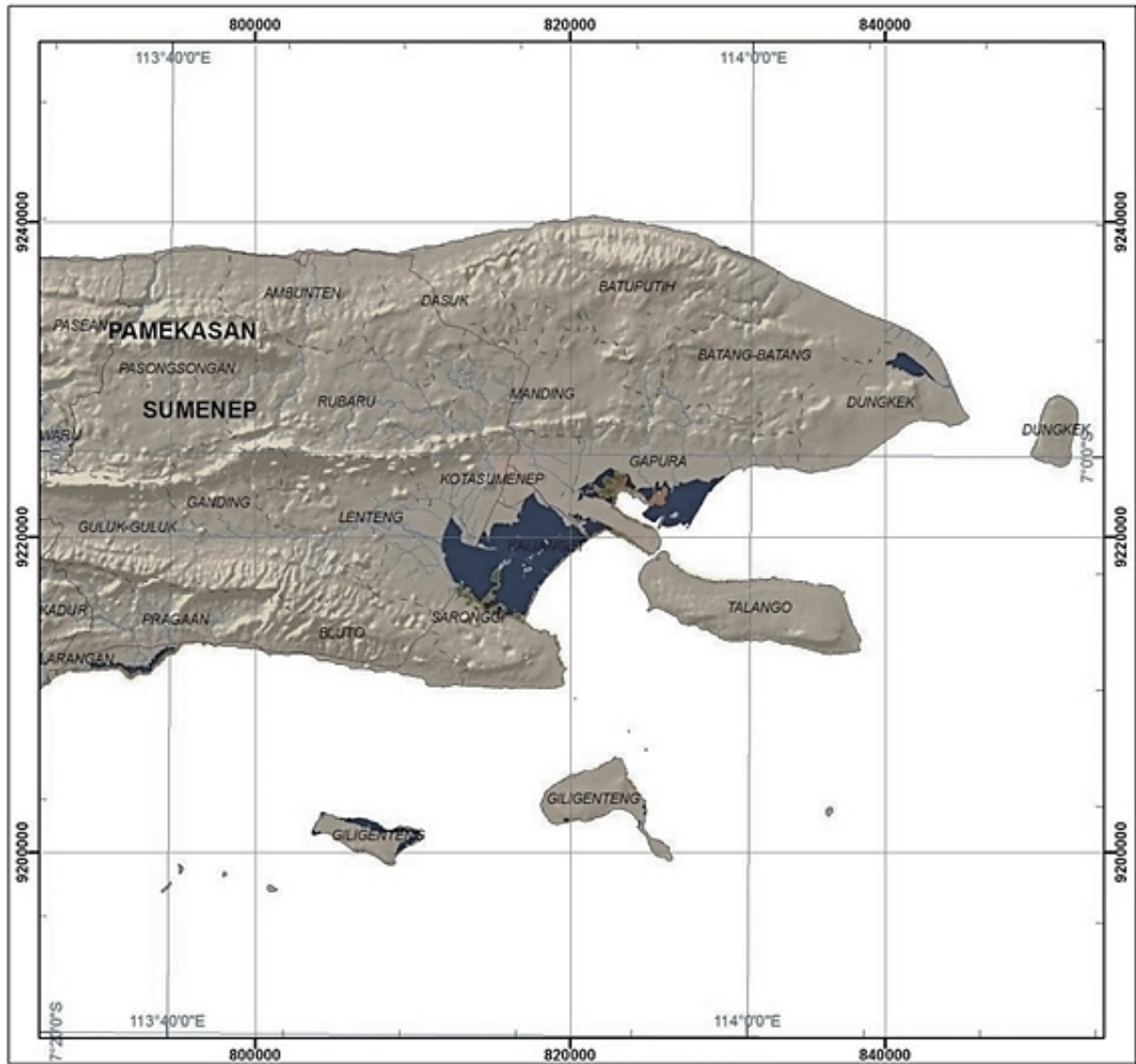
Subdistrict	Total area
Saronggi	81.92
Pragaan	80.28
Kalianget	135.89
Gapura	215.38

Source: [17]

Mangrove forest tourism in Kebundadap Timur, Saronggi, Sumenep through its village enterprise will increase regional budget. Rudi Hartono, head of local tourism management explained that in mangrove tourism, visitors can enjoy a trajectory for around 800 meters that is surrounded by various kinds of mangroves. Besides that, it is also equipped with photo spots and gazebos for visitors to rest. As for the employees taken from the local community to empower the surrounding community, currently there are 8 employees. If it is completely constructed, this mangrove tourism development is still being carried out, by planting with self-help purchases of mangrove seeds. To make the community aware to take care of mangrove tourism together. The supervisors continue to work together with related parties, even the village has built a landfill site. The mangrove tourism area in Kebundadap Timur, Saronggi, Sumenep, Madura, East Java has 22 types of mangroves that grow in the area. There

are types of *rhizophora mucronata*, *rhizophora stylosa*, *rhizophora apiculata*, *sonneratia* and others. This tourist destination was built as part of an effort to protect the existence of the mangrove forest itself, considering that it has many benefits, one of which is preventing abrasion. The fruit of several types of mangroves can be used as

ingredients to make candy, lunkhead, syrup and flour. The development of mangrove tourism is not only for profit or increasing the village's original income, but there is also a rehabilitation program, because it was previously damaged by irresponsible people (Figure 2).



Source: [16]

Figure 2. Distribution and Density of Mangroves in Sumenep

4.3. Government Role in the Transfer of Mangrove Forest Functions for Tourism

The government's role as a dynamist plays an important role in the development of mangrove tourism areas, especially synergizing all parties involved in the development of mangrove tourism areas. The Department of Tourism and Culture of Sumenep Regency with various elements of the community are involved in managing the mangrove forest area. Current technological advances also greatly support the course of communication between all parties, because with technology all information can be easily conveyed from the Department of Fisheries and Marine Affairs, the Department of Tourism and Culture, the Department of Forestry and the environment to the public. The local government communicates directly with community groups to participate in planting mangrove trees so that they are protected from abrasion, high waves and safe from strong winds. Andriansyah et al. [18] stated that the cooperation between the government and the community here can be seen in the process of preserving mangrove forests such as nurseries and planting areas by involving directly between the tourism and cultural services, the environmental and forestry services and the community around the mangrove forest area such as planting to work activities. Collective service in maintaining the cleanliness and sustainability of this mangrove forest area [19].

In addition to the community, the government also involves the private sector in the development of mangrove forest tourism areas. In the construction of facilities for this mangrove forest tourism area, it cannot be separated from the involvement of all parties, including the private sector. Contributions in the form of a budget from the private sector also support the construction of facilities for this tourist area, such as a photo area that can be used by the private sector to introduce or promote themselves in the photo booth of the mangrove forest tourism area [20, 21]. The involvement of the private sector in the development of mangrove forest tourism areas is in the form of budget contributions for infrastructure development, because the budget for the development of mangrove forest tourism areas is limited, additional costs are needed to maximize the construction of facilities and infrastructure to support the development of this mangrove forest area. In tourism development, this tourist area will not develop. Facilities are very supportive for the development of tourist areas. The development of supporting facilities for Kebundadap Timur tourist area is still being carried out according to the initial plan, which is about 20 facilities to be built. Some of them already exist such as entrance gates, prayer rooms, cafeterias and toilets. Most of the funding sources come from village-owned enterprises, assistance from the regional and the provincial government. In addition to providing tourism forest area facilities, the government also provides mentoring programs to improve the quality of existing human resources, such as an ecotourism tour

guide activity program held by the Department of Tourism and Culture in collaboration with the Ministry of Tourism and Creative Economy aimed at the community in order to improve the quality of tourism and local community human resources.

5. Conclusions

Sumenep Regency government has determined spatial planning to regulate the management of mangrove areas, planned as a tourism area and the development of mangrove forest area. In relation with tourism, the development of human resources for mangrove forest tourism plays an important role in achieving synergy between the community and the government and can also improve the welfare of the local community later. The existence of facilities in the mangrove tourism area is very important to support the development of mangrove forest tourism according to the plan. The role of the government for the procurement, arrangement, and maintenance of better facilities in the future is very much needed. The local government as one of the stakeholders of tourism development has a role as a motivator to synergize the parties, so that among them is created a symbiosis of mutualism for the development of tourism. Cooperation between the government and the community is collaborating in managing, maintaining and supervising and preserving the Kebundadap Timur tourist attraction, where the government and the community work together in managing this mangrove tourism area, for example in terms of supervision and protection, where the government and the community work together in minimizing potential damage to the mangrove forest area itself. Furthermore, in terms of management, where the government and the community work together in the management of nursery and planting areas.

As suggestions, dissemination of policies for the protection of mangrove areas is expected to all communities without exception regarding the role of local governments as fully responsible for mangrove forest management. It also needs an effective and equitable communication to all levels of society in the context of developing and managing mangrove forest tourism areas so that cooperation between all parties, both the government and the community, can work together so that there is no worry or turmoil among the community regarding tourism areas managed by the government. Lastly, the establishment of a tourism area manager is needed while still involving all levels of society without exception in order to make it easier for the management and development of tourist areas so that no party feels disadvantaged.

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