

Social Community Participation On Mangrove Management Policy in Gresik District, East Java, Indonesia

Sih Sumadiyono

Post Graduate Student of Public Administration Department, Faculty of Social and Politics, Hang Tuah University, Surabaya, Indonesia.

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Abstract- Indonesia is a maritime country that has abundant resources, vast coastal and aquatic areas and mangrove forests. Coastal mangroves that are being preserved because of damage. Mangrove ecosystems have physical, ecological functions and socioeconomic values that are very important for the surrounding community. Physically mangroves can withstand the onslaught of waves and wind during storms, so that it is able to maintain the presence of beaches, houses and other buildings.

The problem raised in this research is the damage of coastal mangrove forests in Gresik Regency due to economic development that focuses on the coastal area as an industrial center (factory establishment) and recreational location (tourism destination). The research sites in the coastal districts of Gresik Regency are Bungah, Ujung Pangkah, Sedayu, Gresik, Kebomas and Manyar sub-districts.

To overcome these problems, the government is making efforts to restore and increase the ability of forest function and productivity. Through mangrove management activities, Gresik Regency Government has planted mangrove forests, controlled mangrove sustainability in all districts by involving active participation from coastal communities. Mangrove areas are managed into protected areas (conservation) and tourism areas. Related to this, Local government of Gresik Regency states that the coastal regions in the six sub districts mentioned above are green open spaces to protect Gresik Regency from abrasion threats.

Index Terms- policy implementation, mangrove ecosystem management

I. INTRODUCTION

1.1 Background

Indonesia is a maritime country that has abundant resources, vast waters and coastal areas. One of the coastal ecosystems that is being sought for preservation is mangrove forests. Mangrove ecosystem is a unique one because it is a media that combines terrestrial and marine life.

Mangrove ecosystems have physical, ecological functions and socio economic values that are very important for the coastal ecosystem and surrounding communities.

Physically mangroves can withstand the onslaught of waves and wind during storms, so that it is able to maintain the

presence of beaches, housing and other buildings. Ecologically, mangrove ecosystem functions as a place to find food for various aquatic biota such as fish, shrimp and crabs. (Department of Maritime Affairs and Fisheries Directorate General of Coastal and Small Islands Areas, 2008).

Some communities have used mangroves both as natural resources to fulfill their needs such as forest products in the form of wood as fuel, processed as syrup and for the enjoyment of life such as utilizing mangrove areas as tourist areas and recreation areas. In addition, mangrove forests also provide protection against the coastal system against strong winds and waves, maintaining the diversity of coastal biota resources.

Gresik is one of districts in East Java Province which borders directly with Surabaya city and Madura Strait in the east, Lamongan Regency in the west, Java Sea in the north, and Sidoarjo and Mojokerto Regencies in the south. Gresik also has a Mangrove Forest area spread over six existing sub-districts, namely Ujung Pangkah, Bungah, Gresik, Kebomas, Sedayu and Manyar sub districts. The author is very interested in examining Mangrove Forest Area in those coastal areas.

Mangrove forests are a buffering ecosystem between the ocean and land as well. Mangrove forests also provide protection against strong winds and waves, maintaining a diversity of genetic and nutrient resources.

Although mangrove forests have a variety of functions both ecological and economic, but the most important and not replaced by other ecosystems is the position of mangrove forests as a link that connects marine ecosystems with terrestrial ecosystems (Subing, 1994). Mostly in the Gresik district, Mangrove forest is also a tourist destination where on holidays, especially during the holidays, this place is always filled with visitors, both from Gresik district itself or from outside the district.

The total area of Indonesian mangrove forests is around 3.2 million hectares of mangroves, or about 21% of the total area of mangroves in the world. The number of mangrove species found is not less than 75 species. This condition makes Indonesia known as the country with the most extensive mangroves with high levels of biodiversity (Source: Indonesian Ministry of Forestry, 2013). While the area of East Java mangrove forests is 12,924.70 ha. (Source: Department of Fisheries and Maritime of East Java Province), and the extent of mangrove forests in Gresik Regency, 5828.63 ha (Source: Regional Development Planning Agency of Gresik Regency Report, 2017). When compared to the forest ecosystem, the Mangrove ecosystem is a forest area in the coastal

area that has specific flora and fauna and has a lot of diversity that needs to be preserved.

With the emergence of various problems that threaten the preservation of mangrove forests in various sub-districts in Gresik

Regency, the Gresik District Government has made efforts to conserve mangroves through the National Movement for Forest and Land Rehabilitation, namely mangrove ecosystem management.

Figure 1.1 Map of Mangrove Forests in Gresik Regency



Source: Regional Development Planning Council of Gresik Regency 2017

Since the enactment of Law number 32 of 2014 concerning Regional Government, automatically the distribution of territories and authority, especially mangrove management, shifts from the Regency Government to the Provincial Government. However, Gresik Regency Fisheries Service was called to implement mangrove management. District Head of Gresik established a district-level mangrove ecosystem management strategy and formed a District-level Mangrove Ecosystem Management Coordination Team. Then the Governor of East Java Decree No. 522/19382 / 022.3 / 2018 was published on November 14, 2018, stated that the Gresik District Fisheries Office as the Chairperson of the District level Mangrove Ecosystem Management Strategy Coordinating Team, whose tasks are formulating policies, coordinating the implementation and budget support, and reporting the results the implementation.

Seeing this condition, the benefits of mangrove forests which actually have many functions can no longer be enjoyed by humans. Then the increase in population is so fast that is not

accompanied by an increase in knowledge about natural resources and the environment as well as the low level of social welfare. This condition has a significant negative impact on mangrove forest resources so that they are damaged.

Destruction of mangrove forests in Gresik Regency causes the mangrove land to narrow. Mangrove damage can be seen in the following table:

Table 1.1. Comparison of Mangrove Damage and Land Area in Gresik District

N O	DISTRICT S	LAND AREA (HA)	(HA)	(%)
1	Bungah	181,33	-	62,10

2	Ujung Pangkah	84,10	15,34	18,20
3	Gresik	0,40	-	100
4	Kebomas	3,34	-	100
5	Manyar	9,50	3,16	33,26
6	Sedayu	4,60	-	48

Source: Final report of Coastal and Marine Environment Agency of Gresik 2016

From this table it is known that the most severe mangrove damage due to the extent of damaged land is in the Bungah sub-district which is 110.76 ha or 62.10%. Kebomas and Gresik sub-districts reach 100% because they are converted into industrial / factory areas. However, the size of the mangrove forest is only relatively small, namely 3.34 ha in Kebomas sub-district, and 0.40 in Gresik sub-district. But finally in the two districts carried out rehabilitation of mangrove. Damage in Bungah sub-district and Manyar sub-district was also due to the construction of the factory. Mangrove damage in Ujung Pangkah sub-district is relatively small at 18.20% due to its location at the far north end of the city so there is no factory construction. Damage in the area was only caused by cutting down of mangroves for firewood

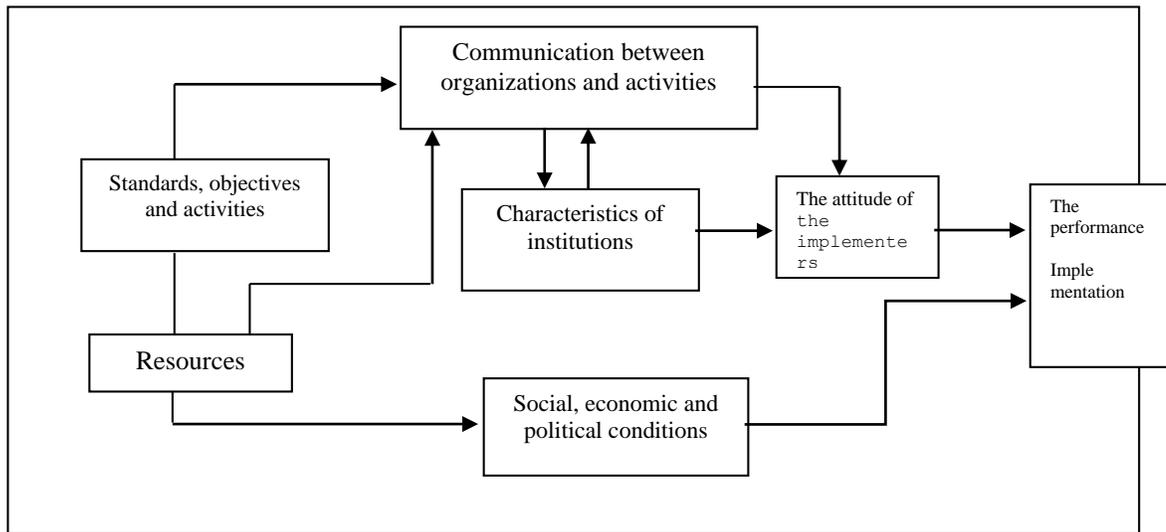
1.2. Case Problem

The case problem of this research is Damage of mangrove forests in Gresik Regency due to the economic development that focuses on the coastal area as an industrial center (factory establishment) and recreational location (tourist destination) which is analyzed using Van Meter and Van theory Horn (1975). Through mangrove management activities. Government of Gresik Regency stipulates that the Coastal Area in six sub-districts in Gresik Regency is as protected area, namely Bungah, Ujung Pangkah, Sedayu, Gresik, Kebomas and Manyar. The green open space area becomes a fortress to protect Gresik Regency from abrasion threats.

II. RESEARCH METHOD

Program or policy implementation is one of the important stages in the public policy process. To examine the extent to which the process of Implementing Mangrove Management on the Coastal District of Gresik, the author examines the factors that influence the policy. By using the theory of policy implementation approaches introduced by Donald S. Van Meter and Carl E. Van Horn with 6 (six) factors or variables that influence the implementation of policies, such as the following figure:

Figure 2.1. Approaches Model of Donald S. Van Meter and Carl E. Van Horn (1975)



Source : Donald S. Van Meter dan Carl E. Van Horn (dalam Ekowati, 2004).

2.1. Type of Research

The method used in this research is a qualitative research method namely social research explains a social phenomenon / social event, which sometimes these events can take the form of a case that occurs in people's lives. This research is to understand the phenomena about what is experienced by research subjects such as behavior, motivation, actions and others in a descriptive way.

2.2. Research focus

The focus of this research is the Implementation of Mangrove Management Policies on the coast of Gresik Regency. The research is focused on the formulation of the problem and the purpose of the study by determining the variables and operating with the indicators to capture the information needed to answer the issues raised.

The variables in this study are the factors that influence the Implementation of Mangrove Management Policies on the coast of Gresik Regency. by using the conception of Van Meter and Van Horn which includes variables as follows:

- 1) Standard and objectives of activities,

- 2) Resources,
- 3) Communication between organizations and their activities,
- 4) Character of the institution,
- 5) The attitude of the executor, and
- 6) Social, economic and politics conditions

The location of the study is conducted in the area of Mangrove Forests on the coast of Gresik Regency, which is located in 6 (six) sub-districts on one land, namely Ujung Pangkah, Bungah, Gresik, Kebomas, Sedayu and Manyar sub districts, not including Bawean Island.

III. RESULTS AND ANALYSIS

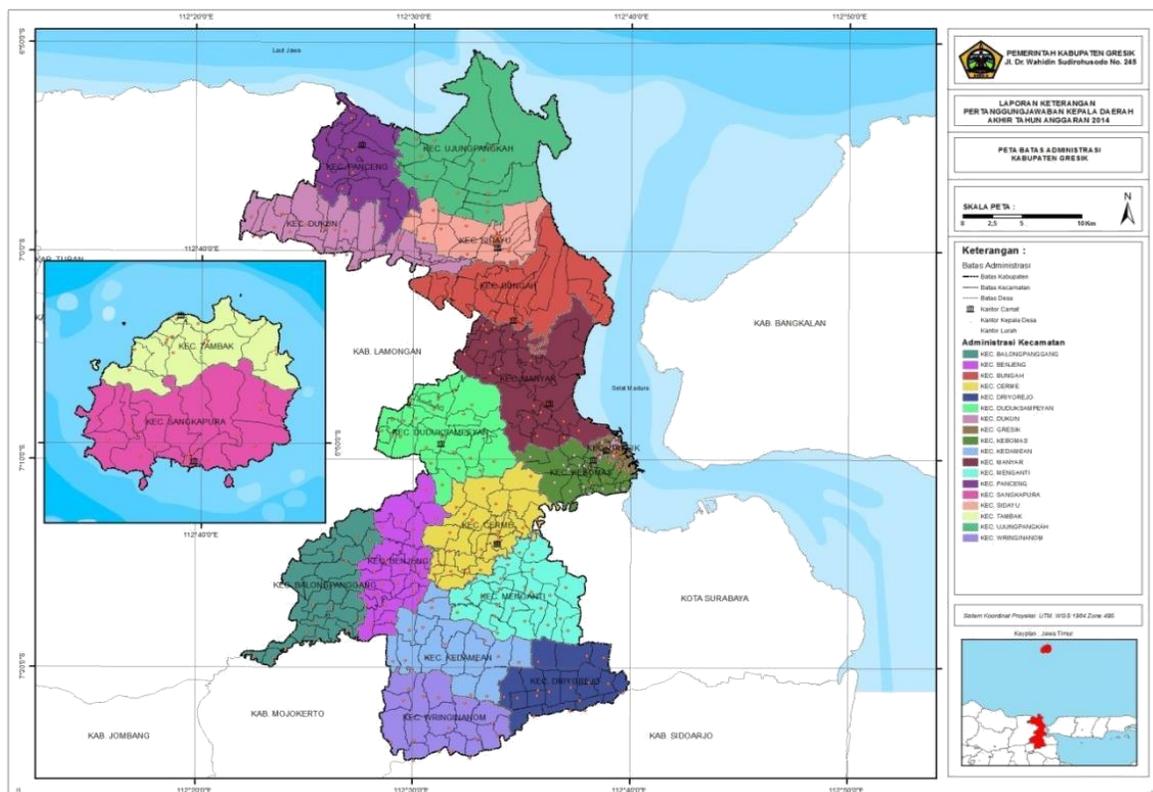
3.1 General Overview of Research Objects

Gresik Regency is located in the northwest of Surabaya City, the capital of East Java Province, with an area of 1,191.25 km². Geographically, the area of Gresik Regency is located between 112° to 113 Timur East Longitude and 7° to 8 Selatan South Latitude is a lowland with a height of 2 to 12 meters above

sea level except for Panceng District which has a height of 25 meters above sea level. Part of Gresik Regency is a coastal area with a coastline of 140 km, 69 km on the mainland of Java Island extending from the Districts of Kebomas, Gresik, Manyar, Bungah, Sidayu, Ujungpangkah, and Panceng and 71 km in Sangkapura and Tambak Districts on Bawean island. Gresik Regency is bordered by the Java Sea in the north, Madura Strait and Surabaya City in the east, Sidoarjo Regency and Mojokerto Regency in the south, and Lamongan Regency in the west.

The condition of ground water surface in Gresik Regency is generally relatively deep, only certain areas around rivers or swamps have a rather shallow ground water surface. The pattern of river flow in Gresik Regency shows that the Gresik area is the estuary area of the Bengawan Solo River and Lamong River and is also traversed by Surabaya River in the South Region. These rivers have different flow characteristics. Bengawan Solo River has a fairly high water discharge by carrying more sediment compared to Lamongan River, so that siltation in the Solo River is faster. The event resulted in the emergence of degraded lands which are often used by residents for fishing grounds.

Figure 3.1 Map of Gresik Regency Administration in 2016 - 2021



Source: Regional Development Planning Agency of Gresik Regency 2016

3.2 Analysis of Mangrove Management Policy Implementation at Coastal Gresik District.

The author used Van Meter and Van Horn implementation models as a tool for analysis. In the Van Meter and Van Horn implementation models, there are six variables that form the

relationship between policy and performance. The two main variables are the basic measures of variables and policy objectives (standard and objectivity) and the resource variable. Whereas the other four variables include the characteristics of the implementing agency (the characteristics of the implementing

agencies), communication between organizations and implementation activities (information communication and enforcement activities), socio-economic and political conditions (economic, social and political conditions), and disposition of implementers (the disposition of implementers). Following are the results and discussion of this implementation model:

1. Policy Standards and Objectives

Policy standards and objectives are factors that will influence the implementation process. Unclear standards and policy objectives can make it difficult for implementers to understand them and at the same time can lead to diversity in the dispositions of various actors involved in the implementation process. This condition will ultimately not support the smooth and successful implementation of the policy.

According to Van Meter and Van Horn, every public policy must have standards and objectives that must always be clearly stated in each program. Failures also often occur if the standards and objectives are not clear (Winarno, 2002: 197-198). A policy is issued based on consideration of the goals and objectives to be realized. These goals and objectives must be clear, decisive and easily understood by each individual as an implementer, so that they will help develop and determine a decision responsibly.

Based on the results of research and data, the standard and policy objectives of the mangrove management strategy in Gresik are limited to the formation of a coordinating team for mangrove management strategies. Before the issuance of Law Number 32 of 2014 concerning Local Government, Mangrove Management in Gresik Regency was carried out by the Gresik District Fisheries Office. With the emergence of Law number 32, the authority to manage Mangroves was taken over by the Department of Maritime Affairs and Fisheries of East Java Province. Then there was a temporary vacuum. Then based on the Decree of the Governor of East Java Number: 522/19382 / 022.3 / 2018, stipulates the Gresik District Fisheries Office as the Head of the District Level Mangrove Ecosystem Management Strategy Coordinating Team whose tasks with formulating policies, coordinating the implementation and budget support, forming a secretariat, and reporting the results of their implementation.

Then based on the Decree of Governor of East Java Number: 522/19382 / 022.3 / 2018, stipulates that the Gresik District Fisheries Office as the Head of the District Level Mangrove Ecosystem Management Strategy Coordinating Team whose tasks are formulating policies, coordinating the implementation and budget support, forming a secretariat, and reporting the results of their implementation.

The results of research also indicates that the implementation process of Policy Implementation is running less maximum. This is due to the lack of a specific strategic plan for mangrove management, however the Fisheries Office continues to implement a mangrove management program in accordance with the Decree of East Java Governor Number: 522/19382/022.3/2018 which stipulates that the Fisheries Service District. Gresik as the head of the coordinating team on mangrove ecosystem management strategies. The Department of Fisheries as the chief supervisor and controller of the mangrove area in the coastal area of Gresik Regency carries out socialization, nursery, planting, supervision and counseling about the importance of

mangroves as coastal community resources. The community welcomed mangrove management program by being actively involved in assisting the Department of Fisheries, with the Community Monitoring Group a form of community participation. Activities undertaken by community groups such as Sari Laut in Pangkah Kulon, Muara Solo in Pangkah Wetan, Tirta Wening in Banyu Urip (Ujung Pangkah) and Kalimireng in Manyar are nursery and mangrove planting activities. Types of mangrove plants that are seeded in this area are *Rhizophora lanata*, *Rhizophora mucronata*, *Rhizophora stilosa*, *Bruguiera gymnoriza*, *Bruguiera stilica*, *Sonneratia casiolearis*, *Sonneratia alba*, and *Ceriops tagal*. The plant seeds are used for planting activities in the Pangkah Wetan area.

2. Resources

One factor that has an important role in policy implementation is resources. Policies can be implemented with the support of adequate resources so that activities can be carried out effectively. Policies that have a certain level of physical and political feasibility may not succeed in achieving the desired goals. This is due to the short period of time, the lack of adequate facilities and infrastructure, the unavailability of sufficient funding sources and the lack of adequate and quality human resources. The available resources in the effort to implement mangrove management in the Gresik Regency area include the Source of Funds and Human Resources.

a. Source of Funds

In mangrove management program in Gresik Regency, the entire budget is charged to the regional government revenue budget of Gresik Regency. Funding is needed to finance all activities ranging from administration, planning, socialization to the community, procurement of seeds, planting and supervision. It can be concluded that the source of funds is charged to the Gresik Regency Regional Revenue and Expenditure Budget (APBD) in accordance with applicable regulations and other sources of funds obtained legally.

b. Human Resources.

The human resource factor has an important role in policy implementation, because however clear and consistent the provisions or rules of a policy are, if the personnel responsible for implementing the policy lack the quality of the resources to carry out work effectively, then implementation of the policy will not be effective.

Important resources referred to in the implementation of the policy include personnel who have the expertise and ability to carry out the task. In addition, it must be considered the number of personnel needed with the expertise that must be possessed by the work to be done. In this case the number of personnel of the Gresik Regency Fisheries Service is very limited, only 7 (seven) people. However, the quality of human resources is quite adequate, although the mangrove area that must be managed is quite extensive. Lack of human resources required coordination and cooperation with other related institutions. Synchronization is needed to implement a policy, as well as the ability of various parties involved in implementing the policy, so that the implementor does not make a mistake in implementing the policy.

The Regional Government of Gresik Regency has established a coordinating team for mangrove management strategies through Decree of East Java Governor Number: 522/19382 / 022.3 / 2018. The following coordination team for mangrove ecosystem management strategies:

1. Head of Fisheries Service District. Gresik Regency as chairman
2. Head of Environmental Agency, Gresik Regency as vice chairman
3. Head of Regional Development Planning Agency Regency. Gresik as a member;
4. Head of Culture and Tourism Office of Gresik Regency as a member
5. Head of Sub distric as a member.

3. Characteristics or Nature of the Implementing Institution

According to Van Meter and Van Horn (1975: 466) what is the policy must be understood by the implementor responsible for achieving the policy standards and objectives. If the sources of information are different, they will provide inconsistent interpretations of policy standards and objectives. Or if the sources are the same but provide conflicting interpretations, then implementers will face far greater difficulties in implementing policies.

a. Delivering Program to Implementor and Policy Users

Communication in the delivery of information to policy implementers about what is the standard and policy objectives must be consistent and uniform. The main implementer of the policy in this case is the Surabaya City Agriculture Office with related agencies coordinating with each other in the transmission or process of delivering standards and policy objectives.

The process of delivering the mangrove management program to the policy implementers is well implemented. Related party regulations must be carried out. Besides that the mangrove activities that have been declared nationally can be approved by the community as the recipient of the policy. Related to the mangrove socialization program in the Coastal District of Gresik, it has run well.

Mangrove management in Gresik Regency is not only carried out by the Department of Agriculture as Team Leader. There are several agencies involved in supporting mangrove management activities such as the Office of the Environment which examines the level of water pollution in mangrove forests.

The author can interpret that in the management of mangroves. each institution or agency is assigned according to its main tasks and functions. In the perspective of the Van Meter and Van Horn policy implementation models the variables about the characteristics of the agency or implementing agency are well implemented. Agencies or agencies related to the implementation refer to the provisions that have been regulated by the government.

The problem of unclear regional boundaries is also a form of lack of communication efforts between related institutions. Regarding illegal logging, controlling and monitoring of mangroves can be coordinated with the Department of Fisheries. No less important coordination is needed with the Civil Service Police Unit, as an office that legally has the authority to carry out

the controlling function of the policies made by the Regional Government of Gresik Regency.

Intensive coordination is absolutely necessary because mangrove management activities are top down programs, the mechanism of which involves the Central Government, Provincial Governments and Regency / City Governments. The management of mangrove forests faces complex problems so that coordination and communication with all relevant parties is a necessity that cannot be abandoned. This coordination is to minimize the possibility of misunderstanding or different perceptions in program implementation so that goals and objectives can be achieved.

Coordination or communication to integrate the implementation mechanism and the authority procedures of administrative structure to be consistent based on the standards and objectives of the policy. To avoid confusion and make it easier to carry out the main tasks and functions of each agency, the entire involved agencies must refer to mangrove management policies.

b. Clarity and Accuracy of Mangrove Management Program Delivering.

In a public organization, policy implementers will find an event that is more difficult to implement a policy intensively. Thus according to this explanation, the prospect of effective policy implementation is largely determined by the clarity of standards and policy objectives and communicated to policy implementers accurately and consistently (accuracy and consistency) (Van Meter and Van Horn).

Based on the findings above, the researcher can interpret that the activities carried out in fulfilling the transmission or delivery requirements as well as the accuracy and clarity of mangrove management in the coastal area of Gresik Regency have been tried and run optimally even though written technical guidelines or instructions in a policy do not yet exist. If the communication flow is drawn from each agency, it runs according to their respective duties. Mangrove management cannot only be carried out by one agency or agency, but requires intensive coordination from several agencies or related agencies.

According to Van Meter and Van Horn, successful implementation often requires institutional mechanisms and procedures. This will in fact encourage a greater possibility for high officials (superiors) to encourage implementers (subordinate officials) to act in a manner that is consistent with the basic measures and objectives of the policy taken.

The level of hierarchical oversight of sub-unit decisions and processes within the implementing body.

- 1) Political sources of an organization (eg support among members (legislative and executive members).
- 2) Vitality of an organization.
- 3) The level of communication open communication, which is defined as a network of horizontal and vertical communication freely and a relatively high level of freedom in communication with individuals outside the organization

The formal and informal relationship of institution with the decision-making body or the executor of the decision.

4. Institution Characteristic.

Viewed from the perspective of the Van Meter and Van Horn implementation model, the understanding of the implementers in carrying out their tasks can be included as one of the variables proposed by Van Meter and Van Horn, namely the tendency of the executor. Van Meter and Van Horn consider there are three types of response elements that can affect the ability and willingness to carry out a policy, namely: 1) Knowledge (cognition), deepening and understanding (comprehension and understanding) of the policy. 2) The direction of their response, whether accepting, neutral or rejecting (acceptance, neutrally or rejection). 3) The intensity of their response to the policy.

a. Implementor's Knowledge and Understanding

Implementing understanding of the general objectives and basic measures and objectives of the policy is an important thing. Successful policy implementation must be followed by awareness of the policy.

Based on the facts revealed by the informants, that the implementers have understood and know the mangrove management program is a national diagram. The Government of Gresik Regency, especially the Fisheries Department, is seriously implementing this program of activities, especially in planting and monitoring mangroves.

The Fisheries Service in carrying out its duties has overseen mangrove forests, in several places in the Mangrove area in Gresik Regency there is the Mangrove Information Center (MIC) office as an extended representative of the Fisheries Office as the coordinator of Mangrove Information in Gresik Regency.

b. Implementor's Attitude towards Mangrove Management Program

The author can interpret that the attitude of implementing mangrove management in Gresik Regency is good. The implementers support each other and play an active role. This can be seen from the implementation of various types of mangrove planting activities in Gresik Regency by the Department of Agriculture together with the community. Mangrove Ecotourisms had an impact on improving the economy of the community, on the other hand the shrimp farmers community feels disadvantaged because of the ecotourism program.

Based on the opinion of Mr. Isahrul, Head of Gresik Fishery Agency, there is an attitude that some people do not support government policies, especially mangrove ecosystems, are declared as ecotourism areas. Besides that, as a consequence, the Mangrove area in six sub districts of Gresik Regency as an Ecotourism area, the Regional Government must complete facilities and infrastructure.

5. Social, Economic and Politics Conditions

The socioeconomic condition is very influential in the efforts to achieve policy objectives, given the democratic governance of Indonesia. Economic, Social and Political Conditions will influence the policy, and vice versa that the implementation of the policy affects the Economic, Social and Political environment for related parties including the community around the mangrove area.

a. Effect of Policy Implementation on the Environment of Mangrove Areas.

Various kinds of conditions in the Mangrove Area of Gresik Regency are very possible to influence or be influenced by policy implementation. In this case the researcher divides the discussion into 3 (three) kinds of conditions, namely as follows:

1) Social conditions

Based on data obtained from informant interviews, researchers found that social conditions in coastal communities did not affect the implementation of this program, while the effect was not too much on the community because the social condition status was not much different before or after this policy rolled. However, there are some people on the coast of the Mangrove forest in Gresik Regency who feel disadvantaged by the Mangrove Forest policy of the coastal area as a conservation area. The party is the owner of the land or land.

2) Economic conditions

Besides mangroves as abrasion prevention, mangroves can also be processed, the results of which can provide economic benefits to the coastal communities of Gresik Regency. Mangroves can be used as a syrup maker. He made mangroves in the coastal area of Gresik Regency as an eco-tourism area, such as Jogging Trac facilities and boat tours.

Findings in the field, the coastal mangrove conservation area of Gresik Regency which invited many visitors and benefited economically has a weakness in its development to date. The existence of a damaged conservation area makes some of the mangrove ecosystems also reduced and damaged and can not be utilized and developed by the manager or the community. In addition, the amount of waste found both in rivers or in mangrove conservation areas is also a weakness of the area. Areas that are less clean because the waste seems unkempt and reduces the sense of comfort for visitors. This can reduce the number of visitors who come to the mangrove conservation area on the coast of Gresik Regency due to the presence of garbage and unclean environment, the reduced number of visitors who want to visit the mangrove area automatically also has an impact on the economic value generated from tourist visits.

3) Political Conditions

Political aspects have an important role in the implementation of mangrove ecosystem management program policies in the coastal area of Gresik Regency, because political problems are part of one of the strategies in managing mangrove ecosystems in Gresik Regency, especially relating to clear regulations on conservation restrictions in Gresik Regency.

Based on data obtained from interviews with informants, the researcher can conclude that political conditions greatly influence District Government. This is evidenced by an increase in public confidence in the Government in the sub-district led by the Camat at this time. Thus the Subdistrict Government benefits from the political side, and economic aspects in improving the welfare of coastal communities.

6. Implementor's Attitudes towards Mangrove Management Program

Researchers can interpret that the attitude of implementing mangrove management in Gresik Regency is good. The implementers support each other and play an active role. This can be seen from the implementation of various types of mangrove planting activities in Gresik Regency by the Department of Agriculture together with the community.

But there are those who feel disadvantaged by the program. Mangrove Ecotourism has had an impact on raising the economic status of the community, on the other hand the shrimp farmers community feels disadvantaged because of the ecotourism program.

Based on the opinion of the shrimp farmers, there is an attitude that some people do not support government policies, especially mangrove ecosystems, are declared as ecotourism areas. In addition, by establishing the Mangrove area in 6 sub-districts in Gresik Regency as an Ecotourism area, the Regional Government must complete the facilities and infrastructure as an ecotourism area.

3.3 Factors that Support and Hinder the Implementation of Mangrove Management Policies in Gresik Regency

1. Factors that Support Mangrove Management.

Based on the descriptions above, researchers can identify several factors whether that supports and inhibits the implementation of mangrove ecosystem management strategies in the Coastal Area of Gresik Regency.

a. Factors that Support the Implementation of Mangrove Management.

1) Conservation Area Areas

The Panyai Coastal Mangrove Forest Region of Gresik Regency is designated as a conservation area by the Gresik Regency Government, which means the use of biological resources of the Mangrove Forest is done wisely to ensure the continuity of its supplies while maintaining and increasing the quality of biodiversity and value. In other words, there are efforts to preserve and maintain mangrove forest areas by the Gresik District Government.

Mangrove conservation in the mangrove forest area on the coast of Gresik Regency has more advantages. The advantages of mangrove conservation are:

- a) The mangrove forest area in the coastal area of Gresik Regency is more dense and well maintained.
- b) Access to the location is easy, with the availability of transportation infrastructure in the form of paved roads to the location.
- c) Concern and participation of the surrounding community is good. With conservation in the area, the surrounding community is happy to help care for and preserve it.

2) Tourism Development

Mangrove Ecotourism in the coastal area of Gresik Regency is an area formed with the aim of contributing knowledge to the community on the importance of awareness in maintaining the balance of the natural ecosystem.

Mangrove Ecotourism in the coastal area of Gresik Regency besides being a Protected conservation area, the existence of integration between farm farmers, ecotourism, and capture fisheries makes mangrove forests in addition to conservation as well as a livelihood for coastal residents around the area.

The existence of an area that is used as a tourist area as well as education is clearly inviting a lot of public attention to visit it. The number of visitors accompanied by easy accessibility to the mangrove area is a positive carrying capacity for the existence of mangroves. The number of visitors who come and provide fees to enter the mangrove ecotourism area can provide its own income for the economy of the special manager of the Mangrove Ecotourism coast of Gresik Regency.

In addition to the strength of its attraction towards visitors, another strength possessed by the Coastal Mangrove area of Gresik Regency is the diversity of mangroves in the Mangrove conservation area that is classified as many and can be developed. In addition to the ecological function of mangroves as a place to live coastal biota and abrasion retaining beach, mangroves also have many benefits in terms of economic. The sustainable management of Coastal Mangrove Conservation in Gresik Regency also brings many economic benefits to the surrounding residents or managers.

- 3) **Community Participation** The support and participation of the coastal community of Gresik Regency is high. This was revealed by informants of the Manyar community leaders: "Before the government managed it in 2012 there was an effort of community initiative in the form of activities to conserve mangrove plants from surrounding residents".

The community participates in the planting and maintenance of Mangrove Forests in Manyar sub-district in particular, and in the Coastal area of Gresik Regency in general. City government involvement and related institutions

The existence of the seriousness of the Government of Gresik Regency in terms of management of the Mangrove Forest in the Coastal Area of Gresik Regency through the establishment of a coordination team to carry out efforts to manage, maintain and supervise the mangrove forests. The appointed institutions can carry out their duties in accordance with their respective fields.

2. Factors that inhibit Mangrove Management.

The factors that support the implementation of Mangrove Management are:

a. Transfer of Land Functions as Supervision of Plant implementation

Mangrove areas on the Coastal Coast of Gresik Regency as a conservation area are still often debated over land ownership. The rapid development in other fields can narrow the area of mangroves such as settlements. There are still conservation areas where the land is still owned by local residents so sometimes there are land disputes. The existence of residential land around

the protected area has the potential to cause pollution, namely pollution from factory waste.

b. The absence of a Strategic Management Policy Administratively, the written policy of the management strategy of Coastal Mangrove Management in Gresik Regency is not available yet, so there is no technical guidance or guidance in the field, only a mangrove management coordination team. The Gresik Regency Fisheries Service as the head of the mangrove management coordination team has not yet maximally compiled a mangrove management program strategy policy, so there is no technical guide or guide for mangrove management to date. The Fisheries Service revealed that: "The mangrove management scheme and design has not yet been completed, including guidelines and technical instructions for mangrove planting."

Based on data from the Fisheries Department's strategic plan and the results of field interviews show that the Gresik District Fisheries Office has not made a strategic plan on how to manage mangrove specifically, in the Strategic Plan the Fisheries Office only slightly touches on the mangrove issues in the coastal strip of Gresik Regency.

IV. CLOSING

4.1. Conclusion

From the results of the research conducted and data analysis above, the author concluded that the implementation of mangrove management policies at the coastal area of Gresik Regency was less successful. In carrying out the role of the six indicators proposed in accordance with the theory of Van Meter and Van Horn policy implementation, it has not been fully implemented optimally because it is still constrained by factors in three indicators, namely:

1. Standards and objectives of the policy program have not been made, the basis is the Regional Regulation of Gresik District Number 8 of 2011 concerning the Spatial Planning for Gresik Regency in 2010-2030, and the Decree of the Governor of East Java Number: 522/19382 / 022.3 / 2018 dated 14 November 2018 which stipulated that the Gresik District Fisheries Service Office as the Head of the District level Mangrove Management Coordinating team whose tasks are formulating policies, coordinating budget implementation and support, and reporting the results of their implementation. In the implementation of mangrove management, Gresik District Fisheries Service was dominated. Intensive coordination between agencies / agencies involved in its implementation has not been maximized.
2. Unadequate supports of Social, economic and political conditions.

With the existence of factory land around the protected area on the coast of Gresik Regency, it has the potential to cause pollution. Unclear boundaries of mangrove conservation have resulted in narrowing of the land. This can affect the achievement of standards and policy objectives to be not optimal.

3. Supporting factors are the coastal area of Gresik Regency as a conservation area used as ecotourism and active community participation in supporting mangrove management.
4. Factors that hinder the implementation of mangrove management policies in the coastal area of Gresik Regency are mangrove ecotourism as business-oriented ecotourism, not educational or research tourism. Mass tourism creates high activity in the river, resulting in a lot of garbage and causing damage to the ecosystem and the absence of a mangrove management strategy policy.

4.2 Suggestions

Referring to the conclusions mentioned above, the author suggests the following:

1. Making a Strategic Plan for managing mangrove ecosystems (strengthening the capacity of local government in making regulations related to mangroves) by accommodating the status of mangrove ecosystems in the spatial planning of coastal areas.
2. Organizing and controlling mangrove management (composing regulations, licensing, making violation sanctions).
3. Develop criteria for which areas function as conservation, which functions for cultivation (ponds) and factory areas, and establish clear boundaries for the three areas.
4. Develop environmentally friendly mangrove ecosystem management models based on involving the community, implementing work synergy between the institutions or government agencies involved.
5. The government should conduct land acquisition in the mangrove conservation area, so that its management and development can be optimal and avoid disputes.

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AUTHORS

First Author – Sih Sumadiyono; Post Graduate Student of Public Administration Department, Faculty of Social and Politics, Hang Tuah University, Surabaya, Indonesia.
Email : sihyono01@gmail.com