

Implementation of Mangrove Management Policy in Twa. Angke Kapuk Pemprov Dki Jakarta

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ABSTRACT

Preservation and utilization of mangrove ecosystems through responsible and sustainable management has become the focus of the Indonesian government in sustaining the functions and benefits of mangrove ecosystems sustainably for the welfare of the community. By looking at the significant features and advantages of mangroves for human life and the environment, Indonesia has established a mangrove ecosystem management policy in the form of a National Ecosystem Management Strategy. The policy is expected to become a reference for ministries/agencies, regional and regency/city governments to make mangrove management policies in their regions. This study aims to determine the extent to which the implementation of the mangrove ecosystem management policy in Angke Kapuk TWA, is associated with the Coordinating Minister for Economic Affairs Number 4 of 2017 concerning Policies, Strategies, Programs and Performance Indicators for National Mangrove Ecosystem Management. Type of qualitative research with research methods in the field. The results of the study show that the management of the mangrove ecosystem in DKI Jakarta area has not yet referred to the Minister of Economic Affairs Regulation Number 4 of 2017, even though the control of the mangrove ecosystem has implemented. Community empowerment in the management and utilization of mangrove ecosystems is still not well applied, and the synergy of the mangrove ecosystem management program has not well integrated.

KEYWORDS: Mangrove Ecosystem Management, Policy Implementation.

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I. INTRODUCTION

UNESCO has declared that every July 26th is an International Mangrove Ecosystem Conservation Day. Mangroves have various kinds of benefits and functions for human life and the surrounding environment. In general, the benefits and features of mangrove forests are to protect the coast from erosion and abrasion, protect settlements from exposure to storms and wind from the sea, prevent intrusion of seawater, a place to live and breed various wildlife such as fish, shrimp, crabs and birds, besides that the mangrove ecosystem also has the potential of education and tourism and mitigating climate change through carbon sequestration (Co2) and producing clean air. Mangroves are recorded as important ecosystems to manage because they are productive ecosystems in the world, this can be seen from the many national and international academic researches and studies that focus on how government policies in managing mangrove ecosystems and community empowerment in the management of mangroves. Data from the Ministry of Environment and Forestry states that the existing mangrove ecosystem in Indonesia is the largest in the world, which is an area of 3.49 (three-point forty nine) million hectares or 21% (twenty one percent) with a good condition covering 1.67 (one point sixty seven) million hectares and damaged states covering 1.82 (one point eighty two) million hectares. This damaged condition caused by the expansion of the property industry, mining, plantations, fishponds, and mass tourism and land piles of garbage that flow into the sea. The Indonesian government has tried to preserve the mangrove ecosystem by making a Presidential Regulation (Perpres) No. 73 of 2012 concerning the National Strategy for Mangrove Ecosystem Management. The derivative of the Presidential Regulation is the Regulation of the Minister of Economic Affairs Coordinator (Permenko) of the Republic of Indonesia as Chair of the National Mangrove Ecosystem Management Team Number 4 of 2017 concerning Policies, Strategies, Programs and Performance Indicators for National Mangrove Ecosystem Management. The regulation aims to realize sustainable management of mangrove ecosystems and sustainable, prosperous communities and become an integral part of the national development planning system.

In DKI Jakarta area, especially behind the luxury housing area of the beautiful Kapuk Beach (PIK), there is a mangrove forest area named Angke Kapuk Nature Park (TWA) which is a mangrove forest conservation area and is also one of the tourist destinations in the Jakarta area. Angke Kapuk TWA is one of the "lungs of the city of Jakarta" because it produces crisp and clean air full of coolness amid the hustle and bustle

of life and pollution in the Metropolitan City. In the area of 99.82 hectares, we can find many things that are different from the atmosphere of the city of Jakarta in general. Angke Kapuk TWA offers a beautiful atmosphere, a typical landscape of mangrove forests, fresh air, and canoeing activities, along with the mangrove forest with a boat and a place to stay with natural nuances, making this tourist park a tourist destination worthy of visits by residents of Jakarta and surrounding areas.

Based on the description and explanation that has been conveyed in the background, the formulation of the problem in this study is (1) How is the implementation of the mangrove ecosystem management policy in Angke Kapuk TWA, linked to the Minister of Economic Affairs No. 4 of 2017 concerning Policy, Strategy, Programs and Indicators National Mangrove Ecosystem Management Performance, successful or not yet successful (2) What are the factors that hinder and support the implementation of mangrove ecosystem management policies in Angke Kapuk TWA.

II. THEORY

Merille S. Grindle (1980: 6-10) introduced an implementation model as a political and administrative process. The model describes the decision-making process carried out by various actors and through the interaction of decision makers in a political and administrative context. The political process can be seen through a decision-making process that involves various policy actors, while the administrative process is seen through a general process of administrative action that can be examined at a certain program level. The process of policy implementation can only be started if detailed goals and objectives have been set. Subianto (2013: 91) also said, that the success of implementing public policies is influenced by two variables, namely the content of the policy (content) and the environment variable policy (context). Content variables related to what constitutes public policy and Context variables are related to how the political context and administrative activities affect the policies implemented.

III. METHODS

In research on mangrove ecosystem management in Angke Kapuk TWA, it refers to the type of qualitative research that uses natural research procedures by describing the process of implementing policies that involve actors directly or indirectly. The actor involved consisted of the Jakarta Provincial BKSDA, DKI Jakarta Provincial Forestry Service, North Jakarta City Government, Angke Kapuk TWA Manager and surrounding community leaders. The research location is in the TWA area. Angke Kapuk, which administratively belongs to the Kelurahan Kamal Muara, Penjaringan District, North Jakarta Municipality. Geographically, Angke Kapuk TWA located at $106^{\circ} 43' - 106^{\circ} 45' \text{ BT } 6^{\circ} 05' - 6^{\circ} 07' \text{ LS}$, this area has a total area of 99.82 ha.

IV. RESULTS AND DISCUSSION

a. Overview of TWA Angke Kapuk

Muara Angke Kapuk Mangrove Forest is part of the mangrove forest area, which is a kapuk angke groove designed as a forest area based on the Decree of the Governor of the Netherlands East Indies No. 5 On July 11, 1928. Then in 1977 the Minister of Agriculture reassigned the allotment of the Angke Kapuk Forest area through the Minister of Agriculture Decree number 161/Kpts/Um/6/1977 dated June 10, 1977 concerning the Re-Establishment of the Functions of the Tegal Alur Angke Kapuk Forest and Nature Reserve Muara Angke.

DKI Jakarta Government initiated the development of the Angke Kapuk Forest area in 1978. The Governor of DKI Jakarta submitted letter Number 842/A/K/BKD/78 dated May 25, 1978, to the President of the Republic of Indonesia through the State Minister for State Apparatus Empowerment Angke Kapuk Forest was formally abolished as a forest area and handed over its management rights to DKI Jakarta Regional Government on the grounds that the forest areas in the Kapuk angke area no longer functioned as forests and their designation was not in accordance with the 1965-1985 RUTR and the difficulties of DKI Jakarta Provincial Government in providing land for low-cost housing.

In 1998, the Minister of Forestry through Decree Number 097/Kpts-II/88 dated February 29, 1998, released the area of 831.63 hectares of Angke Kapuk Forest to the Minister of Home Affairs and then handed over to PT. Mandara Permai (housing developer). In the decree the forest was still maintained at an area of 333.50 Ha and then in 1994 a field boundary for the forest area which was always supported was 327.70 Ha as a permanent forest area, in accordance with the Minister of Forestry Decree Number 667/Kpts-II/1995 on 15 December 1995 and the forest area in question was (1) Protection Forest covering 44.76 Ha, (2) Tourism Forest 99.82 Ha, (3) Nature Reserve 25.02 Ha; and (4) Special-purpose forests, which consist of (a) 10.51 ha nursery garden, (b) PLN transmission 23.70 ha, (c) Cengkareng Drain 28.39 ha; and (d) Toll Roads and Green Lines of 95.50 Ha.



Figure 4.1. Kapuk Angke Forest Zone Map.

b. The critical value of the Coordinating Ministry for Economic Affairs Number 4 of 2017 concerning Policies, Strategies, Programs and Performance Indicators for National Mangrove Ecosystem Management..

Article 1, Establishing Policies, Strategies, Programs, and Performance Indicators for National Mangrove Ecosystem Management is contained in the Attachment to the Regulation of the Coordinating Minister for Economic Affairs as the Chair of the National Mangrove Ecosystem Management Team Director.

Article 2, Policies, Strategies, Programs and Performance Indicators are guidelines and references for related parties to manage mangrove ecosystems.

Article 3, In the context of accelerating the implementation of each ministry/institution, the leadership of the ministry/institution must determine activities/action plans no later than 2 (two) months after the enactment of this Regulation.

c. Results and Discussion

To see the extent of the successful implementation of the mangrove ecosystem management policy in Angke Kapuk TWA, linked to the Coordinating Minister for Economic Affairs Number 4 of 2017 concerning National Policy, Strategy, Program and Performance Indicators of Mangrove Ecosystem Management, then analyzed with the Merilee S. Grindle theory these can be explained as follows:

1. *Content of Policy*

a) *Interest Affected*

The Central Government has set a Permenko for Economic Affairs Number 4 of 2017 which is a derivative of the Presidential Regulation No. 73 of 2012 concerning the National Strategy for Mangrove Ecosystem Management (SNPEM), which aims to synergize mangrove ecosystem management policies and programs, covering the fields of ecology, socio-economic, institutional and statutory regulations. The policy is expected to guarantee the function and benefits of the mangrove ecosystem sustainably for the welfare of the community which is carried out in a coordinated manner and as a foundation and guidance for the Central Government, Regional Government, Managers and Communities in the management of mangrove ecosystems..

DKI Jakarta Provincial Government has not compiled an action plan/plan for managing mangrove ecosystems by the mandate of legislation. DKI Jakarta Provincial Government through the Jakarta Provincial BKSDA and the Jakarta Provincial Forestry Service have implemented the management of the Kapuk Angke Forest, specifically in maintaining the existence and function of mangrove ecosystems and restoring damaged mangrove ecosystems. BKSDA as the management supervisor at Angke Kapuk TWA is committed to making Angke Kapuk TWA the best mangrove tourism area in Java.

PT Murindra Karya Lestari, as the manager of Angke TWA, has not explicitly made management of the mangrove ecosystem but has carried out management of mangrove ecosystems starting from nurseries, planting, maintenance and protection and recovery of mangroves regularly. The manager intends to make the area that was once an open area because the former pond that was looted by unscrupulous farmers became an area that offers the concept of Eco-Green nature tourism as it is today. Angke Kapuk TWA becomes the lungs of the City of Jakarta and at the same time a tourist destination for residents of Jakarta and its surroundings.

b) *Type of Benefit*

The Central Government stipulates Permenko Number 4 of 2017 aims to sustainably manage mangrove ecosystems and be synergized nationally and realize the value of benefits in the fields of Ecology, Socio-Economic, Institutional, and Legislation.

DKI Jakarta Provincial Government and PT Murindra Karya Lestari have not specially arranged the activities/action plans for the management of mangrove ecosystems, but DKI Jakarta Provincial BKSDA has developed the Angke Kapuk TWA Regional Management Plan up to 2025, Structuring the Site Utilization and Design Blocks. The benefits obtained by DKI Jakarta Province and PT Murindra Karya Lestari, in the

management of Angke Kapuk TWA area which is currently only in the ecological field, namely the area becomes green and as CO₂ absorbent and O₂ producer so as to provide comfort to the surrounding environment due to fresh air and abundant flora and existing fauna. Whereas for the Socio-Economic, Institutional and Legislation Regulations, it has not been maximized, this is due to the lack of concern of the surrounding community in the management of mangrove ecosystems, there has been no utilization of mangroves to improve the economy of the surrounding communities, and the program of mangrove management activities is not yet integrated between mangrove managers.

c) *Extend of Change Envisioned*

The Central Government stipulates Permenko Number 4 of 2017 aimed at synergizing mangrove ecosystem management policies and programs covering the fields of ecology, socio-economic, institutional, and statutory regulations. The regulation is a foundation and guideline for the Central Government, Local Government, Managers and Communities in developing policies on the management of mangrove ecosystems in their region.

DKI Jakarta Provisional Government has not compiled policies, strategies, and management programs for mangrove ecosystems in accordance with the mandate of the law, but in fact DKI Jakarta Provincial Government has implemented several programs in compliance with the rules and regulations, for example, DKI Jakarta Provincial Government has designated Forest areas Angke Kapuk as a protected area 1, which means that the city included in the planning of DKI Jakarta RTRW as a Protected Area Zone, where it is also regulated in the legislation sector Regulation of the Coordinating Minister for Economic Affairs Number 4 of 2017 so that each Regional Government enters mangrove forest in the RTRW of the region.

d) *Site of Decision Making*

The Coordinating Minister for Economic Affairs as the steering director of the national coordination team for mangrove ecosystem management has been right to make a national mangrove ecosystem management policy by issuing the Coordinating Minister for Economic Affairs Number 4 of 2017. By looking at the fact that the mangrove forest in Indonesia is <50% damaged, then should the Indonesian government, make a policy of managing mangrove ecosystem nationally, so that it is expected to guarantee the function and benefits of the mangrove ecosystem sustainably for the welfare of the community.

DKI Jakarta Provincial Government as a Regional Government that has a mangrove forest area, should develop a policy and strategy for managing mangrove ecosystem in the action plan according to the mandate of the law and implement it in DKI Jakarta area, despite the fact that DKI Jakarta Provincial Government has implemented a number of programs.

e) *Program Implementer*

Permenko Number 4 of 2017 has mentioned policies, strategies, and programs that must be carried out by each ministry and institution as well as the Provincial government and the City/regency government up to the performance indicators of the national mangrove ecosystem.

While DKI Jakarta Provincial Government as the Regional Government has not prepared an action plan for the management of the mangrove ecosystem by the mandate of the laws and regulations.

f) *Resources Comitted*

The Central Government stipulates Permenko Economic Affairs Number 4 of 2017 which is a government program and mandates the relevant ministries and agencies to make a program for managing mangrove ecosystems that are synergized between the Central Government, Regional Governments, business actors and the community including resources and funding, so that they should adequate resources will support the program.

DKI Jakarta Provincial Government has not compiled policies and strategies for the specific management of the mangrove ecosystem according to the mandate of the legislation, so far DKI Jakarta Provincial Forestry Service and BKSDA has implemented the Kapuk Angke Forest Area management program in the Jakarta area.

2. *Context of Policy*

a) *Power, Interest and Strategy of Aktor Involved*

The Central Government has interests and strategies and a strong commitment in the management of mangrove ecosystems, it sees from the situation and conditions of Indonesia which is an area that is prone to earthquakes and has an impact on tsunamis. History has recorded tsunamis in Aceh, Simelue, Singkil, Sibolga, Mataram, and finally in the Sunda Strait, which resulted in significant material and material losses. Because of this, the Government has issued Permenko Economic Affairs Number 4 of 2017. The regulation has given authority to relevant ministries/institutions in the management of mangrove ecosystems and acceleration efforts

including funding. The rule is expected to be the basis for local governments and managers and the community in the management of mangrove ecosystems.

DKI Jakarta Provincial Government as the regional government has the Kapke Angke Forest Area in the Jakarta area, but until now it has not compiled specific policies and programs for the management of mangrove ecosystems as mandated by the laws and regulations. Mangrove by establishing Kapuk Angke forest area in the protected zone 1 of DKI Jakarta Provincial Government's RTRW, as shown in the picture below.

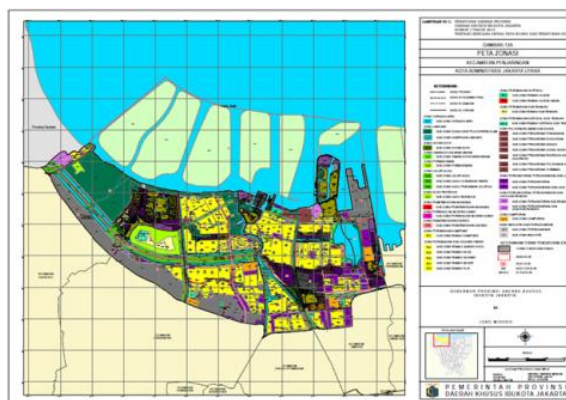


Figure 4.2. Kapuk Angke Forest Zonation Map

PT Murindra Karya Lestari as Angke Kapuk TWA area manager has management authority following the management permit granted by the Minister of Forestry. Permission granted is block 100% utilization. The manager has not prepared an action plan for the management of the mangrove ecosystem in Angke Kapuk TWA which is a mangrove conservation area. Managers focus more on managing eco-tourism. PT Murindra Karya Lestari has built various tourist facilities and infrastructure, including road and bridge infrastructure, lighting, clean water, parking lots; tourist facilities such as lodging, restaurants, halls/meeting rooms, places of worship, information rooms, toilets, shelters, view towers, transportation equipment and so on. Some tour packages offered by managers are mangrove planting, walking around the area on foot or by boat, shooting (pre-wedding), environmental education for students, bird watching, outbound, family tourism (staying) and so on.

b) *Institution and Regime Characteristics*

The ruling Central Government has a strong desire to launch Indonesia as the World Maritime Axis. The first program to become a priority is to re-build the Indonesian maritime culture where the identity, prosperity, and future of the nation is very much determined by sea management and the second program is Indonesia is obliged to maintain and manage marine resources in line with the Indonesian Government's desire to manage mangrove ecosystems nationally by issuing Presidential Regulation 73 of 2012 and has been revealed in the Coordinating Minister for Economic Affairs Number 4 of 2017.

DKI Jakarta Provincial Government has not yet made a specific policy on the management of mangrove ecosystems, although the program has been implemented and has determined the kapuk angke forest area, included in the Protected Zone 1.

c) *Compliance and Responsiveness*

The Central Government stipulates the Ministry of Economic Affairs Regulation Number 4 of 2017 which is the basis for the Ministries/Agencies, Regional Governments and related institutions in managing mangrove ecosystems, to make policies, strategies and programs and Performance Indicators in the management of mangrove ecosystems and determine the most action plans / actions 2 (two) months from the date of stipulation.

DKI Jakarta Provincial Government, as the Regional Government, has not responded to the management of the national mangrove ecosystem, this can be seen in the absence of specific policies, strategies, and programs for the management of mangrove ecosystems that have been created.

3. Supporting and Inhibiting Factors of Implementation

The success of the management of the mangrove ecosystem in Angke Kapuk TWA is determined by several factors that both support and inhibit, as for these factors, as follows:

VARIABLES	INHIBITING	SUPPORTING
I. Content of policy		
1. Interest Affected	- DKI Jakarta Provincial Government and PT. <i>Murindra Karya</i> Lestari has not developed a special mangrove policy, strategy and management program.	- The Government stipulates Presidential Regulation No. 73 of 2012 and <i>Permenko</i> No. 4 of 2017 aims to synergize national mangrove ecosystem management policies and programs.
2. Type of Benefit	- DKI Jakarta Provincial Government has not developed a policy, specifically for mangrove management. - the area becomes green and as CO2 absorbent and O2 producer. - The number of flora and fauna available	- DKI Jakarta Provincial Government has set the <i>Angke Kapuk</i> Forest Area as a Protected Zone 1 of the DKI Jakarta RTRW. - DKI Jakarta Province BKSDA and <i>Angke Kapuk</i> TWA Manager have made a long-term management plan for <i>Angke Kapuk</i> TWA for the 2016-2025 period and <i>Tapak</i> design.
3. Extend of Change Envisioned	- There is no specific policy of the DKI Jakarta Provincial Government in the management of mangrove ecosystems. - Empowerment of surrounding communities and the use of mangroves is lacking. - The program of mangrove management activities has not been integrated.	- DKI Jakarta Provincial Government has designated <i>Angke Kapuk</i> Forest as a Protected Zone <i>Zone 1</i> in the DKI Jakarta RTRW.
4. Site of Decision Making	- DKI Jakarta Provincial Government has not compiled a policy strategy and management program for mangrove ecosystems.	- DKI Jakarta Provincial Government has designated <i>Angke Kapuk</i> Forest as a Protected Zone <i>Zone 1</i> in the DKI Jakarta RTRW.
5. Program Implementer	- DKI Jakarta Provincial Government has not developed an action plan for managing mangrove ecosystems.	- BKSDA and the DKI Jakarta Provincial Forestry Service that carry out the management of the <i>Kapuk</i> <i>angke</i> forest area.
6. Resources Comitted	- DKI Jakarta Provincial Government has not compiled a policy on mangrove ecosystem management	- BKSDA, DKI Jakarta Provincial Forestry Service and PT <i>Murindra Karya</i> Lestari carry out the <i>Kapuk</i> <i>Angke</i> Forest Zone management program.
II. Context of policy		
1. Power, Interest and Strategy of Aktor Involved	- DKI Jakarta Provincial Government has not developed specific policies and programs for the management of mangrove ecosystems.	- The Central Government stipulates <i>Permenko</i> No. 4 of 2017 as a basis for managing mangrove ecosystems - <i>Angke Kapuk</i> forest has been designated a protection zone 1 in the DKI Jakarta RTRW. - DKI Jakarta Province BKSDA and <i>Angke Kapuk</i> TWA Manager have made a long-term management plan for <i>Angke Kapuk</i> TWA for the 2016-2025 period and <i>Tapak</i> design.
2. Institution and Regime Characteristics	- DKI Jakarta Provincial Government has not developed specific policies and programs for the management of mangrove ecosystems.	- The Central Government has a strong commitment to manage mangrove ecosystems sustainably. - DKI Jakarta Provincial Government sets <i>Angke Kapuk</i> Forest as a protected zone 1 in the DKI Jakarta RTRW.
3. Compliance and Responsiveness	- DKI Jakarta Provincial Government and <i>Angke Kapuk</i> TWA Manager have not yet responded to the mangrove ecosystem management policy.	- The Central Government stipulates <i>Permenko</i> No. 4 of 2017 as a basis for managing mangrove ecosystems.

Table 4.1
Inhibiting and Supporting Factor

Based on Table 4.1, it can explain that the Central Government, DKI Jakarta Provincial Government, and Manager of *Angke Kapuk* TWA have strong interests and commitment in the sustainable management of mangrove ecosystems. DKI Jakarta Provincial Government has not compiled an individual management policy for mangrove ecosystems according to the mandate of legislation, but DKI Jakarta Provincial Government has set the *Kapuk Angke* Forest in a protected zone of 1 DKI Jakarta RTRW..

V. CONCLUSIONS AND RECOMMENDATIONS

Based on the results of research in the field and study of documentation on mangrove ecosystem management in *Angke Kapuk* TWA, it can conclude that National Mangrove Ecosystem Management in *Angke Kapuk* TWA in DKI Jakarta Provincial Government has not succeeded, this is because there are no specific policies in managing mangrove ecosystems, community empowerment has not accomplished well and synergy between related agencies is not well integrated it recommended that the DKI Jakarta Provincial Government immediately develop a policy on the management of mangrove ecosystem that refers to the Coordinating Minister for Economic Affairs Number 4 of 2017 involving the relevant agencies.

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