

THE URGENCY OF APPLICATION OF THE ROCCIPI METHOD IN FORMING VILLAGE REGULATIONS REGARDING THE PROTECTION AND MANAGEMENT OF PEAT AND MANGROVE ECOSYSTEMS IN KUBU RAYA REGANCY

Hamdani¹, Muhammad Syafei², Haryadi,³ Oktaviani Yenny,⁴
Chatrine Sabendi Putri⁵

Abstract

Issues regarding Peat and Mangrove Ecosystem Management Arrangements are often discussed and become a problem in a region. There are many questions that arise, especially how to provide protection and management of peat and mangrove ecosystems and what are the wishes of the community, especially the village community, in formulating regulations regarding peat and mangroves. In fact, special methods are needed in regulating and formulating peat and mangrove regulations. For this reason, the ROCCIPI method is an alternative to making village regulations governing the Protection and Management of Peat and Mangrove Ecosystems. This study aims to discuss the urgency of implementing the ROCCIPI Method in Forming Village Regulations Concerning the Protection and Handling of Peat and Mangrove Ecosystems in Kubu Raya Regency. The research method uses descriptive qualitative. Data collection was carried out by observation and in-depth interviews. The withdrawal of informants was done on purpose. Data analysis used Miles and Huberman's interactive model which began with data collection, data reduction, data presentation and drawing conclusions. The results of the study show that the ROCCIPI method is very relevant to be used/applied in the preparation of Village Regulations concerning the Protection and Management of Peat and Mangrove Ecosystems in Kubu Raya Regency.

Keywords: ROCCIPI, Peat, Mangrove, Kubu Raya Regency.

I. INTRODUCTION

Indonesia's peat is a dependent place for millions of people who depend on resources in peatlands for their lives. So far, the community has used peatlands in Indonesia to become agricultural cultivation land. Meanwhile, peatland which is also used as the largest plantation business for palm oil and rubber commodities, the

¹ Lecturer of Faculty of Law, Universitas Tanjungpura, hamdani@hukum.untan.ac.id

² Lecturer of Faculty of Law, Universitas Tanjungpura, muhammad.syafei@hukum.untan.ac.id

³ Lecturer of Faculty of Law, Universitas Tanjungpura, haryadi@hukum.untan.ac.id

⁴ Lecturer of Faculty of Law, Universitas Tanjungpura, oktavani.yenny@gmail.com

⁵ Lecturer of Faculty of Law, Universitas Tanjungpura, chatrinesabendiputri@mail.ugm.ac.id

forestry sector in the form of Industrial Plantation Forest (HTI) and Forest Concession Rights (HPH) and the mining sector is used for state revenue.⁶

The formulation of Pancasila began at the first BPUPKI session, dr. Radjiman Widyodiningrat. The first BPUPKI session discussed a formulation of the problem to be discussed at the session. The problem is about a candidate for the basic formulation of the Indonesian state that will be formed. Then three speakers appeared at the session, namely Mohammad Yamin, Soepomo and Soekarno. On June 1, 1945 in the trial Ir. Soekarno gave a speech orally (without text) regarding the candidate for the basic formulation of the Indonesian state. Ir. Sukarno gave the name of the basic formulation of the country 'Pancasila'. On August 17, 1945 Indonesia proclaimed its independence. The next day, August 18, 1945, the 1945 Constitution was passed. The opening text of the 1945 Constitution contains the contents of the formulation of the five foundations or five foundations of the state which are named Pancasila. Since then Pancasila has become a general term.

Based on this theory it can be concluded that historically Pancasila originated from the first BPUPKI meeting on May 29-June 1 1945. Ir. Soekarno gave a speech orally on June 1, 1945 regarding the basic formulation of the Indonesian state which was named Pancasila.

Based on Global Wetlands data, Indonesia has the second largest peatland in the world with an area of 22.5 million hectares (ha). While the first place is occupied by Brazil with a peatland area of 31.1 million ha. As for the country, the province with the largest peatland is Papua with an area of 6.3 million ha. Followed by Central Kalimantan (2.7 million ha), Riau (2.2 million ha), West Kalimantan (1.8 million ha) and South Sumatra (1.7 million ha). In addition, there are West Papua (1.3 million ha), East Kalimantan (0.9 million ha) and North Kalimantan, North Sumatra, and South Kalimantan which each have 0.6 million ha.⁷

Based on the Decree of the Minister of Environment and Forestry Number SK.130/MENLHK/SETJEN/PKL.0/2/2017 About the Determination of the National Peat Ecosystem Function Map, the Area of National Peat Ecosystem Functions,⁸ namely: Protected Function covering an area of 12,398,482 (twelve million three hundred ninety-eight thousand four hundred eighty-two) hectares and cultivation function covering an area of 12,269,321 (twelve million two hundred sixty-nine thousand three hundred twenty-one) hectares, with details per island as follows:

⁶ Tamas Faiz Dicelebica, Aji Ali Akbar and Dian Rahayu Jati, Identification and Prevention of Forest and Peatland Fire Hazardous Areas Based on Geographic Information Systems in West Kalimantan, *Journal of Environmental Science*, 20(1),115-126; doi:10.14710/jil.20.1.115-126, Volume 20 Issue 1 (2022) : Pp. 118

⁷ This article has been published on Katadata.co.id with the title "Indonesia's Second Largest Peat Area in the World", <https://katadata.co.id/infografik/2019/04/29/luas-gambut-indonesia-terbesar-kedua-di-dunia>

⁸ See Decree of the Minister of Environment and Forestry Number SK.130/MENLHK/SETJEN/PKL.0/2/2017 Concerning the Determination of National Peat Ecosystem Function Map, Area of Function of National Peat Ecosystem

- 1) Sumatra Island, protected function covering an area of 4,985,913 (four million nine hundred eighty-five thousand nine hundred thirteen) hectares and cultivation function covering an area of 4,618,616 (four million six hundred eighteen thousand six hundred sixteen) hectares.
- 2) Kalimantan Island, protected function covering an area of 4,094,203 (four million nine hundred four thousand two hundred three) hectares and cultivation function covering an area of 4,310,614 (four million three hundred ten thousand six hundred fourteen) hectares.
- 3) Sulawesi Island, protected function covering an area of 28,305 (twenty-eight thousand three hundred five) hectares and cultivation function covering an area of 34,985 (thirty-four thousand nine hundred and eighty-five) hectares.
- 4) Papua Island protected function covering an area of 3,290,061 (three million two hundred ninety thousand sixty one) hectares and cultivation function covering an area of 3,305,106 (three million three hundred five thousand one hundred six) hectares.⁹

After the devastating forest and land fires in 2015, some of which occurred on peatlands, the Government of Indonesia established the Peatland Restoration Agency (BRG) as a Non-Structural Institution under the President through Presidential Decree Number 1 of 2016. This special agency is tasked to facilitating and coordinating the restoration of peatland ecosystems covering an area of 2 (two) million hectares in 7 (seven) provinces, namely West Kalimantan, Central Kalimantan, South Kalimantan, South Sumatra, Jambi, Riau and Papua. This policy is part of the implementation of the 'Paris Agreement' in the framework of global efforts to reduce Greenhouse Gas (GHG) emissions for climate change control. This step of the Indonesian Government was appreciated by the international community. Because Indonesia has declared a commitment to reduce GHG emissions by 26% with its own efforts and 41% with international support. The Indonesian government is also ambitious to increase the GHG emission reduction target by 29% after 2020. In December 2020, the Government of Indonesia enacted Presidential Regulation Number 120 of 2020 concerning the Peatland and Mangrove Restoration Agency in order to extend the working period of BRG to become the Peatland and Mangrove Restoration Agency (BRGM) by adding new targets for mangrove rehabilitation. In the four years until 2024, BRGM is given a target for peat restoration covering an area of 1.2 million hectares and mangrove rehabilitation of 600 thousand hectares. In addition to the seven restoration target provinces, the Government increased mangrove rehabilitation targets in North

⁹ Yenisa Jestin Ganindyatama, Rudi Waluyo, and Subrata Aditama, Designing a Structural Model of a Multi-storey Shophouse on Peatland Using the Building Information Modeling Method, Basement Journal Volume 1, No. 1, February 2023, 67-73.

Sumatra, Bangka Belitung, Riau Islands, Riau, East Kalimantan, North Kalimantan, West Kalimantan, Papua and West Papua.¹⁰

Efforts to push the peatland restoration agenda and mangrove rehabilitation in a sustainable manner can be done by strengthening local regulations at the village and regency levels. Mainly through Village Regulations (Perdes) governing the Protection and Management of Peat and Mangrove Ecosystems (Perdes PPEGM). Therefore, the preparation of Perdes PPEGM needs to be supported by a model approach in order to produce quality local regulations. The preparation of the Perdes is also carried out by involving stakeholders in a participatory manner.

To implement a rule (including at the village level) it is not enough just to have good regulations (pro-community) and implemented by a good government apparatus, but must also be equipped with a legal culture of the community that obeys the rules. The legal culture of a society is determined in certain values that live in the community and are used as a reference in making rules such as village regulations. Means, when a village regulation is made, it must first look at the legal culture of the community it will regulate. A rule (such as a village regulation) that is not in accordance with the legal culture of the community will be useless, the rule is like a toothless tiger that has no legal authority. For this reason, in making a rule, it must first examine and know the legal culture of the community it will regulate.

In an effort to find out the legal culture, one way is to conduct a scientific study of a regulation that will be made, which is usually known as the Academy Manuscript or a draft legislation. In an Academy Manuscript there is a scientific study of the sociological state of society against a rule to be made. Therefore, the existence of the Academy Manuscript must be in the draft laws and regional regulations.

In relation to this research because the establishment of Village Regulations does not require an Academic Manuscript, the preparation of Village Regulations on the Protection and Management of Peat and Mangrove Ecosystems directly using the ROCCIPI method is expected to inventory and find solutions to various problems related to the Protection and Management of Peat and Mangrove Ecosystems at the village level.¹¹

The method in the research process is through a qualitative approach which aims to analyze case studies which will be presented descriptively, to answer the problems that have been formulated above. According to Sugiyono, qualitative research methods are often called naturalistic research methods because the

¹⁰ Indah Pratiwi Anhar, Rina Mardina, and Rai Sita, The Impact of Forest and Peatland Fires on Humans and The Environment (Case Study: Village Bunsur, Sungai Apit District, Siak Regency, Riau Province), *Journal of Science Communication and Community Development* Vol. 6 (1) 2022 | 75-85 <https://doi.org/10.29244/jskpm.v6i1.967> Pp. 76

¹¹ Anyualatha Haridison and Afridon Eka Kaharap, Assistance in the Management of Peatland without Burning in Kalumpang Village, Mentangai District, Kapuas Regency, Central Kalimantan, Panrita Abdi Journal, January 2022, Volume 6, Issue 1. <http://journal.unhas.ac.id/index.php/panritaabdi>, Pp. 64

research is carried out under natural conditions, or as an enographic method, because initially this method was used more for research in the field of cultural anthropology, it is referred to as a qualitative method, because the data collected, and the analysis is more qualitative.¹² Data collection was carried out by observation and in-depth interviews. Withdrawal of informants was carried out purposively. Data were analyzed using the Miles and Huberman interactive model which began with data collection, data reduction, data presentation and drawing conclusions.

This research was conducted in Kubu Raya Regency because in this regency various BRG activities have been carried out related to the preparation of village regulations on Peatland Ecosystem Protection and Management, and in 2021 there are also 17 villages in Kubu Raya Regency which are included in the Peat and Mangrove Care Independent Village Assistance Program in West Kalimantan.

II. DISCUSSION

The Urgency of Application of the ROCCIPI Method in the Establishment of Village Regulations Regarding the Protection and Management of Peat and Mangrove Ecosystems in Kubu Raya Regency

As one of the principles of good governance and the realization of people's sovereignty, public participation is the central point in every administration of the state, the establishment of good legislation should be based on empirical studies involving active community participation. With community involvement, the formation of laws and regulations is not only the will of the framers of laws and regulations and is top down, but also based on the aspirations of the community to participate in influencing the policy-making process.¹³

In relation to the creation of a legal product (including village-level legal products) there must be harmony between *das sollen* and *das sein*, in this case it is important to develop legal products that are participatory humanist. *Participatory humanist* laws are laws that give place to local laws and community participation in legal development. The *participatory humanist* function of law is the embodiment of law that is based on human dignity and human values through providing initiatives and opportunities to the community in the decision-making process to meet the needs of people's lives. This process starts from legal planning to legal utilization.¹⁴

¹² Hendra Maujana, and Hanna Rahayu, "Effect of EU policies on Indonesian palm oil exports", Journal ICGET Vol. 8, No. 2, 2022, pp. 296-303 DOI: <https://doi.org/10.29210/020221377>

¹³ Ida Ayu Putu Widiati, Luh Putu Suryani, Ketut Adi Wirawan, Community Participation in Forming Regional Regulations as an Effort to Produce Responsive Legal Products, contained in <https://e-journal.unmas.ac.id/index.php/JHS/article/view/659/624>, Pp. 239.

¹⁴ Novi Angraini¹, Harianto, and Harmini, The Cost of Peat Fires Borne by Farmers Households in Air Sugihan District, Ogan Komering Ilir Regency, Journal of Indonesian Agricultural Sciences (JIPI), April 2023, Vol. 28 (2) 305-315, <http://journal.ipb.ac.id/index.php/JIPI> DOI: 10.18343/jipi.28.2.305. Pp. 306

With different terminology, Bagir Manan¹⁵ said, as a product especially the law-method is nothing other than the will of the maker or who gave birth to it. When law is or becomes one of the functions of power, and it is increasingly dominant, then law is nothing but the embodiment of the will or desire of the decisive or dominant forces at a given time or time. It is such forces that usually have and exercise power.

Therefore, from that the complexion, form, and role of law, will be determined by the will or desire of its creator or maker. In this context, it is often heard expressions such as "*political will*" or more extremely, law is merely the will of *the ruler (command of the sovereign* from adherents of legal positivism), some even say, law is a mere tool of power (as Marxists say).

In fact, although there can be seen an increase in regulation formation activities (including village regulations), there are empirical symptoms in legislation, including ineffective, unimplemented, unresponsive regulations, regulations produced instead of solving social problems, but instead causing new difficulties in society, and the existence of rules that are not relevant to the needs or problems that exist in the community.

Thus, if the statutory provisions are born, they usually do not cause difficulties in their application, because the statutory provisions are born in accordance with the norms that have been manifested in the community. However, it is also necessary to note the existence of *just living law* and *unjust living law*. That not all laws that live in society are forever good and just. It may be good and fair for certain minority communities, but it is macro injustice.¹⁶

As known that Indonesia has the second largest peatland in the world with an area of 22.5 million hectares (ha). **West Kalimantan has a peatland area of 1.8 million ha.** Landscape-wise, the area of peatland in Kubu Raya – the focus area of this study – is around 523,174 ha. This peatland area takes up about 60 percent of the administrative area of Kubu Raya Regency. Peatland in the context of Kubu Raya Regency is the community's livelihood land, there have been settlements and community cultivation has long been carried out.

In this study, from 17 villages, 13 villages were sampled which in 2021 received programs from BRGM. The condition of peatlands and/or mangroves in the study area is as follows:¹⁷

- 1) On peatlands that have been burned and there are many shrubs that are prone to burning, there are also forests on peatlands.
- 2) In some villages peatlands and mangroves are good.

¹⁵ Bagir Manan, 2005, *Authoritative Justice System (A Search)*, Yogyakarta, FH UII Press, Pp. 68.

¹⁶ Loebby Loqman, 1995, *The Role of Written Law in a Developing Society* in the book *Scientific Work of Legal Experts, Anthology of Indonesian Legal Development*, Bandung, PT. Ersco, Pp. 65-66.

¹⁷ Summary of the results of distributing questionnaires to respondents

- 3) Mangroves still have many trees but there are also some trees that have been damaged, but every year there can be an increase in the area and sediment of sea mud.
- 4) The condition of peatlands is some that are in good condition and also those that have begun to deteriorate.
- 5) Peatlands and mangroves are well maintained by local communities.
- 6) Peatlands with swamps have fires and floods frequently.
- 7) There are wet peatlands because there is still a lot of water content.
- 8) There are peatlands that have suffered severe damage due to frequent fires and land fires.
- 9) There are mangrove lands that have suffered severe damage due to land burning by some aquaculture fishermen to open cages.
- 10) The land condition is very thick.
- 11) Peatlands are partly used as oil palm plantations and industrial timber plantations.

Based on the data above, it is illustrated that the condition of peatlands and / or mangroves in several villages in Kubu Raya Regency is still very good and continues to be maintained by the community, some have suffered damage due to fire and there is land clearing for cultivation activities (cages), and so on and there are even peatlands carried out activities for oil palm plantations and industrial timber plantations.

From the data above, it can be seen that peatlands still often occur forest and land fires, so this must be prevented because the impact is very detrimental both to the environment and to human health. Forest and land fires including peatlands and mangroves in several villages in Kubu Raya Regency were caused by fires originating from other villages, burning accidentally due to throwing away live cigarette punting, and some were even deliberately burned to clear land to be used for various agricultural activities and fisheries cultivation.

After the devastating forest and land fires in 2015, some of which occurred on peatland, the Government established the Peatland Restoration Agency (BRG) as a Non-Structural Institution under the President through Presidential Decree Number 1 of 2016. This special agency is tasked with facilitating and coordinating the restoration of peatland ecosystems covering an area of 2 (two) million hectares in 7 (seven) provinces, namely West Kalimantan, Central Kalimantan, South Kalimantan, South Sumatra, Jambi, Riau and Papua. This policy is part of the implementation of the 'Paris Agreement' in the framework of global efforts to reduce Greenhouse Gas (GHG) emissions for climate change control.

In December 2020, the Government enacted Presidential Regulation Number 120 of 2020 in order to extend the working period of BRG to become the Peatland and Mangrove Restoration Agency (BRGM) by adding a new target for mangrove rehabilitation. In the four years until 2024, BRGM is given a target for peat

restoration covering an area of 1.2 million hectares and mangrove rehabilitation of 600 thousand hectares. In addition to the seven restoration target provinces, the Government increased mangrove rehabilitation targets in North Sumatra, Bangka Belitung, Riau Islands, Riau, East Kalimantan, North Kalimantan, West Kalimantan, Papua and West Papua.

The next stage in understanding the problem is finding the cause of the behavior. Regulations are considered successful when they are able to change or eliminate various causes of problematic behavior. That is, the causes of problematic behavior need to be known in order to formulate a vision and elements of success. The thing to remember in finding the cause of the problematic behavior is that "one problematic behavior is always caused by many causes.

In finding problematic behavior, it is necessary to formulate allegations that are the cause of that behavior based on existing empirical facts. Those forecasts must be substantiated by empirical facts and explained logically in cause-and-effect relationships. To help find the various causes of problematic behavior in relation to Forest and Land Fires and regulations regarding the Protection and Management of Peatland and Mangrove Ecosystems, can be use an analytical tool called ROCCIPI.

This tool was developed through a long process by three regulatory design experts, namely Robert B. Seidman, Ann Seidman, and Nalin Abeysekere from Boston University. The seven categories in ROCCIPI are not a priority order, but only a tool to make it easier for people to remember. Not all ROCCIPI categories are met. It could be that the cause of problematic behavior only meets the ROCC category because there is no cause in the IPI category. The categories in that order may not be complete. ROCCIPI is open to be added with new categories.

Based on the description above, it is illustrated that the ROCCIPI method is very relevant to be used/applied in the preparation of Village Regulations on the Protection and Management of Peat and Mangrove Ecosystems. By using the ROCCIPI Method, various problems can be known in the village of the study area in providing protection for peat and mangrove ecosystem management funds. The same thing was also expressed by the Head of the Legal Section of the Regional Secretariat of Kubu Raya Regency who said that with the ROCCIPI method, it can be known the real conditions that exist in the village, what the wishes of the village community in the future with this arrangement, and what materials must be formulated in village regulations governing the Protection and Management of Peat and Mangrove Ecosystems.

Formulation of Regulations Regarding the Protection and Management of Peat and Mangrove Ecosystems in Village Regulations in Kubu Raya Regency

In the life of society, nation and state it often happens that the law cannot always be seen as a guarantor of legal certainty, an enforcer of community rights, or

a guarantor of justice.¹⁸ There are so many legal regulations that are dull, unable to cut arbitrariness, unable to uphold justice and unable to present themselves as guidelines to be followed in solving various cases that should be answered by law. Even many legal products are more colored by the political interests of the dominant power holders.

It turns out that the law is not sterile from other societal systems. Politics often intervenes in the making and implementation of law, so questions arise about which system between law and politics is in reality more supremacy, how politics influences the law, what type of political system can give birth to legal products and what kind of character, and so on.

The answers to the questions above have entered the realm of legal politics. Legal politics can simply be formulated as legal *policy* that will or has been implemented nationally by the government, including also an understanding of how politics affects law by looking at the configuration of power behind making and enforcing the law. Here the law cannot only be viewed as articles that are imperative or imperatives that are *das sollen*, but must be viewed as a subsystem that in reality (*das sein*) is not impossible to be determined by politics, both in the formulation of material and articles and in the implementation of its policies.¹⁹

The scope of government policy can be divided into national policy and regional policy. National policy is a policy issued by the central government that is fundamental and strategic in achieving national goals. Regional policies are policies issued by local governments as an implementation of regional autonomy, including policies at the village level.

The implementation of government policy is not only concerned with the mechanism of translating political decisions into routine procedures through bureaucratic channels, but more than that, it also concerns the issue of conflicts, decisions, and who gets what from a policy. Therefore, it is not wrong to say that policy implementation is an important aspect of the entire policy process.²⁰

Policy formulation as part of the public policy process is the most crucial stage because policy implementation and evaluation can only be carried out when the policy formulation stage has been completed, in addition to the failure of a policy or program to achieve its objectives largely stems from imperfections in the formulation stage. Tjokroamidjojo²¹ said that *Policy formulation* is the same as policy formation is a series of actions to select various alternatives that are carried

¹⁸ Putu Yunika, legal protection against environmental pollution in the Badung Bali mangrove forest area related to law number 32 of 2009 concerning environmental protection and management, legal communication journal, Volume 9 Nomor 1, Februari 2023 P-ISSN: 2356-4164, E-ISSN: 2407-4276 Open Access at : <https://ejournal.undiksha.ac.id/index.php/jkh>, Pp. 893

¹⁹ Moh. Mahfud MD., 1998, Legal Politics in Indonesia, Jakarta: Indonesian LP3ES Library, Pp. 1-2.

²⁰ M. Grindie in Wahab Solichin Abdul, 1991, Policy Analysis, PT. Earth Script, Jakarta, Pp. 57.

²¹ Islamy, 1997, *Op.Cit.*, hal 24.

out continuously and never completed, in this case including decision making. Further about the process of making state (*public*) policy, the state policy-making as “*The whole process of articulating and defining problems, formulating possible solutions into political demands, channelling those demands into the political systems, seeking sanctions or legitimation of the preferred course of action, legitimation and implementation, monitoring and review (feedback)*”.

The stages reflect ongoing activity that occurs all the time. Each stage corresponds to the next stage, and the last stage (*policy assessment*) is associated with the first stage (*agenda-making*) or the middle stage in non-linear activities. Policy formulation as a process, according to Winarno, can be viewed in 2 (two) kinds of activities. The first activity is to decide in general what to do or in other words the formulation is directed to obtain agreement on an alternative policy chosen, a decision that agrees is the result of a whole process. While the next activity is directed at how policy decisions are made, in this case a policy decision includes action by an official or official institution to approve, change or reject a chosen policy alternative. In line with Winarno's opinion, while Islamy²² divided the policy formulation process into the stages of policy problem formulation, government agenda preparation, policy proposal formulation, policy ratification, policy implementation and policy assessment.²³

The next stage is the activity of compiling and developing a series of actions necessary to solve the problem, including: Identification of alternatives is carried out for the benefit of problem solving. For problems that are almost the same or similar, policy alternatives that have been chosen may be used, but for new problems, policymakers are required to creatively find and identify new policy alternatives so that each alternative is clearly characteristic, because providing correct and clear identification of each policy alternative will facilitate the process of formulating alternatives.

Defining and formulating alternatives, aims to make each alternative that has been collected by policymakers clear understanding, because the clearer the alternatives are understood, the easier it will be for policymakers to assess and consider the positive and negative aspects of each alternative.

Assessing alternatives, namely weighting activities on each alternative, so that it is clear that each alternative has its own value of goodness and shortcomings, so that by knowing the weight possessed by each alternative, decision makers can decide which alternative is more likely to be implemented/used. To be able to assess various alternatives well, certain criteria and relevant information are needed.

²² *Ibid*, hal. 77.

²³ Abdillah Munawir, Nurhasanah, Edi Rusdiyanto and Siti Umamah Naili Muna, Policy on Sustainable Use of Mangrove Forest Using Interpretative Structural Modeling Techniques in Rawa Aopa National Park, Southeast Sulawesi, Marina Scientific Bulletin Socio-Economic Maritime Affairs and Fisheries p-ISSN: 2502-0803 <http://ejournal-balitbang.kkp.go.id/index.php/mra>, Vol. 8, No. 2, Desember 2022, pp. 128.

As a collective process, policy ratification is a process of conforming to recognized principles or accepted standards. The main basis for legitimacy is social variables such as the value system of society, state ideology, political system and so on.

In the use of the ROCCIPI Method in the formation of Village Regulations on the Protection and Management of Peat and Mangrove Ecosystems, strength mapping is needed.

Previously, it was explained about the role of the drafter. The drafter's role is to conduct empirical studies in recognizing forms of individual and group behavior related to behavior to be overcome by regulations such as land clearing behavior by burning. The institutionalized way of problematic behavior is formulated and compiled by the drafter in the form of rules that have been explained in the step of understanding the problem.

These empirical facts greatly affect the design process and results. Although the mandate of the framer of the regulation may vary, the drafter still has the same role and position. Therefore, the drafter's perspective is very important in this regard. This step focuses on assets, potential or capital owned by the community and government within the scope of issues and areas related to the root of the problem. Initially, it is necessary to look at the successes that have been achieved. From that success, you can see the strengths you have to achieve that success. With that power, it can achieve other goals that have a wider influence. That power not only answers questions from existing problems, but can also answer other questions beyond the problems that appear. In mapping assets / capital or strength is to weigh the strength from the economic, sociocultural and political sides.

As known that by knowing the advantages of seeing everything based on the power possessed. Therefore, even in designing regulations, it is necessary to see the potential that exists. As long as the economic, social, and political potential of the social situation is already determined. Economic and social forces are important to know. If you realize the economic and social forces, a policy can answer many questions, and even contribute to developing the area.

As a tool of community work, laws and regulations are one of the mediums to achieve the dream of a society. Rules are paths designed to be paths to achieve common goals. Without a clear purpose, rules become just strings of words without meaning. Therefore, before drafting a regulation, there needs to be intensive reflection and discussion on the purpose of a regulation.

In formulating policies for the Protection and Management of Peat and Mangrove Ecosystems in Kubu Raya Regency in the form of Village Regulations, it is necessary to pay attention to the sociological basis by not neglecting the philosophical and juridical foundations.

The hope is that laws and regulations will be accepted by the community reasonably and even spontaneously. Reasonably accepted legislation will have

effective force and does not require much institutional mobilization to carry it out. Village regulations must have a sociological basis or factual applicability, namely the real needs and aspirations of the community. These needs and aspirations underlie why village regulations on the Protection and Management of Peatland and Mangrove Ecosystems must be formed.

Materials that will be regulated in the Village Regulation on the Protection and Management of Peat and Mangrove Ecosystems, among others:

1) Data Collection and Planning

In order to implement peat restoration and mangrove rehabilitation as a whole in the village area, biophysical and social data collection is carried out, including:

- a) Peat areas within the village including peat depth;
- b) The mangrove area in the village includes mangrove forest cover areas;
- c) Existing forms of peat utilization;
- d) Locations prone to fire, flood and drought;
- e) The location of damaged and still good mangrove forests, empty land areas in mangroves that have the potential to be planted with mangrove vegetation;
- f) Peatland and mangrove users;
- g) Conflict areas in peat and mangrove areas;
- h) Community economic activities that utilize resources from peat and mangrove areas;
- i) Settlements in and around peat and mangrove areas;
- j) Transportation facilities, public and social facilities in peat and mangrove areas;
- k) Natural and artificial canals; and
- l) The condition of plants in peatlands and mangroves such as type, age of plants, and density.

Data collection is carried out by the Peat and Mangrove Data Collection Team formed by the Village Head through a Village Head Decree. Based on the results of peat and mangrove data collection, the Village Government prepares a plan for the implementation of peat restoration and mangrove rehabilitation. The plan must be in line with the function of peat and mangrove ecosystems, plans for the protection and management of peat ecosystems and mangrove ecosystems as well as peat restoration and mangrove rehabilitation plans set by the Government and Regional Governments.

The implementation plan for peat restoration and mangrove rehabilitation includes, among others:

- a) Hydrological restoration and rehabilitation activities, revegetation and revitalization of residents' livelihoods will be carried out;
- b) Institutions or Community Groups tasked with supporting peatland restoration and mangrove rehabilitation;
- c) Forms of supervision carried out by the Village Government;
- d) Sources of financing.

Peatland restoration and mangrove rehabilitation implementation plans are consulted with Village Facilitators and can be prepared with the help of other parties. Peatland restoration and mangrove rehabilitation implementation plans are made annually and included in the Village Government Work Plan.

2) Implementation

Peatland Restoration activities in Antibar Village are carried out through the 3R approach, namely Reweting, Revegetation and Revitalization which are explained as follows:

- a) Reweting is the restoration of peatland water management to make peatland ecosystems or parts of them wet and/or moist so that they function again to support ecosystem services as an effort to restore hydrology by building canal blocks, canal backfilling, building boreholes and / or reservoirs;
- b) Revegetation is carried out to restore land cover of Peatland Ecosystems through replanting in peat areas in accordance with local native plants that are adaptive to wetlands that have economic value; and/or
- c) Revitalization is carried out to intensify and redevelop the capacity of the community in managing peatland ecosystem resources in a sustainable manner by optimizing various existing potentials, which are well implemented.

The implementation of peatland restoration activities may change and be updated in accordance with the restoration plans of the Central Government, Provincial and Regional Governments. The implementation of mangrove rehabilitation is carried out by:

- a) Enrichment of Biological Resources;
- b) Habitat improvement;
- c) Protection of marine life species to grow and develop naturally;
- d) Eco-friendly; and
- e) Establishment of mangrove ecotourism area.

Enrichment of Biological Resources is carried out through:

- a) Planting;

- b) Transplant;
- c) Seed sowing or restocking; an/or
- d) Creation of artificial habitats.

Habitat improvement is carried out through:

- a) prevention and/or cessation of activities that may damage habitats;
- b) the use / application of building construction in accordance with ecological principles;
- c) the technical use/application of habitat improvement;
- d) transplant; and/or
- e) creation of artificial habitats.

Protection of biota species is carried out through:

- a) provision and/or protection of *spawning* grounds, *nursery grounds*, and *feeding* grounds;
- b) counseling and awareness;
- c) surveillance; and/or
- d) law enforcement against perpetrators of damage.

Eco-friendliness is done through:

- a) the use of species that have the same genetic pole;
- b) prioritization of local raw materials that do not pollute the environment;
- c) selective use of technology as needed;
- d) application of technologies adapted to biological seasons and hydro-oceanographic patterns; and/or
- e) adjustment of frequency, area and volume according to the carrying capacity of the environment.

3) Management Institution

To carry out peat restoration and mangrove rehabilitation, the Village Government can establish a Village Institution, Social Forestry, or other designations in charge of carrying out activities. The Social Forestry Village Institute was formed by the Village Head through consultation with residents and witnessed by BPD. In carrying out activities, Village Social Forestry Institutions can cooperate or receive financial assistance or technical assistance from other parties with the approval of the Village Head.

The Social Forestry Village Institute can form a sub-group that specifically carries out peat restoration and mangrove rehabilitation activities. Membership of the Social Forestry Village Institute must

include youth and women. The management structure of the Social Forestry Village Board is determined by the Village Head Decree.

In carrying out its duties, the Social Forestry Village Institute has the following functions:

- a) disseminate to the community about the protection and management of peatland and mangrove ecosystems; and
- b) as a partner of the community.

In carrying out activities, Social Forestry Village Institutions must be open, participatory, transparent and responsible. The management of the Social Forestry Village Institute submits activity reports including financial reports to residents through the Village Government.

Peatland Ecosystem Protection and Management is related to Environmental Protection and Management as affirmed in Article 1 point 2 of Law Number 32 of 2009 concerning Environmental Protection and Management which states that Environmental Protection and Management is a systematic and integrated effort carried out to preserve environmental functions and prevent environmental pollution and/or damage which includes: planning, utilization, control, maintenance, supervision, and law enforcement.²⁴

The determination of peatland ecosystems that cannot be managed within a certain period of time is included in national, provincial, and district/city Peatland Ecosystem Protection and Management plans. Preservation of the function of Peatland Ecosystems as a controller of climate change impacts is carried out through efforts to: mitigate climate change; and climate change adaptation. Climate change mitigation and adaptation efforts are carried out in accordance with laws and regulations.²⁵

III. CONCLUSION

Based on the problem, discussion and analysis of research results, it is concluded as follows:

- 1) The application of the ROCCIPI method in the preparation of village regulations to overcome the problem of protection and management of peat and mangrove ecosystems in Kubu Raya Regency is very necessary considering that village regulations regarding the protection and

²⁴ Anies Handayani, Muhlin, Siska, Implementation of Policies Concerning the Protection and Management of Mangrove Ecosystems in Banggai Islands District, JOURNAL OF EDUCATION AND COUNSELING VOLUME 5 NUMBER 1 YEAR 20234738, 2023, Pp. 4740

²⁵ Muhammad Fachri Hibatullah, Sofyan Jafar, and Hasan Basri, "CORPORATE CIVIL LIABILITY FOR ENVIRONMENTAL POLLUTION (Research Study of PT. Ciomas Adisatwa)", Student Scientific Journal (JIM FH) E-ISSN 2798-8457 Volume VI Number 1 (January, 2023) Faculty of Law, University of Malikussaleh Pp. 63

management of peat and mangrove ecosystems are new and require assessment because in villages that have peatlands and / or mangroves there is often forest and land loss including clearing land by burning, And on the other hand, there are also community members who use mangrove wood as a livelihood that has long been done by the local community. With the ROCCIPI method, various aspects are studied so that the village regulations produced are in accordance with the values that live and develop in the community.

- 2) The formulation of regulations regarding the protection and management of peat and mangrove ecosystems in village regulations in Kubu Raya Regency must be in accordance with the conditions and legal needs in the village concerned so that these village regulations can solve various existing problems, including data collection and planning, implementation of peat restoration and mangrove rehabilitation, institutions, cooperation, guidance and supervision, rights, prohibitions, incentives, sanctions.

REFERENCES

Abdul, Wahab Solichin, 1991, Policy Analysis, PT. Earth Script, Jakarta.

Anggraini, Novi, Harianto, and Harmini, The Cost of Peat Fires Borne by Farmers Households in Air Sugihan District, Ogan Komering Ilir Regency, Journal of Indonesian Agricultural Sciences (JIPI), April 2023, Vol. 28 (2) 305-315, <http://journal.ipb.ac.id/index.php/JIPI> DOI: 10.18343/jipi.28.2.305.

Anhar, Indah Pratiwi, Rina Mardina, and Rai Sita, The Impact of Forest and Peatland Fires on Humans and The Environment (Case Study: Village Bunsur, Sungai Apit District, Siak Regency, Riau Province), Journal of Science Communication and Community Development Vol. 6 (1) 2022 | 75-85 <https://doi.org/10.29244/jskpm.v6i1.967>.

Dicelebica, Tamas Faiz, Aji Ali Akbar and Dian Rahayu Jati, Identification and Prevention of Forest and Peatland Fire Hazardous Areas Based on Geographic Information Systems in West Kalimantan, Journal of Environmental Science, 20(1),115-126; doi:10.14710/jil.20.1.115-126, Volume 20 Issue 1 (2022).

Ganindyatama, Yenisa Jestin, Rudi Waluyo, and Subrata Aditama, Designing a Structural Model of a Multi-storey Shophouse on Peatland Using the Building

Information Modeling Method, Basement Journal Volume 1, No. 1, February 2023.

Handayani, Anies, Muhlin,Siska, Implementation of Policies Concerning the Protection and Management of Mangrove Ecosystems in Banggai Islands District, Journal Of Education And Counseling Volume 5 Number 1 Year 20234738, 2023.

Haridison, Anyualatha and Afridon Eka Kaharap, Assistance in the Management of Peatland without Burning in Kalumpang Village, Mentangai District, Kapuas Regency, Central Kalimantan, Panrita Abdi Journal, January 2022, Volume 6, Issue 1. <http://journal.unhas.ac.id/index.php/panritaabdi>.

Hibatullah, Muhammad Fachri, Sofyan Jafar, and Hasan Basri, "Corporate Civil Liability For Environmental Pollution (Research Study of PT. Ciomas Adisatwa)", Student Scientific Journal (JIM FH) E-ISSN 2798-8457 Volume VI Number 1 (January, 2023) Faculty of Law, University of Malikussaleh.

Loqman, Loebby, 1995, The Role of Written Law in a Developing Society in the book Scientific Work of Legal Experts, Anthology of Indonesian Legal Development, Bandung, PT. Ersco.

Manan, Bagir, 2005, Authoritative Justice System (A Search), Yogyakarta, FH UII Press.

MD, Moh. Mahfud, 1998, Legal Politics in Indonesia, Jakarta: Indonesian LP3ES Library.

Wibowo, Eddy, et.al., 2004, Law and Public Policy, YPAPI Publishers, Yogyakarta.

Munawir, Abdillah, Nurhasanah, Edi Rusdiyanto and Siti Umamah Naili Muna, Policy on Sustainable Use of Mangrove Forest Using Interpretative Structural Modeling Techniques in Rawa Aopa National Park, Southeast Sulawesi, Marina Scientific Bulletin Socio-Economic Maritime Affairs and Fisheries p-ISSN: 2502-0803 <http://ejournal-balitbang.kkp.go.id/index.php/mra>, Vol. 8, No. 2, Desember 2022.

Maujana, Hendra, and Hanna Rahayu, "Effect of EU policies on Indonesian palm oil exports", Journal ICCET Vol. 8, No. 2, 2022, pp. 296-303 DOI: <https://doi.org/10.29210/020221377>

Widiati, Ida Ayu Putu, Luh Putu Suryani, Ketut Adi Wirawan, Community Participation in Forming Regional Regulations as an Effort to Produce Responsive Legal Products, contained in <https://e-journal.unmas.ac.id/index.php/JHS/article/view/659/624>.

Yunika, Putu, legal protection against environmental pollution in the Badung Bali mangrove forest area related to law number 32 of 2009 concerning environmental protection and management, legal communication journal, Volume 9 Nomor 1, Februari 2023 P-ISSN: 2356-4164, E-ISSN: 2407-4276 Open Access at : <https://ejournal.undiksha.ac.id/index.php/jkh>.

Katadata.co.id with the title "Indonesia's Second Largest Peat Area in the World", <https://katadata.co.id/infografik/2019/04/29/luas-gambut-indonesia-terbesar-kedua-di-dunia>