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**LEGAL PROTECTION OF MANGROVE FORESTS: FROM  
COMMUNITY CONSENSUS TO WRITTEN LAW**

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***Abstract***

Environmental degradation occurs worldwide and has become an issue of international interest. It has been observed since the 1950s and also affects the ASEAN region, including Indonesia. Some cases of environmental damage in Indonesia include pollution cases, such as forest fire cases, as well as illegal logging, and mining in almost all Indonesian provinces. In relation to the protection and management of the environment at the provincial level, the government of South Sulawesi takes responsibility for protecting and managing the living environment, including concerns related to the mangroves. There are some laws (community consensus) that need to be formulated into written law in order to preserve the mangrove forest from environmental damage. The aim of this paper is to identify the extent to which the community consensus in the form of *PerDes* (a written law based on village regulations) can be transferred as a written law in order to preserve mangroves from environmental damage. This study was conducted in two villages located in Tongke-Tongke in Sinjai and Tanakeke Island in Sulawesi, Indonesia. The data were predominantly primary in nature whereas secondary data was used to support the concept and results. The findings show that the unwritten laws regarding the preservation of mangrove forests has not been affirmed as a written law in the village of Tongke-Tongke in Sinjai, whereas in Tanakeke Island, the unwritten law, inspired by the consensus of the community (*Bangko Tapampang*), has been affirmed in village regulation (*PerDes*). The four villages in Tanakeke Island have initiated a village regulation concerning mangrove management. Both Tongke-Tongke in Sinjai and Tanakeke Island have large areas of protected mangrove. The objective is to highlight that the unwritten law should be formulated in writing as *PerDes* to guarantee that future generations will abide by the laws to preserve the mangrove forests. This means that to preserve the mangrove forests in Tongke-Tongke in the future, those local values of preserving mangroves in Tongke-Tongke should be transformed into *PerDes*.

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**Keywords:** Mangrove forest, community consensus, protection of law.



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## 1. Introduction

Environmental protection is an important issue and has become a topic of interest in various forums, both national and international. Environmental protection plays an important role in ensuring the survivability of humankind. As environmental sustenance is needed in order to maintain the balance of nature, environmental development patterns have been identified as the main key in maintaining the balance of nature.

The principle of environmental development has become a sensitive issue and is one of the main points of focus for groups concerned about the continuous damage to the environment. Unwise utilization of natural resources causes significant degradation in terms of their quality and quantity, and subsequently leads to their exhaustion (Takdir Rahmadi, 2011). Therefore, a strategic approach to environmental issues is required to save the environment from further damage.

Environmental degradation on a global scale has been on the increase since the 1950s since the onslaught of industrialisation. Indonesia too, like the rest of ASEAN (Association of South East Asian Nations) has been subject to numerous cases of environmental degradation such as forest fires in Sumatera and Kalimantan, as well as illegal logging, and mining in almost all Indonesian provinces.

In relation to the protection and management of the environment at the provincial level, the government of South Sulawesi is responsible for protecting and managing the living environment. Facts have shown that during the period of 2000–2009, the deforestation rate in South Sulawesi reached 50,072.92 hectares per year. The data is a warning for the South Sulawesi government to pay more attention to its living environment (Takdir Rahmadi, 2011). Therefore, the South Sulawesi government's commitment to address this issue is evident in the efforts to effectively manage the living environment, including the coastal areas, by means of the Local Regulation No. 6 of 2007 concerning the Management of the Coastal Area and Small Islands. The coastal area of South Sulawesi in 24 districts/cities covers 25,369.8 km<sup>2</sup> ( $\pm$  45% of the South Sulawesi's territory) and extends along the line of the beach to reach 1,973.7km. More than 65% of the people who live in South Sulawesi reside in the coastal areas and islands, amounting to about 1,248,378 people (731,531 males and 877,971 females). However, the fact is that 80% of the people who live in the districts and cities are relatively poor but living amidst abundant resources around the coastal areas that have the potential for further development (DKP Propinsi Sulawesi Selatan, 2010).

One of these coastal resources is the ecosystem of the mangrove forest. It has high economic and ecological values. If it is utilised properly based on careful planning and sustainability, it will not only increase the revenue and prosperity of the coastal society but also increase the revenue of the region. The mangrove forest ecosystem is a unique and fragile ecosystem. It has ecological and economic functions. The ecological functions of the mangrove forest include the following: it protects the beachline; it prevents the intrusion of sea water; it serves as a habitat; it serves as feeding grounds, nursery, and spawning grounds for various aquatic organisms; and it serves as a micro climate management system (Carter, Steffen, Schmidt, & Hiron, 2015). Meanwhile, the economic functions of the mangrove forest are to produce the daily and industrial needs of the local people and serve as a source of seeds (Santoso & Arifin, 1998). The extensive mangrove forests in Indonesia are the largest in the world, with an area of 3,112,989 hectares, which comprise 22.6% of the total area of mangrove worldwide (Giri et al., 2011). However, the mangrove forest ecosystem in South Sulawesi continues to face degradation. In South Sulawesi, from a total mangrove

forest area of 35,052.19 hectares, only 48.03% was classified as well preserved, while the rest was identified as having been damaged (DKP Propinsi Sulawesi Selatan, 2010). One of the regions of South Sulawesi that has the potential of providing benefits from its mangrove forest is Takalar District, especially the Island of Tanakeke. However, the total area of mangrove forest in Takalar has declined. In 1994, the total area was 4,703.50 hectares, while in 1998, only 2,488.50 hectares remained (Setiawan, 2016). The biggest and widest mangrove forest in South Sulawesi is Tongke-Tongke – located in East Sinjai Sub-district, District of Sinjai – which has a mangrove forest of around 3,266.12 hectares.

Generally, the destruction of mangrove forest is caused by the use of mangrove forest areas for the purposes of mound expansion, residential areas, construction of harbor facilities, and industrial infrastructural development (Tahir, 2010). It has, of course, impacted directly on environmental sustainability and has affected the resources used as sources of livelihood by local people residing in coastal and small islands, who rely solely on the mangrove forest for their needs.

## **2. Problem Statement**

There are a number of laws (community consensus) that need to be formulated in writing into local Regulations called *PerDes* in order to preserve mangrove forest in both Tanakeke Island and the village of Tongke-Tongke. The community consensus holds the means of protecting the mangrove from further and more extensive environmental damage.

## **3. Research Questions**

The article will focus on identifying the extent that the community consensus can be transferred as a written law in the form of *PerDes* in order to preserve mangrove from the damage.

## **4. Purpose of the Study**

**4.1** To find out how the community consensus can be adapted into the written law and applied effectively to preserve the mangrove forests.

**4.2** To elaborate that the community consensus can be more effective than its affirmation as a written law to be obeyed by the community.

## **5. Research Methods**

In order to obtain an in depth understanding of the issues, qualitative research methodology was employed to collect and analyze relevant data. This study was conducted in two villages located in Tongke-Tongke in Sinjai and Tanakeke Island in South Sulawesi, Indonesia. Secondary research was conducted to support the concept and results. In collecting the secondary data, the researchers use available resources, including libraries and government archives. The secondary data assisted in clarifying certain pitfalls, grey areas, unanswered questions, and unattended concerns of the unwritten rule in both villages related to preserving mangrove forests.

## 6. Findings

In the village of Tongke-Tongke in Sinjai, the unwritten law regarding the preservation of mangrove forest has not been affirmed as a written law. This is entirely different in Tanakeke Island. Inspired by the consensus of *Bangko Tapampang*,<sup>1</sup> the four villages in Tanakeke Island, initiated a village regulation – called *Peraturan Desa* or *PerDes* for short – concerning mangrove management. The illustration can be seen in Table 1 below:

**Table 01.** The laws available in the study sites

No.	Location	Unwritten Law	Written Law
1.	The village of Tongke-Tongke in Sinjai	✓	-
2.	Tanakeke Island	✓	✓

### 6.1. The Consensus of the Community

Some years ago, the people of Tanakeke Island reached a consensus to protect and preserve the mangrove forest. They designated an area of the mangrove forest as protected area called *Bangko Tapampang* in the local language. At the time, they realized that they depended on the mangrove forest to fulfill their basic nutritional needs, such as fishes and shrimps. They were aware also that the mangrove forest would assist them to avoid certain climatic problems, such as sea level rise, storm damage, precipitation, and extreme temperature. *Bangko Tapampang* is an area of the mangrove forest covering ±50 hectares that was set aside as a protected area and is still preserved until today. This area is not owned by anyone. The total area of mangrove forest in Tanakeke Island has diminished from 1,776 hectares before the 80s to only about 500 hectares presently. The *Bangko Tapampang* area of ±50 hectares is included in the remaining 500 hectares.

*Bangko Tapampang* in the context of village administration previously covered only two villages. However, due to Law No. 23 of 2014 concerning Local Government, the two villages were split to become five villages. This situation will indirectly affect the existence of *Bangko Tapampang* as a community forest in Tanakeke because it is directly related to the administration of the villages.

According to the head of the village of Tompotana, *Bangko Tapampang* is only recognised by the people of Tanakeke. It has existed for some time and has become a legacy to protect the mangrove forest. The existence and the relevant regulation associated with *Bangko Tapampang* is still maintained until now, and has become the only no man's land of the mangrove area. However, the people in the island who do

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<sup>1</sup> *Bangko Tapampang* is a concept of local wisdom to protect and preserve mangrove forest and has been in place for several years. It is basically an unwritten law which exists as a traditional mangrove management regulation in villages in Tanakeke Islands. The concept includes: (a) Living mangroves can only be cut by the owner (or family that has a traditional claim on the mangrove forest area in question). (b) When a living mangrove is cut – five to ten mangroves (always *Rhizophora*) are planted back. (c) Dead mangroves can be harvested for firewood by anyone in the community at-large, without need for permission by traditional “land” owner. (d) All fisheries products from a mangrove area are open-access to the community at-large. (e) All non-timber forest products (honey, fruit, etc.) are open-access to the community at large. The practice (consensus) is rewritten formally in order to align to several government regulations. The contents of the formal concept - called *Peraturan Desa* (*Perdes*) – then are socialized by the village's government to assist the community members in Tanakeke islands to obey the regulation for the sake of future generations.

not have land in the mangrove area are still allowed to log the wood they need as long as they obey the consensus enacting *Bangko Tapampang*.

It is basically divided into three zones, as follows:

1. The Core Zone: This is the zone that functions as the mangrove protective zone, and all logging activities are forbidden in this zone.
2. The Buffer Zone: This is the zone that functions as the limited utilization zone in accordance with the agreement about the system of *Bangko Tapampang* management.
3. The Rehabilitation Zone: This is the zone that functions as the area for restoring the mangrove forest that has experienced damage.

The management system comprises the following regulations:

1. All parties are restricted from chopping or logging any mangrove trees in the Core Zone.
2. The people of the village who do not have and are incapable of buying mangrove land are allowed to chop or log the mangrove trees only in the Buffer Zone of *Bangko Tapampang* and are limited to a maximum of 10 logging activities per family in a year.
3. After logging the mangrove forest, those involved shall plant 20 seeds in the logged area or in the Rehabilitation Zone of *Bangko Tapampang*.
4. The planting of mangrove seeds is done collectively at least once a year in cooperation with the relevant institutions in the Rehabilitation Zone.
5. The people who wish to chop the mangrove trees in *Bangko Tapampang* are obliged to report to the local government before and after conducting the logging activity.

A consensus similar to the one reached by the people of Tanakeke Island to set aside an area of the mangrove forest as protected area is also found in the village of Tongke-Tongke in Sinjai. The people's consensus in Tongke-Tongke is based on three main pillars, which are as follows:

- 1) Self-awareness
- 2) Sincerity
- 3) Diligence

The implementation of the three pillars is the result of past experiences, especially the beach abrasion experience of 1955 in Tongke-Tongke village, which led to the loss of about 15 meters of land per year and threatened the village along with the entire mound in the beach of Tongke-Tongke. In the 1970s, the tide was as high as 30-40cm and even reached the houses of the people. In the 1980s, beach abrasion greatly threatened the houses of the people, and some of them even had to be removed to avoid catastrophic damages. To reduce the damage, people in Tongke-Tongke coordinated by a village chief Badaruddin<sup>2</sup>

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<sup>2</sup> Badaruddin was the head of the sub-village in Tongke-Tongke, along with several Tongke-tongke community leaders, to rescue the beach in Tongke-tongke by collecting rocks to be used as dike. The collection of coral reefs was carried out vigorously to save the environment from the threat of abrasion.

saved the beach by piling corals to make an embankment. The rock piling process was conducted with commitment to save the environment from the threat of abrasion.

The use of coral did not entirely save the people from abrasion. The people of Tongke-Tongke coordinated by a community leader, Muh Tayeb<sup>3</sup> later developed a new solution to avoid abrasion. They started to plant mangrove seeds and influenced the mind-set of others to be more conscious of their environment. Implementing the concepts of self-awareness, sincerity, and diligence became the key to success in the planting of mangrove to save the people from the threat of abrasion.

The three pillars are the foundation of the preservation of mangrove forest by the people of Tongke-Tongke village. The consensus that one chopped tree will be replaced by 100 trees became the control tool for the people not to carelessly log the mangrove forest. At this moment, the mangrove forest in Tongke-Tongke village has reached an area of  $\pm 170$  hectares. The total area is three times the total area of *Bangko Tapampang*.

## 6.2. Affirmation of Unwritten Law as Written Law

The consensus in the village of Tongke-Tongke in Sinjai based on three pillars as mentioned above has not been formulated into a regulation at the local governmental level. In this context, the existence of a consensus in Tongke-Tongke is enough to ensure that people will have a strong commitment to guard the mangrove forest from the threat of damage. The relationship between the people and the mangrove forest has formed self-awareness among the people about the need for them to protect the mangrove forest in order to prevent the threat of abrasion, similar to what happened in 1970.

This is entirely different from what happened in Tanakeke Island. The affirmation process of unwritten law as written law was conducted in Tanakeke Island. Inspired by the consensus of *Bangko Tapampang*, the four villages in Tanakeke Island, namely Balandatu, Maccini-Baji, Rewataya, and Tompotana, initiated a village regulation – called *Peraturan Desa* or *PerDes* for short– concerning mangrove management.

The four villages in Tanakeke Island realized that they needed the mangrove forest to prevent abrasion and to serve as a place for fish reproduction and a source of aquatic resources. They realized also that the mangrove forest management needs to be controlled wisely in order to guarantee proper and sustainable usage for the benefit of future generations. The village government initiated *PerDes* in cooperation with some NGOs (*Yayasan Konservasi Laut Makassar* [Makassar Sea Conservation Foundation] and the Makassar Mangrove Action Plan).

The four regulations stipulated above basically do not have any substantive difference (same norms) from one another. Article 7 of the village regulation, for example, regulates the mangrove management and consists of the following provisions:

- 1) Mangrove logging in other people's land requires the permission of the land owner through the village government.
- 2) For every logging referred to in Article 1, it is obligatory to spare some trees as the core trees.

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<sup>3</sup> Muh. Tayeb was a community leader in Tongke-tongke who dedicated his life to preserve the mangrove in Tongke-tongke. According to him, the use of coral reefs does not fully save the community from the threat of abrasion, a solution for the community is to start mangrove planting. He instilled the value of awareness, sincerity, and perseverance as the key to the success of mangrove planting in order to save people from the threat of abrasion.

- 3) Every mangrove land that has a transferred management right, either by selling or granting, must re-register their land to the village government.
- 4) The land owner or the village government is recommended to conduct a rehabilitation exercise in the abandoned land.
- 5) Control and surveillance of the mangrove forest are conducted completely by the village government and the villagers.

The norms in Article 7 are essentially an affirmation of *Bangko Tapampang* that are translated into written law. This affirmation is expected to control the awareness and behavior of the community in order to protect the mangrove forest and use it as wisely as possible. The need for affirmation of the *Bangko Tapampang* concept into *Peraturan Desa* (written law) is to ensure that the people in Tanakeke Island do not harm the mangrove forest. It is expected that people will extend the same treatment of the mangrove forest outside *Bangko Tapampang* as they treat *Bangko Tapampang*.

However, people in the Island tend to harm the mangrove forest because of certain problems that arise daily, such as weather conditions, debt, and lack of money. To deal with these problems, they switch their jobs in accordance with the conditions in the Island at a particular time. For example, if the production of seaweed is decreasing, the people will turn to the production of charcoal primarily made from mangrove wood. The average age of the mangroves cut down by charcoal makers is nine years, and they usually grow in very dense stands (up to 10,000 stems per hectare) and exhibit low individual volumes per tree. This condition extremely threatens the existence of mangrove forest, but the people do not really have any other option than to cut down the forest uncontrollably for their subsistence.

Another problem that harms the mangrove forest in Tanakeke Island is conversion from mangrove forest to brackish water pond (*Tambak*). As known, *Tambak* is one of the most common features of land use in Tanakeke Island. The conversion of land has decreased the size of the mangrove forest compared with its size at the beginning of 1980.

*Peraturan Desa* (*PerDes*) as a written law has been enacted in four villages in the Tanakeke Island. However, there has been a gradual tendency for the people to disobey and ignore the *PerDes*. According to Blue Forest, only Balandatu village is still consistent and effective in protecting the mangrove forest. Blue Forest has initiated a new village regulation on mangrove forest management to complement the previous regulation since the end of 2016.

The new village regulation was created to involve the villagers actively. Its sanction provisions are wider than the sanction in the prior *PerDes*. The prior sanction of *PerDes* for illegal mangrove cutters was Rp. 100,000/tree. However, the sanction provisions of the new regulation are as follows:

1. The mangrove cutters shall replant the mangroves that he/she cut; it is the first warning.
2. The mangrove cutters shall pay Rp. 250,000 /tree; it is the second warning.
3. The mangrove cutters shall pay Rp. 500,000 /tree; it is the third warning.
4. The mangrove cutters shall be arrested by the police if they ignore the third warning.

The new regulation basically applies the concept of bottom-up participation, which involves the villagers actively. The villagers are expected to be more responsible in protecting the mangrove forest.

### **6.3. Analysis on the Forms of Legal Protection of Mangrove Forest in Tanakeke Island and Tongke-Tongke Village**

The consensus initiated by the people is basically one of the forms of community participation. As mentioned previously, achieving community development relies heavily on the role of government and the participation of the people in creating a developed society. Without community participation, the development conducted by the government will not run optimally.

Community involvement is necessary because it creates a policy that is in accordance with the potentials, aspirations, and interests of the people. A policy based on the potentials of the people will accelerate the involvement of the community in utilizing and protecting the natural resources.

Involving the community also allows for extended benefits. First, accommodating the community's aspiration to protect the mangrove forest will stimulate the villagers to participate in the management of the mangrove forest. If this is done, it is expected that the management process of the mangrove forest will become easier. Second, it gives the community the opportunity to take responsibility for the preservation of the mangrove forest. In addition, the most important thing is prosperity, which is the essence of the interest of the people.

In this context, community involvement in protecting the mangrove forest, especially in Tanakeke Island, is discussed in *Musrenbang* which is a forum of consultation for all stakeholders to produce an agreement for the development plan in the areas concerned in accordance with their regional level. At the level of the village or sub-district, the function of *Musrenbang* is to approve the prioritized regional issues, programs and activities that will be funded by the Village Allocation Fund (ADD) and will then be recommended to the Regional Expenditure Budget (APBD) or the programs will be executed through NGOs and the Village Expenditure Budget (APBDesa). *Musrenbang* at this level also selects the representatives or delegation that will participate in *Musrenbang* at the district level.

The consensus reached by the community both in Tanakeke Island and in the village of Tongke-Tongke is a concrete manifestation of community involvement in the process of both saving the life of the community and saving the mangrove forest. Community participation in the form of consensus is an optimization of the plan to build a strong self awareness amongst the community. Geddesian (Sumarno, 2005) explains that, basically, the community may be actively involved from the beginning of the planning process. The involvement of the community may come in the following forms: (1) training programs, (2) active participation in gathering information, and (3) participation in the context of providing alternative plans and recommendations to the government.

In relation to the consensus reached by the community, from the historical and functional perspectives, *Bangko Tapampang* could be recommended by the Tanakeke Village Forum to the Takalar government to be recognized as a conservation area. The aim of the conservation area is to protect Tanakeke Island in order to achieve the required development. From the regulation perspective, the Takalar government has established the Local Law No. 6/2012 concerning Spatial Plans (RTRW). The RTRW law has generally provided protection to the mangrove forest in Tanakeke Island. The government has also established the conservation area in the coastal areas and small islands as stated in Article 31, Paragraph 7. In the Draft of the Law of RTRW Province of South Sulawesi, the district of Takalar is included in the

development of Mamminasata City Area, which is a pilot project for the development of integrated spatial planning in Indonesia, as governed in the Presidential Decree No. 55/ 2012.

The Government of South Sulawesi had initiated the Draft of the Local Regulation on the Plan on Coastal Areas and Small Islands (RZWP-3-K). The issue of mangrove forest in the draft is located in the Chapter of Mangroves particular in articles 26, 27, and 28. The draft states that Tanakeke Island and the village of Tongke-Tongke are classified as preservation zones and the mangrove forest zone in the coastal areas of South Sulawesi should be maximized.

Consensus is perceived not only as a form of community involvement and participation but also as a form of personification of local values, particularly collectivism, which enhances the “power and spirit” of the villagers. Several factors, therefore, have become the focus of local value personification, and they are as follows:

- a) The mangrove forest management at the local level shall be conducted in line with local methods.
- b) The government shall involve local communities in the mangrove forest management.
- c) The forestry resources management shall involve multiple-stakeholders in the same area of the mangroves.
- d) The mangrove forest management shall be simultaneously connected to the environmental, economic, and socio-cultural purposes.

A state as a mandate holder is philosophically responsible for providing a public service as an attempt to accommodate the fundamental rights of the people. In this context, the state is a public servant of the public users, while the community has the right to use the public service provided by the state (Dwiyanto, 2005). In relation to democratic practices, the community has the right to participate in every governance attempt to implement democratic values.

The importance of community empowerment by the establishment of local government in the system of the Unitary State of Indonesia (NKRI) is also stipulated in the consideration (b) of Law No. 23/2014, which states that the establishment of local government is arranged to quicken the realization of community prosperity by increasing services, empowerment, community involvement, and increasing the local competitiveness with regards to democratic principles, equality, justice, and local uniqueness in the system of NKRI. It can, therefore, be summarized that the philosophical basis of the importance of community involvement is that it is a manifestation of democratic principle.

The relation between government and community in a democratic state can be explained as follows: The government has the authority to govern its people (*sturen*) and also to apply sanctions if there are violations of certain rules that have been established by the government. Furthermore, in the concept of democratic development, a state holds several functions, which include regulator, provider, entrepreneur, and empire. As a public service provider to the people, a state (in this instance the local government) is obliged to provide prime services to the people as stipulated in Law No. 23/2014. The quality of local governance and services provided for the people must be proportionate to the minimum standard of the service established by the central government in accordance with Law No. 25/2009 concerning Public

Services. Finally, it can be concluded that the consensus reached by the community both in Tanakeke Island and in Tongke-Tongke village is a form of community participation in taking a protective measure.

In relation to the affirmation of unwritten law as written law (*Peraturan Desa*), it should be understood that the affirmation is basically an attempt to regulate the existing unwritten norms, like *Bangko Tapampang* practised in Tanakeke Island and the three pillars of the people of Tongke-Tongke village. The affirmation (*Peraturan Desa*) must be sited in the hierarchy of laws as mentioned in Law No. 12/2011 concerning the Formation of Laws.

Affirming an unwritten law as a written law is a sign and characteristic of modern law, which regulates and serves the needs of the modern era. According to Satjipto Rahardjo (2014), written law is created in order to achieve the following:

1. Regulate an issue such that the regulation can easily be known by the people;
2. Put people in the same position to access the laws. It means that every person, except for those who cannot read, can have an equal access to law;
3. Guarantee certainty for the people. It means that people's knowledge in regards to the law can always be checked with what has been written;
4. Develop the law itself. It means that the written law will provide easy access to laws.

It cannot be guaranteed that the written law will always create justice. In this context, it must be understood that the written law is not related to the quality of justice. It is just a matter of the form of justice. Therefore, in some instances, the unwritten law may be more effective than the written law. In this regard, the consensus of the people can create a better order to protect the mangrove forest than the written law as stipulated in the form of *Peraturan Desa* (Hadjon et al., 1993).

Law No. 12/2011 does not mention the existence of *Peraturan Desa* as a part of the hierarchy. The lowest part of the hierarchy as stipulated in Law No. 12/2011 is local regulation (*Peraturan Daerah*). In this context, of course, it is understood that *Peraturan Desa* was made by all four villages in Tanakeke Island as a structured effort to direct the norms of mangrove forest, which are regulated in accordance with Law No. 12/2011 – called *Peraturan Daerah* (Bruggink, 1999).

Therefore, the most important consideration in formulating *Peraturan Desa* is that it must be based on the principles of formation of law, which includes the following:

- a. The principle of clear purpose - Every law must have a clear goal to be achieved.
- b. The principle of institution - Every type of law must be made by authorized institutions or authorized officials. The laws can be cancelled or aborted for the sake of the rule of law if it was made by an unauthorized institution or an unauthorized official.
- c. The principle of proportionality between the types and the contents of the laws - In order to ensure the rule of law, the content of laws must be in accordance with the types of laws.
- d. The principle of feasibility - Every law must consider the effectiveness of the rule of law in the community philosophically, legally, and sociologically.
- e. The principle of empowerment and benefit - Every law is made because it is really needed and has the benefit of regulating the life of the citizen, nation, and the state.

- f. The principle of clear formulation - Every regulation must fulfill the requirements and technical procedures of the rule of law. So, the system, choice of words or terminology, and its legal language shall be clear and easy to understand in order to avoid any different interpretation in its practice.
- g. The principle of transparency - Every planning process, preparation, procedure and discussion must be transparent in nature. Thus, every layer of the community will have a huge opportunity to provide input for the process of making the law (Laode, Maskun, & Latif, 2015).

## 7. Conclusion

Legal protection for the preservation of the mangrove forest in the areas under discussion can be done with multiple approaches. The consensus of the people both in Tanakeke Island and the village of Tongke-Tongke has become the primary tool in the preservation of mangrove forest from the threat of damage. The affirmation of unwritten law as written law has taken place only in Tanakeke Island while the village of Tongke-Tongke does not need the written affirmation to protect its mangroves. The affirmation in Tanakeke Island is conducted in the area outside Bangko Tapampang. PerDes was enacted in four villages in Tanakeke Island. However, it has only worked effectively in Balandatu village since 2013.

The enactment of *Perdes* has led to an increase in the people's awareness of the need to preserve the mangrove forest in Tanakeke islands. The community members have incorporated the new regulations (moving from traditional regulations to *Perdes*). In Tongke-tongke itself, the village government has commenced to initiate *Perdes* to improve the community's awareness. This study highlights the importance of formalizing traditional regulations (consensus) into *Perdes* in order to obtain the approval of the stakeholders. Through the *Perdes* enactment, the mangrove forests will be well preserved and the community will be safe from being swallowed by the sea, which is a continual threat in this region. Additionally, the economic benefits are high as the community can sell bundles of mangrove wood as fuelwood at high prices further securing their prosperity.

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