Contribution of Customary Law in Sustainable Forest Management for Supporting Climate Action

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Abstract. In support of climate action, a paradigm shift in environmental management needs to occur by acknowledging the perspective of traditional communities and customary law to preserve the environment. Efforts to anticipate and mitigate the impacts of climate change are important in sustainable development. Sustainability of forest management is highly dependent on the participation of local communities which enforce customary law in forest management. Reducing and preventing deforestation can accelerate efforts in mitigation and improving resilience. This paper aims to describe the contribution of customary law as an approach to sustainable forest management for supporting climate action. The research method uses a qualitative approach with literature study and document study. This study shows that customary law has contributed in sustainable forest management approach for the protection by integrating aspects based on ecological and social characteristics in forest ecosystem. In addition, the existence of indigenous people in the context of forest resource conservation is one of the important factors in the practice of just and sustainable management of conservation areas. The contribution of this research is by serving as a reflection and evaluation of forest management practices in order to integrate customary law in regulation and the formation of public discourse regarding awareness of environmental protection.

1. Introduction

Currently, environmental problems are becoming increasingly complex and efforts are needed to overcome the impacts of climate change. Climate change is a major challenge for societies and environments and forests have been integral to this challenge. Environmental protection is important and needs to be prioritized to achieve environmental sustainability as stated in the Sustainable Development Goals (SDGs) number 13 in an effort to stabilize the climate [1]. As for climate change mitigation actions in Southeast Asia, it is necessary to prioritize efforts to avoid deforestation, encourage reforestation and promote sustainable forest management (SFM) in the forestry sector [2]. Strategy integration and participation in environmental protection are parts of the efforts to increase adaptive
capacity in climate change situations. Also, Indonesia is ranked in the top-third of countries in terms of climate risk, with high exposure to all types of flood and extreme heat. The intensity of these hazards is expected to grow as the climate changes [3]. Then, for universal needs, efforts to encourage biodiversity conservation can take into account the contribution of customary law in sustainable forest management and conservation [4]. The use of customary law is also a way to increase the capacity and involvement of local communities through the recognition of customary law approaches in forest management which are very important to be integrated into policies.

In this paper, environmental protection efforts are focused on the importance of forest management. Forests have a role as natural storage places that absorb and store carbon so they can overcome the problem of climate change and preserve biodiversity [5]. In addition, the role of tropical forests as a place of terrestrial biodiversity for the world is related to SDGs number 15. The ecological functions of forests contribute to the natural balance that the planet needs [6]. In addition, forest resources also have economic and social functions. Therefore, forest protection efforts require a strategy that allows the achievement of sustainable forest management. Climate action efforts through sustainable forest management are the measures that need to be done in Indonesia, considering Indonesia’s position in the top three countries with climate risk, with high exposure to all types of disasters, including floods and extreme heat.

In Indonesia, there are around 2371 indigenous communities that are currently registered in the Alliance of Indigenous Peoples of Indonesia distributed throughout the islands of Indonesia (Figure 1). This data shows that customary laws can vary. Customary law has a variety of styles that are different from other laws. In various places in Indonesia, customary laws apply in activities including forest clearing for cultivation and other agriculture, livestock grazing, hunting wild animals and the collection of forest products, as well as in various forest areas are managed sustainably by customary law based communities as their source of life with all their wisdom. In general, customary law is known as a rule created by ancestors or ancestors in an indigenous environment and is present in an unwritten form. These values are generally considered as matters that must be upheld by the community concerned. These patterns are known to have systems that are closely related to the management of natural forests, plantation forests, gardens and agricultural businesses so their forms are very diverse, dynamic and integrated which consequently produce various benefits for the community and the environment, both economically, socio-culturally, religiously, and ecologically. Generally, customary law is influenced by godly beliefs [7].

![Figure 1](image-url)  
**Figure 1.** The distribution of indigenous communities in Indonesia. [7]

However, the role of customary law in environmental protection is still being debated because in the era of globalization there is a movement of ideas, changes in the mindset of development actors who
assume that natural resources and environmental aspects are economic commodities. Regarding forest management, it is still not holistic in terms of social, cultural, economic and environmental sustainability. In fact, if the environment and natural resources are not managed properly, it will further cause environmental degradation and reduce the productive capacity of the community. Sustainable forest management needs to link adaptive management, with knowledge gained through feedback mechanisms of social learning (cycles of action and reflection occur) and be flexible to responding to changes [8]. The strife for sustainability requires being adaptive in forest management while linking the environment, social and economy system together, and bringing about fundamental changes according to the local situation [9].

Sustainable forest management in forest conservation must cover legal, economic, social and environmental aspects related to forest protection and utilization. Customary law can support activities to maintain and manage forest ecosystems and their functions in an effort to support the life of certain species or groups of species related to social and economic values. Forest management to prevent forest degradation and deforestation is necessary for forest protection to preserve important ecosystem services, such as carbon sequestration, biodiversity conservation, and protection of water resources. Likewise, accommodating the existence of indigenous people is one of the innovations in the just and sustainable practice of managing conservation areas. With local wisdom in living their lives, indigenous people and local communities have proven to be very caring with the surrounding nature, and even act as protectors of environmental sustainability. This paper aims to describe the contribution of customary law as an approach to sustainable forest management for supporting climate action.

2. Method
This study was conducted in July-August 2021 with this paper written based on literature review and document analysis. The method of this study is the qualitative method, with narrative reviews to summarize ideas and important findings from studies of various scientific references [10]. The qualitative method was chosen because qualitative methods can describe what and why some problems happen, as well as supporting the practice and problem solving [11]. The literature review process is carried out by finding keywords from papers that are relevant to the research conducted which are then compiled thematically. Based on the results of an article search through Google Scholar, 802 articles were found with the keywords of SFM, customary law, traditional knowledge, and climate action. Then articles related to climate action (SDGs 13) were selected, and articles that used qualitative approach were selected. In total, 35 articles were selected in relevance to the conditions of forest management in Indonesia. Then, document analysis to gather secondary data was chosen as a method in this study to evaluate pre-existing government documents and articles that were written with the themes of “customary law”, “sustainable forest management”, “traditional knowledge” and “climate action”. The documents used were selected by considering all constraints in data accessibility, theme, and time availability. The data from the collection was analyzed to gain customary law perspective in sustainable forest management and its relation to climate action.

3. Results and discussion
In relation to human ecology, there is a relationship between humans and nature, such is the thought of indigenous people who have lived in the forests for several generations; that they are part of the environment so that the core of life is the environment itself. Values and norms that apply in society are formed based on their life experiences interacting with their environment. This paradigm is called “society in self “[12]. Related to environmental degradation due to the shifts of values in development and modernization, customary law can then become an alternative when moral issues have arrived at conditions only limited to public space discourse. Customary law is something that cannot be separated from community life. Regardless of the pattern of life of people who have undergone modernization, customary law tends to remain a reference to every community activity. Customary law has the advantage of adjustment or flexibility to keep up with the development of the social situation in the community. Some moral discourses can sometimes undergo very dynamic changes. Some values are
also static, absolute as doctrines and cannot be changed. For example, *adat*, in general can be understood as a part of a collection of selected cultures and constructed into something rigid. The formation of a custom is generally used as a function of social control or guidance in daily behavior in accordance with the expectations and goals of the community.

In the management of an environment, ethics are applied as a means of control over these management activities. While the environment, in general, can be understood as the natural surroundings of humans themselves. So it can be concluded that environmental ethics is a critical reflection of how humans should act in an ecological or biotic scope. The critical reflection referred to in the definition of environmental ethics itself was derived from the thought which is oriented to the reciprocal relationship between humans and nature. The purpose of reciprocity is to consider how humans treat the environment as well as how the environment responds to human treatment. This attitude will create harmony between humans and the environment so that ideal conditions can be achieved. In an effort to achieve this condition, it is necessary to understand the importance of the division of roles as part of the ecological composition. Many local customs and wisdoms now have been adjusted by modernity and religions. Religions that reshaped the ancient beliefs of animism and dynamism are Islam, Catholic and Christian. These religions mainly reshape how local people believe in gods or deities, while they do not much reshape the local customs on other domains like marriage, inheritance, and other local wisdoms. Local customs have several dimensions of rule. Dimensions refer to the terms of ‘what’ are being ruled within the law. Local customs have several dimensions. The dimensions consist of deity, humans, other living beings, and the hereafter [13]. The dimension of deity rules how humans believe in deities, meaning that they may believe the current religions. Current religions were mixed and integrated with their local genius, or pure local genius. Various local customs found that they still believe in animism and dynamism while most of them were reshaped by religions such as Islam and Christianity [14]. This dimension rules how people should believe in deities, and how the deities make the universe work for them. Moreover, custom laws also rule how their deity give rewards and punishments if they obeyed or disobeyed the rules [15].

In local customs, protecting the environment describes how local humans evolve their connection to nature in terms of environmental preservation [13]. In the long run, humans who want to take care of themselves need to take care of their environment. In the concept of local laws, humans behave toward nature by using their ancestor’s approach. Their ancestor’s approach affects their worldview of how they see nature for providing support for their live activities [16]. For some local customs, nature are friends that must be kept from any harm, especially man-made harms [14]. In the concept of custom law, the environment is one of the several beings that must be paid attention on, beside other humans (people), animals, and plantation. Then, different cultures and different spatial configurations would again reshape the connection between humans and the nature. The combination of both factors would reshape on how human behaves and interacts with nature – the form of environmental preservation. As the example, there exist local cultures preserving forests, rivers or lakes by prohibiting their people from entering, to use or to take certain available resources there. This types of laws of the local custom indicates the perception, also connection between the ancestor and the indigenous inhabitants on the site [14].

Customary ethics can consider or pay attention to the behavior of members of indigenous people in making decisions related to moral considerations. However, in this context, environmental ethics demands that customary actors maximize their moral considerations for the environment. So, with the existence of environmental ethics, the actions and ways of behaving of indigenous peoples are directed and grounded. Ethics can show a person's intellectual ability in dealing with problems that require moral considerations. For indigenous people, it is very possible that their ethical reference is a manifestation of divine intervention and thus was considered ethical and possessing moral references because they carry out their actions according to God's will, in accordance with the manifestation of the love for God, and also as an act of rendering unto God. Some indigenous peoples are also very likely to have sociological references to ethical values, without the involvement of divine beliefs. In this sociological ethics, the expected big goal is security, safety, and welfare in people's lives. Sociological ethics is about how to behave and carry out activities in
relationships between community members properly. With ecological considerations, they also must not abdicate the responsibility to consider all their behavior related to the natural environment. Indigenous people's behavior can be a reference for behavioral and lifestyle changes in an effort to prevent the impact of climate change and adaptability as part of climate action.

Related to customary law, efforts to integrate traditional knowledge as a sustainable forest management approach are not only done for the purpose of forest protection but also for increasing the capacity of local communities. Socio-ecological-based forest management mechanisms are required in customary laws that regulate the use of natural resources, the existence of areas that are considered prohibited by dividing forest zones along with beliefs and taboos, the role and behavior of protecting forests, as well as the knowledge of biodiversity supported by the values of respect and simplicity in interaction with nature. The link between efforts to integrate sustainable forest management and customary law to support climate action in SDGs 13 can be seen in Figure 2.

Although many of the rules in customary law are mystical in nature, of which for the current modern standards are considered illogical, protecting forests with rules, taboos, and beliefs in nature can be rationalized as a form of human interaction with nature. This approach is the right alternative and contributes to sustainable forest management. By using customary law as a reference, efforts to safeguard and preserve the environment will be increasingly focused because both have very strong links. The traditional environmental knowledge is an information resource for conservation science, conservation policy and management so traditional environmental knowledge is a “vital conservation resource” [17]. Customary law as an approach to forest management and biodiversity conservation will support the recognition of indigenous peoples' rights. Recognition is not only of the tangible rights to land and natural resources (resource rights), but also to the intangible rights of indigenous people, for example intellectual property rights over drug inventions, traditional rights and the rights of indigenous people to biosafety derived from the process of cultivation (biosafety) [18] sourced from indigenous knowledge and their customary territories. Basically, mitigation strategies in climate action aimed at local access to forests and forest resources will be able to contribute to the adaptive capacity of forest-dependent communities [19].
4. Conclusion

The application of customary law in forest management is often very successful as an approach to forest sustainability by integrating aspects based on natural/ecological and social characteristics in the management of each forest ecosystem. Customary law serves as a guideline with the hope that the community can live in peace and order, as well as being an alternative for forest protection. Therefore, the values that exist in customary law tend to be more easily internalized and can directly be applied to suit the environment. Recommendations from this study are to continue research on the effectiveness of integrating customary law into formal law and forest management policies in support to climate action. In addition, collaboration from the local government, as well as other stakeholders is needed in supporting the recognition of customary law and traditional knowledge possessed by indigenous peoples in sustainable forest management.

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