

## Research Article

# Environmental Ethics in Islam: Balancing Rights and Ecological Justice in Forest Management

Erina Pane\*, Adam M. Yanis

Universitas Islam Negeri Raden Intan Lampung

**ORCID**Erina Pane: <https://orcid.org/0009-0005-1265-43801>**Abstract.**

Environmental ethics in the perspective of Islam, position nature and God's creation with honor and equality alongside humans. This aligns with the concept of social forestry, which aims to uplift impoverished communities and preserve forests. The balance between the two is necessary because social forestry is not only about land distribution but also about justice for communities to access welfare and achieve ecological justice. The dynamics of social forestry in Lampung strive to improve community well-being while ensuring forest sustainability. In conclusion, social forestry builds strategic ecological values that guarantee the sustainability of forest functions managed by communities. Social forestry in Lampung can succeed if policies and regulations provide legal certainty regarding community rights to forest land.

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Pane; email:  
[erinapane@radenintan.ac.id](mailto:erinapane@radenintan.ac.id)**Published** 11 January 2024Publishing services provided by  
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## 1. Introduction

Forests serve as a life support system, influencing ecosystem functions and biodiversity conservation. [1] However, a forest crisis is occurring due to the significant reduction in forest area caused by various human activities, such as land clearing for settlements or industries. [2] Forests also have social functions where they can be utilized by communities living inside and around the forests. Communities have the right to enjoy the quality of the environment generated by the forests and have the right to receive compensation for the loss of access to the surrounding forests as a source of livelihood or to meet their basic needs. Communities residing inside and around forest areas can also benefit from conservation efforts related to biodiversity resources.

Currently, a forest governance scheme involving local communities is being developed. Forest governance involving communities is known as community forests or social forestry. The fundamental question is why communities need to be involved in forest management. Communities living inside and around forests are directly affected by

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forest fires or damage caused by exploitation. Therefore, communities around forests need to be involved with the aim of synergizing efforts to alleviate poverty among communities living near forests and to preserve the forests. These efforts are carried out in rural areas, combining conservation with economic development and cultural values to benefit the local population. [3] Involving communities in forest management is formally recognized as one of the solutions to address economic and environmental issues. The participation of communities in forest management is believed to have the potential to improve their livelihoods while preserving the ecological functions of forests. [4–8] Forests involving communities are part of the process of participatory forest reform. [9] Community-based forest management aims to reduce rural poverty, enhance reforestation, and potentially contribute to carbon emissions mitigation. However, there are inhibiting factors that impede the achievement of these goals. [10]

In Indonesia, the paradigm shift in forest management is manifested in the implementation of social forestry governance. [11] The establishment of social forestry is guided by the philosophy that the well-being of communities residing in and around forests can be achieved through their active involvement in forest management. [12,13] Research in East Java indicates that social forestry policies are crucial in achieving equitable and socially just development for all people in Indonesia. However, there are still some issues that need to be addressed. [14–16]

The presence of forest areas nowadays generally faces various issues. No forest area is free from illegal activities, such as illegal logging, poaching, encroachment for shifting cultivation and settlements, exploration and exploitation of mining resources, as well as conflicts over land use and other uses. Human behavior that often harms nature continues in order to meet human needs and therefore needs to be exploited. Therefore, strategic efforts such as social forestry and advocating environmental ethics to the community are necessary. This paper aims to examine the significance of environmental ethics in the Islamic perspective and efforts to achieve justice for communities around forests while preserving ecological justice.

## 2. Methods

This study is a literature review that begins by tracing, discovering, and inventorying the historical development, policies, and regulations related to forest management in Indonesia. The research focuses on secondary data obtained from literature studies, articles, Indonesian government policies, and also examines relevant legal products related to social forestry in Indonesia. The data is analyzed using policy content analysis

or content analysis methods. [17] The substance analyzed pertains to the dynamics of the implementation of social forestry in Indonesia.

### 3. Results and Discussion

#### 3.1. Dynamics of Social Forestry: Policies and Regulations

Indonesia allocates approximately 63 percent of its land area as forest areas. The remaining land area is classified as non-forest areas known as non-forest land use. Forest areas are divided into three functions: production forests, conservation forests, and protection forests. Production forests cover an area of 68.8 million hectares (57 percent of forest areas), conservation forests cover 22.1 million hectares (18 percent of forest areas, including additional conservation areas for water), and protection forests serve to protect watershed areas covering 29.7 million hectares (25 percent of forest areas). [18] The Constitution of Indonesia guarantees that the people shall benefit from the natural wealth contained in the Indonesian land. Forests are considered natural wealth. With a land area of 120,599,794.73 hectares, forests constitute a significant portion of this natural wealth. [19] This needs to be reconsidered in terms of the benefits derived from its management for the welfare of the Indonesian people.

The majority of the Indonesian population still relies on the economic potential of forest areas. Out of a total of 74,954 villages in Indonesia, 25,800 villages, or 34.1%, are located directly adjacent to forest areas. The terrestrial conservation areas, covering an area of 22.1 million hectares, are surrounded by 6,381 villages, with the majority of their inhabitants depending on natural resources for their livelihoods. During the period from 2015 to 2019, the natural resource and ecosystem conservation program set a target of providing traditional utilization access to 100,000 hectares in the traditional zones of national parks. These traditional zones within national parks are designed to meet the needs or dependence of local communities (traditionally) on available natural resources, especially non-timber forest products, secondary forest products, and other specific resources. Through conservation partnerships, up to now, this access provision has benefited 4,812 households in 62 villages inside and around 15 national parks.[18]

To unravel the current forest management practices, it is relevant to examine the history of forest management in Indonesia. By doing so, a comprehensive understanding of the development of forest management can be obtained, which has economic, ecological, and socio-cultural implications. [20] These kind of forest management policies in Indonesia have been in place since the Dutch colonial era.. [21–23]

The Indonesian Constitution, which was drafted in 1945, has laid down ideal principles for the management of natural resources. It states that the state has control over land, water, and the natural wealth contained in the Indonesian land, and should utilize them to the maximum for the welfare of the people. During the New Order era, efforts to improve the economy were carried out by exploiting forests to generate significant foreign exchange. Forest exploitation required capital, which was legalized through the involvement of both foreign and domestic investors through regulations in 1967. These regulations expanded the state's authority, leading to the development of state-based forest management legal frameworks. The management of forest resources was predominantly influenced by actors who had access to decision-making power. The implemented legal instruments tended to prioritize the role and power of the government, often neglecting and restricting the access and rights of local communities to forest resources. [21] This also caused the local communities that have traditionally been present and have managed the forests have been marginalized and impoverished.

Widespread forest exploitation has been carried out in Sumatra, Kalimantan, Sulawesi, Maluku, and Irian Jaya. Forest management is conducted by foreign and domestic investors through various forms such as private enterprises and state-owned enterprises, utilizing concession mechanisms. [24] Concession mechanisms have contributed positively to the growth of Indonesia's economy. However, the forest concession management policies have been criticized for being non-transparent, non-selective, lacking effective supervision, and weak law enforcement. As a result, the exploitation of forest resources has become uncontrolled. [21] The consequences of these practices include the degradation of both the quantity and quality of tropical forests in various regions of Indonesia. Local communities who have traditionally depended on forests for their livelihoods have lost their sources of sustenance and their rights to forest resources have been neglected. [21,23]

Uncontrolled forest exploitation has led to a forest crisis. Since the late 1990s, various initiatives have been undertaken to address this issue. Forest rehabilitation efforts have been carried out through the development of large-scale industrial plantations, aimed at meeting the increasing demand for wood from the rapidly growing timber and paper industries, while also rehabilitating critical land areas. [22] Forest rehabilitation efforts came to an end with the changing political landscape in Indonesia. The rights of businesses to manage forests were terminated, leaving behind vast areas of critical forests as a result of deforestation.

During the reform era, the paradigm of forest rehabilitation emerged, emphasizing the need to provide certainty to communities residing inside and around forests in

order to benefit from the rehabilitation efforts. The involvement of local communities in forest and land rehabilitation activities was considered crucial. However, the process often overlooked the social and cultural aspects. One indicator of this neglect was the lack of recognition of local community organizations as partners in the rehabilitation efforts. [22] The role of indigenous institutions was not taken into account. The rights to manage rehabilitated areas were only partially granted, particularly within forest areas. Communities were given the right to manage under formal requirements, such as the development of a memorandum of understanding reinforced by local regulations, where communities jointly managed an area with the district forestry agency. Meanwhile, lands were managed based on cooperation agreements prepared by cooperatives or other farmer groups based on customary boundaries.

The responsiveness of forestry regulations began in the early 2000s, through the regulation of Law Number 41 of 1999, which emphasized that forestry activities should be carried out based on utilization and sustainability principles. Forestry activities should consider the balance and conservation of environmental elements, as well as social and cultural equilibrium. Bentham provides an understanding that legal recognition is given when the law provides the maximum benefit to society.[25] By the year 2016, the issuance of Minister of Environment and Forestry Regulation No. 83 of 2016 regarding Social Forestry marked a significant development.

According to the Development Plan, a total of 12.7 million hectares of forest land has been allocated for access by the community through the Social Forestry program. This program is developed through providing funds to the community in the form of revolving credit (received as People's Business Credit/*kredit usaha rakyat*). The assistance is used to enhance community access to capital and markets as an effort to achieve economic autonomy. The Social Forestry program has contributed 6.3 percent to farmers' income. [22]

The policy of social forestry has undergone regulatory development, aligning it with the Regional Government Law. Therefore, there is a need to adjust the policy of social forestry with local government regulations. Through Minister of Environment and Forestry Regulation No. 83 of 2016 on Social Forestry, the policy does not directly address the issues on the ground as a result of the Regional Government Law. The regulation stipulates that "regional governments must have social forestry programs and allocate budget to implement them." [26]

The development of social forestry policy is part of agrarian reform policies. [27] Overall, this policy allocates a total of 21.7 million hectares of land for farmers. This includes 9 million hectares through redistribution and legalization via certificates under

the Ministry of Agrarian Affairs and Spatial Planning. Additionally, 12.7 million hectares are under the supervision of social forestry outside of Java, and 1,127,073 hectares are under social forestry in Java. However, conflicts have arisen as communities feel that the social forestry policy, which was initially promised, has not met their expectations. There is a lack of legal certainty for managing forest land around their settlements, and farmers experience discrimination in utilizing the promised forest land. Farmers also encounter difficulties in obtaining permits to manage the land. [28,29] The distribution of social forestry land to beneficiary communities has not been maximally implemented. In 2020, based on the Indonesian Centre for Environmental Law's records on the forestry sector, it was explained that the simplification of various regulations (omnibus law) in the draft of the Job Creation Law was analyzed to have an impact on Indonesia's forests. [30] The overall issues related to forests will have an impact on the implementation of social forestry in Indonesia.

### 3.2. The principle of balance in forest management

Social forestry is part of the state policy aimed at fulfilling the people's rights to forests without causing harm to the forests. This balance is a manifestation of environmental ethics, which serves as a moral foundation for the conservation and improvement of the environment. [31–33] Humans not only balance their rights with responsibilities towards the environment but also limit their behaviors and efforts to control various activities to stay within the environmental limits. Humans are increasingly aware that natural resources provided by God are not only for humans but also for all living beings on this Earth. [33] According to Sastrapratedja, there are several principles of environmental ethics that govern human attitudes towards the environment [33]:

- 1.1.1. the rule of non maleficence), which involves not causing harm to the environment, not destroying species populations or biotic communities, and not harming what does not harm humans.
- 1.1.2. the rule of non interference, this involves not imposing obstacles to the freedom of every organism
- 1.1.3. the rule of fidelity, This entails not trapping, deceiving, or setting traps for living beings solely for the benefit of humans.
- 1.1.4. the rule of restitutive justice, This involves creating justice by compensating for the damages caused by humans or providing restitution

According to Franz Magnis-Suseno, the elements of environmental ethics that represent human responsibility towards nature include several aspects: (a) respecting nature, (b) internalizing a sense of specific responsibility towards the local environment, (c) being responsible for the preservation of the biosphere, (d) solidarity with future generations, (e) developing the principle of proportionality, meaning that development activities should be proportionate and not excessively exploit or harm nature, and (f) the principle of cost burden on the causes of environmental damage, which means that the costs of environmental restoration or repair should be borne by the perpetrators of environmental destruction.

Islam teaches that nature is created for the benefit of humanity. This can be further examined in various aspects of Islamic teachings as follows:

- 3.2.1. Q.S. Al-Baqarah (2:164). Indeed, in the creation of the heavens and earth, and the alternation of the night and the day, and the [great] ships which sail through the sea with that which benefits people, and what Allah has sent down from the heavens of rain, giving life thereby to the earth after its lifelessness and dispersing therein every [kind of] moving creature, and [His] directing of the winds and the clouds controlled between the heaven and the earth are signs for a people who use reason.
- 3.2.2. The explanation that nature is created for the benefit of humanity can also be found in Q.S. Al-Baqarah (2:22). [He] who made for you the earth a bed [spread out] and the sky a ceiling and sent down from the sky, rain and brought forth thereby fruits as provision for you. So do not attribute to Allah equals while you know [that there is nothing similar to Him].
- 3.2.3. Allah SWT positions nature and His creation with respect and equality to humanity. This is reflected in Q.S. Al-Jumu'ah (62:1) Whatever is in the heavens and whatever is on the earth is exalting Allah, the Sovereign, the Pure, the Exalted in Might, the Wise.
- 3.2.4. Q.S. Fushshilat (41:11) Then He directed Himself to the heaven while it was smoke and said to it and to the earth, "Come [into being], willingly or by compulsion." They said, "We have come willingly." This explains how Allah has equated humans with nature. The command of Allah in the Quran for nature to submit to Him actually indicates that nature has a personality that deserves respect.
- 3.2.5. Q.S. Al-An'am (6:38) And there is no creature on [or within] the earth or bird that flies with its wings except [that they are] communities like you. We have not neglected in the Register a thing. Then unto their Lord they will be gathered.

3.2.5. Q.S. Al-Qashash (28:77) But seek, through that which Allah has given you, the home of the Hereafter; and [yet], do not forget your share of the world. And do good as Allah has done good to you. And desire not corruption in the land. Indeed, Allah does not like corrupters.”

Historical records convey that Prophet Muhammad (SAW) introduced and practiced the concept of environmental conservation, known as "hima" and "ihya'ul mawat." "Hima" refers to protected forest areas designated by the government based on Islamic law to preserve wildlife and forests. Prophet Muhammad (SAW) once declared the surrounding area of Madinah as a "hima" to protect the valley, grasslands, and vegetation within it. The area he protected was approximately six miles or more than 2,049 hectares. On the other hand, "ihya'ul mawat" involves efforts to transform unproductive land into land that is beneficial for humans. [34]

### 3.3. Achieving the balance between well-being and ecological justice

The dynamics of social forestry in Indonesia reveal overlapping policies and regulations, but several regions have shown that the implementation of social forestry can achieve a balance between well-being and ecological justice. Some examples include the implementation of social forestry in Bantaeng Regency, South Sulawesi, Kalibiru Village in Yogyakarta Special Region, Tebing Tinggi Timur Subdistrict in Riau, and Pasaman Regency in West Sumatra.

The perception of forests in Indonesian society is that they are a source of livelihood. Communities directly experience the benefits of non-timber forest products, such as rattan, honey, fruits, and ornamental plants. They also perceive the indirect benefits or environmental services provided by forests, such as water. Water has significant indirect economic value, serving as a source of clean water, irrigation for rice fields, and can be managed to generate electricity through micro-hydro systems. This highlights the economic value of forests that can drive local economic development.[35] The following descriptions illustrate how social forestry can provide benefits to communities while ensuring forest conservation:

Social forestry can take the form of village forests. The village forest in Bantaeng Regency, South Sulawesi Province, is one of the pioneers in this regard. The governor has granted legitimacy to the community's forest management rights. Institutional transformation has occurred, whereby local forest management institutions have been strengthened and formalized as Village-Owned Enterprises. In its implementation, a set



of rules and behaviors has been agreed upon. These rules include provisions such as "farmers are prohibited from changing the status and function of the village forest area, cutting down trees, and burning shrubs or grass to clear their land or expand their land." Violations are subject to sanctions that may result in the loss of forest management rights for the farmers.

Prior to the establishment of village forest management, the welfare level of the community was relatively low. Economic indicators showed that "each household was only able to meet an average of 73.6 percent of their ideal needs." After gaining the rights to manage the village forest, the community has developed organic coffee farming, beekeeping, passion fruit cultivation, and the utilization of rattan. These development activities, implemented through agroforestry practices, have the potential to increase farmers' production and income two to three times without compromising the protective function of the forest area. Furthermore, the community commercially manages water from rivers through water installations that have been established since 1988. This is a consequence of their obligation to protect the forest areas that serve as the catchment areas for the rivers from which they extract water. Supratman argues that "there are costs associated with the obligation to protect the catchment areas, and as a result, the Village-Owned Enterprise has established an institutional system for water users to provide compensation to finance the forest protection activities. The community has also harnessed the river's flow as a source of micro-hydropower." [35]

Kalibiru Hamlet in the Special Region of Yogyakarta has successfully managed social forestry through a community-based forest scheme. The community of Kalibiru Hamlet has been able to manage the forest based on community participation, integrating economic, social, and ecological interests. In 1999, the area started as an ecotourism initiative, where, with temporary permits, the community transformed critical forest areas into productive ones. The established ecotourism area has provided economic benefits and improved the livelihoods of the surrounding community. Activities in the ecotourism area include farming, handicraft production, food preparation, and more. These economic activities directly contribute to the growth and increased income of the community. The prosperity achieved has also helped curb the community's desire to engage in illegal logging in the forest. The success of Kalibiru Hamlet in social forestry can be attributed to the policies that have placed the community as knowledgeable and experienced actors in sustainable forest resource management. [36]

Since 2007, an area of 10,390 hectares covering seven villages in Tebingtinggi Timur, Kepulauan Meranti, Riau, has remained under the concession scheme of PT. Lestari Unggul Makmur, a timber plantation company. By the end of 2008, PT. Lestari Unggul

Makmur started canal construction for land clearing purposes and introduced acacia plantations. As a result of the canalization, the surrounding land, especially community land, started to dry out and wildfires began to occur. The peak of the wildfires happened in 2014, affecting over 2,400 hectares of community land. The analysis by Global Forest Watch of the forest fires in Riau showed that peatland fires lasted longer, produced more smoke, and were more difficult to extinguish. [37]

After a visit by President Joko Widodo, the concession permit of PT. Lestari Unggul Makmur was revoked, and the management of the seven villages' forests was transferred to a village forest scheme. Through Presidential Regulation No. 88 of 2017, changes were made to the forest boundary, allowing the community to manage the forest under the village forest scheme. The community actively participated in managing the village forest. [38] To prevent further forest destruction, the utilization and management of timber are regulated by village regulations and monitored by the village enterprise. Logging in the village forest is prohibited, and violators face written warnings and criminal reports to forestry authorities. [39]

From 2012 to 2017, Pasaman Regency in West Sumatra was designated under the community forest management scheme. The target for expanding the area of community forest management was set at 500,000 hectares, with 71,000 hectares assigned to Pasaman Regency as part of forestry development in the area. However, in 2015, Pasaman Regency was only able to realize an area of 1,366 hectares. The low percentage of achievement in expanding the community forest management area was due to lengthy and time-consuming licensing processes, low human resource capacity (government officials and forest farmer groups), insufficient financial support, the lack of clarity on nagari boundaries, and overlapping with other permits. The community of Pasaman Regency has been developing community forestry by formulating alternative strategies and policy directions for the development of community forestry in the region. There are nine main priority strategies, one of which is "enhancing the role of the government and community participation in improving the economy and the quality of human resources through the development of knowledge systems, technology transfer, and forestry education." [40]

## 4. Closing

Allah has equated humans with nature. The command of Allah in the Quran for nature to submit to Him actually indicates that nature has a personality that deserves respect. Community-based forest management through various social forestry schemes serves

as a link between community welfare and forest conservation in addition to being a way to respect nature.

Environmental issues arising from conflicting interests have prompted some individuals to seek improvement and preservation of nature. Environmental ethics provide a new perspective that places the future and human life in a balanced condition with the environment. People are becoming increasingly aware that natural resources are provided by God not only for humans but also for all living beings on Earth.

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