



## IMPACT OF FOREST EXPLOITATION ON COMMUNITY ECONOMY (CASE STUDY OF SUMATERA, HARAPAN FOREST)

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**Abstract:** Harapan Forest is a global priority area for forest habitat representing 20 percent of the remaining lowland forests in Sumatra. Most of the area in Harapan Forest is a high-value secondary natural forest that is being restored. There are many rare fauna and flora riches that are difficult to find elsewhere, such as various species of hornbills. Forest exploitation is an increasingly pressing issue in Indonesia, where this activity not only impacts the environment, but also has significant implications for the economy of society and the country. In an economic context, forest exploitation often results in large financial losses for local governments due to the loss of potential revenue from taxes and royalties as well as negative impacts on the livelihoods of communities that depend on forest resources. Forest exploitation is often seen as a solution to encourage economic growth, especially in developing countries. It can be concluded that forest exploitation is the arbitrary use and exploitation of forest resources and products, whether in the form of land, water, flora and fauna, etc., without considering aspects of sustainability in the future.

**Keywords:** Economy; Exploitation; Forest

### 1. Introduction

Indonesia is a megabiodiversity country. Indonesia's tropical forests are the lungs of the world and contain extraordinary biodiversity that has great potential to be utilized for the benefit of humanity. The wealth of biodiversity has not been fully utilized, but many are on the verge of extinction. Indonesia has many obstacles in its efforts to protect biodiversity because its territory is vast and consists of many islands, while human resources, funds and time for these efforts are very limited.

Harapan Forest is a global priority area for forest habitat representing 20 percent of the remaining lowland forests in Sumatra. Most of the area in Harapan Forest is a high-value secondary natural forest that is being restored. There are many rare fauna and flora riches that are difficult to find elsewhere, such as various species of hornbills. In addition, Harapan Forest is home to the indigenous Jambi tribe, namely the Suku Anak Dalam Batin Sembilan, who depend on forest products for their livelihood. The area, which is located in two provinces, namely South Sumatra with an area of 52,170 hectares and Jambi with an area of 46,385 hectares, is a former production forest area that has been abandoned. On the initiative of the international NGO The Royal Society for the Protection of Birds (RSPB) and BirdLife



International together with the NGO Burung Indonesia, the former production forest area was then restored to be reforested in order to maintain its high biodiversity. The Harapan Forest restoration program, which began in 2002, is the first in Indonesia. If the restoration of Harapan Forest is successful, it will be a positive model that can be developed in the management of natural forests in Indonesia. The success of the restoration of Harapan Forest will also improve Indonesia's image in the eyes of the international community, which is seen as one of the countries destroying tropical forests.<sup>1</sup>

Globally, biodiversity is decreasing due to damage to environmental sustainability. The awareness that preserving the environment means preserving human life, makes environmental issues a topic in various international forums and also influences the interaction of international relations actors. The negative impacts of environmental degradation are transnational, environmental damage due to excessive exploitation of natural resources that occurs in one country can have a negative impact on other countries.

Forest exploitation is an increasingly pressing issue in Indonesia, where this activity not only impacts the environment, but also has significant implications for the economy of society and the country. Since colonial times, unsustainable logging practices have resulted in severe ecosystem damage, reduced biodiversity, and triggered natural disasters such as floods and landslides. In an economic context, forest exploitation often results in large financial losses for local governments due to the loss of potential revenue from taxes and royalties as well as negative impacts on the livelihoods of communities that depend on forest resources.<sup>2</sup>

Forest exploitation is often seen as a solution to encourage economic growth, especially in developing countries. However, the long-term impacts of these activities are often not taken into account, such as loss of biodiversity, soil degradation and climate change. The decline in environmental quality not only impacts the ecosystem, but also the local and global economy. Many communities depend on forests for their livelihoods, and environmental degradation can exacerbate poverty and social injustice. In this regard, it is important to explore the relationship between forest exploitation, economy and environment. By understanding these impacts, we can develop more sustainable and inclusive forest management strategies. Therefore, this

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<sup>1</sup> Adirini Pujayanti, "LSM Internasional Dan Dilema Pelestarian Di Hutan Harapan Provinsi Jambi," *Politica* 5, no. 1 (2024): 17–36, <https://jurnal.dpr.go.id/index.php/politica/article/view/334/268>.

<sup>2</sup> Kayla Ratu Natia and Raizky Rienaldy Pramasha, "Dampak Eksploitasi Hutan Terhadap Ekonomi Dan Lingkungan," *JUDIMAS (Jurnal Inovasi Pengabdian Kepada Masyarakat)* 02, no. 02 (2024): 419–24.

article will discuss various aspects of the impacts of forest exploitation on the economy and the environment, and offer solutions to overcome the challenges faced in managing forest resources.

It can be concluded that forest exploitation is the arbitrary use and exploitation of forest resources and products, whether in the form of land, water, flora and fauna, etc., without considering aspects of sustainability in the future. This process involves excessive and uncontrolled use of forest resources, which can result in ecosystem damage, loss of biodiversity, and negative impacts on the environment and surrounding communities.<sup>3</sup>

Based on the above problems, the author is interested in analyzing various problems from the exploitation carried out on the community's economy. The purpose of this study is to analyze the impact of excessive exploitation of Sumatran forests on the community's economy.

## 2. Research Method

In the research on the impact of forest exploitation on the economy and environment, the methodological approach used is Literature Study Conducting a study of various literature sources, including scientific journals, books, reports of international institutions and discussions, and previous case studies. This aims to collect data and information related to the impact of forest exploitation and existing management policies and uses a qualitative research type with a descriptive analytical method

## 3. Discussion

### 3.1 Forest Biodiversity

The world's decreasing forest areas are expected to result in the increasing extinction of biodiversity. Human activities change the natural environment of forests into agricultural land, plantations, and infrastructure development for industrial activities, which are a series of activities that cause the reduction or even disappearance of forests. The increasing pressure on wildlife and natural ecosystems is due to population growth and unsustainable economic and development policies. For example, tropical rainforests in Indonesia are areas rich in biodiversity that are very important for human life. The rate of deforestation has lowered Indonesia's international ranking in terms of biodiversity.

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<sup>3</sup> Haidar Trisna Tanaya, "Belajar Dari Sejarah: Refleksi Atas Warisan Kolonial Dan Praktik Pelestarian Sumber Daya Alam Di Indonesia," *Jurnal Sejarah Citra Lekha* 8, no. 2 (2024): 120–29, <https://doi.org/10.14710/jscl.v8i2.40992>.

Indonesia, which was previously recorded as second after Brazil in terms of biodiversity, has been in the top three since 2013 after Brazil and Congo. Since then, experts believe another 5 million hectares have been lost, due to rampant illegal logging even in protected areas, the establishment of oil palm plantations, road construction, and mining. Of particular international concern is the degradation of forests on the island of Sumatra. The island is part of the Sundaland “Sundaland Hotspot” of Southeast Asia, one of the 25 richest and most endangered sources of plant and animal life on Earth. The island is home to more than 10,000 species of plants, and it is the only place in the world where elephants, rhinos, tigers, leopards, and orangutans can all be found in the same place. Sixteen of the 210 mammal species are unique to the island.

Efforts to protect or save biodiversity in Sumatra are not new. The Indonesian government has allocated a lot of funds and manpower for the management of conservation areas, including funds from international aid, both through bilateral and multilateral cooperation and from national and international non-governmental organizations. To date, the Indonesian government has designated 134 conservation areas on the island of Sumatra, with a total area of 5,742,196.17 ha with the largest part being 11 National Parks covering an area of 3,882,218.48 ha.<sup>19</sup> However, field facts show that between 1985 and 2007, forest damage in Sumatra was very high as indicated by a decrease in forest cover of 12 million ha or a decrease in forest area of 48% in 22 years due to forest conversion, illegal logging and fires. their habitat .<sup>4</sup>

### **3. 2 Impact of Forest Exploitation on Economy and Environment**

Forest exploitation has significant impacts on both aspects, namely economy and environment.

#### **a. Impact on Economy**

- 1) Reduced food sources: Forests can be a source of food for local communities, so deforestation can reduce the quality and quantity of food available.
- 2) Poverty: Utilization of forests for agriculture and industry can cause poverty in certain areas. When forests are lost or damaged, communities that depend on forests for their livelihoods can suffer economic losses.

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<sup>4</sup> Mia Siscawati, “Deforestation and Forest Degradation in Indonesia,” *Underlying Causes of Deforestation and Forest Degradation in Indonesia; a Case Study on Forest Fires*, no. 64 (2021): 554–63, [https://enviroscope.iges.or.jp/system/files/publication\\_documents/pub/researchreport/740/ir98-5-11.pdf](https://enviroscope.iges.or.jp/system/files/publication_documents/pub/researchreport/740/ir98-5-11.pdf).

- 3) Unemployment Rate: Utilization of forests as an economic resource can lead to increased unemployment because communities that previously relied on forests as a source of income can no longer obtain sustainable employment.
- 4) Pollution: Agricultural and industrial activities that replace forests can cause water, air, and soil pollution. Pollution threatens public health, increases the risk of contamination, and can cause economic decline in the surrounding area. Deforestation Policy and Law Enforcement Crisis: Deforestation can exacerbate the policy and law enforcement crisis, including the lack of monitoring or approval of illegal logging.<sup>5</sup>

b. Impacts on the Environment

- 1) Drought: The inability of forests to absorb, store, and supply water.
- 2) Floods: Because forests play an important role in controlling water flow and absorption, deforestation can increase the likelihood of major flooding. Bare land is less resistant to erosion and water flow disturbances.
- 3) Landslides: When forests are lost or damaged, rural buildings become more vulnerable to landslides. Landslides can cause large-scale disasters, including loss of life and property.
- 4) Forest fires: Forest fires often occur in areas undergoing development due to forest drought.
- 5) Climate change: Utilization of forests for other purposes, such as agriculture and industry, can reduce the forest's ability to absorb carbon and accelerate climate change. Thus, forest exploitation does not only refer to physical damage, but also has broad long-term implications for ecosystem balance and economic stability.

### 3.3 Solutions to Overcome Challenges Faced in Forest Resource

Management Solutions to overcome challenges in forest resource management can be prepared through the following strategies:

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<sup>5</sup> Ir Rosyani, Endriatmo Soetarto, and Heiko Faust, "Fostering Landscape Transformation in Jambi Province, Sumatra, Indonesia," *Forest Policy and Economics* 81, no. 5 (2022): 1–9, <http://dx.doi.org/10.1016/j.forpol.2017.04.005>.

- a. Reforestation and Greening Reforestation in forest areas that have been damaged or depleted. This strategy is stated in the 2020-2024 RPJMN with a target of reducing the exploitation rate to 310 hectares/year.
- b. Productive Forest Management Optimizing the allocation of production forest (HP) areas to improve the economy and gross domestic product (GDP) without ignoring environmental aspects. Most HP areas in Indonesia are still not burdened with permits, indicating the potential for optimizing land use.
- c. Community and Private Partnerships Private-community partnerships use a partnership model between the government, the private sector, and communities to improve accessibility and utilization of forest resources. Examples include crop partnerships, forest utilization cooperation between KPH and communities, and HTI cooperation with HKM/HKM. forest between KPH and the community, and cooperation between HTI and HKM/HKM.
- d. Conservation and Restoration Program Reduction Emission from Deforestation and Degradation (REDD+), This program uses a financial scheme for forest conservation, providing benefits to developing countries to reduce carbon emissions and prevent deforestation.
- e. Technological Monitoring Using satellite technology to monitor changes in forest areas in real time, increase transparency in the company's supply chain, and detect early signs of deforestation.
- f. Social Forestry Policy Community Plantation Forests (HTR), Community Forests (HKM), Community Forests (HR): This policy increases the productivity of forest edge and forest communities through partnerships and active community participation in forest management.<sup>6</sup>

#### 4. Conclusion

Based on the discussion above, the findings of this study are exploitation in the forest area of Sumatra, especially Harapan Forest is often seen as a solution to encourage economic growth, especially in developing countries. However, the long-term impacts of these activities are often not taken into account, such as loss of biodiversity, soil degradation and climate change. The

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<sup>6</sup> Murniati, D. P. Garrity, and A. Ng Gintings, "The Contribution of Agroforestry Systems to Reducing Farmers' Dependence on the Resources of Adjacent National Parks: A Case Study from Sumatra, Indonesia," *Agroforestry Systems* 52, no. 3 (2001): 171–84, <https://doi.org/10.1023/A:1012047602192>.

decline in environmental quality not only impacts the ecosystem, but also the local and global economy. Many communities depend on forests for their livelihoods, and environmental degradation can exacerbate poverty and social injustice. In this regard, it is important to explore the relationship between forest exploitation, economy and environment. By understanding these impacts, we can develop more sustainable and inclusive forest management strategies. Therefore, this article will discuss various aspects of the impacts of forest exploitation on the economy and the environment, and offer solutions to overcome the challenges faced in managing forest resources. It can be concluded that forest exploitation is the arbitrary use and exploitation of forest resources and products, whether in the form of land, water, flora and fauna, etc., without considering aspects of sustainability in the future. This process involves excessive and uncontrolled use of forest resources, which can result in ecosystem damage, loss of biodiversity, and negative impacts on the environment and surrounding communities

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