

Yance Arizona



T	ABLE OF CONTENTS	0
LI	ST OF ABBREVIATION	2
E)	KECUTIVE SUMMARY	3
١.	INTRODUCTION	8
II.	THE HISTORY OF FOREST ESTATE AND THE NEED FOR THE INCLUSION OF	
	INDIGENOUS PEOPLES AND LOCAL COMMUNITIES IN FOREST MANAGEMENT	11
	2.1. The Dutch Colonial Forestry Legislations	11
	2.2. National forestry law with colonial legacies	11
Ш	REGULATORY FRAMEWORK ON INDIGENOUS PEOPLES AND LOCAL COMMUNITI	ES
	RIGHTS IN FOREST MANAGEMENT	14
	3.1. The Constitution	14
	3.2. Ratification of International Instruments	15
	3.3. Forest and Environmental Legislation	18
	3.4. Other relevant legislations (Omnibus Law on Job Creation)	20
	3.5. Implementing regulations	
١V	. IMPLEMENTATION OF SOCIAL FORESTRY POLICIES IN INDONESIA	25
	4.1. The emergence of social forestry policies	25
	4.2. Five Social Forestry Schemes	26
	4.3. The implementation of social forestry program	30
	4.4. Changing role of Forest Management Unit	
۷.	ANALYSIS AND EVALUATION OF SOCIAL FORESTRY POLICY	
	5.1. Social forestry, rural livelihood, and poverty alleviation	37
	5.2. Community participation in social forest management	
	5.3. Social forestry program, environmental protection and climate change mitigat	ion
	5.4. The dynamic of Social Forestry Programs	
VI	CONCLUSION	
	BLIOGRAPHY	

LIST OF ABBREVIATION

BFL : Basic Forestry Law

CBFM : Community-Based Forest Management

COP : Conference of Parties

EIA : Environmental Impact Assessment

EU : European Union

FAO : Food and Agriculture Organization

FLEGT : Forest Law Enforcement, Governance and Trade

IPLCs : Indigenous Peoples and Local Communities

MoEF : Ministry of Environment and Forestry

NDC : Nationally Determined Contribution

NGO : Non-Governmental Organisation

NTFPs : Non-Timber Forest Products

SVLK : Sistem Verifikasi Legalitas Kayu (The Indonesian Timber Legality

Assurance System)

UNFCCC : United Nations Framework Convention on Climate Change

VPA : Voluntary Partnership Agreement

EXECUTIVE SUMMARY

1. State of national regulations regarding IPLC customary rights over forest area and resources

Forestry regulations in Indonesia are strongly influenced by forestry regulations established during the Dutch colonial period. In the 1860s, the Dutch colonial government brought foresters from Germany and the Netherlands to overcome the timber crisis in Java. Since then, colonial rulers have implemented 'scientific forestry' or also known as the German School for Forestry to maximize the benefits of forest management to build houses, shipping, and other means of transportation at that time. To strengthen the new forestry model introduced by the colonial rulers, the Forestry Regulation 1865 was made which essentially stated that all forests were the property of the rulers so that there could be no individual and collective ownership in forest areas. This is supported with a narrative that only the government is the proper actor for sustainable forest management. For this purpose, forest management practices by communities are eliminated, even people who use forests without government permits are considered criminal offenses.

The first forestry law created by the Indonesian government after independence, Basic Forestry Law (Number 5 of 1967), followed the forestry legal framework inherited from the Dutch colonials. In fact, in the 1980s, the Indonesian government expanded control of state forests to outer islands to increase state revenue from forestry activities. During the New Order Authoritarian Government (1965-1998), the government granted large-scale forestry concessions to companies to extract timber in natural forests. This has led to deforestation and degradation of natural resources, as well as increased conflict between companies and indigenous peoples and local communities. Based on Basic Forestry Law, the government controls 67% of Indonesia's land which is claimed as state forest area. Meanwhile, there are about 40% of villages in Indonesia whose area is partially or fully overlapped in forest areas. The overlapping conditions of these claims are a major factor in the persistence of forestry tenure conflicts in Indonesia, especially involving indigenous peoples.

2. Place of customary rights in forest land management plans

For a long time, the Indonesian government has never tried to resolve conflicts between the government and companies with indigenous peoples and local communities. In the 1980s, there was a strong wave at the international level that saw the adverse effects of development exploitation carried out by new emerging countries in post-World War II, including in Indonesia. At the international level, the Rio Declaration on Environment and Development in 1992 has provided a new perspective to accommodate indigenous peoples and local communities in forest management. In Indonesia, the government began conducting pilot projects for the development of community-based forest management with support from various institutions and international donors. Various policy experiments involving IPLCs in forest management in Indonesia have been implemented in various places. This policy experiments have come to be known as social forestry.

Social forestry is a Community-Based Forest Management (CBFM) formulated in policies and practiced in Indonesia. In Indonesia, regulations and policies on social forestry are being developed incrementally (Siscawati 2012). Since the 1980s, the Government has been developing social forestry models to open access to Indigenous Peoples and Local Communities (IPLCs) living near forest areas to manage forests. Furthermore, in the 1990s, the Government began to institutionalize social forestry in the policies of the Minister of Forestry.

Political reforms implemented in Indonesia in 1998 shifted the country's Government from an authoritarian to a democratic model. This is followed by the decentralization of Government, which gives local governments and communities in the regions more opportunities to handle public affairs, including in forest management. Nonetheless, the state's paradigm of forest tenure remains strong in the new Forestry Law enacted in 1999, which assumes that all forest areas belong to the state property. The growing demands of communities and non-governmental organizations (NGOs) in environment and forestry have encouraged various experiments with social forestry models. This is also driven by the Indonesian Government's active participation in international forums and international

cooperation in forestry and the environment, such as Forest Law Enforcement, Governance and Trade (FLEGT) and climate change programs such as REDD+.

Political changes in 1998 also prompted constitutional changes in 1999-2002. The constitutional amendment has integrated many provisions regarding the protection of human rights, the environment, and the rights of indigenous peoples and local communities. In 2013, a Constitutional Court ruling corrected the government's actions that ignored community rights to forest areas. The ruling has prompted the government to recognize customary forests that have already been designated as state forests. However, one of the prerequisites for indigenous peoples to obtain legal recognition of their customary forests is preceded by the determination of the legal status of indigenous peoples through regional regulations made jointly by the head and district parliament. This has prompted the establishment of more than 100 regional regulations in Indonesia to follows the Constitutional Court ruling.

3. Policies, programs and initiatives (international and national) strengthening the recognition and respect of customary rights.

The Indonesian government continues to exercise policies to involve Indigenous Peoples and local communities in forest management, as well as develop various pilot projects. Currently, the Government has five social forestry schemes in place: (a) community forestry, (b) village forests, (c) people's plantation forests, (d) forestry partnerships, and (e) customary forests. The Government has set a goal of allocating 12.7 million hectares of forest land for social forestry since 2014. As of 2023, the Government has realized 6,073,184 ha for social forestry programs, nearly half of the target set in 2014. More specifically, the Government has determined the area of community forest 1,180,267.09 ha, village forest 2,609,215.77 ha, peoples' plantation forest 363,148.08 ha, and forest partnership 581,432.23. Meanwhile, customary forests are divided into two categories: customary forest designation of 250,971 ha and indications of customary forest designation of 1,088,149 ha.

Forest designation is a government decision that has finally recognized customary forests belonging to indigenous peoples as part of their customary territories. In short,

the determination is carried out by the government when all the requirements for the designation of customary forests have been fulfilled. Meanwhile, the indication of the customary forests' designation is a temporary decision made by the Minister of Environment and Forestry to allocate certain areas of state forests to be used as customary forests. However, the decision to establish customary forests has not been given yet because all conditions for the designation of customary forests by indigenous peoples have not been completed. One of the most difficult requirements is the necessity for the determination of indigenous peoples as legal subjects through regional regulations or decrees of regional heads.

Climate change programs with multiple objectives, such as REDD+, are another option. In addition to mitigating climate change, the implementation of REDD+ pilot projects aims to improve forest governance and protect indigenous peoples' and local communities' rights. The Indonesian government has supported dozens of REDD+ pilot projects, but there has not been a single successful model that can be replicated in Indonesia. This demonstrates that when faced with more complex local conditions, projects derived from international narratives on climate change could be more challenging.

4. Effectiveness of the recognition of customary rights on the ground

In Indonesia, social forestry policy is based on several main assumptions: improving people's livelihoods, strengthening social institutions, resolving forestry tenure conflicts, and improving environmental protection. Various social forestry schemes that have been implemented show many positive results in achieving these goals. However, some cases show that the implementation of social forestry has some limitations, including its lack of effectiveness in resolving land conflicts, the complicated process for obtaining social forestry permits because each different schemes have their own procedures, and the communities' limited capacity to manage forests.

Especially for indigenous peoples, the barriers to obtaining recognition of customary forests are more complicated than other social forestry schemes. The

process of recognizing customary forests must follow the stages of a tiered political decision. In the first stage, indigenous peoples must obtain legal recognition status from the local government. This process of legal recognition is political because it depends heavily on the pressure that indigenous peoples can exert to convince local governments. Many indigenous peoples have failed to obtain legal recognition from local governments. After successfully obtaining legal recognition status from the local government, the second stage is the submission of customary forest designation to the Ministry of Environment and Forestry. In the application stage of customary forests, the Ministry of Environment and Forestry verifies the applications submitted by indigenous peoples. This application process also often causes problems because of differences in understanding between verifiers appointed by the government in assessing the status of indigenous peoples and customary forests they propose. This complex process has hindered the realization of customary forest recognition for indigenous peoples.

Finally, this phenomenon raises the question of how much social forestry can contribute to environmental protection and climate change mitigation. Further investigation into this is required through multidisciplinary studies. For further analysis, social forestry must be situated within three different contexts. Firstly, social forestry must be contextualized as one of the means by which communities can improve their livelihoods and resolve forest tenure conflicts. Thus, the success of social forestry objectives will be primarily determined by the context in which the interests of various actors are situated. Second, with regard to national policies and the enhancement of institutions dedicated to social forestry, policies and institutions pertaining to social forestry must be evaluated in order to develop more effective and efficient means of achieving social forestry objectives. Furthermore, it is crucial to situate social forestry policies and practices within a broader global context. Therefore, a comparative analysis of Indonesia's experiences should be conducted to understand the contributions and limitations of social forestry policies and practices in Indonesia.

I. INTRODUCTION

In the past decade, the Indonesian Government has become more open to including Indigenous Peoples and Local Communities (IPLCs) in forest management. The Government created some policies and regulations to provide various forest management schemes, procedures and guidelines for realizing community-based forest management. Generally, the Government refers to these schemes as Social Forestry (*Perhutanan Sosial*).

In the early years of President Joko Widodo's administration since 2014, even the Social Forestry program was categorized as one of the national strategic programs (*Program Strategis Nasional*/PSN) as part of the Government's top priority programs. In 2020, the Government no longer included the Social Forestry Program as a National Strategic Program because the Government prioritizes infrastructure development. Social forestry policies have been developed to support visions of rural development, poverty reduction, and local community empowerment while promoting forest protection and conservation (Gilmour, 2016; Fisher et al., 2018). In addition, social forestry policies are also aimed at resolving the increasing occurrence of forest tenure conflicts (Lindayati, 2002; Purnomo and Anand, 2014; Tarigan and Karuniasa, 2021).

The Government committed in the National Mid-Term Development Plan 2014-2019 to granting legal rights/permits to individuals and groups of Indigenous Peoples and Local Communities through a variety of social forestry schemes, specifically to meet a total target of designating 12.7 million hectares (Ha) of the state's forests (MoEF 2020). This equates to roughly 10 per cent of the total area of Indonesia's forest estate. These commitments have also been extended through the 2020-2024 government plan, demonstrating the central Government's ongoing commitment to meeting these targets.

As of October 2022, the Government has realized social forestry to reach 5,087,754.07 Ha, consisting of 7,694 units of decrees, with beneficiaries of approximately 1,127,815 households. These achievements include (a) Village Forests (*Hutan Desa/HD*) with an area of 2,013,017.21 Ha; (b) Community Forests (*Hutan Kemasyarakatan/HKM*) with an area of 916,414.60 Ha; (c) People's Plantation Forests (*Hutan Tanaman Rakyat/HTR*) with an area of 355,185.08 Ha; (d) Forestry Partnerships (*Kemitraan*

Kehutanan/KK), covering the Recognition and Protection of Forestry Partnership with an area of 571,622.38 Ha, and the Social Forestry Forest Utilization Permit (IPHPS) with an area of 34,789.79 Ha; and (e) Customary Forest (*Hutan Adat/HA*) reached 1,196,725.01 (Customary Forest Designation 108,576 Ha and Indicative Customary Forest 1,088,149 Ha). This achievement, statistically, shows significant progress compared to the previous decade. Through Social Forestry, the Government hopes that forestry tenure conflicts can be resolved, and communities become more prosperous because they have the legality to access forest areas. Forests and the environment will become more sustainable because they have cared to manage forests sustainably.

Furthermore, the Indonesian Government is also actively involved in implementing international commitments related to forest protection and climate change. In 2010, the Government of Indonesia and Norway made an agreement to reduce greenhouse gas emissions from deforestation and forest degradation. This was the basis for developing REDD+ pilot projects in Indonesia. In addition, the Government of Indonesia passed an agreement with the European Union concerning Forest Law Enforcement, Governance and Trade (FLEGT). Moreover, the Indonesian Government enacted a Nationally Determined Contribution (NDC) in 2021. NDC refers to the commitments taken by Indonesia within the framework of the Paris Agreement to reduce greenhouse gas emissions and encounter climate change. The Paris Agreement, agreed at the United Nations Conference of the Parties on Climate Change Framework (UNFCCC) COP21 in 2015, is a global effort to address climate change. Indonesia's NDC is a way for the Indonesian state to contribute to reducing the impact of climate change. It includes nationally defined targets and actions to reduce greenhouse gas emissions, increase renewable energy capacity, and increase resilience to the impacts of climate change. In relation to the achievement of the NDC, the Government also considers the community's contributions through various social forestry schemes. Other relevant policies related to carbon trading will only begin at the end of 2023. Through carbon trading schemes, social forestry sites can get incentives from carbon trading involving large companies with high emission contributions.

On the other hand, the Government also issued many regulations that put pressure on the environment and rural communities. The culmination was the establishment of the Job Creation Law in 2020, also called Omnibus law, which relaxed aspects of environmental protection and community rights to facilitate the expansion of investment in various fields, including in the natural resource management sector. The Omnibus Law also centralizes licensing processes and institutions, including in the forestry sector. In fact, one of the important changes made in forest management in Indonesia is the institutional decentralization with the establishment of Forest Management Units (Kesatuan Pengelolaan Hutan/KPH) at district levels since 2007. The Omnibus law reduces the role of Forest Management Units in accommodating the interests of IPLCs in forest management. Such policies and regulations intensify conflict over land and natural resources because the government in favor of giving land to business entities instead of recognizing forest management practice by IPLCs. In the end, it will also disrupt the Government's targets to expand and increase the role of Indigenous Peoples and Local Communities in forest management.

In addition, various social and environmental problems have still not been fully resolved by enacting national policies and regulations. Many unresolved forestry tenure conflicts remain due to limited effective conflict resolution mechanisms. Forest and land degradation, especially peatlands due to forest fires, continues to recur, majorly impacting public health and increasing greenhouse gas emissions.

This study was carried out first by mapping various national policies and regulations regarding IPLCs' position and role in forest management. It was conducted to understand the development of social forestry policies and regulations up to 2023 and to unpack the basic assumptions from enacting these policies and regulations.

This report aims to address the following objectives: (a) Analyze the development of regulations and policies on social forestry in Indonesia, at the national level and in selected regions; (b) Analyze the implementation of social forestry in selected case studies; and (c) Evaluate the basic assumptions of social forestry policy, especially related to social, economic, and environmental dimensions.

II. THE HISTORY OF FOREST ESTATE AND THE NEED FOR THE INCLUSION OF INDIGENOUS PEOPLES AND LOCAL COMMUNITIES IN FOREST MANAGEMENT

2.1. The Dutch Colonial Forestry Legislations

Since the Dutch colonial period, forestry regulations strengthened state control while weakening people's rights to land and forest resources. In 1865, the Dutch colonial government issued a forestry regulation targeting the islands of Java and Madura to tighten forestry control. By removing a provision recognizing native communities managing their village forests, the 1865 forest regulation defined forests as state-owned forests. European imperialism and expansionism as a whole encouraged the establishment of laws designed to both defend colonies from rival colonial powers and increase the lucrative potential of colonial exploitation.

After its initial publication in 1865, the forestry regulation underwent numerous updates in the following years. Such revision was conducted to expand government control over forest areas, including by implementing the 'domain declaration' principle, according to the *Agrarische Besluit* of 1870 (Rachman 2012). This regulation strengthened the colonial government's control and provided a legal basis for issuing concessions to private corporations to exploit teak forests. In the beginning, the colonial government was only interested in controlling the teak forest in Java because of its commercial value. The latter forest regulation was the *Boschordonantie voor Java en Madura* 1927, later revised in 1932. Article 2 of this forestry regulation states that forests are state-owned and free from indigenous rights. According to this regulation, state forests consist of uncultivated trees and bamboo plants, timber gardens planted by the Forestry Service or other government agencies, and gardens containing plants that do not produce trees but are planted by the Forestry Service (Termorshuzen-Arts, 2010:65).

2.2. National forestry law with colonial legacies

The Dutch colonial land laws were replaced with national laws that were more in line with the interests of the Indonesian people in the early years of independence. In 1967, the first forestry law was drafted following the end of colonial rule. To boost economic activity in forest areas and thereby generate state income, President Suharto enacted Basic Forestry Law Number 5 of 1967 (BFL). Unlike the BAL, which specifically repealed agrarian regulations during the colonial period, the BFL did not repeal the Boschordonantie 1932. Officials from the Forestry Service translated the Boschordonantie 1932 into Indonesian and used it as the primary source for the BFL (Arizona 2022).

The government can preserve implementing regulations in the forestry sector, including maps of forest areas, by not repealing the *Boschordonantie* 1932. The BFL continued the forestry management policy of the *Boschordonantie* by stating that the state is the forest landowner. The Minister of Forestry has the authority to determine which areas are designated as' forest areas' (Article 1, point 4 of the BFL) and to grant logging concessions to foreign and domestic companies (Article 14 of the BFL, and Government Regulation No. 21/1970). The BFL does not recognise customary territories. Therefore, there are no customary forests or other schemes to involve indigenous and local communities in forest management (Rachman and Siscawati, 2009; Affif and Rachman, 2019). Through the Forestry Law, the Suharto Administration expanded state control over forest areas outside Java, especially on Kalimantan, Sulawesi and Sumatra islands. The government created an Agreement Forest Use Program (*Tata Guna Hutan Kesepakatan*/TGHK) to make claims and determine the boundaries of forest areas unilaterally without the community's consent. This makes forestry conflicts increasingly widespread in areas outside the island of Java.

Following Suharto's resignation as president in 1998, the government passed a new Forestry Law (Number 41/1999) in the spirit of reform. The repeal of colonial forestry regulations is specifically mentioned in the new Forestry Law. However, the fundamental tenet of the forestry ideology—that the government is the sole owner of the forest—remains in place. NGOs attempted to strengthen communities' rights by influencing the new Forestry Law's provisions, but their efforts fell short. The Forestry Law, therefore, has very little room for incorporating community rights. For instance, because customary forests are defined as forests located in state forest areas, the Forestry Law ambiguously regulates them.

The government also implemented a decentralization strategy during the reform period, allowing local governments to issue business permits in the forestry industry. As a result, the forest's timber supply was being increasingly exploited. This takes place both legally and illicitly. In many areas of Indonesia, illegal logging is rife. The government and the House of Representatives passed Law No. 18 of 2013 concerning the Prevention and Eradication of Forest Destruction in order to combat illegal logging and other forestry crimes. This law entirely replaces all criminal provision in the Forestry Law (Number 41/1999). The government's repressive strategy also targets those who have lived in forested areas and depend on those resources. As a result, numerous parties frequently appeal to the Constitutional Court their disagreement with the Forestry Law and the Law on the Prevention and Eradication of Forest Destruction. The petitioners contend that both laws' provisions have resulted in human rights violations, depriving them of their constitutional rights.

The history of forestry regulation in Indonesia from the colonial period to the present day still limits the involvement of IPLCs in forestry management. This is also the basis for forestry conflicts because of a conflict based on claims between the state and communities in forest management. This situation has also generated much support from the local, national and international levels to support the incorporation of IPLCs in forest management.

III. REGULATORY FRAMEWORK ON INDIGENOUS PEOPLES AND LOCAL COMMUNITIES RIGHTS IN FOREST MANAGEMENT

This section divides the legal framework governing IPLCs' rights in forest management into four subsections. The first subsection examines the constitutional provisions that form the basis for forestry regulation, including those about the rights of IPLCs. In the second subsection we will discuss about ratification of international treaties and agreement concerning environment and forest management. In the third subsection, several regulations on the rights of IPLCs in forest management and environmental protection are discussed. The fourth subsection discusses implementing regulations, including Government and Minister of Forestry regulations. This subsection will demonstrate that schemes for making indigenous and local peoples participating in forest management are becoming more sophisticated as governments develop policies responding to community demands.

3.1. The Constitution

The Constitution in force in Indonesia is the 1945 Constitution. This Constitution was passed in 1945, the year Indonesia declared its proclamation of independence, and this Constitution has been implemented for many decades. Political reform in 1998 after President Suharto stepped down from his position encouraged constitutional amendments. In 1999-2002, four amendments were enacted to include many new provisions related to democracy, the rule of law, human rights, and the environment.

The framers of the constitutional amendments added a chapter on human rights to the Indonesian Constitution, containing a complete human rights catalogue. A few related provisions concern the protection of forests and the environment. However, the two articles are most closely associated with environmental protection and people's rights to a good living standard. The first is Article 28H Paragraph (1) of the 1945 Constitution, which states that: "Everyone has the right to live a prosperous life physically and mentally, to have a home, and to have a good and healthy living environment and the right to obtain health services." Citizens often use this provision as a legal argument for suing the Government for action that does not fulfil the right to a good environment.

In addition, Article 33 Paragraph (4) of the 1945 Constitution specifies that a focus on the environment is one of Indonesia's economic development principles. This article stated that: "The national economy is organized based on economic democracy with the principles of togetherness, equitable efficiency, sustainability, environmental insight, independence, and by maintaining a balance of progress and national economic unity." Although this provision makes the principle of environmental awareness central to economic development, in practice, it often contradicts and is defeated by other, more growth-oriented principles. Jimly Asshiddiqie (2009), a former constitutional judge and an expert on Indonesian constitutional law, said that the 1945 Constitution is a green constitution, meaning a constitution that protects the environment. Nonetheless, Jimly argued that the environmental provisions in the Constitution are not bold. Therefore, he contended that the Indonesian Constitution is a light-green constitution.

Another important provision related to the IPLCs' rights is Article 18B Paragraph 2 and Article 28I Paragraph (3) of the 1945 Constitution. Article 18B Paragraph (2) stated that: "The State recognizes and respects adat law communities (*indigenous peoples*) and their traditional rights as long as they are alive and in accordance with the development of society and the principles of the Unitary State of the Republic of Indonesia, which are stipulated in the law." Article 28I Paragraph (3) stated, "The cultural identity and rights of traditional communities are respected in harmony with the development of times and civilizations." These two provisions serve as the main references for IPLCs' demands to encourage legal reform at the statutory level and operational regulation to realize land rights and provide legal protection to IPLCs.

3.2. Ratification of International Instruments

The Indonesian Government is increasingly involved in international meetings on forestry and the environment. The Indonesian Government ratifies international treaties and agreements into laws and presidential regulations. The following section lists the ratifications of international legal treaties and instruments related to forest and environmental management (Table 1).

Table 1. List of Ratification of International Instrument to the Indonesian Legislation

No	International Instrument	Year of	Ratification by	Year of
D		signature	Indonesia Govt	Ratification
	ication by legislation	0011		0011
1	Paris Agreement to the United	2016	Law No. 6 of	2016
	Nations Framework		2016	
	Convention on Climate Change	2222		2014
2	ASEAN Agreement on	2002	Law No. 26 of	2014
	Transboundary Haze Pollution		2014	
3	Nagoya Protocol on Access to	2010	Law No. 11 of	2013
	Genetic Resources and the Fair		2013	
	and Equitable Sharing of			
	Benefits Arising from Their			
	Utilization to the Convention on			
	Biological Diversity			
4	The International Covenant on	1966	Law No. 12 of	2005
	Civil and Political Rights		2005	
5	The International Covenant on	1966	Law No. 11 of	2005
	Economics, Social and Cultural		2005	
	Rights			
6	United Nations Framework	1992	Law No. 6 of	1994
	Convention on Climate Change		1994	
7	United Nations Convention on	1992	Law No. 5 of	1994
	Biological Diversity		1994	
Ratif	ication by Presidential Regulation	S		
8	Agreement Recognizing the	2009	Presidential	2021
	International Legal Personality		Regulation	
	of the Partnerships in		No.36 of 2021	
	Environmental Management			
	for the Seas of East Asia			
9	Agreement On The	2016	Presidential	2018
	Establishment Of The Asian		Regulation No.	
	Forest Cooperation		115 of 2018	
	Organization			
10	Agreement for the	2005	Presidential	2017
	establishment of the ASEAN		Regulation No.	
	Center for Biodiversity		100 of 2017	
11	Voluntary Partnership	2014	Presidential	2014
	Agreement between the		Regulation No.	
	Republic of Indonesia and the		21 of 2014	
	European Union on Forest Law			
	Enforcement, Governance, and			

	Trade in Timber Products into the European			
12	International Tropical Timber	2006	Presidential	2006
	Agreement		Regulation No.	
			78 of 2008	

From these various international instruments and programs, the Indonesian Government cooperates with the European Union regarding Forest Law Enforcement, Governance, and Trade (FLEGT). FLEGT Action Plan is an initiative of the European Union (EU) to address illegal logging and promote sustainable forestry management in countries that export timber to the EU. Indonesia is one of the countries participating in the FLEGT Action Plan. Under the FLEGT Action Plan, countries like Indonesia engage in a Voluntary Partnership Agreement (VPA) with the EU. VPAs are bilateral agreements that aim to ensure that timber and timber products exported to the EU are legal and meet certain environmental and social standards.

In the case of Indonesia, the country has made significant progress in implementing its FLEGT VPA. The Indonesian Timber Legality Assurance System (SVLK) is a key component of this process. The SVLK is a certification system that verifies the legality of timber products. It involves a chain-of-custody certification to ensure that the timber has been harvested, processed, and traded in accordance with Indonesian laws. By participating in the FLEGT Action Plan, Indonesia aims to improve the sustainability of its forestry sector, combat illegal logging, and promote responsible timber trade. The FLEGT VPA with the EU provides a framework for achieving these goals and enhancing market access for Indonesian timber products in the EU.

Another important program in Indonesia is Reducing Emissions from <u>Deforestation</u> and Forest Degradation (REDD+). This program was implemented to address the international commitment for collaboration between the government of Indonesia and Norway in 2010, as well as a follow up to Indonesia's commitment to implement the recommendations from the COP 2007 to the United Nations Framework Convention on Climate Change that was held in Bali, Indonesia. Susilo Bambang Yudhoyono (SBY), then Indonesia's president, took the opportunity to position his country

within the emerging REDD+ agenda, pledging to improve forest governance and stem forest loss (Scheyvens and Setyarso, 2012; Mulyani and Jepson, 2013; van Noordwijk et al., 2014). Since then, the government has developed many REDD+ pilot projects in Indonesia and has more recently taken a jurisdictional approach.

3.3. Forest and Environmental Legislation

In Indonesia, the Forestry Law (Number 41/1999) is the core legislation governing forests. This law provides a legal framework for managing, utilizing, and conserving forests in Indonesia. The Forestry Law divides forests into three categories: production forests, protection forests, and conservation forests. Production forests are forests managed to produce timber, non-timber forest products, and other forest products. Protection forests are forests that are managed for the protection of the environment, including watersheds and soil stability. Conservation forests are protected for their biodiversity and ecological value and are not intended for commercial exploitation. The Forestry Law also establishes the government's and other stakeholders' roles and responsibilities in forest management, including the rights and obligations of forest concession holders, local communities, and indigenous communities. The act also contains provisions for protecting forests from illegal logging and other activities that may damage forests.

Nevertheless, the current Forestry Law in Indonesia (Law No. 41 of 1999) inherits the concept of forest estate promoted by the Dutch colonial authorities. It is based on the idea that forest areas are state-owned, that only the Government can manage and protect forests, and that the Government can criminalize IPLCs already living in forest areas. Although Indonesia declared independence in 1945 and made its own Forestry Law, it continued with a colonial approach to forestry. Therefore, the Forestry Law only provides limited provisions for IPLCs involvement in forest management.

Space for indigenous peoples' involvement has opened since the Constitutional Court Decision Number 35/PUU-X/2012. The Constitutional Court recognized customary forests and amended provisions in the Forestry Law to recognize the existence of customary forests of indigenous peoples. This ruling provides a new opportunity for

indigenous peoples to resolve the forestry conflicts they face with the government and business enterprises.

Meanwhile, environmental regulation stems from the development of international environmental law in the 1970s and 1990s, especially when the United Nations was more open to institutionalizing the environment and climate into international law. The Rio Declaration on Environment and Development in 1992 was the peak of international environmental law. In that decade, the Indonesian Government was actively involved in international meetings discussing environmental and climatic issues. In fact, in the 1980s and 1990s, the Government had already created a Ministry for the environment. The first environmental law made by the Government was Law No. 4 of 1982 on Basic Environmental Management. The law was replaced by Law No. 23 of 1997 on Environmental Management and further strengthened and replaced through Law 32 of 2009 on Environmental Management and Protection.

The present Environmental Law (Number 32 of 2009) established a system for strategic and environmental impact assessments, set out requirements for environmental permits and licenses, and imposed stricter penalties towards wrongdoers. Furthermore, this law regulates many positive dimensions related to environmental protection. It maintains the balance of authority between the central Government, provincial governments, and district governments in making policies and programs to protect life.

In Indonesia, the primary law that regulates the conservation of natural resources and ecosystems is Law No. 5 of 1990 on the Conservation of Natural Resources and Ecosystems (known as the "Conservation Law"). Under the present Conservation Law, the Government has the authority to regulate the use, management, and conservation of natural resources, including forests, land, water, minerals, and other resources. The Conservation Law also provides for the creation of protected areas, such as national parks and nature reserves, where the conservation of natural resources and ecosystems is given priority. The law also requires that environmental impact assessments be conducted before any development projects are carried out to ensure they do not negatively impact the environment.

However, with the development of conservation policy at the international level and challenges at the national level, Law No. 5 of 1990 has been subject to criticism. Since the legislation was enacted in 1990, there have been numerous political changes in Indonesia, most notably the transition from centralism to decentralism; therefore, the law should be amended to reflect these changes. In addition, the Conservation Law must provide adequate community participation in conservation efforts, funding provisions, and protection for endangered species. As a result, since 2016, the Parliament has been drafting legislation to replace the existing conservation law to increase people's participation in conservation activities.

Indonesia also has special criminal regulations regarding preventing and eradicating forest destruction (Law Number 18 of 2013). Initially, this law was created to overcome rampant illegal logging in Indonesia. Although the target of this law was large-scale organized forestry crimes, it has also been used to criminalize residents and indigenous peoples who live and carry out activities within forest areas. On December 10, 2015, the Constitutional Court issued Decision No. 95/PUU-XII/2014, which restricts the use of this law to criminalize people who have lived for generations in the forest; those who cut trees, harvest, collect forest products, and herd livestock in forest areas for daily use, rather than for commercial purposes.

3.4. Other relevant legislations (Omnibus Law on Job Creation)

Although the Indonesian Government has enacted several laws and programs to include indigenous peoples' rights in forestry and environmental management, some regulations narrow and even further exclude IPLCs. One of the latest legislations that is seen as hindering the fulfilment of IPLCs rights is the Omnibus Law on Job Creation (Law Number 6 of 2023). This law was created by the Government and the House of Representatives by amending 77 laws into one regulation.

The Omnibus Law encompasses a multitude of sectors, with environmental regulations being a significant area of influence. The purpose of the legislation is to streamline and accelerate the licensing procedure for enterprises, including those operating in the environmental sector. Nevertheless, it has generated considerable

debate and has encountered censure from environmental advocates as well as specific factions within the populace. The environmental licensing process, including the environmental impact assessment (EIA) prerequisites, is streamlined by the Omnibus Law on Job Creation. A company that involves relevant experts proposes an EIA, also known as an *Analysis Mengenai Dampak Lingkungan/AMDAL*, in order to logically calculate the potential impacts that may occur and the necessary mitigation strategies. But according to the Omnbus Law on Job Creation, not every environmental business needs an EIA. However, only those businesses deemed to have a detrimental impact on the environment require an EIA. Critics contend that this has the potential to compromise environmental safeguards, as the rigors of the process might be eased.

In addressing developments in the forestry industry, the legislation modifies land use regulations. Critics have voiced apprehensions regarding the potential adverse effects of these modifications on forests and biodiversity. In an effort to streamline the investment procedure, the Omnibus Law combines licenses and registration. For business activities with low risk, business actors do not need a license, but only need to register their business. Although the primary objective is to streamline business operations, apprehensions have been expressed regarding the possible erosion of environmental regulations. It is imperative to acknowledge that the execution and understanding of the legislation, in addition to any subsequent advancements, are subject to change over time. Additionally, the application of particular provisions may be impacted by legal challenges and public opinion.

3.5. Implementing regulations

Operational regulations regarding the rights of Indigenous Peoples and Local Communities have evolved. These regulations are essentially the result of government policy experiments that are not directly ordered by law. International funding agencies and national environmental NGOs play a significant role in encouraging governments to make policies to adopt community-based forest management. This policy is then called social forestry, and the development of the policy occurs incrementally (Siscawati, 2012).

The first operational policy to adopt social forestry was the Minister of Forestry Number 622/Kpts-II/1995 Decree concerning Community Forestry. The decree was replaced by Decree Number 677/Kpts-II/1998 and Decree Number 865/Kpts-II/1999. It is important to note that these three decisions came before the Government made Law No. 41 of 1999 on Forestry. This means that the decision of the Minister of Forestry was made during the late administration of President Suharto, who was against the involvement of indigenous and local peoples in forest management.

Table 2. Implementing regulations related to social forestry programs

	rable 2. Implementing regulations related to social forestry programs					
No.	Year	Type of policy and regulation	Number of regulation	Title	Scheme	
1	1995	Decree of the Minister of Forestry and Plantations	622/Kpts- II/1995	Community Forest	Community Forest	
2	1998	Decree of the Minister of Forestry and Plantations	677/Kpts- II/1998	Community Forest	Community Forest	
3	1999	Decree of the Minister of Forestry and Plantations	865/Kpts- II/1999	Revision of Decree number 677/KPTS-II/1998 on Community Forest	Community Forest	
4	2001	Decree of the Minister of Forestry	31/Kpts- II/2001	Community Forest Management	Community Forest	
5	2004	Regulation of the Minister of Forestry	P.01/Menhut- II/2004	Empowering Local Communities within and/or Surrounding Forests in the Framework of Social Forestry	Social forestry	
6	2007	Regulation of the Minister of Forestry	P.37/Menhut- II/2007	Community Forest	Community Forest	
7	2009	Regulation of the Minister of Forestry	P. 18/Menhut- II/2009	Revision of Regulation Number P.37/Menhut-II/2007 on Community Forest	Community Forest	

8	2010	Regulation of the Minister of Forestry	P. 13/Menhut- II/2010	Revision of Regulation Number P.37/Menhut-II/2007 on Community Forest	Community Forest
9	2011	Regulation of the Minister of Forestry	P.52/Menhut- II/2011	Revision of Regulation Number P.37/Menhut-II/2007 on Community Forest	Community Forest
10	2014	Regulation of the Minister of Forestry	P.88/Menhut- II/2014	Community Forest	Community Forest
11	2008	Regulation of the Minister of Forestry	P. 49/Menhut- II/2008	Village Forest	Village forest
12	2010	Regulation of the Minister of Forestry	P. 14/Menhut- II/2010	Revision of Regulation Number P.49/Menhut-II/2008 on Village Forest	Village forest
13	2011	Regulation of the Minister of Forestry	P.53/Menhut- II/2011	Revision of Regulation Number P.49/Menhut-II/2008 on Village Forest	Village forest
14	2014	Regulation of the Minister of Forestry	P.89/Menhut- II/2014	Village Forest	Village forest
15	2007	Regulation of the Minister of Forestry	P. 23/Menhut- II/2007	Procedures for Applying for Business Licenses for the Utilisation of Timber Forest Products in People's Plantation Forests	Community plantation forest
16	2008	Regulation of the Minister of Forestry	P.5/Menhut- II/2008	Revision Regulation Number P. 23/Menhut- II/2007 on Procedures for Applying for Business Licenses for the Utilisation of Timber Forest Products in People's Plantation Forests	Community plantation forest
17	2011	Regulation of the Minister of Forestry	P.55/Menhut- II/2011	Procedures for Applying for Business Licenses for the Utilisation of Timber Forest Products in People's Plantation Forests	Community plantation forest
18	2013	Regulation of the Minister of Forestry	P.31/Menhut- II/2013	Revision of Regulation Number P.55/Menhut-II/2011 on Procedures for Applying for Business Licenses for the	Community plantation forest

				Utilization of Timber Forest Products in People's Plantation Forests	
19	2020	Regulation of the Minister of Environment and Forestry	P.11/MENLHK /SETJEN/KUM. 1/5/2020	People's Plantation Forests	Community plantation forest
20	2013	Regulation of the Minister of Environment and Forestry	P.39/Menhut- II/2013	Empowering Local Communities Through Forestry Partnerships	Forest partnership
21	2015	Regulation of the Minister of Environment and Forestry	P.32/MENLHK- SETJEN/2015	Right Forest	Customary Forest
21	2016	Regulation of the Minister of Environment and Forestry	P.83/MENLHK /SETJEN/KUM. 1/10/2016	Social Forestry	Social forestry
22	2017	Regulation of the Minister of Environment and Forestry	P.39/MENLHK/ SETJEN/KUM.1 /6/2017	Social Forestry in Working Areas of Perum Perhutani	Forest partnership
23	2021	Regulation of the Minister of Environment and Forestry	9 Year 2021	Management of Social Forestry	Social forestry
24	2021	Government Regulation	23 Year 2021	Forest Management	Social forestry

According to the table 2 above, implementing regulations on social forestry are very dynamic and constantly changing over time. This demonstrates that social forestry schemes exist in Indonesia as policy experiments conducted by the Ministry of Forestry in response to community demands. However, because social forestry is governed by the Omnibus Law on Job Creation, these disparate laws and regulations have been consolidated. Regulation of the Minister of Environment and Forestry Number 9 of 2021

Concerning Management of Social Forestry is the current operational regulation that is the reference for the five social forestry schemes.

IV. IMPLEMENTATION OF SOCIAL FORESTRY POLICIES IN INDONESIA

4.1. The emergence of social forestry policies

In the late 1970s, international funding agencies, national non-governmental organizations, and academics urged the Indonesian Government to recognize community-based natural forest management (CBFM) as a legal and nonviolent solution to land conflicts. This marked the beginning of a process in which the Government gradually established policies and programs to grant local communities access and rights to forest management. In 1978, the Food and Agriculture Organization (FAO) and the Indonesian Government organized the Eighth World Forestry Congress, which led to the establishment of a global program called "Forestry for Local Community Development." This program aimed to promote and support programs involving forest uses for rural development, particularly in developing nations (Siscawati 2012; Arizona 2022).

In 1984, the State Forestry Company (Perhutani) developed a program that granted landless farmers temporary access to grow and maintain teak forests in Java, focusing on "intercropping" and engaging villagers as forest management labourers. However, the Perhutani model did not significantly impact land conflict resolution in Indonesia due to its limited scope and limitations.

In the 1980s, international donor agencies supported key actors in their efforts to advance social forestry, including funding a visit by a delegation of government officials and Perhutani representatives to social forestry pilot projects in India and Thailand (Siscawati 2012). However, social forestry could only become a formal solution to forest conflicts if incorporated into the national legal system.

The regime's change in 1998, which brought an end to the authoritarian New Order era, created a new opportunity for social forestry. The concept that the people should own the forest has been bolstered by democratization since 1998, and the Ministry of Forestry has undergone significant changes since 2000. In 2014, President Joko Widodo

asserted a national goal to release 12,7 million hectares (10 percent) of the state forest for social forestry programs. Consequently, the forest area is now also a target of land reform initiatives. The Government planned to distribute 4,9 million hectares of forest land to farmers under the land reform program. This political commitment was included in the national development plan, and it subsequently became one of the nation's most important programs. Then, social forestry programs evolved into various management access schemes for state forest areas for local communities. However, implementation of these programs continues to fall far short of the Government's goal. The subsequent sections will inform about the realization of social forestry policies in five schemes.

4.2. Five Social Forestry Schemes

The previous section has shown that policies on social forestry in Indonesia are evolving incrementally. Regulations on social forestry also constantly change following social and political dynamics at the local level (Wong et al, 2020). Even these policies and regulations develop as a form of experimentation to face the community's demands in the field. To the present, there are five social forestry schemes in Indonesia, which will be briefly described in this section (Table 3).

a. Community forests (Hutan Kemasyarakatan) starting from 1995

Community forests are state forests utilized by groups of local communities and non-village institutions, such as farmer's associations and local cooperatives. This is the oldest scheme in social forestry policy in Indonesia. The primary objectives of community forests are job creation, poverty alleviation, and resolving social conflicts while preserving the forest and its environmental functions (MoEF, 2016). Community forest is managed by farmers association and local cooperatives.

b. Village forest (Hutan Desa) starting from 2008

Village forests are comparable to community forests regarding property rights, governance mechanisms, tenure length, and renewal procedure. Village forests are state forests utilized to improve the welfare of villagers by providing optimal benefits of forest

resources through fair access and local capacity building (MoEF, 2016). The main difference with community forest lies on the presence of forest management units in the case of village forest. A community institution manages village forests, it is called the Village Forest Management Agency (*Lembaga Pengelola Hutan Desa/LPHD*) and is under the supervision of the village government. n the other hand, community forest is managed by farmers association and local cooperatives.

Regarding property rights, the village forest scheme transfers forest management rights from the Government to the village communities. However, it retains ownership rights, preventing rights transfer to third parties, such as corporations. Villages that receive village forests are also required to practice sustainable forest management. The maximum duration of a village forest concession is 35 years, but it can be extended based on performance evaluations conducted every five years by the provincial and central governments (MoEF, 2016). The village forest may be a part of the production and protection forests, but not the conservation forests, as the permitted activities in the village forest may impact biodiversity and ecological systems. Farming, except for palm oil production, and the collection of non-timber forest products (NTFPs) are permitted in village forests. However, only areas classified as production forests are allowed for logging under this scheme.

The village forest can be a part of the production and protection forests, but not the conservation forest. This is because the activities allowed in the village forest might impact biodiversity and ecological systems. In village forests, people can earn a profit by farming, except for palm oil, and gathering non-timber forest products (NTFPs). But under this scheme, logging is only allowed in places that are considered "production forests."

c. Community plantation forests (*Hutan Tanaman Rakyat*) starting from 2007 Community plantation forests are plantations managed by community groups to ensure sustainable forest management by applying appropriate silvicultural systems (MoEF, 2016). This scheme only applies to production forests that sustainably harvest timber and non-timber forest products. Community plantation forests are managed by individual farmers, farmers' associations, and farmer cooperatives, who may operate the program

independently or in conjunction with forest companies. The property rights, governance mechanism, tenure duration and renewal process are the same as the village and community forests.

d. Forestry partnerships (Kemitraan Kehutanan) starting from 2013

A forestry partnership is a collaboration between local communities and (government or private) forest authorities in managing state forests. All state forest authorities are required to empower communities by establishing forest management partnerships (MoEF, 2016). Forestry partnerships are developed and granted to families living near forests that depend heavily on the forests for their livelihoods. Each family is permitted up to two hectares of state forests under government management and five hectares under private management for farming and timber collection. The granted area can be expanded if the forests are utilized for obtaining NTFPs and environmental services (MoEF, 2016). Forestry partnerships are available in all three categories of state forests: production, protection, and conservation (MoEF-ENRC, 2018). The duration of the forestry partnership is extendable based on the performance evaluation, mutual agreement and duration of company's permit. This scheme shares the same property rights and governance structure as village, community, and community plantation forests.

e. Customary forests (Hutan Adat) starting from 2015

Customary forests, individual forests (*Hutan Perseorangan*), and peoples' forests (Hutan Rakyat) are non-state forests located on private or communal property. Customary forests are owned, governed, and managed by indigenous communities, i.e., people who have lived in a particular geographical area for generations because of their ties to ancestors, relationship to the environment, and value systems (Arizona 2022). Customary forest is the only social forestry program that transfers forest property rights. This scheme provides indigenous communities with the legal certainty and fairness necessary to own and manage forests for their own welfare sustainably. All types of state forests (production, protection, and conservation) may be converted into customary forests, at which point they cease to be state-owned. Indigenous communities can practice

customary agriculture, hunting, fishing, grazing, timber harvesting, collection of NTFPs, and use of environmental services in customary forests.

Table 3. Five Social Forestry Schemes

	(1) Community Forest	(2) Village Forest	(3) People's plantation forest	(4) Forest Partnership	(5) Customary Forest
Forest tenure	State forest	State forest	State forest	State forest	Customary land
Allocated state forest	Production and protection forest	Production and protection forest	Production forest	Production, protection and conservation forest	Production, protection and conservation forest
Receiving entity	Farmers' association, local cooperatives	Village institution	Individual farmers, Farmers' associations, local cooperatives	Individual farmers	Indigenous communities
Contract duration		imum with evaluation every 5 5 years in conservati forest		conservation	
Allowed activities	Collecting NTFPs, harvesting timber (in production forest only), farming (except palm oil), utilizing environmental services, etc.			Customary forest livelihood	

(Source: Rakatama and Pandit 2020)

The main difference between the schemes mentioned above lies in customary forests, especially in terms of forest tenure. The four other social forestry schemes provide temporal access to communities to manage state forests. Meanwhile, customary forests are not a state forest management scheme but rather a form of government recognition of customary land tenure and traditional forest management. The customary forest is managed by Indigenous communities, which in Indonesia must first be enacted through regional regulation created together between the head of districts and the local Parliament or through a decision of the regional head. The difference with other schemes lies in the duration of the contract. Customary forests do not have a time limit, unlike other social forestry schemes, which have a duration of 35 years and are evaluated every five years. NGOs and indigenous peoples' organizations questioned the Government's policy of including customary forests in social forestry schemes. According to them,

customary forests should be a separate mechanism from social forestry, providing temporal access to communities to manage state forests. In theory, customary forests are stronger for providing tenure security to indigenous communities. However, on the other hand, the procedure of customary forest recognition is the most complicated compared to other schemes. The following sections will discuss the implementation of the five schemes.

4.3. The implementation of social forestry program

The social forestry program allows local communities, including indigenous communities, to participate in managing and utilizing forests in their area in collaboration with the Government. The program aims to promote the conservation of forests and biodiversity and to increase the economic benefits of forests for local communities. Some activities that may be carried out under the social forestry program include afforestation, reforestation, agroforestry, and non-timber forest product (NTFP) cultivation and commercialization. The Ministry of Environment and Forestry implements the program with other government agencies and NGOs.

The social forestry program initiative is a form of industrial forestry (conventional) modified to allow the distribution of benefits to local communities (Gilmour and Fisher, 1991 in Suharjito and Darusman, 1998). The Social Forestry Program has been widely discussed since 1995 by creating pilot projects. The Government eventually started the Social Forestry program in 2007 as an integrated project. However, the program's implementation experienced severe problems until 2014 due to the centralized program policies, procedural restrictions, limits to the arenas in which the program could be enacted, and exclusion of stakeholders from the planning and development of the program framework (Slamet Edi Sumanto, 2009). According to the Ministry of Environment and Forestry, only 449,104.23 hectares of state forest were allocated for community management between 2007 and 2014.

The current regulation on social forestry programs is the Government Regulation Number 23 of 2021 of Forest Management. This regulation becomes the main procedure to expand social forestry permits. Based on the Regulation of the Minister of Environment

and Forestry Number 9 of 2021, "Social Forestry is a sustainable forest management system implemented in state forest areas, or Private Forests/Customary Forests carried out by Local Communities or Indigenous Peoples as the main actors. This is the basis for implementing the five social forestry schemes. The implementation of social forestry programs based on different schemes is informed in the following table.

Table 4. The realization of social forestry programs

No	Schemes	Area (ha)
1	Community Forest	1,180,267.09
2	Village Forest	2,609,215.77
3	People's plantation forest	363,148.08
4	Forest partnership	581,432.23
5	Customary forest	
	Customary forest designation	250,971.00
	Indicative location of customary forest	1,088,149.00
	Total	6,073,184.42

(KLHK. updated on September 13, 2023).

The table 4 shows the realization of social forestry until September 13, 2023, where the Government has set a social forestry area of 6,073,184.42 hectares covering 9,642 units of ministerial decrees. The Government claimed that this program has benefited 1,287,710 households in rural Indonesia (Table 5). Village Forest is the most extensive of the five social forestry schemes, although the first scheme introduced was Community Forest. One of the driving factors for the high number of village forests is the preparation of local institutions to manage state forests. Village government is part of formal governance at the local level and is ready to engage in social forestry schemes. The number of social forestry allocations is followed by the People's Plantation Forest and Partnership Forest.

The Ministry of Environment and Forestry established The National Working Group for Accelerating Social Forestry in July 2021. This working group is mandated to accelerate the implementation of social forestry policy by integrating government programs from ministries and institutions in provinces and regencies or cities. This plan has been effective at raising the performance of the social forestry program, such that in

2021, the goal of access to 250,000 Ha was exceeded and reached 506,219 Ha (202% of the target). Thus, the projected total achievement for 2021 is 4,920,515 Ha.

One of the lowest-achieving social forestry schemes is Customary Forest. This is because the requirements and procedures for establishing customary forests are more complicated. Establishing customary forests is preceded by the designation of a group as an indigenous people through political decisions at the district level. According to Law 6 of 2014 concerning villages and Law 41 of 1999 concerning forestry, indigenous people and their territory must be recognized as existing in a province, district, or city through local regulations. Meanwhile, local governments are not enthusiastic about recognizing indigenous communities in their regions. Local governments also have concerns about enacting policies for the legal recognition of indigenous communities within forest areas. This is because local governments do not have authority when faced with forest areas that are under the authority of the Ministry of Forestry. The Ministry of Environment and Forestry created the Map of Indicative Areas of Customary Forests to overcome this obstacle. This map is used to give confidence to local governments to issue policies recognizing indigenous peoples as a condition for applying for customary forest designation.

Table 5. Implementation of social forestry program based on the province

		REAL	ISASI		
NO	PROVINSI	Alokasi	Capaian	JML SK (Unit)	JML KK
		LUAS (Ha)	LUAS (Ha)		
1	ACEH	447,217	276,369.40	88	21,957
2	SUMATERA UTARA	611,472	91,247.84	242	21,590
3	SUMATERA BARAT	724,726	333,417.97	327	169,016
4	RIAU	1,310,678	160,944.34	141	30,092
5	JAMBI	357,592	220,656.28	414	39,097
6	SUMATERA SELATAN	495,896	134,334.27	212	32,994
7	BENGKULU	156,848	87,512.16	86	18,360
8	LAMPUNG	365,736	234,255.23	441	88,756
9	KEP BANGKA BELITUNG	168,380	47,783.97	395	27,669
10	KEP RIAU	163,069	33,874.00	39	5,011
11	JAKARTA	-	-	-	-
12	JAWA BARAT	38,198	57,870.98	202	32,226
13	JAWA TENGAH	90,406	100,608.09	143	25,610
14	YOGYAKARTA	3,413	1,565.88	45	5,005
15	JAWA TIMUR	176,150	193,448.69	409	133,558
16	BANTEN	9,803	24,503.06	34	15,544
17	BALI	31,094	25,152.04	140	70,341
18	NUSA TENGGARA BARAT	286,876	65,753.43	373	41,746
19	NUSA TENGGARA TIMUR	502,154	75,428.83	331	28,546
20	KALIMANTAN BARAT	1,529,682	756,375.29	228	85,001
21	KALIMANTAN TENGAH	1,497,391	429,981.83	259	35,828
22	KALIMANTAN SELATAN	197,238	97,125.02	188	27,276
23	KALIMANTAN TIMUR	516,892	323,194.18	178	21,240
24	KALIMANTAN UTARA	274,863	522,417.67	92	12,384
25	SULAWESI UTARA	125,211	47,145.35	254	6,609
26	SULAWESI TENGAH	426,628	232,275.69	1,278	35,137
27	SULAWESI SELATAN	473,401	343,488.83	784	77,240
28	SULAWESI TENGGARA	275,865	122,076.93	343	26,178
29	GORONTALO	65,624	30,485.85	178	16,094
30	SULAWESI BARAT	122,050	61,115.06	511	9,310
31	MALUKU	237,470	236,216.96	166	33,156
32	MALUKU UTARA	280,289	239,491.00	255	47,832
33	PAPUA BARAT	632,321	274,710.00	151	10,536
34	PAPUA	2,812,804	192,358.30	92	14,930
	TOTAL	15,407,437	6,073,184.42	9,019	1,265,869

(KLHK. updated on September 13, 2023).

4.4. Changing role of Forest Management Unit

Forest Management Unit (*Kesatuan Pengelolaan Hutan*/KPH) is one of the government's institutional innovations in forest management in Indonesia. The establishment of Forest Management Units (FMU) is part of the forestry decentralization policy by strengthening regional institutions to facilitate and assist in increasing the productivity of forest resources and expanding community access to forest areas and resources. The FMU first introduced in 2007 by the enactment of Govern Regulation Number 6 of 2007 concerning Forest Land Use.

The position of FMU is at the forefront of forest management at the site level, making it possible for FMU to build intensive cooperation with local communities. The potential of FMU's human resources makes it possible to utilize their expertise in community assistance. The role of FMUs in community-based forest management has been explained by Setyarso et al. (2014) based on the collaboration theory of Himmelman (1994). Various roles are pinned on FMUs including as initiators, catalysts, technical assistance providers, capacity builder, facilitator, and partners for forest management communities in State Forest areas (Fitra et al 2021).

Social forestry policy in Indonesia is still centralised. The authority related to the social forestry program from the central government to FMU is the function of facilitating the preparation of granting rights or social forestry permits, facilitating planning preparation, and facilitating business development. Administrative functions related to social forestry and budget, especially the issuance of dominant permits, are carried out by the central government, but Public consultation is carried out in FMU.

After the issuance of the Job Creation Law Number 11 of 2020, there has been a change in the role and responsibility of FMU as stipulated in the Minister of Environment and Forestry Regulation Number 8 of 2021. Regarding the role of FMUs in Social Forestry Program, it has been explicitly mentioned while still carrying out the facilitation and coordination functions. This change affects the ability of FMUs to carry out their previous functions because changes in authority also have implications for changes in the budget that can be managed by FMUs (Fitra et al 2021).

A study conducted by Fitra et al (2021) on the role of FMUs in social forestry programs in Kerinci and Sinjunjung districts shows several important lessons. For the initial process of Social Forestry development, both FMUs tend to rely heavily on the central government budget. In its implementation, for community empowerment, FMU Office of Kerinci district tends not to rely too much on the central government, because it has begun to seek budgets from donors and build business units. One of them is assistance from Fauna and Flora International (FFI) to establish a production house next to the FMU office and an independent business to establish a "café business unit" that becomes a showcase for social forestry products from the community. Meanwhile, at FMU Office of Sijunjung District, the Putra Harapan Forest farmer group established a production house with independent businesses. During this transition period, FMU Office of Kerinci district does not have its own budget, all activities that require funding are determined by the Provincial Office, including in terms of issuing a Letter of Assignment to communicate with the community. This change in budget allocation affects the effectiveness of FMU's role in facilitating social forestry programs.

V. ANALYSIS AND EVALUATION OF SOCIAL FORESTRY POLICY

Social forestry is an integrated approach that addresses the interplay between the economy, social aspects, and the environment. It seeks to strike a balance between meeting the socio-economic needs of local communities, promoting social cohesion and resolution of forest tenure conflicts, and ensuring environmental sustainability (Pambudi 2020).

Social forestry fosters the development of local communities economically by means of ecotourism, agroforestry, sustainable timber harvesting, and the collection of non-timber forest products. Engaging in these revenue-generating endeavors supports the alleviation of poverty and enhances the economic welfare of local communities. Employment opportunities are created through the establishment and management of forest-related enterprises, as well as through activities such as afforestation and reforestation. This may be especially crucial in rural regions where economic alternatives are scarce. A common objective of social forestry initiatives is the establishment of

sustainable value chains for forest products. This entails the processing, marketing, and sale of products in a manner that generates value for communities and benefits local economies.

Social forestry empowers local communities by involving them in forest management decision-making processes. This empowerment encourages a sense of ownership, responsibility, and pride in the management of local natural resources. Community empowerment through training and capacity-building programs associated with social forestry improves community members' skills and knowledge. This improves their ability to participate in forest management and related economic activities actively. Mechanisms for resolving conflicts over forest resources are frequently included in social forestry initiatives. Addressing conflicts promotes social cohesion within communities and ensures equitable benefit distribution. Traditional knowledge and practices must be recognized as part of social forestry. This contributes to the preservation of indigenous communities' cultural identities, as well as the maintenance of a harmonious relationship between people and their environment. Gender-sensitive approaches may be used in social forestry programs to ensure that both men and women have equal opportunities to participate in decision-making processes and benefit from the initiatives.

Social forestry contributes to the conservation of biodiversity by promoting sustainable forest management practices. It is vital to preserve diverse ecosystems in order to sustain the wellbeing of plant and animal species. Through the absorption and storage of carbon dioxide, social forestry initiatives like afforestation and reforestation aid in carbon sequestration, which reduces the effects of climate change. This is in line with climate change mitigation programs, such as REDD+. Watershed protection is a primary concern in many social forestry initiatives. For the benefit of ecosystems and communities downstream, forests are essential for controlling water flow, enhancing water quality, and halting soil erosion. Social forestry works to stop deforestation, degradation, and overuse of natural resources by promoting sustainable practices like agroforestry and controlled harvesting (Nurrochmat 2019). Climate-resilient practices that assist ecosystems and communities in adjusting to changing climate conditions may be a part of social forestry initiatives.

5.1. Social forestry, rural livelihood, and poverty alleviation

Social forestry programs seek to improve rural communities' wellbeing by providing opportunities for livelihood activities such as farming, collecting timber and non-timber forest products (NTFPs), and utilizing environmental services. It enables rural communities to engage in a variety of income-generating activities such as agroforestry, the collection of non-timber forest products, and ecotourism (Nurfatriani et al, 2023; Amaliah et al, 2023). This diversification lessens reliance on a single source of income. Social forestry programs improve the quality of life in rural communities by providing alternative livelihood opportunities. Better access to education, healthcare, and other essential services is one example. Social forestry helps to alleviate rural poverty by promoting sustainable livelihoods and income-generating activities.

Rakatama and Pandit (2020) carried out an analysis of the social forestry programs in Indonesia in order to determine the extent to which social forestry contributes to the regional economies of three areas. They discovered that the economic performances of these schemes across regions are relatively good and that capacity development for local communities in running their agricultural businesses in accordance with social forestry is important to ensure that poverty is alleviated in rural areas (Njurumana et al, 2020). However, in order to increase their efficacy, some policy implications have been identified. These include enhancing the business skills of the local communities, ensuring that investments are made in a manner that is both cost-effective and efficient and coupling and integrating social forestry with broader community development initiatives.

Local communities can legally access forest resources through social forestry programs. The sustainable harvesting of timber, non-timber forest products, and other natural resources can be a part of this access, helping impoverished households generate income. The growth of community-based businesses focused on sustainable forest management is aided by social forestry. These businesses, which offer chances for entrepreneurship and revenue generation, can range from eco-tourist endeavors to the processing of forest products. Value chains for forest products can be developed

more easily with the help of social forestry initiatives. This entails creating connections with the market, encouraging fair trade methods, and guaranteeing that local communities get fair compensation for their goods. In isolated and economically underprivileged areas, social forestry can have a particularly positive effect. Social forestry helps to lessen poverty and promote more inclusive development in these areas by generating opportunities for income generation. Communities can develop and amass assets, such as timber and non-timber forest products, through sustainable forest management. This helps build long-term wealth and resilience to economic shocks. One way to reinvest the economic benefits of social forestry initiatives is to use them to fund social infrastructure, like healthcare and education facilities. Improved community wellbeing is a direct result of increased access to these services.

Although social forestry has much promise to reduce poverty, its practical implementation necessitates thorough planning, community involvement, and continuous support. For social forestry to have a positive effect on reducing poverty, it is imperative that the rights of local communities are respected and that benefits are distributed fairly.

5.2. Community participation in social forest management.

Community involvement is critical to the success of social forestry initiatives. Involving local communities in the planning, decision-making, and implementation processes helps to ensure that social forestry programs are long-term, effective, and aligned with the needs and aspirations of people who live in and around forested areas. Indigenous Peoples and Local Communities can participate in decision-making processes for obtaining social forestry permits (Ramadhan et al, 2023). Social forestry initiatives frequently recognize and incorporate indigenous communities' traditional knowledge and practices to help preserve cultural diversity and strengthen the connection between communities and their natural environment.

It is important to ensure that community members have access to all of the information required in order to make appropriate choices, so it is important to provide information that is both open and transparent regarding the goals, processes, and

potential benefits and impacts of social forestry initiatives. Access to forest products and other economic, social, or environmental benefits can be generated by clearly defining and communicating the mechanisms for the equitable sharing of benefits derived from social forestry initiatives (Budi et al 2021).

Communities need to be engaged in the process of developing plans for forest management and allowed to contribute with their knowledge and preferences. It will ensure that the projects are culturally sensitive and that they meet the needs of local people. Gender dynamics of community participation need to be taken into account, making it a priority to ensure that women are afforded equal opportunities to take part in the decision-making processes and to benefit from social forestry initiatives. Management strategy needs to be flexible enough to accommodate changes in response to feedback and alterations brought on by the environment. It builds the capacity of local community members by providing training in sustainable forest management practices, agroforestry, and other relevant skills (Yatim et al, 2023). Learning from both successes and challenges contributes to the improvement of social forestry practices. The ability to take an active role in the implementation of social forestry programs is crucial. Moreover, establishing community-based monitoring and evaluation systems will enable communities to assess the impact that social forestry activities are having and determine how far they have progressed. It not only improves accountability but also guarantees that the goals will be accomplished.

Social forestry promotes the legal recognition of their rights to participate in and benefit from social forestry initiatives and ensures the security of their land tenure. It contributes to the prevention of conflicts and guarantees the programs' long-term success. Rural communities' tenure security can be enhanced through social forestry programs that acknowledge their rights to access and manage forests. This recognition of the rights of the local communities can aid in safeguarding their means of subsistence and guaranteeing their long-term viability. In a different model, customary forest recognition schemes in social forestry provide more certainty of permanent land tenure compared to other social forestry schemes.

Furthermore, social forestry programs also foster cooperation between corporations, public authorities and local communities. This partnership has the potential to increase rural communities' access to livelihood opportunities and enhance forest management practices. Although social forestry has the potential to alleviate conflicts associated with forests and forest land uses, it also carries the risk of escalating tensions. While some attempt to resolve conflicts on their own, others seek assistance from external actors, such as NGOs. Regarding forest management, devise efficient mechanisms for resolving conflicts or disputes that may arise within or between communities. The implementation of transparent and equitable conflict resolution procedures is instrumental in ensuring the long-term viability of social forestry programs.

5.3. Social forestry program, environmental protection and climate change mitigation

Social forestry contributes substantially to the mitigation and prevention of the adverse effects of climate change. It incorporates a multitude of methodologies and strategies that engage local communities in the pursuit of sustainable forest and natural resource management. Social forestry frequently entails the restoration of degraded lands and the planting of trees. By absorbing and sequestering carbon dioxide (CO2), trees contribute to the mitigation of climate change's effects. Social forestry practices that focus on biodiversity conservation contribute to the resilience of ecosystems (Gunawan et al, 2022). Diverse ecosystems are better able to adapt to changing climatic conditions. It frequently includes agroforestry, which involves the integration of trees into agricultural landscapes. Agroforestry systems improve crop resilience by increasing soil fertility, retaining water, and providing shade and windbreaks.

Social forestry programs often incorporate community-based adaptation strategies. It may include selecting tree species that are resilient to climate change, implementing water conservation practices, and promoting sustainable land-use planning. Social forestry contributes to the mitigation of deforestation and forest degradation through community engagement in forest management. Existing forest preservation is essential for preventing the release of carbon stored around them and preserving carbon sinks. Several pilot projects on REDD+ have also been implemented in

social forestry sites, especially in community forest and customary forest schemes. However, there is no measure by which to assess the success of REDD+ pilot projects at social forestry sites. This would require more in-depth research to understand the impact of REDD+ on social forestry.

In the Social Forestry program, afforestation and reforestation initiatives aid in the mitigation of climate change by sequestering carbon. Social forestry may also incorporate agroforestry practices that are resilient to the effects of climate change in order to assist communities in their adaptation. Furthermore, it is common for social forestry initiatives to incorporate watershed protection and rehabilitation. In the context of climate change, the preservation of water quality, the regulation of water flow, and the mitigation of flood and drought hazards are all critical functions that healthy forests perform.

Social forestry plays a crucial role in promoting environmental sustainability by integrating the principles of sustainable forest management with the active involvement of IPLCs. This approach seeks to balance environmental conservation with the socioeconomic needs of communities. By involving local and customary communities in sustainable forest management, social forestry can contribute to the protection and rehabilitation of forests, promoting environmental conservation and biodiversity. Social forestry promotes sustainable practices, ensuring that communities manage and use forest resources in a way that preserves ecological balance. This approach helps to prevent overexploitation and degradation of natural resources.

Additionally, social forestry initiatives frequently use traditions and local knowledge to manage changes in the environment. In order to increase community resilience, this may involve making up early warning systems for extreme weather events. It increases local communities' awareness of IPLCs regarding climate change. In order to enable communities to adapt to changing circumstances and take part in sustainable forest management, it supports education and capacity building. Participation encourages a sense of accountability and ownership, which produces more equitable and long-lasting results.

Through community engagement in conservation initiatives, these programs support the preservation of ecosystems' resilience and health. Even though social forestry has a lot to offer in terms of adaptation and mitigation of climate change, its successful implementation requires strong governance, community involvement, and continuous support. The beneficial effects of social forestry on local communities and ecosystems can be amplified by incorporating it into larger climate change strategies.

5.4. The dynamic of Social Forestry Programs

Although the implementation of social forestry has greatly increased in recent years in Indonesia, it does not mean that social forestry is without limitations. Some limitations of social forestry show interesting dynamics to be explored. They can be observed by reviewing the initial objectives of social forestry to improve community economy, forestry tenure conflict resolution and environmental protection (Fisher et al, 2019).

Social forestry frequently confronts obstacles pertaining to land tenure and landuse rights in conflict situations. Clear delineation of land rights and resolving conflicts among different stakeholders can be complex and time-consuming. Among the five social forestry schemes examined, only customary forest schemes effectively transfer indigenous peoples' land ownership status from the state to the indigenous communities. The remaining four schemes merely grant transitory access, thereby reinforcing the state's ownership of forested areas. Therefore, social forestry is constrained in its ability to resolve disputes over forest tenure, particularly when communities rely on traditional land claims.

Local communities may experience restricted participation and involvement in decision-making processes in certain circumstances. Insufficient participation in social forestry endeavors may result in their failure, as they might fail to address the genuine preferences and requirements of the local communities (Maryudi et al, 2022). Social forestry may result from a top-down strategy implemented by the Government or non-governmental organizations. It relates to endeavors to attain the government-established objective of expanding social forestry. In certain instances, non-governmental organizations (NGOs) collaborate exclusively with community-based contact persons,

excluding larger community-based organizations. Consequently, this instrumental approach undermines the active involvement of local communities in the formulation of social forestry plans.

Financial resources are vital to the achievement of social forestry initiatives. The implementation of essential initiatives, including sustainable forest management practices, community capacity building, and infrastructure development, could potentially be impeded by constrained financial resources. The social forestry program has been largely successful thus far due to the substantial assistance provided by local NGOs to IPLCs. Very few funds are allocated by the Government for the establishment of social forestry sites. Support from NGOs and financial resources are thus extremely beneficial in accelerating social forestry.

In a similar fashion, IPLCs have been deficient in the technical expertise and competencies necessary for sustainable and efficient forest management. It may result in suboptimal outcomes and hinder their capacity to maximize the benefits of social forestry initiatives. The achievement of social forestry will be contingent upon external assistance, be it from governmental entities or non-governmental organizations. Thus, social forestry may fail to promote community autonomy in the sustainable management of forests, as it will foster community reliance on NGOs and the Government.

Although social forestry policies are generally supportive, their practical implementation may still encounter obstacles. Advancements may be hindered by bureaucratic obstacles, inconsistent enforcement, and a dearth of coordination among various governmental entities (Maryudi et al., 2022). To overcome problems related to the social forestry application process, the government has issued Minister of Forestry Regulation Number 9 of 2021 concerning Social Forestry Management which integrates all arrangements for five social forestry schemes into one implementing regulation. However, the successful execution of social forestry policy necessitates the collaboration of numerous provincial, national, and district government agencies. The duration of the procedure is required to acquire legal access and rights to forests that are part of social forestry initiatives.

Social forestry initiatives may unintentionally exacerbate environmental degradation in certain circumstances, mainly when adequate enforcement mechanisms and monitoring systems are absent. It may include problems like overharvesting, illegal logging, or unsustainable resource utilisation. The potential consequences of climate change on social forestry initiatives include the disruption of indigenous tree species' viability and the modification of local ecosystems. Social forest practices must be adapted to changing climate conditions in order to ensure their long-term viability.

When monitoring and evaluation systems are inadequate, determining the effectiveness of social forestry programs can be difficult. It is challenging to evaluate the success of these initiatives and make well-informed decisions regarding future enhancements in the absence of accurate data. The lack of adequate market access and underdeveloped value chains pertaining to forest products may impede the economic feasibility of social forestry endeavours. It is vital for the success of such programs that communities can market and sell their products effectively. A comprehensive and multistakeholder approach involving the private sector, government agencies, local communities, and non-governmental organisations is necessary to address these limitations. Ongoing evaluation and adjustment of social forestry policies and practices are imperative to ascertain their efficacy and long-term viability.

VI. CONCLUSION

The formulation of policies and regulations pertaining to social forestry in Indonesia deviates from the premise that such initiatives can ameliorate disputes over forest tenure, enhance environmental and community economies, and bolster forest conditions. As the Government designates an expanding number of areas as social forestry areas and social forestry initiatives progress, the practical manifestation of these objectives grows. Social forestry objectives can be attained through increased transparency and collaboration among NGOs, IPLCs, and governments.

Nonetheless, some cases demonstrate that the implementation of social forestry has several limitations, including the inability of communities to manage their forests, the difficulty of obtaining social forestry permits, and the inability to resolve conflicts. These limitations raise problems that require subsequent research. Further investigation is required to understand the dynamics of social forestry management at the site level. Additionally, ongoing policy review is required at the national level to address community demands and to enhance the institutionalization of social forestry more accessible to the community. Given the shifting CBFM context in various countries, a more thorough theoretical and practical examination of Indonesia's forestry experience is needed to contribute to the global discussion on the rights of indigenous peoples and local communities in forest management.

BIBLIOGRAPHY

- Amaliyah, Aam., Saifuddin, Saifuddin. (2023). Empowerment of social forestry business group in improving village welfare in South Lampung. Community Empowerment, doi: 10.31603/ce.9015
- Arizona, Yance,. (2022) Rethinking Adat Strategies: The politics of state recognition of customary land rights in Indonesia, PhD thesis at Leiden University.
- Asshiddiqie, Jimly, (2009) *Green constitution: nuansa hijau Undang-Uundang Dasar*Negara Republik Indonesia, Jakarta: Rajawali Press.
- Budi, Budi., Hariadi, Kartodihardjo., Bramasto, Nugroho., Rina, Mardiana. (2021). Implementation of Social Forestry Policy: A Review of Community Access. doi: 10.24259/FS.V5I1.9859
- Fisher, M., Moeliono, M., Mulyana, A., Yuliani, E.L., Adriadi, A., Kamaluddin, Judda, J., & Sahide, M.A. (2018). Assessing the New Social Forestry Project in Indonesia: Recognition, Livelihood and Conservation? *International Forestry Review, 20*, 346 361.
- Fisher, Micah, R., Ahmad, Dhiaulhaq., Muhammad, Alif, K., Sahide. (2019). The politics, economies, and ecologies of Indonesia's third generation of social forestry: An introduction to the special section. doi: 10.24259/FS.V3I1.6348
- Fitra, Wira., Didik Suharjito, and Sulistya Ekawati (2021). Roles of Forest Management Unit (FMU) on Social Forestry Implementation: Study on Production FMU Kerinci and Protection FMU Sijunjung, Jurnal Analisis Kebijakan Kehutanan Vol. 18 No. 2, November 2021: 145-160
- Gilmour, D.A. (2016). Forty years of community-based forestry: a review of its extent and effectiveness.
- Gunawan, Hendra., Irma, Yeny., Endang, Karlina., Sri, Suharti., Murniati., Subarudi., Budi, Mulyanto., Sulistya, Ekawati., R., Garsetiasih., Pratiwi., B., Sumirat., Reny, Sawitri., N., M., Heriyanto., Mariana, Takandjandji., Asmanah, Widarti., Surati., Desmiwati., Titi, Kalima., Rachman, Effendi., Edwin, Martin., Nur, Arifatul, Ulya., Sylviani., A., Nurlia. (2022). Integrating Social Forestry and Biodiversity Conservation in Indonesia. Forests, doi: 10.3390/f13122152

- Gunawan, Hendra., Irma, Yeny., Endang, Karlina., Sri, Suharti., Murniati., Subarudi., Budi, Mulyanto., Sulistya, Ekawati., R., Garsetiasih., Pratiwi., B., Sumirat., Reny, Sawitri., N., M., Heriyanto., Mariana, Takandjandji., Asmanah, Widarti., Surati., Desmiwati., Titi, Kalima., Rachman, Effendi., Edwin, Martin., Nur, Arifatul, Ulya., Sylviani., A., Nurlia. (2022). Integrating Social Forestry and Biodiversity Conservation in Indonesia. Forests, doi: 10.3390/f13122152
- Maryudi, Ahmad., Muhammad, Alif, K., Sahide., Muhammad, Haidar, Daulay., Dhany, Yuniati., Wildan, Syafitri., Suryanto, Sadiyo., Micah, R., Fisher. (2022). Holding social forestry hostage in Indonesia: Contested bureaucracy mandates and potential escape pathways. Environmental Science & Policy, doi: 10.1016/J.ENVSCI.2021.11.013
- Njurumana, Gerson N., Kirsfianti, Ginoga., Dona, Octavia. (2020). Sustaining farmers livelihoods through community forestry in Sikka, East Nusa Tenggara, Indonesia. Biodiversitas, doi: 10.13057/BIODIV/D210846
- Nurfatriani, Fitri., Erwidodo.., Herlina, Tarigan., Henri, W, Perkasa. (2023). The Role of the Social Forestry Programs in Increasing Farmers' Income and Conserving Forests in the Upstream Citarum Watershed, West Java, Indonesia. International Forestry Review, doi: 10.1505/146554823837244455
- Nurrochmat, Dodik, Ridho., Muh, Yusram, Massijaya., I, N, S, Jaya., Lutfy, Abdulah., Meti, Ekayani., E, W, Astuti., James, Thomas, Erbaugh. (2019). Promoting community forestry to reduce deforestation surrounding Gunung Rinjani National Park in Central Lombok, Indonesia. doi: 10.1088/1755-1315/285/1/012014
- Pambudi, Andi Setyo,. (2020). The Development of Social Forestry in Indonesia. doi: 10.46456/JISDEP.V1I1.11
- Purnomo, E.P., & Anand, P.B. (2014). Similarity index: The Conflict of Forest Tenure and the Emergence of Community Based Forest Management in Indonesia.
- Rakatama, Ari., Ram, Pandit,. (2020). Reviewing social forestry schemes in Indonesia:

 Opportunities and challenges. Forest Policy and Economics, doi:
 10.1016/J.FORPOL.2019.102052

- Ramadhan, Reza., Rustam, Hanafi., Muhammad, Haidar, Daulay., G., Prakosa. (2023).

 Transformation of Forest Governance: Policy Concepts and Actor Changes in Social Forestry Program Implementation in Indonesia. International Forestry Review, doi: 10.1505/146554823836838673
- Siscawati, Mia,. (2012). Social Movements and Scientific Forestry: Examining the Community Forestry Movement in Indonesia, PhD thesis at Washington University.
- Tarigan, A.P., Karuniasa, M., & Saleh, C. (2021). Village forest management for mitigation of climate change and contribution to community social-economic resilience. *IOP Conference Series: Earth and Environmental Science*, 724.
- Wong, Grace., Moira, Moeliono., Indah, Waty, Bong., T.T., Pham., Muhammed, Alif, Sahide., Daisuke, Naito., Maria, Brockhaus. (2020). Social forestry in Southeast Asia: Evolving interests, discourses and the many notions of equity. Geoforum, doi: 10.1016/J.GEOFORUM.2020.10.010
- Yatim, Hertasning., Yusran, Yusran., Supratman., Nur, Basit, Zaman. (2023). Collaborative Management to support sustainable Community Forest. IOP Conference Series: Earth and Environmental Science, doi: 10.1088/1755-1315/1131/1/012014