

The Impact of Social Forestry on Communities and Forest Areas Salimbutan Lubuk Alung

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Received: February 10, 2024

Revised: May 9, 2024

Accepted: May 25, 2024

Published: May 31, 2024

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DOI: [10.29303/jppipa.v10i5.7196](https://doi.org/10.29303/jppipa.v10i5.7196)

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Abstract: Indonesia is one of the countries that has the largest area of natural forest in the world and is often referred to as one of the world's lungs which contributes oxygen for the survival of living things. Even though forests have many benefits, if the benefits from forests are not managed properly and correctly, they can have negative impacts and can lead to disasters and conflicts, apart from that, there is a fairly high level of deforestation and poverty is still often found in communities in and around forests. made various parties including the Ministry of Environment and Forestry try to encourage community empowerment programs. One of these community empowerment programs is Social Forestry. This type of research uses a quantitative approach with a descriptive design in the form of a case study. The population used in this research is the area and managers of LPHN Salimbutan Lubuk Alung, Padang Pariaman Regency. The samples from this research are all areas managed by LPHN Lintasutan Lubuk Alung. The instruments used in this research were observations and questionnaires. The results of this research show that in 2017 the level of deforestation at the Salimbutan LPHN increased by 9.7 Ha, then in 2018 it decreased by 2.6 Ha, in 2019 by 0.8 Ha, in 2020 by 1.4 Ha, in 2021 with a total of 0.8 Ha, and then in 2022 it will increase again with a total of 4.7 Ha. Meanwhile, community income before the training and assistance was still relatively low with a percentage of 11.16%. The data after training and assistance was carried out in the Salimbutan LPHN area, community income increased by 28.08% in 2022 and 57.38% in 2023.

Keywords: Forest; Impact; Social forestry

Introduction

Natural resources are everything found in nature that must be preserved so that it can be used for human benefit (Dharmawibawa, 2019). Natural resources are an important factor in human life and play a role in shaping human civilization (Persada et al., 2018). One of the resources that is still abundant in Indonesia is forest resources. Forest resources are natural resources that have an important role in the lives of humans and other living creatures (Ausat et al., 2023). Indonesia is one of the countries that has the largest area of natural forest in the world and is often referred to as one of the world's lungs which contributes oxygen for the survival of living things (Shafitri et al., 2018). According to the Director General of Forestry Planning and Environmental

Management of the Ministry of Environment and Forestry, Indonesia's forest area will cover 125,795,306 Ha in 2022 and is equivalent to 49.1% of the land area in Indonesia, this causes people to depend on forests for their livelihoods to meet their living needs (Anggriani et al., 2018).

Forests are natural resources that play an important role in life, both economically, socially, culturally and environmentally (Widodo et al., 2020). The existence of forests must be maintained optimally, wisely, wisely, fairly, professionally and responsibly to maintain their sustainability (Syofiarti et al., 2023).

The existence of forests can be utilized in tangible and intangible ways. Tangible benefits are benefits obtained from natural resources in the form of materials and can be used directly, such as wood, latex, rattan,

How to Cite:

Rinaldi, R., Barlian, E., Syah, N., & Umar, I. (2024). The Impact of Social Forestry on Communities and Forest Areas Salimbutan Lubuk Alung. *Jurnal Penelitian Pendidikan IPA*, 10(5), 2356–2362. <https://doi.org/10.29303/jppipa.v10i5.7196>

fruit, leather and so on (Endayani, 2022). Meanwhile, intangible benefits are benefits obtained from natural resources but cannot be felt directly by the community, such as recreation, climate regulation, hydrology, oxygen supply, air pollution filters and so on (Parmawati, 2019).

Even though forests have many benefits, if the benefits of forests are not managed properly and correctly, they can have negative impacts and can cause disasters and conflicts for the government and surrounding communities (Dekiwati, 2022). The community's large dependence on forests often results in community pressure for the existence of forests, such as rampant land clearing and illegal logging which can cause and increase deforestation (Haryani et al., 2019). The relatively high level of deforestation and the poverty that is still often found in communities in and around forests has made various parties, including the Ministry of Environment and Forestry, try to encourage community empowerment programs. One of these community empowerment programs is Social Forestry (Faisol et al., 2023).

Social Forestry is a sustainable forest management system implemented in state forest areas or private forests implemented by local communities or traditional communities as the main actors to improve their welfare and social and cultural dynamics (Regulation of the Minister of Environment and Forestry No. P.83 /2016). The government allocated 12.7 million hectares for social forestry, through village forest schemes, community forests, community plantation forests, customary forests and forestry partnerships (Fauzi, 2020).

The social forestry program was carried out because of Indonesia's great potential in the forestry sector which has not yet been utilized optimally by the government and society and the forestry sector can be able to help people improve their quality of life (Kamaluddin et al., 2019). The aim of the social forestry program is indirectly explained that Indonesia still experiences inequality in access and levels of welfare between people in rural and urban areas, and Indonesia's deforestation level is still quite large, which can threaten the existence of forests and people living in forest areas (I. N. Dewi, 2018; Marliyana, 2020).

The difference in quality of life between rural and urban communities can be seen from the percentage of people living below the poverty line (Magal et al., 2021). People's low quality of life is caused by the lower purchasing power of people in rural areas compared to urban areas (Ariani et al., 2021). One of the reasons for this is the low economic potential that can be developed by the community and lower economic activity compared to urban areas (Sofianto, 2020).

The government's efforts are to provide recognition to the community of non-management customs through

social forestry programs which aim to improve community welfare in terms of forest management (Situmorang et al., 2023). Forest management within the scope of social forestry encourages and allows state forests to be managed by the community, through permits that have been established (Harimbawan et al., 2022). One of the provisions of the social forestry program that has been established by the Ministry of Environment and Forestry is that a group must be formed to guarantee sustainable forest management with a 35 year term contract system with evaluation and monitoring every 5 years (Yunianto et al., 2019).

West Sumatra Province is one of the provinces that is committed to supporting government programs to make social forestry the basis for forest management by involving communities around the forest. The Government of West Sumatra has set a target of allocation of community managed forest areas through a social forestry scheme covering an area of 500,000 hectares as a form of forestry development in the region. By 2022, 199 Social Forestry program units have been established which have been determined through a Decree (SK) of the Minister of the Environment and Forestry with an area of 271 745.78 hectares located in the Protected Forest (HL), Production Forest (HP) and Limited Production Forest (HPT) areas spread across the West Sumatra Province (West Sumatra Forestry Service, 2023).

Based on the data above, it can be seen that the West Sumatra Provincial government is targeting almost a third of the area of Protected Forest and Production Forest in West Sumatra Province, the area of Protected Forest and Production Forest in West Sumatra Province is 1,521,260 Ha as a Social Forestry area. It is hoped that social forestry can be a solution to overcome state forest conflicts, the threat of forest degradation and deforestation, as well as limited human resources for forestry officers (Manopo, 2021). Apart from that, the social forestry program is expected to provide economic, social and environmental conservation impacts so that it can contribute to achieving the SDGs (Sustainable Development Goals (Sami, 2020).

One of the social forestry areas in West Sumatra Province is the Nagari Forest Management Institute (LPHN) Lintasutan Lubuk Alung. LPHN Lintasutan Lubuk Alung was designated as the Nagari Forest Management Institution (LPHN) based on the Decree of the Minister of Environment and Forestry No SK. 6152/MENLHK-PSKL/PKPS/PSL.0/7/2019 dated 3 July 2019. The permitted area is 2,791 Ha in the Protected Forest area in Nagari Salibutan Lubuk Alung, Padang Pariaman Regency, West Sumatra Province. Padang Pariaman Regency is a showcase for social forestry management in West Sumatra Province. The location is close to the city center of West Sumatra Province, which

is 37 kilometers from Padang City and has fairly good accessibility.

As explained by Barlian et al. (2020), all types of activities carried out by humans must have an influence on the surrounding environment. Every human activity has positive and negative influences and impacts on the environment, environmental problems arise because human interactions with their environment deviate from what they should be. In connection with this description, the researcher is interested in researching and studying The Impact of Social Forestry on Communities and Forest Areas Salimbutan Lubuk Alung.

Method

This type of research uses a quantitative approach with a descriptive design in the form of a case study. This type of research was chosen with the aim of systematically, factually and accurately describing the facts and characteristics of a particular population, or trying to describe a phenomenon in detail (Barlian, 2020).

The population used in this research is the area and managers of LPHN Salimbutan Lubuk Alung, Padang Pariaman Regency. The samples from this research are all areas managed by LPHN Lintasutan Lubuk Alung. The instruments used in this research were observations and questionnaires. The data sources in this research are primary data and secondary data. Primary data is obtained through filling out questionnaires and direct observation, while secondary data is obtained from other sources which can be used to increase data accuracy and validate the data obtained.

The data analysis technique used in this research is descriptive analysis. Descriptive analysis is used to understand changes in forest land cover resulting from social forestry programs, as well as the influence of social forestry on community income as managers of social forestry programs.

Results and Discussion

Research Sites

LPHN Salimbutan Lubuk Alung is a nagari forest management institution located in Nagari Salimbutan, Lubuk Alung District, Padang Pariaman Regency. LPHN Salimbutan Lubuk Alung was originally an initiative of the local community who were members of the tourism awareness group (Pokdarwis). Pokdarwis manages the Lubuk Nyrai tourist attraction, but the existence of this tourist attraction is in a protected forest area, this will allow for legal conflicts with the government. On this basis, the local community, accompanied by the forestry service, initiated the

formation of LPHN, which has been attempted since 2014.

LPHN was established through a decree from the Minister of Environment and Forestry of the Republic of Indonesia in 2019 with SK Number. 6152/MENLHK-PSKL/PKPS/PSL.0/7/2019 on 3 July 2019 concerning the granting of village forest management rights to the Salimbutan Lubuk Alung village/nagari forest management institution covering an area of 2,791 Ha located in the protected forest area of Nagari Salimbutan Lubuk Alung Lubuk District Alung, Padang Pariaman Regency, West Sumatra Province (Forestry Service, 2023). The research schedule will be carried out in December 2023, located at LPHN Lintasutan Lubuk Alung, whose address is Nagari Salibutan, Lubuk Alung District, Padang Pariaman Regency.

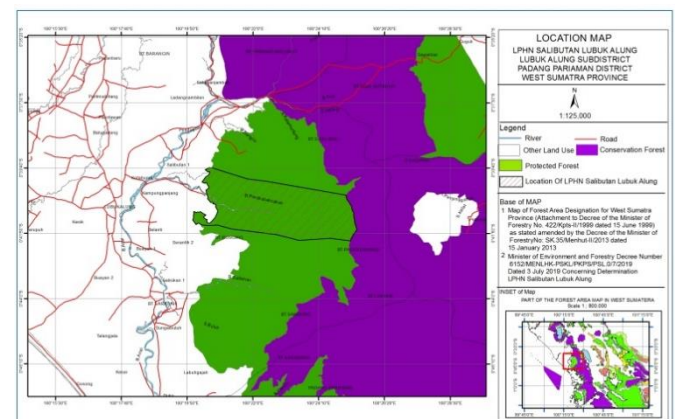


Figure 1. Location of LPHN Lintasutan Lubuk Alung (Source: Personal Documents)

Deforestation of Salimbutan Lubuk Alung LPHN Forest

Deforestation is a condition where forest area is decreasing due to various reasons such as land conventions for infrastructure, settlements, agriculture, mining and plantations (Syahriyah et al., 2022; Wahyuni et al., 2021). Deforestation can also be caused by forest fires, whether intentional or natural. Deforestation can threaten humans and other living things. Apart from that, the biggest contribution to climate change currently occurring is also caused by deforestation (Poerwantika, 2021; Syahriyah et al., 2022).

The level of deforestation in Indonesia from 1985 to 1998 reached 1.6 to 1.8 Ha every year. High deforestation rates each year can cause massive loss of forest land which can have a negative impact on environmental sustainability and social life which can have direct negative effects or impact on the future. Furthermore, deforestation data from 2016 to date has decreased by 0.48 Ha every year. The rate of deforestation can decrease or increase every year due to various human and community activities, so cooperation and joint awareness are needed regarding efforts that can reduce

forest deforestation which will have a positive impact on the environment and public health (Nakita et al., 2022).

Forest deforestation that occurs in Indonesia is spread across various regions in Indonesia. One of them is in the LPHN Salimbutan Lubuk Alung area which is a nagari forest management institution located in Nagari Salimbutan, Lubuk Alung District, Padang Pariaman Regency, West Sumatra Province. A map of the location of the Salimbutan LPHN experiencing deforestation can be seen in Figure 2.

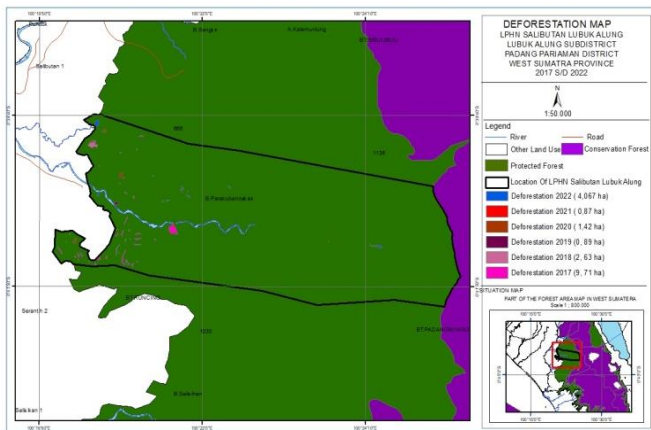


Figure 2. LPHN Lintasutan deforestation map (Source: Personal Documents)

Deforestation data obtained at the Salimbutan LPHN from 2017 to 2022 experienced increases and decreases. This happened because in 2017 LPHN Salimbutan had not yet become an area with a social forestry program, so this year deforestation increased. Furthermore, from 2018 to 2021, data was obtained that the level of deforestation in the Salimbutan LPHN had decreased, this was because in 2018 a social forestry program had been proposed and in 2019 to 2021 a social forestry program had been implemented. This is what causes the level of deforestation in LPHN to decrease. However, in 2022, the level of deforestation will increase again due to various kinds of human activities and communities living in the Salimbutan LPHN area (R. U. I. Dewi et al., 2023). The deforestation data from 2017 to 2022 can be seen in the figure 3.

From the figure 3 it can be seen that in 2017 the level of deforestation at the Salimbutan LPHN increased by 9.7 Ha, then in 2018 it decreased by 2.6 Ha, in 2019 by 0.8 Ha, in 2020 by 1.4 Ha, in 2021 with a total of 0.8 Ha, and then in 2022 it will increase again with a total of 4.7 Ha. The increase and decrease that occurred in the Salimbutan LPHN occurred because in 2017 the Salimbutan LPHN had not implemented a social forestry program, this is what caused the Salimbutan LPHN to experience a high level of deforestation. Meanwhile, from 2018 to 2021, LPHN has proposed and implemented a social forestry program that can prevent

deforestation. This can be seen in Figure 3 that from 2018 to 2021 the level of deforestation has decreased.

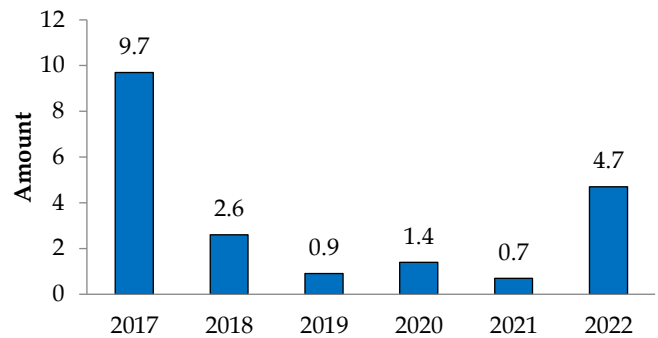


Figure 3. Deforestation graph at LPHN Salimbutan (Source: Personal Documents)

In line with this, Mulyana et al. (2022) stated that the existence of social forestry programs will have an impact on deforestation levels. Because this program can also empower communities to manage forests sustainably. It can be seen in general that social forestry managed by the community will be more effective than managed by the State. Because local people understand the characteristics of the forest (Farid et al., 2022; Pambudi, 2023).

The Impact of Social Forestry on Community Income

Social forestry is one of the agendas that is being strongly promoted by the government. It is hoped that this program can reduce poverty and improve the community's economy (Rahman et al., 2021). Social forestry is a legal reforestation effort with the community as the main actor. The impact of social forestry is expected to reduce poverty through increasing income, providing new economic sources, increasing the added value of forest product production, developing new community-based business units, increasing land-based community investment, increasing people's purchasing power and creating industry in order to increase exports. Apart from that, social forestry can also realize sustainable forest management, reduce tenure conflicts, and reduce unemployment through the creation of new jobs (Murti, 2019).

Efforts to create sustainable forests and prosperous communities continue to be carried out through social forestry programs, social forestry areas are managed for the preservation and welfare of communities around the forest, sustainability and as a contributor to the country's foreign exchange (Mahardika et al., 2021). This is also in line with the administration of forestry which must adhere to the principles of benefit and sustainability, the principle of people, the principle of justice, the principle of togetherness, the principle of openness and the

principle of integration, as regulated by Law number 41 of 1999 concerning forestry that forests and their natural resources are controlled. by the state and used for the prosperity of its people (Situmorang et al., 2022).

The social forestry program implemented at LPHN Salimbutan can open up opportunities for communities around the forest to manage forest resources through the use of non-timber forest products and tourism. Apart from that, the West Sumatra government is also not remaining silent about the existence of this social forestry program. What the government is doing to increase the income of people living around the forest is by providing guidance and facilities and infrastructure such as guidance on the management and packaging of non-forest forest products such as kandis acid, management of honey bees and providing supporting facilities such as the development of tourist areas and compost management tools.

The training and assistance provided by the government can increase community understanding and the community can produce and manage forest products properly so that community income can increase. The income of the people in the LPHN Salimbutan area before and after being given training and assistance can be seen in the table 1.

Table 1. Comparison of Community Income

Year/ Month	Before		After	
	IDR x Million	Percentage	IDR x Million	Percentage
2022/12	1.978.367	11.16%	2.533.797	28.08%
2023/12	1.978.367	11.16%	3.113.591	57.38%

From the data above, it can be seen that before the training and assistance provided by the government for the community in the Salimbutan LPHN area, community income was still relatively low with a percentage of 11.16%. The data is that after training and assistance was carried out in the Salimbutan LPHN area, community income increased by 28.08% in 2022 and 57.38% in 2023. Therefore, from the training and assistance provided by the government for the people living around the Salimbutan LPHN, it is clear that The search for people to rely on forest areas has been proven to be able to increase people's income, reduce unemployment, so that the management and benefits of forest land and other forest resources can increase the income of people living around the Salimbutan LPHN.

One of the promising sources of community income at LPHN Salimbutan Lubuk Alung is the tourism sector. Tourism is a variety of tourist activities supported by various facilities and services provided by the community, entrepreneurs, government and local governments (Yani, 2021). After the tourism sector at LPHN Salimbutan was given facilities by the

government and facilities and infrastructure were built to support tourism activities, it can be seen that the income of the community around the LPHN Salimbutan forest has increased. This also cannot be separated from regional autonomy, which makes each region strive to exploit its regional potential. So that it contributes to making tourism oriented towards improving the welfare of local communities. This also impacts the surrounding environment both directly and indirectly, both in the short and long term (Alivia et al., 2022).

The implementation of social forestry programs with various types of activities that have been going on so far can be seen to have a direct impact on increasing community income and forest sustainability can be safely maintained (Satria et al., 2020). This can also be done because all parties involved in the social forestry program are bound by an agreement which contains rights and obligations that must be fulfilled and obeyed.

Conclusion

Based on research that has been carried out, the results show that in 2017 the level of deforestation at the Salimbutan LPHN increased by 9.7 Ha, then in 2018 it decreased by 2.6 Ha, in 2019 by 0.8 Ha, in 2020 by 1.4 Ha, in 2021 with a total of 0.8 Ha, and then in 2022 it will increase again with a total of 4.7 Ha. Meanwhile, community income before the training and assistance was still relatively low with a percentage of 11.16%. The data after training and assistance was carried out in the Salimbutan LPHN area, community income increased by 28.08% in 2022 and 57.38% in 2023.

Acknowledgments

During the research, the author received a lot of support, guidance, direction and input from various parties, for this reason the author would like to take this opportunity to thank colleagues and lecturers at Padang State University.

Auhor Contributions

R : preparation of original draft, results, discussion, methodology, conclusions; E. B, N. S and I. U: analysis, review, proofreading and editing. R , E. B, N. S and I. U: All authors have read and approved the published version of the manuscript.

Funding

This research received no external funding.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

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