

CONSERVATION PARTNERSHIP IMPLEMENTATION BETWEEN RURAL FORESTRY EXTENSION CENTERS AND KELIMUTU NATIONAL PARK

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ABSTRACT

Wologai Central Village conservation partnership was formed to deal with the increasing spread of invasive Kirinyuh plants in the Kelimutu National Park (KNP) area. This conservation partnership was created in the context of ecosystem recovery with an alternative program in the form of community empowerment around the site through an ecotourism management program. The Wologai Central Village Conservation Partnership aims to improve people's welfare and preserve conservation areas. Still, the management of the Wologai Central Village conservation partnership in the past five years has not shown optimal results for its formation in the control of the KNP area and the management of existing ecotourism. This study aims to determine the implementation of the ongoing conservation partnership between KNP and Sentra Penyuluhan Kehutanan Pedesaan (SPKP, Rural Forestry Extension Centers) in Wologai Central Village using data collection techniques, including interviews, observation, and documentation, which are then analyzed descriptively. The results showed that the Wologai Central Village conservation partnership had been appropriately implemented but had not yielded optimal results. In the "Low" category due to the lack of impact provided by the conservation partnership for the community and the area

Key words: *Implementation, Conservation Partnership, SPKP*

INTRODUCTION

Conservation areas are intended to protect the potential for biodiversity and their ecosystems as life support (Raharjo et al., 2019). The area of Indonesia's conservation forests decreased in 2020 from 27.26 million ha in 2016 to 27.05 million ha (Central Bureau of Statistics, 2020). Performance report of Sekretariat Direktorat Jenderal KSDAE (2020) stated that 1.8 million ha of conservation areas were opened land with indications of ecosystem damage or degradation caused by unclear land tenure in conservation areas and land utilization by the community, illegal logging, and damage due to natural factors.

Through KSDAE Director General Regulation No. 6 2018, conservation partnership is a win-win solution to balance conservation interests and guarantee the life and well-being of society in and around the conservation area (Prayitno, 2020). The regulation defines conservation partnerships Community involvement in the management of conservation areas helps maintain the sustainability of the conservation area itself (Qodriyatun, 2020). Hartoyo et al., (2020) said the conservation partnership aims to protect nature and emphasizes developing and empowering communities around forest areas. Study results by Raharjo et al. (2019) found that conservation partnerships were able to realize conservation area management plans. Implementing conservation partnerships in several national parks had helped resolving conflicts between park managers and communities and met ecosystem restoration goals (Raharjo et al., 2019).

The Wologai Central Village Conservation Partnership was formed to restore the ecosystem and develop ecotourism (Conservation partnership agreement Wologai Central Village, 2018). In the Wologai Central Village conservation partnership, Sentra Penyuluhan Kehutanan Pedesaan (SPKP, the Rural Forestry Extension Center) was chosen as a conservation partner to empower the community. The implementation of the conservation partnership program must follow the stages determined based on an agreement between the two parties referring to the Decree of Director General of KSDAE to produce programs with the right targets and benefits for the region and the community. (Sarah, 2018). Conservation partnerships can change people's views on supporting the management of conservation areas (Okthalamo et al., 2022).

Wologai Central Village conservation partnership in 2022 has entered its fifth year, so an evaluation is necessary. Conservation partnerships must be evaluated at least once every 5 years (KLHK, 2018). Bappenas (2017) mentions evaluation as a systematic and objective assessment of ongoing or completed interventions' design, implementation, and results. The aims of this study are (1) to describe the implementation of the Wologai Central Village conservation partnership; (2) to find out the factors that influence the Wologai Central Village conservation partnership

RESEARCH METHOD

This research was conducted from July to August 2022 in Wologai Central Village, Detusoko District, Ende Regency, East Nusa Tenggara Province. The

research location has an area of 441.61 ha with a stretch of plains and hills with a cold climate. The population of Wologai Central Village reaches 964 people, with occupations dominated as farmers.

Research on implementing the Wologai Central Village conservation partnership was conducted first by determining research informants from Kelimutu National Park (KNP), SPKP, and Wologai Central community. The determination of informants was carried out by purposive sampling for officers of the KNP, namely, the decision with specific considerations (Sahir, 2021). Informants are people who are considered to know or are directly involved in the conservation partnership with SPKP, such as the head of KNP, the head of the Region II National Park Management Section (SPTN II), and staff of SPTN II. For SPKP informants were determined using a saturated sampling technique, in which all populations were sampled because of the relatively small population size (Sahir, 2021). Meanwhile, for Wologai Central community informants were determined using the snowball sampling technique, which is a technique that is carried out in stages from a small number to a large number (Sahir, 2021). In this study, the head of Wologai Central Village became a key informant in the selection of the next community respondent. Qualitative

research data was collected through observation, informant interviews, and documentation and then analyzed descriptively and qualitatively.

Descriptive analysis is used to determine the formation of conservation partnerships, the stages of implementing conservation partnerships, the implementation of conservation partnership programs, and the performance of conservation partnerships.

Furthermore, to assess the performance of the conservation partnership in Wologai Central Village, it refers to the 8 principles of Ostrom (1990), which are described in table 1. The calculation of institutional performance adopts a Likert scale calculation model with gradations 1 to 3 where:

- 1 = Not clear / Not good / Rare
- 2 = Self-explanatory / Good enough / Occasionally
- 3 = Clear / Good / Often

Institutional performance assessment variables use Ostrom's Design principles (1990) which are analyzed descriptively (Massiri, 2022) and grouped into three categories as follows:

- 1. High = if you get a total score of 28.01 – 36.00
- 2. Moderate = if you get a total score of 20.01 – 28.00
- 3. Low = if you get a total score of 12.00 – 20.00

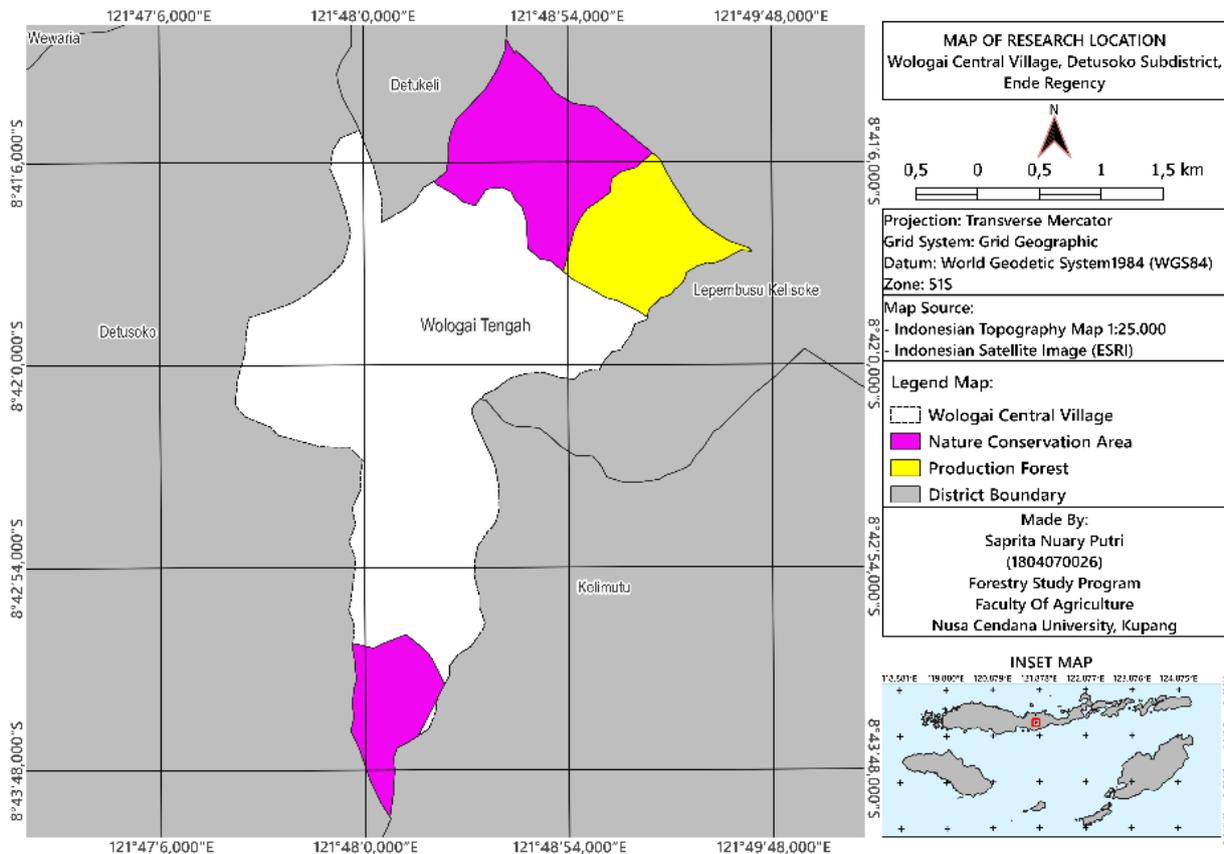


Figure 1. Research Locations

RESULT AND DISCUSSION

1. Formation of conservation partnerships

Wologai Central Village conservation partnership was formed in 2018 through a Cooperation Agreement (PKS) NO.70/T.40/TU/KSA/9/2018 concerning Strengthening Area Functions Through Conservation Partnerships in the Framework of Ecosystem Recovery and Ecotourism Development in Wologai Central Village, Wologai Resort KNP with an area of partnership in the area of 55 ha. The association's location used for ecosystem recovery is a rehabilitation zone of 25 ha. A place of collaboration outside the scope of 7.8 ha, which is used to develop alternative programs in the form of community empowerment through ecotourism development, with a cooperation period is 10 years (2018-2027), which aims to realize self-sufficiency and community welfare in the context of managing the governance and functions of the KNP area and

preserving biodiversity through restoring the condition of the KNP ecosystem.

2. Implementation of conservation partnership stages

The conservation partnership regulated in Perdirjen Number 6 of 2018 states the stages of a conservation partnership in the context of ecosystem recovery. Ecosystem restoration activity is also stated in a Decree of Ministry of Forestry No. 48/2014 and Decree of Director General of KSDAE No. P12 and P13/2015. These stages have been implemented in the Wologai Central Village conservation partnership, namely inventory and identification of ecosystem damage and stages of proposing an activity plan. These stages are carried out as activities as described in table 2. The implementation of the community empowerment program should follow the entire process of the predetermined steps, the program objectives are appropriate, and there are benefits for the area and the community (Sarah, 2018).

Table 1 Common-Pool Resources (CPRs) institutional sustainability evaluation scores

Principle	Indicator	Score
Clarity of management area boundaries suitability	Clarity of partnership land area Clarity of partnership rules Appropriate distribution of costs and benefits Conformity of partnership rules with the economic conditions of the community	
Collective arrangement	meeting intensity Society Participation	
Monitoring	Process monitoring by institutions	
Application of sanctions	Customary sanction mechanism	
Conflict resolution mechanisms	The existence of institutions and procedures for conflict resolution	
Recognition of the right to regulate	Community rights in the partnership program	
Management system linkages	Linkages between program rules at operational, collective, and constitutional levels	
Total		

Table 2 Stages of ecosystem recovery activities for the Central Wologai conservation partnership.

No	Activity stages	Activity	Information
1.	Inventory and identification of ecosystem damage	Determination of recovery location Examination of damage	The recovery location is in the rehabilitation zone of 25 ha The restoration damage area is 55 ha
2.	Action plan proposal stage	Determination of recovery location Determination of potential partners Determination of implementation methods Recovery time setting Financing	The recovery location is in the rehabilitation zone of 25 ha The conservation partner is SPKP The method of execution is mechanical and biological Recovery will be carried out from 2018-2022 Budget Plan for Activities in the 2018-2027 Program Implementation Plan

3. **Implementation of the Conservation Partnership Program**

The Wologai Central Village conservation partnership cooperation agreement states that the parties are obliged to prepare a Program Implementation Plan (RPP) for 10 years and an Annual Work Plan (RKT). The research shows that the Wologai Central Village conservation partnership has programs in the form of strengthening group institutions, protecting areas, restoring ecosystems, developing nature tourism, community empowerment, developing cultural tourism and local community customs, and monitoring and evaluation.

The study's results obtained activity plan data compiled in the conservation partnership RPP, reaching 32 activities. Only six activities were realized following the annual plan, sixteen activities have been carried out, but the amount is not following the annual plan, and while ten activities were not carried out at all from 2018 to 2022, as described in table 3. The incompatibility of ongoing activities with the annual plan is due to the Covid-19 pandemic, which has

resulted in limited tourism activities and has an impact on income for SPKP (Harsono, 2020). Thus, the budget that should have been used to realize the activities was used for the needs of the SPKP group due to the reduced number of visitors during the Covid-19 pandemic, which resulted in a decline in SPKP's economy (Handayani et al., 2021). The economic factor is one of the factors that threaten the existence of forests (Sylviani & Hakim, 2014). The results showed that the program had not yielded optimal results. The existence of the Covid 19 pandemic also resulted in a shift in KNP funding for Covid 19 handling and prevention activities. Hence, this impacted planned activities not being carried out due to a lack of financial support. In addition, the lack of costs resulted in monitoring and evaluation that were not optimal. Monitoring and evaluation do not optimally affect the direction of partnership management (Salim et al., 2018; Situmorang et al., 2022). Evaluation of conservation partnerships is carried out to measure the effectiveness of the conservation partnership program.

Table 3 Conservation partnership program (2018-2022).

No.	Program	Activities	Annual Plan Schedule					Realization				
			I	II	III	IV	V	I	II	III	IV	V
1.	Group institutional strengthening	Management training and group capacity building**		√			√		√		-	
		Post-harvest management training***			√				-			
		Ecotourism management training**	√		√		√	√		-		-
		Eco-interpreter capacity-building training on trekking trails and tourist areas*	√	√				√	√			
		Honey bee farming training***				√					-	
2.	Area protection	Security patrol**	√	√	√	√	√	√	√	-	-	-
		Management of land and forest fires**	√	√	√	√	√	√	√	-	-	-
		Counseling and Outreach**	√	√	√	√	√	√	√	-	-	-
3.	Ecosystem recovery	Eradication and control of kirinyuh***	√	√	√	√	√	-	-	-	-	-
		KNP rehabilitation***	√	√	√	√	√	-	-	-	-	-
		Rescue and arrangement of springs area*	√	√				√	√			
		Utilization of organic kirinyuh**	√	√	√	√	√	√	√	-	-	-
4.	Natural tourism development	Procurement of stoves & left fuel*	√					√				
		Arrangement of natural attractions**		√	√	√	√		√	-	-	-
		Arrangement of access roads around the spot**	√	√	√	√	√	√	√	-	-	-
		Arrangement/maintenance of trekking routes**	√	√	√	√	√	√	√	-	-	-
		Arrangement/maintenance of camping ground areas within the area**	√	√	√	√	√	√	√	-	-	-
		Granting eco interpreter permits for trekking routes***	√	√	√	√	√	-	-	-	-	-
5.	Community empowerment	Leading agroforestry development***		√	√	√	√		-	-	-	-
		Arrangement of camping areas outside the area*	√	√				√	√			
		Reservoir arrangement*	√	√				√	√			
		Reading hut setting**	√	√	√	√	√	√	√	-	-	-

No.	Program	Activities	Annual Plan Schedule					Realization					
			I	II	III	IV	V	I	II	III	IV	V	
6.	Development of cultural tourism and local customs	Arrangement of access roads around the camping ground and trekking routes**		√	√	√			√	-	-		
		Making swafoto/selfie spot facilities**		√	√	√	√		√	-	-	-	
		Honey beekeeping development***				√	√	√			-	-	-
		Local food management***		√	√	√	√			-	-	-	-
		Arrangement of the traditional Wologai Central village*		√						√			
7.	Monitoring and Evaluation	Development of custom wood demonstration plots**		√		√			√		-		
		Identification and inventory of local customary cultural wisdom***		√	√					-	-		
		Coaching**	√	√	√	√	√	√	√	-	-	-	
		Supervision**	√	√	√	√	√	√	√	-	-	-	
		Reporting***	√	√	√	√	√	-	-	-	-	-	
Total	7 Programs	32 Activities	20	28	23	22	20	16	20	0	0	0	

Notes: * = Activities are realized following the annual plan; ** = Activities have been carried out, but the amount is not following the annual plan; *** = Activities were not carried out at all

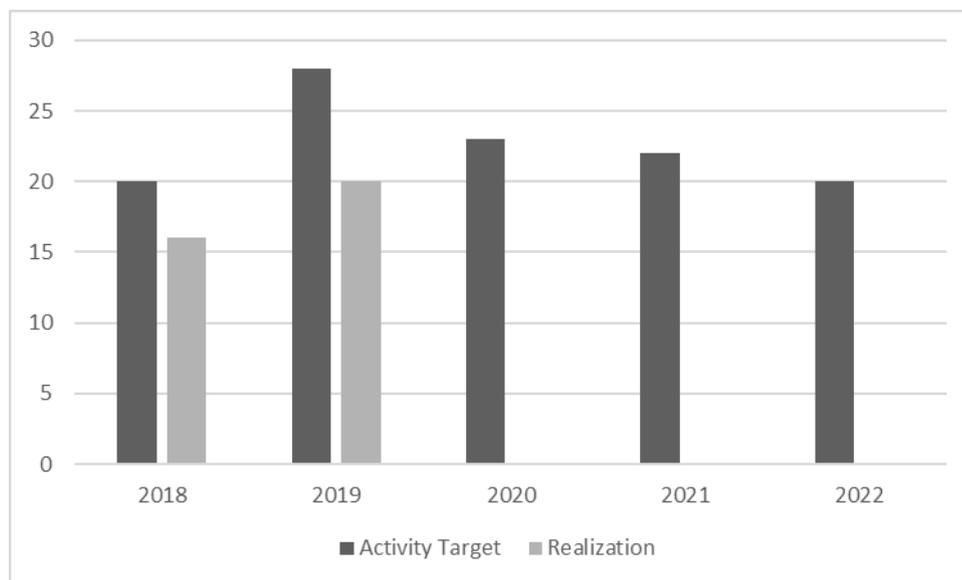


Figure 2. Graph comparison between the target and realization of the 2018-2022 partnership program.

The comparative chart shows the realization of the Wologai Central Village conservation partnership program that was actively carried out in 2018 and 2019, while from 2020 to 2022, no activities were carried out due to the covid 19 pandemic that occurred in 2019-2021, and this had an impact on the budget that SPKP no longer had to carry out activities in 2022, which limited the space for the management of conservation partnerships, especially in the development of ecotourism. In addition, the lack of monitoring of conservation partnerships is an inhibiting factor for these conservation partnerships. Each party in the conservation partnership is responsible for monitoring, evaluating, and reporting on conservation partnership activities (KLHK, 2018). However, this activity was not carried out in the field due to a gap between the KNP and SPKP in monitoring and reporting. Based on the study's results,

TNK had never carried out monitoring activities for the conservation partnership program due to the lack of funding, which was the impact of the Covid-19 pandemic. This was also suspected to be due to SPKP's lack of proactivity in reporting achievements, constraints, needs, and input supporting the program's success. This gap has been going on for a long time, so reporting and monitoring are less than optimal (Situmorang et al., 2022). Thus, it can be seen that KNP can ask for help from SPKP in carrying out its activities, and SPKP can take the economic impact of the eco-camp management, so the Wologai Central Village conservation partnership has not yet achieved its goal of establishing an effort to improve community welfare and assisting ecosystem recovery.

4. Institutional Performance of Conservation Partnerships

An institutional performance assessment was carried out to find out how the criteria for implementing the Wologai Central Village conservation partnership have been running for five years, so based on research that has been conducted through interviews and observations, data is obtained that the Wologai Central Village conservation partnership is in a Low category with a total rating of 15, 83. Assessment of criteria in evaluating institutional performance in the value range of 12.00-20.00 is included in the "Low" category (Ostrom, 1990). That happened because most of the conservation partnership programs had not gone according to the existing plans, coupled with the absence of real benefits for the community outside the SPKP group, and the main objectives of the conservation partnership had not been achieved. That shows the Wologai Central Village conservation partnership did not work well good. The institutional performance of the association can reach the criteria of "High" if the association can provide tangible benefits to the community and each party can carry out their rights and obligations by mutually agreed rules (Abidin, 2018).

5. Supporting factors

In the Wologai Central Village conservation partnership, the supporting factors include the support of the parties and the cooperation of other parties. The consent of the parties in question is the active participation of the parties in conservation partnership activities, both within and outside the area. The support of related parties in the partnership is one of the supporting factors for the successful implementation of the forestry partnership (Rukminda et al., 2020).

In addition to the parties support, cooperation with other parties as stakeholders in the Wologai Central Village conservation partnership is another supporting factor. The collaboration is carried out to increase ecotourism development as part of the Wologai Central Village conservation partnership program. These parties include Bumdes Wologai Central Village, University Flores, LATIN, and other educational institutions. Stakeholder involvement in partnerships can help support the partnership's sustainability (Kartika et al., 2022).

6. Obstacle factors

The implementation of the Wologai Central Village conservation partnership found several inhibiting factors, such as monitoring that was not optimal, low human capacity resources, and nepotism in society. The results of the study indicate that monitoring has not been carried out by the parties, as seen from the absence of reports on the results of the evaluation of partnership activities during the 2018-2022 period, resulting in a non-direction of group activities in helping to realize the objectives of the existing conservation partnership. In addition, negligent monitoring activities resulted in many conservation partnership programs that did not provide satisfactory results for managers and community groups.

Monitoring and evaluation activities do not optimally affect the direction of partnership management (Salim et al., 2018). Apart from that, it was difficult for the community to accept new things that had no financial impact, coupled with allegations of nepotism in the SPKP, as seen from the group structure one family dominated.

The low human capacity resources factor makes it difficult to develop conservation partnership management, and the community's common educational background affects the level of community understanding of the partnership. Kartika et al., (2022) stated that the low human resources of conservation partner group members inhibited implementation.

7. The role of the parties

Wologai Central Village conservation partnership involves the KNP, rural forestry extension centers, and the Wologai Tengah village community. The KNP Agency is an extension of the Directorate General of Conservation of Natural Resources and Ecosystems, Ministry of Environment and Forestry. KNP assists SPKP and the people of Wologai Central Village in implementing conservation partnerships in the form of providing public facilities around ecotourism as a partnership program, providing ecotourism supporting tools, training, and coaching in ecotourism management, and helping introduce ecotourism to other parties to attract tourists to increase the income of SPKP Wologai Central Village as the manager of the partnership.

The role of SPKP itself is as a conservation partner that manages ecotourism outside the KNP area in the form of Boeembung Eco-Camp Ecotourism. In addition, SPKP also maintains the security and sustainability of the site. The results showed that the role of the Wologai Central Village community as supporters of the conservation partnership program in protecting the area from threats was a form of gratitude to KNP for their concern village problems

8. Impact of conservation partnerships

Conservation partnerships impact not only to the community but also to the region. The impacts of the Wologai Central Village conservation partnership include social and economic effects. The social implications that arise are in the form of securing the area carried out by conservation partners in protecting the area from harmful external disturbances. Conservation partners also supervise and report on people who damage the site. That benefits the KNP as the implementing unit in its duties. Conservation partnerships can improve good social relations between communities and officers following a PHBM program involving the community in forest use and management.

In addition to having a social impact, it is in line with the objectives of the Wologai Central Village conservation partnership to realize self-sufficiency and community welfare through a community empowerment program in the form of Boeembung Ecotourism Eco-camp management. The existence of this alternative

program provides jobs and increases income for the people of Wologai Central Village, especially for SPKP as a conservation partner. The partnership program helps increase the revenue of the community around the area through the use of forest land for tourism purposes (Pramono et al., 2019).

CONCLUSION

The implementation of the Wologai Central Village conservation partnership has been carried out properly by the existing technical instructions. Still, it has not yielded optimal results by the objectives of its formation due to the non-optimal implementation of the partnership program and the lack of monitoring and evaluation. The assessment of the institutional performance of the Wologai Central Village conservation partnership is in the "Low" category for each party involved because the impact has not been satisfactory

REFERENCES

- Abidin, M. (2018). *Implementasi Kemitraan Kehutanan Antara Balai Kesatuan Pengelolaan Hutan Lindung (BKPHL) Rinjani Barat Pelangan Tastura dengan Masyarakat Desa Rempok Kabupaten Lombok Utara* (Doctoral dissertation, Universitas Mataram).
- Handayani, Y., Tampubolon, B., & Adlika, N. M. (2021). Dampak Pandemi Covid-19 Terhadap Pemenuhan Kebutuhan Hidup Masyarakat Sekitar Objek Wisata Mempawah Mangrove Park. *Jurnal Pendidikan Dan Pembelajaran Khatulistiwa (JPPK)*, 10(6).
- Harsono, S. (2020). The impact of Covid-19 on Marine ecotourism in Tegal City. *E3s Web of Conferences*, 202, 07020.
- Hartoyo, D., Pambudi, K. S., & Putri, E. F. (2020). Kemitraan konservasi dan masa depan hutan Papua. *Jurnal Dinamika Sosial Budaya*, 22(2), 148–157.
- Kartika, D., Ichsan, A. C., & Setiawan, B. (2022). Implementasi kemitraan kehutanan di wilayah kesatuan pengelolaan hutan rinjani timur. *Prosiding Seminar Nasional Mahasiswa Kehutanan Indonesia*, 1(1), 53–66.
- Kementerian Kehutanan dan Lingkungan Hidup. (2018). *Peraturan Direktur Jenderal No. 6 Tahun 2018 tentang Petunjuk Teknis Kemitraan Konservasi pada Kawasan Suaka Alam dan Kawasan Pelestarian Alam*. Jakarta.
- Massiri, S. D. (2022). *Strategi Pemberdayaan Masyarakat Pemberdayaan pada Kawasan Konservasi*.
- Okthalamo, V., Iskandar, D. A., & Masturiatna, A. (2022). Implementasi program kemitraan konservasi di taman nasional bukit barisan selatan. *Jurnal Penelitian Ekosistem Dipterokarpa*, 8(2), 111–124.
- Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge university press.
- Pramono, T., Bramantyo, R. Y., Setiono, G. C., & Suwadji, S. (2019). Peningkatan Kesejahteraan Masyarakat Melalui Program Kemitraan Perhutani Di Kecamatan Ngancar Kabupaten Kediri (Studi Implementasi Peraturan Menteri Lingkungan Hidup dan Kehutanan No. P. 83/MenLHK/Setjen/Kum. 1/10/2016 Tentang Kemitraan Kehutanan). *Transparansi Hukum*, 2(2).
- Prayitno, D. E. (2020). Kemitraan konservasi sebagai upaya penyelesaian konflik tenurial dalam pengelolaan kawasan konservasi di Indonesia. *Jurnal Hukum Lingkungan Indonesia*, 6(2), 184–209.
- Qodriyatun, S. N. (2020). Peran dan partisipasi masyarakat dalam pengelolaan kawasan konservasi secara kolaboratif. *Kajian*, 24(1), 41–54.
- Rukminda, G. M., Soekmadi, R., & Adiwibowo, S. (2020). Perspektif masyarakat terhadap program kemitraan kehutanan sebagai solusi konflik tenurial di kesatuan pengelolaan hutan lindung Rinjani Barat. *Media Konservasi*, 25(1), 17–25.
- Sahir, S. H. (2021). *Metodologi penelitian*. KBM Indonesia.
- Salim, D. W., Agustino, L., & Rahmawati, R. (2018). *Evaluasi Kebijakan Kemitraan Konservasi Taman Nasional Ujung Kulon Di Kabupaten Pandeglang* (Doctoral dissertation, Universitas Sultan Ageng Tirtayasa).
- Sarah, FA (2018). *Efektivitas Program Sentra Penyuluhan Kehutanan Pedesaan (SPKP) di Taman Nasional Bukit Tiga Puluh Riau Dalam Mencapai Kesejahteraan dan Kelestarian Hutan*. (Master Theses, Gadjah Mada University).
- Sekretariat Direktorat Jenderal Konservasi Sumber Daya Alam dan Ekosistem. (2020). *Laporan Kinerja 2020 Sekretariat Direktorat Jenderal Konservasi Sumber Daya Alam dan Ekosistem Kementerian Lingkungan Hidup dan Kehutanan*. Jakarta.
- Situmorang, A., Roslinda, E., & Hardiansyah, G. (2022). Kemitraan Konservasi sebagai Upaya Pemberdayaan Masyarakat Desa Rantau Malam. *Jurnal Lingkungan Hutan Tropis*, 1(1), 269–282.
- Sylviani, S., & Hakim, I. (2014). Analisis tenurial dalam pengembangan kesatuan pengelolaan hutan (KPH): Studi kasus KPH Gedong Wani, Provinsi Lampung. *Jurnal Penelitian Sosial Dan Ekonomi Kehutanan*, 11(4), 29125.