

## The Existence of the Alipbata Pokdarwis Community in Mangrove Ecosystem Rehabilitation in Pantai Bahagia Village, Muara Gembong Subdistrict, Bekasi Regency

Arief Rachman<sup>1</sup>, Budiaman,<sup>2</sup> Desy Safitri<sup>3</sup>  
*Universitas Negeri Jakarta, Indonesia<sup>1,2,3</sup>*

**Abstract:** *This study aims to determine the existence of the Pokdarwis Alipbata community in the rehabilitation of the mangrove ecosystem and the efforts of the Pokdarwis Alipbata community in the rehabilitation of the mangrove ecosystem. The method in this study uses a descriptive method, with data collection techniques through closed questionnaires, observations, interviews, documentation, and literature studies. The subjects in this study were the chairman and members of the Pokdarwis Alipbata community, totaling 30 people and cross-checking was carried out with the community of Pantai Bahagia Village, totaling 10 people. The results of this study indicate that based on the existence indicators, the activities of Pokdarwis Alipbata have a good influence on the mangrove area which is getting denser and wider so that it can slightly reduce the abrasion that occurs, community members assess that the mangrove planting has a good impact on the mangrove area, and The people of Pantai Bahagia Village acknowledge and know that the existence of Pokdarwis Alipbata has a good influence on the mangrove area. Efforts have been made to rehabilitate mangrove ecosystems, namely planting mangroves that always involve the surrounding community, the Pokdarwis Alipbata community also educates and awakens the public to be able to preserve mangrove areas, mangrove management is able to improve the community's economy, carry out good communication with the community, and the community is always used as a benchmark. in the rehabilitation of mangrove ecosystems.*

**Keywords:** *Abrasion, Ecosystem, Existence, and Rehabilitation*

### Introduction

Mangrove forest land in Muara Gembong District, one of which is in Pantai Bahagia Village, has decreased in total area. Pantai Bahagia Village has the largest mangrove forest in Muara Gembong District. Mangrove forest area in Pantai Bahagia Village experienced a decline, previously in 2009 the area of 312.93 ha decreased in 2014 to 245.35 ha (Maulani *et al.* , 2021: 57) . According to data taken from data processing from Pantai Bahagia Village, the reduction of mangrove forest land in 2009 to 2014 was caused by two factors, namely human factors due to the conversion of mangrove forest land into aquaculture areas and natural factors due to

---

<sup>1</sup> Correspondent Author E-Mail: [arief Rachmanofficial@gmail.com](mailto:arief Rachmanofficial@gmail.com)1, [budiaman@unj.ac.id](mailto:budiaman@unj.ac.id)2, [desysafitri@unj.ac.id](mailto:desysafitri@unj.ac.id)3

abrasion and old age of mangroves. (Maulani *et al.* , 2021: 59) . Most of the damage to the mangrove forest in Pantai Bahagia Village was carried out by the surrounding community to convert the mangrove forest area into an area that is considered more productive, namely a fish pond area. In addition, a small part is also due to natural factors, namely the age of the mangrove forest which is old and the abrasion caused by the lack of quantity of mangrove forest.

Various activities of the people of Pantai Bahagia Village in making changes to mangrove forest land for the expansion of fish ponds, rice fields, plantations, and settlements that are not controlled and carried out continuously every year have caused damage to most of the other mangrove forest lands. Illegal logging of some mangrove forests which was carried out intentionally by several people of Pantai Bahagia Village for the expansion of fishpond land resulted in environmental damage and the negative impact felt by the local community in recent years. The economy of the people of Pantai Bahagia Village, which is very difficult and is at the poverty line, forces them to convert the mangrove forest area into land which they consider much more productive.

Damage to the mangrove forest in Pantai Bahagia Village resulted in very severe negative impacts, one of which was abrasion. Over the past seven years, it is estimated that 1.7 ha of land was seriously damaged due to eroded sea waves in Kampung Beting, Pantai Bahagia Village. The abrasion had an impact on dozens of houses of the surrounding community which were badly damaged due to tidal flooding so that many people left their homes (Lestari, 2017) . Abrasion that occurred in Pantai Bahagia Village because the mangrove forest that was still there was unable to withstand the sea waves that hit continuously so that it could be eroded and eroded the land area. In addition to community houses which were damaged by abrasion, public facilities were also severely damaged, such as roads, school buildings, and mosques.

Damage to the mangrove forest in Pantai Bahagia Village also threatens the existing ecosystem. Some of the fauna in the mangrove forest area in Pantai Bahagia Village are threatened with extinction. The fauna whose habitat is in the mangrove forest area in Pantai Bahagia Village there are 32 types of fauna, but most of them are swamp birds such as egrets, protected and rare fauna, namely the Javan langur (*Trachypetus auratus*), and fauna that are cultivated because they have economic value such as shrimp and mangrove crabs (Saribano *et al.*, 2017: 45) . The reduction in mangrove forests has resulted in the reduction of one of the protected animals, namely the Javan langur because the food source of the Javan langur is reduced so that many Javan langurs fight over each other for food, which is increasingly scarce. As a result, many dead Javan langurs fight each other over existing food sources (Surjaya, 2019).

Several community groups in Muara Gembong District, one of which is in Pantai Bahagia Village, are concerned and have environmental awareness when they see the unfavorable condition of the mangrove ecosystem. One of them is the Alipbata Pokdarwis Community which was formed so that local communities can manage their own mangrove ecosystem. Pokdarwis Alipbata was born because of the community's concern for the destruction of mangrove forests and the threatened extinction of some of the fauna that exist there, one of which is in Pantai Bahagia Village, Muara Gembong District, and can develop tourist areas.

The existence of the Pokdarwis Alipbata community in the community of Pantai Bahagia Village is expected to be able to manage the existing mangrove areas themselves to

make tourist attractions and save and preserve the existing mangrove ecosystem. However, in preparing the tourist area, it is quite obvious that the condition of the Pantai Bahagia Village area is in poor condition. Facilities are still not built properly, access roads are in poor condition, severe abrasion, and tidal flood disasters can occur at any time. These conditions hinder the development of mangrove tourism.

So regarding the explanation above, this study was conducted to determine the existence of the Pokdarwis Alipbata community in the rehabilitation of the mangrove ecosystem and the efforts of the Pokdarwis Alipbata community in the rehabilitation of the mangrove ecosystem.

## **Literature Review**

Existence is used as the basis for proving a person or group of people whose existence is assessed by themselves and the community or other parties regarding the results of their work in the community. According to Andriani and Ali (2013: 255), existence is a proof of the work or performance that occurs in an event or phenomenon so that it can be interpreted as an existence that is judged by oneself and recognized by other people or parties.

A community group or community will certainly maintain and even increase its existence in the community. There are several efforts that can be made in maintaining the existence of the community (Media, 2020: 2–7), namely: 1) maintaining commitment, 2) having goals, activities, evaluations, 3) collaborating with other communities, 4) innovating, 5) regeneration and sharing, 6) create a community effort, and 7) show the world (publication).

Mangrove planting to rehabilitate the mangrove ecosystem in Pantai Bahagia Village is carried out by the Alipbata Pokdarwis community through various activities and programs. The Alifbata Pokdarwis Community was proposed and approved in 2016 based on the decision of the head of the Bekasi Regency Tourism, Culture, Youth and Sports Office Number: 800/3684/Disporbudpora/2016 (Herawati, 2020: 42–43).

The Pokdarwis Alipbata Community from its inception until now has been consistent in efforts to save the surrounding environment by rehabilitating mangroves. According to Mayalanda, Yulianda, and Setyobudiandi (2014: 25), mangrove rehabilitation is an effort to restore the function of the mangrove ecosystem which has decreased in quality and quantity and to restore its condition to a better condition capable of carrying out its functions economically and ecologically. These rehabilitation activities are carried out inside and outside the mangrove forest area.

The mangrove area in Pantai Bahagia Village is an existing mangrove ecosystem system. According to Santoso in (Rahim & Banderan, 2017: 2), the mangrove ecosystem is a system that occurs in coastal areas as a place for reciprocal relationships between living things whose habitat is influenced by tides and is dominated by flora species that grow in waters. salty or brackish. Some of the fauna that make up the mangrove area in Pantai Bahagia Village include Javan langurs, long-tailed monkeys, mangrove crabs, fish, shrimp, and dominated by swamp birds.

In rehabilitating the mangrove ecosystem in Pantai Bahagia Village, of course, several efforts have been made. According to Ahnanto et.al., (2014: 33), there are several efforts made to rehabilitate damaged mangrove ecosystems and preserve them, namely: 1) planting mangroves involving the community, 2) rearranging the spatial layout of coastal areas, 3) increasing public awareness to preserve mangroves by being able to use mangrove forests

responsibly, 4) business permits in mangrove areas must pay attention to conservation aspects, 5) increase knowledge about mangrove conservation or preservation, 6) increase coastal community income, 7) mangrove conservation communication programs, 8) strict law enforcement, and 9) integrated community-based rehabilitation of mangrove ecosystems.

## **Methodology**

This research was conducted in Kampung Beting, Pantai Bahagia Village, Muara Gembong District, Bekasi Regency. This research was conducted for three months, starting from January to April 2022. This research was conducted in Kampung Beting, Pantai Bahagia Village because this area is the area most affected by the greatest impact from abrasion and the focus of the Pokdarwis Alipbata community in the rehabilitation of the mangrove ecosystem.

The method used in this research is descriptive method. According to Best in (Sukardi, 2009: 157), descriptive research method is a research method that seeks to describe or describe an object that is adapted to the actual situation. The data collection technique used by this researcher uses four methods, namely 1) non-participant observation, 2) structured interviews, 3) questionnaires, 4) documentation, and 5) literature study.

The researcher used the non-participant observation method (non-participant observation). Researchers are not directly involved in the observation, but only observe independently to obtain data, record, collect, and analyze the existence of the Pokdarwis Alipbata community in the rehabilitation of mangrove ecosystems.

The research used a structured interview method (structured interview). In this structured interview, the researcher has prepared an interview instrument in the form of written questions before conducting interviews with the informants. Researchers conducted interviews with three residents of Pantai Bahagia Village, the head of Pokdarwis Alipbata, and three members of Pokdarwis Alipbata. The interview was conducted in Kampung Beting, Pantai Bahagia Village with a duration of 10-20 minutes, recorded by audio and video, and transcribed word for word.

Researchers distributed questionnaires to respondents using google forms and print outs. The subjects in this study were the chairman and members of the Alipbata Pokdarwis community, totaling 30 people, so that the sampling technique used was the saturated sampling technique. In addition, a cross-check was carried out on the results of the questionnaire/questionnaire of community members to the people of Pantai Bahagia Village, totaling 10 people. The crosscheck was carried out by researchers to adjust the results of the answers of the Pokdarwis Alipbata community to the answers of the people of Pantai Bahagia Village. The number of statements in the questionnaire/questionnaire is 50 statements, using closed statement types, and using measurements with the Guttman scale through two answer choices, namely "Yes" and "No".

The researcher uses documentation in the form of pictures and writings for additional research data regarding the existence of the Pokdarwis Alipbata community in the rehabilitation of the mangrove ecosystem. Documentation in the form of images such as photos and videos as well as written documentation such as SK (Decree) for community formation.

The data analysis technique used is based on the data that has been obtained and will be processed using descriptive analysis, that is, some of the data obtained is processed using tables

or graphs aimed at describing the research data. To get the percentage value or relative frequency in this study using the formula, namely: (Sudijono, 2018: 36–44)

$$P = \frac{F}{N} \times 100\%$$

Information:

- P = Questionnaire percentage
- F = Frequency being searched for percentage
- N = *Number of cases* (number of frequency/number of individuals)
- 100% = Constant number

## Findings & Discussion

From 2016 until now the Pokdarwis Alipbata community is still actively carrying out its activities in the rehabilitation of the mangrove ecosystem. The activeness of the Pokdarwis Alipbata community in carrying out various activities to increase its existence in the community. Existence is needed so that people from outside the Pantai Bahagia Village and local communities can be interested and participate in planting and preserving mangrove areas. In carrying out the rehabilitation and preservation of mangrove ecosystems, several efforts or strategies are needed.

### The Existence of Alipbata Pokdarwis Community in Mangrove Ecosystem Rehabilitation

To find out the existence of the Pokdarwis Alipbata community in the rehabilitation of mangrove ecosystems, it can be assessed based on the existence indicators according to Andriani and Ali (2013: 255), there are three proofs of work results, self-assessed existence, and existence recognized by others.

From the evidence of the work, from 2016 until now 2022 the Pokdarwis Alipbata community has carried out many activities in the rehabilitation of mangrove ecosystems and has made good changes in mangrove areas and repairs abrasion. The Pokdarwis Alipbata community and other parties have planted approximately 200.000 mangrove trees and expanded the mangrove area to 40 hectares.

The rehabilitation of the mangrove ecosystem by the Pokdarwis Alipbata community is carried out in damaged ponds located behind community settlements. The result is that so far the mangrove growth that has been planted by Pokdarwis Alipbata grows large and very dense so that it is strong and able to withstand the waves that hit the mainland and people's homes. In addition, the mangrove area has also been able to hold waste in the sea from entering the house into the house.

The big waves stuck in the mangrove area also affect the abrasion in Pantai Bahagia Village, which has started to improve. Although tidal waters and occasional tidal flooding still occur which makes abrasion unstable, large waves do not directly hit the land area so that it can protect the land from severe erosion or abrasion. Although the mangrove rehabilitation carried out by Pokdarwis Alipbata has not been able to eliminate abrasion, at least it can keep Kampung Beting from being lost and drowning. The results of the questionnaire, regarding the evidence

from the work of the Pokdarwis Alipbata community on average, answered "Yes" by 90% and the results of the crosscheck community answered "Yes" by 80%.

### Image 1

*The condition of the mangrove area behind the community settlements is already dense and has grown large after being planted by the Pokdarwis Alipbata community*



The existence of Pokdarwis Alipbata also received an assessment from community members. The majority of members assessed that the existence of the Pokdarwis Alipbata community had a good influence on the mangrove area in Pantai Bahagia Village. The activities of planting mangroves or mangroves that have been carried out by members of the Alipbata Pokdarwis community assess the many positive impacts they and the community feel after the mangrove rehabilitation. Even though Pokdarwis Alipbata is currently only minimizing the abrasion that occurs, these changes provide hope for the community to be able to improve their living environment. The results of the questionnaire, regarding whereabouts were assessed by themselves, the average Pokdarwis Alipbata community answered "Yes" by 93% and the results of the crosscheck community answered "Yes" by 80%.

In addition, the community of Pantai Bahagia Village also largely acknowledged the existence of the Pokdarwis Alipbata community making good changes to the mangrove area in Pantai Bahagia Village. At the beginning of the formation of the Pokdarwis Alipbata community, there were indeed many people who were against the assessment of mangrove planting activities. This is because some people misunderstand and do not know about the importance of mangrove areas. The community considers that planting mangroves can narrow their ponds and there are concerns that Pokdarwis Alipbata can take their pond land that has been planted with mangroves. There are even people who want to report on activities carried out by the Pokdarwis Alipbata community. Though the accusations and thoughts are not true.

However, after the dialogue, understanding, education, and the people of Pantai Bahagia Village themselves who felt the positive impact of the mangrove rehabilitation activities, many people understood and supported the mangrove planting activities carried out by the Alipbata Pokdarwis community. Although according to the Alipbata Pokdarwis community as a whole, it is still not 100% of the community to support community activities, but most of the people think that the activities carried out by the Alipbata Pokdarwis community are good. The results of the questionnaire, regarding the existence of being acknowledged by other people or other parties, on average the Pokdarwis Alipbata community answered "Yes" by 90% and the crosscheck results from the community answered "Yes" by 70%.

In addition, the Pokdarwis Alipbata community also strives to maintain and even improve its existence in the community. According to the *Smart Media Writing Team* (2020: 2–7) , there are several ways to maintain the existence of a community, namely maintaining commitment, having goals, activities, carrying out evaluations, collaborating with other communities, innovating, regenerating, sharing knowledge, creating community businesses, and publication. The following are some of the ways the Pokdarwis Alipbata community maintains its existence in the community, namely:

1) Members of the Pokdarwis Alipbata Community Maintain Commitment to Improving Mangrove Ecosystem

It is proven that from 2016 to 2022, members of the Pokdarwis Alipbata community are still active and consistent in their activities with the community and other communities in planting mangroves. The results of the questionnaire, regarding maintaining the commitment of the Pokdarwis Alipbata community on average, answered "Yes" by 93% and the crosscheck results from the community answered "Yes" by 90%.

2) The Pokdarwis Alipbata Community Has A Purpose, Actively Conducts Activities, and Conducts Evaluation Meetings

One of the goals of the establishment of the Pokdarwis Alipbata community is to create a green belt around community settlements. One of the activities carried out is by planting mangroves either independently or with other groups. In addition, evaluation meetings are always held at the homebase of the Pokdarwis Alipbata community. The results of the questionnaire, regarding having goals, activities, and evaluations, the average Pokdarwis Alipbata community answered "Yes" by 88% and the crosscheck results from the community answered "Yes" by 83.3%.

3) Pokdarwis Alipbata Community Cooperates With Other Communities and Corporations

From 2016 to 2022, the Pokdarwis Alipbata community has collaborated with approximately 500 communities to plant mangroves. The results of the questionnaire, regarding collaboration with other communities, the average Pokdarwis Alipbata community answered "Yes" by 83% and the crosscheck results from the community answered "Yes" by 80%.

4) Pokdarwis Alipbata Community Creates Creative Ideas

Pokdarwis Alipbata opened mangrove ecotourism by offering visitors to plant mangroves. The Pokdarwis Alipbata community together with Kebaya women also use mangrove trees to make food and drinks. The results of the questionnaire, regarding innovation, the average Pokdarwis Alipbata community answered "Yes" by 90% and the results of the crosscheck community answered "Yes" by 80%.

5) Pokdarwis Alipbata Community Invites Young People to Join and Share Knowledge with the Community

Of the total 30 members, as many as 5 members of Pokdarwis Alipbata are still students. The Alipbata Pokdarwis community also shared their knowledge about the rehabilitation of mangrove ecosystems and taught them to use mangrove trees as food and drink to the people of Pantai Bahagia Village. The results of the questionnaire, regarding regeneration and sharing, the average Pokdarwis Alipbata community

answered "Yes" by 83% and the crosscheck results from the community answered "Yes" by 70%.

**Figure 2**

*The Pokdarwis Alipbata community planted mangroves in collaboration with the Lindunghutan community*



### **The Efforts of the Alipbata Pokdarwis Community in Rehabilitation of the Mangrove Ecosystem**

Several efforts must be made to rehabilitate mangrove ecosystems. According to Ahnando et.al., (2014: 33) explains that there are 9 efforts that can be made to rehabilitate and preserve mangrove ecosystems. Efforts that have been made by the Pokdarwis Alipbata community in ecosystem rehabilitation, namely:

- 1) The Pokdarwis Alipbata community always involves the surrounding community to help improve the mangrove area

Almost all community members and most of the community feel that Pokdarwis Alipbata is always invited to participate in mangrove rehabilitation. The people of Pantai Bahagia Village, who already have the awareness to protect the surrounding environment, feel happy because they can contribute to planting mangroves and at the same time they can also improve their own living area. The results of the questionnaire, regarding protecting the mangrove area, the average Pokdarwis Alipbata community answered "Yes" by 93% and the crosscheck results from the community answered "Yes" by 90%.

- 2) The Pokdarwis Alipbata community makes people aware to preserve the mangrove area by being able to use mangroves responsibly

Pokdarwis Alipbata continuously convinces and makes people aware that mangrove planting has a very positive impact. Although not all people immediately realized this, the results from planting mangroves had such a good influence that they could convince the community. Finally, at this time, there are some people who are aware of doing mangrove planting independently without waiting for activities from Pokdarwis Alipbata. The results of the questionnaire, regarding increasing public awareness to preserve mangroves by being able to use mangrove forests responsibly, on average the Pokdarwis Alipbata community answered "Yes" by 87% and the crosscheck results from the community answered "Yes" by 90%.

- 3) The Pokdarwis Alipbata community together with the Save Mugo movement and students educate coastal communities to conserve mangrove areas

The education carried out by Pokdarwis Alifbata is assisted by the Save Mugo movement and students because they have broader knowledge and a high level of education so that people are more confident. The results of the questionnaire, regarding increasing knowledge about mangrove conservation or preservation, the average Pokdarwis Alipbata community answered "Yes" by 83% and the results of the crosscheck community answered "Yes" by 70%.

- 4) Mangrove rehabilitation that has been carried out by the Pokdarwis Alipbata Community has been able to increase the income of the coastal community of Pantai Bahagia Village

Mangrove tree roots are a good habitat for the breeding of fish, shrimp, and mangrove crabs because the mangrove roots are a source of food for these fauna. In addition to taking advantage of the benefits of mangroves, the community also takes advantage of the management of mangrove ecotourism. The results of the questionnaire, regarding increasing the income of coastal communities, the average Pokdarwis Alipbata community answered "Yes" by 90% and the results of the crosscheck community answered "Yes" by 70%.

- 5) The Pokdarwis Alipbata community held discussions and dialogues with the community and local community leaders as a form of communication program for mangrove conservation

Discussions and dialogues conducted by the Pokdarwis Alipbata community became a form of communication program regarding mangrove ecosystem rehabilitation activities in order to provide understanding and the community could support the activities carried out by the community. The results of the questionnaire, regarding the communication program for the conservation of mangrove areas, the average Pokdarwis Alipbata community answered "Yes" by 93% and the crosscheck results from the community answered "Yes" by 90%.

- 6) The community has always been the benchmark by the Pokdarwis Alibata community in carrying out mangrove rehabilitation

In making green belts or planting mangroves on the coast of Pantai Bahagia Village, Pokdarwis Alipbata always discusses it with the people who own the ponds and the people whose settlements around the area will be planted. The results of the questionnaire, regarding the integrated rehabilitation of mangrove ecosystems based on the community, the average Pokdarwis Alipbata community answered "Yes" by 80% and the crosscheck results from the community answered "Yes" by 70%.

### **Figure 3**

*The making of the track by the Pokdarwis Alipbata community for the Javan langur tourism area is carried out with the community*



Efforts that have been made by the Pokdarwis Alipbata community in the rehabilitation of mangrove ecosystems are considered to be very lacking so that abrasion control is still slow. Support from government and law enforcement agencies is needed. Some of the efforts that can accelerate the prevention of abrasion are the re-arrangement of the coastal area layout, strict law enforcement, and firm permits for pond land clearing by taking into account the conservation aspect. According to one member of the Pokdarwis Alipbata community, he gave his opinion regarding the obstacles that have not been carried out in spatial planning, stating that:

*“The first obvious obstacle is the land status. It’s a big polemic, big PR because of the nature of the government system. So we ourselves cannot acquire the land that we have planted as our land because the status is still three elements, namely forestry, then the community as the manager, and us as the planter.”* The law governing mangrove conservation is still considered very weak and supervision has not been carried out firmly. The head of the Pokdarwis Alipbata community stated, *“In terms of law enforcement, we are actually still weak, because according to the law, we are called private land or land for compensation from Perhutani to the government. This means that the community is free to open their ponds based on permission from the village and sub-district heads in the form of the SKD. And there the community has the right to work on the land. So, legally, the logging in our forest is still weak, because so far the community members are still clearing new ponds.”* Weak supervision and laws make the owners of these ponds ignore the conservation aspect.

The researcher's field notes during data collection were combined with the researcher's own experience in the process of analyzing the existence of the Pokdarwis Alipbata community in carrying out efforts to rehabilitate the mangrove ecosystem in Pantai Bahagia Village. The Pokdarwis Alipbata community consistently carries out planting activities, besides that, mangrove care and conservation is carried out together with the community as evidence of direct *support* and contribution.

*The efforts that have been made by the Pokdarwis Alipbata community in rehabilitating the mangrove ecosystem have slightly reduced the impact of abrasion in Pantai Bahagia Village. The program or the limited authority of the Pokdarwis Alipbata community really needs the*

*role of several parties with broad powers such as the government and law enforcement agencies. In addition, in maintaining or improving its existence in the wider community, the Pokdarwis Alibata community is still unable to use social media for publications related to activities and tourism. This is due to several technical obstacles, namely poor internet connection and no members who are able to manage the social media.*  
(Field Notes, May 2022)

## References

- Ahnanto, A., et.al. (2014). Urgensi Pelestarian Dan Rehabilitasi Mangrove Bagi Masyarakat Desa Pantai Mekar Kecamatan Muara Gembong. *SPATIAL: Jurnal Wahana Komunikasi Dan Informasi Geografi*, 12(2), 28–34. <https://doi.org/10.21009/spatial.122.05>
- Andriani, M. N., & Ali, M. M. (2013). Kajian Eksistensi Pasar Tradisional Kota Surakarta. *Jurnal Teknik PWK*, 2(2), 252–269. <https://ejournal3.undip.ac.id/index.php/pwk/article/view/2351/2431>
- Herawati, M. (2020). Kontribusi Komunitas Save Mugo Dalam Pemberdayaan Ekonomi Kreatif Kelompok Bahagia Berkarya Melalui Ekowisata Kawasan Hutan Mangrove Di Kampung Beting Muara Gembong Bekasi [Universitas Islam Negeri Syarif Hidayatullah Jakarta]. In *Fakultas Ilmu Dakwah dan Ilmu Komunikasi Universitas Islam Negeri Syarif Hidayatullah Jakarta*. [https://repository.uinjkt.ac.id/dspace/bitstream/123456789/49952/1/MUNAH\\_HERAWATI-FDK.pdf](https://repository.uinjkt.ac.id/dspace/bitstream/123456789/49952/1/MUNAH_HERAWATI-FDK.pdf)
- Lestari, S. (2017). *Tentang Warga Bekasi dan Desa Mereka yang Ditelan Laut*. BBC News Indonesia. <https://www.bbc.com/indonesia/indonesia-40852256>
- Maulani, A., Taufiq-SPJ, N., & Pratikto, I. (2021). Perubahan Lahan Mangrove di Pesisir Muara Gembong, Bekasi, Jawa Barat. *Journal of Marine Research*, 10(1), 55–63. <https://doi.org/10.14710/jmr.v10i1.28396>
- Mayalanda, Y., Yulianda, F., & Setyobudiandi, I. (2014). Strategi rehabilitasi ekosistem mangrove melalui analisis tingkat kerusakan di Suaka Margasatwa Muara Angke, Jakarta. *Bonorowo Wetland*, 04(01), 12–36. <https://doi.org/10.13057/bonorowo/w040102>
- Media, T. P. S. (2020). *Menjaga Eksistensi Komunitas dan Tips-Tips Remaja Lainnya*. Intera dan Smart Media Prima.
- Rahim, S., & Banderan, D. W. K. (2017). *Hutan Mangrove dan Pemanfaatannya* (M. S. Hamidun (ed.)). Deepublish. <https://repository.ung.ac.id/karyailmiah/show/2660/sukirman-rahim-buku-hutan-mangrove-dan-pemanfaatannya.html>
- Saribano, N., et.al. (2017). Potensi Keanekaragaman Hayati Muaragembong. In *Sekolah Pascasarjana Universitas Nasional*. Sekolah Pascasarjana Universitas Nasional. <https://biodiversitywarriors.kehati.or.id/wp-content/uploads/2021/10/Potensi-Keanekaragaman-Hayati-Muara-Gembong.pdf>
- Sudijono, A. (2018). *Pengantar Statistik Pendidikan*. Rajawali Press.
- Sukardi. (2009). *Metodologi Penelitian Pendidikan: Kompetensi dan Praktiknya*. PT Bumi Aksara.
- Surjaya, A. M. (2019). *Kelaparan, Habitat Lutung Jawa di Bekasi Terancam Punah*. Sindonews.Com. [467](https://metro.sindonews.com/berita/1469005/170/kelaparan-habitat-</a></p></div><div data-bbox=)

lutung-jawa-di-bekasi-terancam-punah#:~:text=BEKASI - Populasi Lutung Jawa di,diperkirakan kurang dari 81 ekor.&text=Apalagi%2C menyusutnya hutan mangrove berdampak pada berkurangnya sumber

**About the Author:**

Chief Researcher
<b>Arief Rachman</b> <i>State University of Jakarta, Indonesia</i>
Researcher Member
<b>Budiaman</b> <i>State University of Jakarta, Indonesia</i>
<b>Desy Safitri</b> <i>State University of Jakarta, Indonesia</i>

