



PRESERVATION AND UTILIZATION OF LAKE ANEUK LAOT AS A SOURCE OF SOCIAL LIVELIHOOD FOR THE COMMUNITY IN SABANG CITY

Munawiah Abdullah*✉, Dhyaake Naxrasya**, Muhammad Yunus Ahmad***, Marduati Mukhtar****, Nurul Aliyah Sham Binti Rambely*****

*Universitas Islam Negeri Ar-Raniry Banda Aceh, Indonesia
E-mail: munawiah@ar-raniry.ac.id

**Universitas Islam Negeri Ar-Raniry Banda Aceh, Indonesia
E-mail: naxrasyadhyaake@gmail.com

***Universitas Islam Negeri Ar-Raniry Banda Aceh, Indonesia
E-mail: m.yunus@ar-raniry.ac.id

****Universitas Islam Negeri Ar-Raniry Banda Aceh, Indonesia
E-mail: marduati@ar-raniry.ac.id

*****Universiti Utara Malaysia, Malaysia
E-mail: nurul_aliyah_sham@cob.uum.edu.my

Abstract

Aneuk Laot Village is home to a lake that serves as the primary source of livelihood for the local community. Residents play a vital role in maintaining the lake's sustainability through mutual cooperation and adherence to rules that prohibit littering in the surrounding area. This reflects a strong collective spirit toward environmental preservation. This study aims to describe the level of community participation in preserving Lake Aneuk Laot, to understand the lake's functions and benefits for residents, and to analyze the government's role in conservation efforts. A qualitative approach with descriptive research methods was used. Data were collected through observation, interviews, and documentation. Analysis was carried out through data reduction, presentation, and verification. The findings show that the residents of Aneuk Laot Village actively contribute to the preservation of the lake, demonstrating high awareness by avoiding actions that cause pollution, such as littering. This individual and collective awareness significantly supports the lake's sustainability. Lake Aneuk Laot provides essential benefits, such as a source of clean water for daily needs and irrigation for nearby crops. For local fishermen, it offers a steady source of income. The government supports sustainability through communication, monitoring, and protective actions to safeguard the lake from various threats.

Keywords: Preservation; Utilization; Lake Aneuk Laot; Source of Social Livelihood; Sabang.

✉ Corresponding author:

Email Address: munawiah@ar-raniry.ac.id

Received: February 14, 2025; Accepted: June 1, 2025; Published: June 30, 2025

Copyright © 2025 Munawiah Abdullah, Dhyaake Naxrasya, Muhammad Yunus Ahmad, Marduati Mukhtar, Nurul Aliyah Sham Binti Rambely



Abstrak

Gampong Aneuk Laot memiliki sebuah danau yang menjadi sumber penghidupan utama bagi masyarakat sekitar. Penduduk setempat memegang peranan penting dalam menjaga kelestarian danau tersebut melalui kegiatan gotong royong serta penerpaan larangan membuang sampah di area sekitar danau. Partisipasi aktif dari masyarakat ini menunjukkan tingginya semangat kolektif dalam pelestarian lingkungan. Penelitian ini bertujuan untuk mendeskripsikan tingkat partisipasi masyarakat dalam melestarikan Danau Aneuk Laot, memahami fungsi dan manfaat danau bagi kehidupan warga, serta menganalisis peran pemerintah dalam upaya pelestarian danau tersebut. Penelitian dilakukan menggunakan pendekatan kualitatif dengan jenis penelitian deskriptif. Teknik pengumpulan data mencakup observasi, wawancara, dan dokumentasi. Data yang diperoleh dianalisis melalui proses reduksi, penyajian, dan verifikasi data. Hasil penelitian menunjukkan bahwa masyarakat Gampong Aneuk Laot berperan aktif dalam menjaga kelestarian Danau Aneuk Laot dengan kesadaran tinggi untuk tidak mencemari air danau, seperti tidak membuang sampah sembarangan. Kesadaran individu ini menjadi faktor utama yang mendukung kelestarian danau. Danau Aneuk Laot memberikan berbagai manfaat signifikan bagi masyarakat, termasuk penyediaan air untuk kebutuhan sehari-hari dan irigasi tanaman di sekitar danau. Bagi para nelayan, danau ini menjadi sumber penghasilan melalui tangkapan ikan. Di sisi lain, pemerintah berperan dalam menjaga kelestarian danau dengan membangun komunikasi yang baik, melakukan pengawasan, serta melindungi danau dari berbagai ancaman yang dapat merusaknya.

Kata Kunci: Pelestarian; Pemanfaatan; Danau Aneuk Laot; Sumber Kehidupan Sosial; Sabang.

INTRODUCTION

Aceh comprises several islands, one of which is Sabang Island, part of the Aceh Province. Before establishing its own local government, Sabang was under the jurisdiction of Aceh Besar. There are several versions regarding the origin of the name "Sabang." One version states that it derives from the Arabic word shabag (rupture), while another version claims that it originates from the Acehnese word saban, which means equal or undifferentiated.¹

Sabang City consists of two districts, namely Sukajaya and Sukakarya. Sukajaya District comprises 10 villages (gampong), and Sukakarya District consists of 8 villages. In Sukakarya District lies Aneuk Laot Village, where Lake Aneuk Laot is located—a vital source of livelihood for its residents. Lake Aneuk Laot was formed from an extinct volcanic crater,

¹Yusuf Al-Qardhawy Al-Asyi, *The History of Aceh: Mengenal Asal-Usul Nama, Bahasa, dan Orang Aceh* (The History of Aceh: Understanding the Origins of the Name, Language, and People of Aceh), (Banda Aceh: PeNA, 2019), p. 1.

which over time became filled with rainwater, eventually forming a lake.² The lake spans approximately 0.61 km in length, with a maximum depth of 29 meters. During the rainy season, the water level rises but does not cause flooding. Lake Aneuk Laot is still utilized as a source of raw water for the regional water utility company (PDAM), agriculture, tourism, as well as for bathing and washing by local residents.³

According to Mac and Page, as cited by M. Mawardi J., society can be understood as a system composed of customs, norms, authority structures, and cooperation among various groups to regulate human behavior. Ralph Linton argues that society comprises groups of people who have lived and worked together for an extended period, thereby capable of self-regulation. Meanwhile, Selo Soemardjan defines society as a group of individuals living together and developing a shared culture. Based on these definitions, Soerjono Soekanto formulates four main characteristics of society: first, the presence of humans living together; second, sustained interaction over a considerable period; third, individual awareness of being part of a unity; and fourth, the existence of a shared system of life.⁴

Law Rahardjo presents a different view, suggesting that participation refers to community involvement in an activity, either through expressions or concrete actions. More specifically, participation refers to the active engagement of the community in programs they design themselves. From another perspective, participation encompasses involvement, attention, and contributions arising from participatory groups to foster and sustain a collective spirit of engagement.⁵ The relationships that unite individuals into a community stem from behavioral patterns that reflect life factors as a distinct unity. This has become a defining characteristic, hence the community must possess a strong sense of identity and feel part of a unique entity, different from other groups.

To realize Lake Aneuk Laot as a well-maintained and clean area, active community participation is essential for preserving the lake in Sabang City. Participation can be defined as the involvement of the community in an activity, either in the form of inquiries or actions. Spontaneous participation refers to involvement based on personal awareness and willingness, whereas induced participation refers to involvement influenced by others.⁶

The community of Aneuk Laot Village appears to possess a high level of awareness regarding Lake Aneuk Laot and actively contributes to its preservation. They undertake various initiatives, such as mutual cooperation in cleaning the environment around the lake and refraining from littering. Moreover, to ensure the sustainability of fisheries, the community has established regulations for residents of Sabang City and Aneuk Laot Village to catch only mature fish, allowing smaller fish to continue growing. This initiative aims to

²Purwoko R. M., "Panglima Danau sebagai Model Pengelolaan Sumber Daya Berkelanjutan Berbasis Kearifan Lokal di Danau Aneuk Laot" (Lake Commander as a Model for Sustainable Resource Management Based on Local Wisdom at Lake Aneuk Laot), *Jurnal Kebijakan Perikanan Indonesia* 13, no. 1 (2021): 11.

³T. Widyanto, "Kajian Parameter Kimia dan Mikrobiologi Danau Aneuk Laot sebagai Sumber Air Baku Masyarakat Kota Sabang Provinsi Nanggroe Aceh Darussalam" (Chemical and Microbiological Parameters of Lake Aneuk Laot as Raw Water Source for Sabang City), *Jurnal Limnotek* 24, no. 2 (2017): 87.

⁴Mac and Page, cited in M. Mawardi J., *Sosiologi* (Sociology) (Lampung: Pusat Studi Islam dan Kebudayaan, 2009), p. 14.

⁵Machyuzar Firdaus and Sri Murlianti, "Community Participation in CSR Program of PT. Pertamina Hulu Mahakam 'Petani Maju 4.0' in Sanipah Village," *eJournal Pembangunan Sosial* 12, no. 3 (2024): 257-270, accessed May 25, 2025.

⁶G. Bleszinsky, "Community Participation in the Coastal Area of Padang," *Journal of Education on Social Science* 3, no. 1 (2019): 3.

maintain the ecological balance of the lake and ensure fish availability for future generations.

The involvement discussed here is not passive but actively demonstrated by the individuals concerned. Thus, participation is more accurately interpreted as engagement in a social group to take part in community activities outside of one's primary profession or occupation. In efforts to preserve the lake, community involvement should not be limited to a mental aspect alone, but must also encompass all stages—from planning to implementation. Based on the above overview, the following text aims to elaborate on community participation in the preservation of Lake Aneuk Laot in Sabang City.

LITERATURE REVIEW

Previous studies that are relevant to this paper and serve as important references are as follows:

1. An article titled "Community Participation in the Development of Tourism Attractions at Lake Limboto, Pentadio Barat Village, Gorontalo Regency" by Siti Mulghimma Anastasya Oliy, Anggraeni Ms Lagalo, and Desriska Talib analyzes the level of community participation in the development of Lake Limboto as a tourism attraction. The study employed a survey method with purposive sampling, involving 30 respondents from the local community. Data were collected through questionnaires and analyzed using descriptive quantitative methods. The results showed that the level of community participation in tourism development was moderate. Contributing factors included knowledge of tourism, attitudes toward tourism development, and support from the local government.⁷
2. Awiska Alfata, Elly Malihah, and Rini Andari, in their article "The Role of Communities in the Conservation of Lake Gunung Tujuh Nature Tourism in the Kerinci Seblat National Park Region", examine the extent of community involvement in the conservation of the area. The research methods included interviews, literature review, and field observations. The findings indicated that community participation in conservation efforts was still low. Influencing factors included awareness of conservation importance, environmental attitudes, and support from government and related institutions.⁸
3. In an article by Herling A. Watania, Ellen Eva Poli, and Xaverius Erick Lobja entitled "Community Participation in the Conservation of Lake Tondano in Minahasa Regency", the study analyzes the level of community participation in conserving Lake Tondano. The method used was descriptive analysis with a quantitative approach, involving data collection through questionnaires distributed to 100 randomly selected respondents. The results showed that the level of participation was moderate, influenced by education level, knowledge of lake conservation importance, and support from the government and related institutions.⁹

⁷Siti Mulghimma Anastasya Oliy, Anggraeni Ms Lagalo, and Desriska Talib, "Community Participation in Tourism Attraction Development of Lake Limboto, Pentadio Barat Village, Gorontalo," *Tulisan Ilmiah Pariwisata* 5, no. 1 (June 2022): 30.

⁸Awiska Alfata, Elly Malihah, and Rini Andari, "Community Role in Preserving Lake Gunung Tujuh Nature Tourism in TNKS Area," *Syntax Idea* 4, no. 2 (February 2022).

⁹Herling A. Watania, Ellen Eva Poli, and Xaverius Erick Lobja, "Community Participation in the Conservation of Lake Tondano in Minahasa Regency," *GEOGRAPHIA: Jurnal Pendidikan dan Penelitian Geografi* 2, no. 1 (June 2021): 104–109.

4. Dita Aulia Rahma and Pratiwi Permadani, in their study "The Social Impact of the Silting of Lake Rawa Pening", explore the social consequences of the silting process in the lake and its impact on the surrounding community. The study used a qualitative case study approach. Researchers conducted in-depth interviews with 20 informants including local residents, local government officials, and environmental activists to gain a holistic understanding. The findings revealed significant impacts on community livelihoods, including decreased fishery yields and reduced tourism appeal. This shift forced residents to move toward agricultural and trade sectors.¹⁰
5. Nur Hadiati Endah and M. Nadjib in their study "Utilization and the Role of Local Communities in the Conservation of Lake Maninjau", analyze the multifunctional use of Lake Maninjau resources and the role of local communities in its conservation. Methods included questionnaires, in-depth interviews, focus group discussions (FGDs), and field observations. Despite the community's positive environmental attitude, this was not reflected in actual behavior. Cultural factors, regulations, and supervision were key barriers to optimal utilization and conservation efforts.¹¹
6. The article "Community Participation in the Conservation of the Lake Toba Area (Case Study: Balige District, Toba Samosir Regency - North Sumatra)" by Simar Mata and Rodiana, analyzes community participation levels and the factors influencing it. The study used a survey method with purposive sampling, involving 30 local respondents. Data were collected through questionnaires and analyzed using descriptive quantitative methods. The findings indicated a moderate level of participation, with contributing factors including knowledge of environmental conservation, attitude toward conservation, and local government support.¹²
7. In the article "Raising Awareness Among Lakeside Communities to Preserve the Lake Through the Use of Traditional Fishing Tools Based on Local Wisdom" by Nirwan Junus, the study aims to educate lakeside communities about environmental regulations through legal counseling. The method used involved identifying issues within the community. The study found that traditional fishing tools are rarely used, and in Iluta Village, Gorontalo, the traditional tool "tinggawango" is no longer in use, replaced by modern tools that tend to harm the lake ecosystem. Unlike the previous studies, this paper titled "Preservation and Utilization of Lake Aneuk Laot as a Source of Social Livelihood for the People of Sabang City" focuses on the active role of the Aneuk Laot Gampong community in preserving the lake, with emphasis on both individual and collective awareness.¹³
8. Purwoko et al., in their article "Panglima Danau as a Model for Sustainable Fisheries Resource Management Based on Local Wisdom in Lake Aneuk Laot", highlight the establishment of the Panglima Danau customary institution as a response to unsustainable exploitation of fishery resources. Using a qualitative approach based

¹⁰Dita Aulia Rahma and Pratiwi Permadani, "Social Impact of Lake Rawa Pening Silting on Local Communities," *Jurnal Ilmiah Mediasi* 3, no. 2 (August 2024): 141-153.

¹¹Nur Hadiati Endah and M. Nadjib, "Utilization and Role of Local Communities in the Preservation of Lake Maninjau," *Jurnal Ekonomi dan Pembangunan* 25, no. 1: 55-67.

¹²Simar Mata and Rosdiana, "Community Participation in the Conservation of Lake Toba Area (Case Study: Balige Subdistrict, Toba Samosir Regency, North Sumatra)", <https://repositori.usu.ac.id/handle/123456789/80309?show=full>.

¹³Nirwan Junus, "Raising Awareness among Riverside Communities to Preserve the Lake through Local Wisdom-Based Fishing Tools," *Jurnal Pengabdian Masyarakat* 3, no. 1 (January 2023).

on interviews and literature studies, the research demonstrates that this institution successfully regulates equitable and sustainable fishing practices, including restrictions on fishing periods, banning certain gear, and imposing customary sanctions on violators. This initiative is supported by fish restocking activities that contribute to ecological balance and economic improvement. The study reinforces the argument that local wisdom can serve as an effective foundation for natural resource management, especially in inland fisheries within local sociocultural contexts.¹⁴

METHOD

This study adopts a descriptive qualitative approach to understand the preservation and utilization of Lake Aneuk Laot as a source of social livelihood for the people of Sabang City.¹⁵ This approach aims to depict phenomena based on the experiences and perspectives of the community without manipulating the studied variables.¹⁶ Descriptive qualitative research allows the researcher to deeply explore situations or phenomena according to their existing social contexts.¹⁷

Data were collected through structured and semi-structured interviews. These interviews involved local stakeholders such as fishermen, farmers, tourism actors, government officials, and community leaders who are involved in the management and utilization of the lake. Structured interviews used a fixed list of questions,¹⁸ while semi-structured interviews allowed informants to elaborate based on their personal experiences and understandings.¹⁹ In qualitative research, interviews aim to gain rich insights into the community's social experiences related to the utilization and conservation of the lake.²⁰

Data analysis was conducted using a thematic descriptive approach, which included three stages: data reduction, data presentation, and conclusion drawing.²¹ Data reduction involved filtering and categorizing relevant information.²² Data presentation took the form of descriptive narratives that illustrated patterns in the utilization and conservation of Lake Aneuk Laot by the community. The final stage involved drawing conclusions based on identified patterns.²³

¹⁴Purwoko R. M., "Panglima Danau sebagai Model Pengelolaan Sumber Daya Berkelanjutan Berbasis Kearifan Lokal di Danau Aneuk Laot" (Lake Commander as a Model for Sustainable Resource Management Based on Local Wisdom at Lake Aneuk Laot), *Jurnal Kebijakan Perikanan Indonesia* 13, no. 1 (2021): 11.

¹⁵L. J. Moleong, *Metodologi Penelitian Kualitatif* (Qualitative Research Methodology), Revised Edition (Bandung: Remaja Rosdakarya, 2017), pp. 6–7.

¹⁶John W. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 4th ed. (Thousand Oaks, CA: SAGE Publications, 2014), p. 27.

¹⁷Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, dan R&D* (Quantitative, Qualitative, and R&D Research Methods) (Bandung: Alfabeta, 2017), p. 45.

¹⁸K. G. Esterberg, *Qualitative Methods in Social Research* (Boston: McGraw-Hill, 2002), p. 87.

¹⁹Steinar Kvale and Svend Brinkmann, *InterViews: Learning the Craft of Qualitative Research Interviewing*, 2nd ed. (Thousand Oaks, CA: SAGE Publications, 2009), p. 47.

²⁰M. Q. Patton, *Qualitative Research & Evaluation Methods: Integrating Theory and Practice*, 4th ed. (SAGE Publications, 2015), p. 46.

²¹Matthew B. Miles, A. Michael Huberman, and Johnny Saldaña, *Qualitative Data Analysis: A Methods Sourcebook*, 3rd ed. (Thousand Oaks, CA: SAGE Publications, 2014), pp. 75–90.

²²A. Fatoni, *Metodologi Penelitian dan Teknik Penyusunan Skripsi* (Research Methodology and Thesis Writing Techniques) (Jakarta: Rineka Cipta, 2011), p. 104.

²³Virginia Braun and Victoria Clarke, "Using Thematic Analysis in Psychology," *Qualitative Research in Psychology* 3, no. 2 (2006): 77–101.

Data validity was ensured through source triangulation,²⁴ by comparing information from various respondents to obtain a more objective picture.²⁵ Additionally, this study adhered to research ethics, including maintaining the anonymity of informants and securing formal consent prior to interviews to ensure openness and trust from participants.²⁶

FINDINGS AND DISCUSSION

A. Community Participation in the Preservation of Aneuk Laot Lake

Community participation in environmental conservation, particularly in aspects closely related to daily life, reflects a sense of awareness and responsibility toward fulfilling their basic needs. This awareness encourages positive habits in protecting Aneuk Laot Lake, which plays a vital role in both the local ecosystem and the well-being of surrounding communities. The residents' enthusiasm is evident through their efforts to maintain the lake's cleanliness, especially by refraining from littering. Since settlements are located around the lake, irresponsible waste disposal into the lake can pollute the water, degrade its quality, and hinder its use in daily life. Therefore, active community participation becomes a key factor in preserving the cleanliness and sustainability of the lake's ecosystem.

The "Panglima" (local guardian) of Aneuk Laot Lake stated that the level of community participation in preserving the lake is very high, as shown by the people's strong awareness of the importance of environmental conservation. Residents of Gampong Aneuk Laot show great concern for maintaining the cleanliness of the lake, particularly by avoiding littering, which could contaminate the water. However, a major challenge arises from a lack of awareness among outsiders who do not live in the area. These non-residents tend to show less concern for the lake's cleanliness and sustainability. Despite this, the Panglima acts promptly when anyone, whether local or outsider, is found disposing of waste into the lake. One of the efforts made includes putting up warning posters as an educational tool and reminder for the public not to pollute the lake, thus helping to preserve its sustainability.²⁷

Aneuk Laot Lake plays an essential role for the community, especially as a major source supporting their daily needs. As a valuable natural resource, the lake is an inseparable part of local life. Community involvement in its conservation is driven by a collective sense of responsibility to maintain ecological balance. Such participation encourages both individuals and groups to contribute to various environmental preservation activities. The impacts of conserving Aneuk Laot Lake on the community can be seen from two perspectives: the positive effects that support the sustainability of water resources and the environment, and the negative consequences that may arise from external factors affecting the lake's ecosystem.

B. Impacts of Lake Water Pollution on the Community

Water is a basic necessity for life, and without it, the processes of living cannot function properly. Although water is a naturally renewable resource, its quality depends

²⁴Feny Rita Fiantika et al., *Metodologi Penelitian Kualitatif* (Qualitative Research Methodology) (Padang: PT Global Eksekutif Teknologi, 2022), p. 14.

²⁵Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif...*, p. 50.

²⁶John W. Creswell, *Research Design: Qualitative, Quantitative...*, p. 30.

²⁷Interview with Daud, S., Lake Aneuk Laot Handler, October 24, 2023.

heavily on how humans protect and manage it. If communities fail to maintain water quality, pollution can occur, resulting in harmful and detrimental impacts on their lives.²⁸

Problems related to lake water pollution include environmental degradation, loss of biodiversity, and reduced ecological functions—issues that often stem from human activities. In this case, community needs for clean water are intricately linked to these environmental challenges. The growing population around the lake contributes significantly to water pollution issues and calls for specific mitigation efforts. Water pollution in Aneuk Laot Lake not only affects the residents of Gampong Aneuk Laot but also has broader impacts on the population of Sabang City.

Should Aneuk Laot Lake become polluted to the extent that its water becomes unusable, the resulting consequences would be severe for both Gampong Aneuk Laot and the wider Sabang City. From a public health perspective, polluted water poses risks for daily usage, as local communities rely heavily on the lake as their water source. Pollution may degrade water quality, posing health risks. In terms of agriculture and fisheries, water pollution can damage the lake's aquatic resources, threatening the livelihoods of local fishers and potentially causing the loss of native fish species. If polluted water is used for irrigation, agricultural produce may also become contaminated. Consequently, water pollution diminishes access to clean water, reducing overall quality of life. It also harms the lake's aesthetics and the surrounding environment, directly impacting those who live nearby.

Aneuk Laot Lake is also governed by customary law and cultural practices, which must be respected by both local residents and visiting tourists. These customary laws include prohibitions against fishing using poison, as such practices harm the lake's aquatic ecosystem. Other traditional rules relate to fishing schedules: lake fishers are allowed to fish on Thursday evenings until Friday morning (7 PM to 7 AM), a restriction not applied to sea fishers. Cultural traditions at the lake include the khanduri (ritual feast), which is similar to khanduri blang (rice field feast) and involves communal prayers of gratitude to God held at the lake.

The khanduri or lake feast is held at least once every three years or as agreed upon by local fishers. During this ritual, a three-day fishing ban is enforced, beginning at sunrise on the first day and ending at sunset on the third. Additionally, fishing is prohibited every Friday, from sunset on Thursday until sunset on Friday. Other designated non-fishing days include Eid al-Fitr, Eid al-Adha, Indonesia's Independence Day (August 17), and December 26 to commemorate the tsunami.²⁹

C. Functions and Benefits of Aneuk Laot Lake

A lake, as a body of calm and deep water, plays a vital role in providing numerous environmental and human benefits. With its unique characteristics, a lake supports rich biodiversity—from fish to aquatic plants—and maintains ecological balance. Freshwater ecosystems promote biological diversity and support life interdependently. Lakes also regulate the water cycle and influence local climate by moderating surrounding

²⁸Dinarjati Eka Puspitasari, "Impact of Water Pollution on Environmental Health from the Perspective of Environmental Law (Case Study: Code River, Wirogunan Village, Mergangsang District and Prawirodirjan Village, Gondomanan District, Yogyakarta)," *Jurnal Mimbar Hukum* 21, no. 1 (2009): 24.

²⁹Purwoko R. M., "Panglima Danau sebagai Model Pengelolaan Sumber Daya Berkelanjutan Berbasis Kearifan Lokal di Danau Aneuk Laot" (Lake Commander as a Model for Sustainable Resource Management Based on Local Wisdom at Lake Aneuk Laot), *Jurnal Kebijakan Perikanan Indonesia* 13, no. 1 (2021): 11.

temperatures. In addition to ecological functions, lakes serve as valuable resources by supplying clean water, providing food, and generating economic benefits for local fishing communities.

The benefits of lakes extend beyond environmental aspects and encompass social and economic dimensions. Apart from supplying water for the daily needs of Gampong Aneuk Laot residents, the lake also supports sustainable fisheries and contributes significantly to human livelihood and regional economic development. Its natural beauty presents opportunities for tourism, which can boost local income and welfare. Moreover, the lake functions as an ecologically rich resource and is a vital asset for the people of Sabang City as a whole. This was reinforced by the Acting Village Chief, Edi Firmansyah, who emphasized that the lake plays a vital role for the people, particularly those in Gampong Aneuk Laot. The community depends on the lake for income, which encourages strong awareness and commitment to its preservation.

Aneuk Laot Lake provides various functions and benefits for the local community, especially in Gampong Aneuk Laot. The support and active involvement of residents in maintaining and preserving the lake have had a clearly positive impact. It is undeniable that the lake remains a focal point of attention for village authorities and the local population.

Active participation in lake conservation yields many benefits, particularly because the lake water is used for daily needs. For fishers, the lake serves as a source of livelihood through fish catches, both for consumption and sale. Farmers near the lake also depend on its water to irrigate crops and meet various agricultural needs. Thus, Aneuk Laot Lake is not only a vital natural resource but also an economic and ecological asset that must be preserved.

The role of the government, particularly the Sabang City administration, in preserving Aneuk Laot Lake is crucial for maintaining environmental balance and ensuring the sustainability of local and non-local communities. The government's role in lake conservation includes supervision, funding, and providing education to the public. Government initiatives include enforcing regulations on lake usage, especially concerning economic activities like agriculture and household water use. These regulations help prevent pollution caused by deforestation around the lake and reduce irresponsible business practices that may harm the lake's ecosystem.

The Sabang City government also plays an important role in facilitating communication and coordination among various community elements, particularly with village officials, to ensure effective lake conservation efforts. Government presence that aligns with local values and collective interests will elevate the lake's role not only as a center of social activity but also as a crucial source of income for the population.

As a responsible authority, the government conducts environmental monitoring and protection to maintain the lake's natural state and sustain its biodiversity. Ibnu Hajar, a representative from the Department of Environment and Sanitation (DLHK), confirmed that the government continues its efforts to maintain cleanliness around the lake. One concrete step is the daily garbage collection by DLHK staff from residents' homes in Gampong Aneuk Laot. This measure aims to prevent environmental pollution and keep the lake water clean, thereby preserving the natural resources sustainably.³⁰

³⁰Interview with Hajar, I., Officer at Environmental and Sanitation Agency, October 24, 2023.

CONCLUSION

Aneuk Laot Lake plays a crucial role in the lives of the residents of Gampong Aneuk Laot, encompassing environmental, social, cultural, and economic aspects. The lake serves not only as the primary source of clean water for the community but also supports the fisheries, agriculture, and tourism sectors, which contribute to the economic well-being of the local population.

Community awareness and participation in preserving the lake are remarkably high, particularly in maintaining cleanliness and the sustainability of its ecosystem. However, the main challenge comes from outsiders who lack the same level of awareness in maintaining the lake's cleanliness. To address this issue, the Panglima Danau (Lake Commander) and village officials have taken preventive measures, such as installing warning posters and educating the public. Moreover, the role of the Sabang City Government, especially the Department of Environment and Sanitation (DLHK), is vital in maintaining the balance of the lake's ecosystem. Waste management programs and environmental monitoring carried out by the government help preserve the lake from pollution.

Customary laws are also implemented at Aneuk Laot Lake as a form of local wisdom to maintain ecological balance. One such regulation is the prohibition of using poison to catch fish, as this can damage the lake's ecosystem. Lake fishermen have specific times and conditions for fishing—only allowed from Thursday evening to Friday morning, between 7:00 p.m. and 7:00 a.m.—which differs from sea fishermen, who do not face such time restrictions. Additionally, local customs prohibit fishing on certain days, such as during Eid al-Fitr, Eid al-Adha, Indonesia's Independence Day on August 17, and on December 26 to commemorate the tsunami disaster. The lake ritual, known as khanduri danau, is also an important tradition of the local community, typically held at least once every three years or as agreed upon by the fishermen.

Through collaboration between the community, the government, and relevant stakeholders, along with the implementation of customary laws that support lake conservation, Aneuk Laot Lake is expected to remain a well-preserved natural resource for the community. The lake functions not only as a water source and livelihood but also as an ecological and tourism asset that contributes to the sustainable development of Sabang City.

BIBLIOGRAPHY

- Alfata, Awiska, Elly Malihah, and Rini Andari. 2022. "Peran Masyarakat terhadap Pelestarian Wisata Alam Danau Gunung Tujuh pada Wilayah TNKS." *Syntax Idea* 4 (2): February. ("Community Roles in Preserving Natural Tourism at Lake Gunung Tujuh in the TNKS Area.")
- Anastasya, Oliy, Siti Mulghimma, Anggraeni M.S. Lagalo, and Desriskha Talib. 2022. "Partisipasi Masyarakat Terhadap Pengembangan Daya Tarik Wisata Danau Limboto Desa Pentadio Barat Kabupaten Gorontalo." *Tulisan Ilmiah Pariwisata* 5 (1): 30. ("Community Participation in Developing Tourist Attractions at Lake Limboto, Pentadio Barat Village, Gorontalo Regency.")
- Bleszinsky, G. 2019. "Partisipasi Masyarakat dalam Lingkungan di Kawasan Pantai Padang." *Journal of Education on Social Science* 3 (1): 3. ("Community Participation in the Environment of Padang Coastal Area.")

- Braun, V., and V. Clarke. 2006. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology* 3 (2): 77–101.
- Creswell, J.W. 2014. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 4th ed. Thousand Oaks, CA: Sage.
- Endah, N.H., and M. Nadjib. 2022. "Pemanfaatan dan Peran Komunitas Lokal dalam Pelestarian Danau Maninjau." *Jurnal Ekonomi dan Pembangunan* 25 (1): 55–67. ("Utilization and Role of Local Communities in the Conservation of Lake Maninjau.")
- Esterberg, K.G. 2002. *Qualitative Methods in Social Research*. Boston: McGraw-Hill.
- Fatoni, A. 2011. *Metodologi Penelitian dan Teknik Penyusunan Skripsi*. Jakarta: Rineka Cipta. (*Research Methodology and Thesis Writing Techniques*.)
- Fiantika, F.R., et al. 2022. *Metodologi Penelitian Kualitatif*. Padang: PT Global Eksekutif Teknologi. (*Qualitative Research Methodology*.)
- Firdaus, M., and S. Murlianti. 2024. "Partisipasi Masyarakat dalam Program CSR PT Pertamina Hulu Mahakam 'Petani Maju 4.0' di Kelurahan Sanipah." *eJournal Pembangunan Sosial* 12 (3): 257–270. ("Community Participation in CSR Program 'Petani Maju 4.0' by PT Pertamina Hulu Mahakam in Sanipah Subdistrict.")
- Junus, N. 2023. "Peningkatan Kesadaran Masyarakat Bantaran dalam Menjaga Kelestarian Danau melalui Pemanfaatan Alat Tangkap Berbasis Kearifan Lokal." *Jurnal Pengabdian Masyarakat* 3 (1): January. ("Raising Awareness of Riverbank Communities in Preserving the Lake through the Use of Fishing Gear Based on Local Wisdom.")
- Kvale, S., and S. Brinkmann. 2009. *InterViews: Learning the Craft of Qualitative Research Interviewing*. 2nd ed. Thousand Oaks, CA: Sage.
- Mawardi, J.M. 2009. *Sosiologi*. Lampung: Pusat Studi Islam dan Kebudayaan. (*Sociology*.)
- Miles, M.B., A.M. Huberman, and J. Saldaña. 2014. *Qualitative Data Analysis: A Methods Sourcebook*. 3rd ed. Thousand Oaks, CA: Sage.
- Moleong, L.J. 2017. *Metodologi Penelitian Kualitatif*. Revised ed. Bandung: Remaja Rosdakarya. (*Qualitative Research Methodology*.)
- Patton, M.Q. 2015. *Qualitative Research & Evaluation Methods: Integrating Theory and Practice*. 4th ed. Thousand Oaks, CA: Sage.
- Puspitasari, E.D. 2009. "Dampak Pencemaran Air terhadap Kesehatan Lingkungan dalam Perspektif Hukum Lingkungan (Studi Kasus Sungai Code di Yogyakarta)." *Jurnal Mimbar Hukum* 21 (1): 24. ("The Impact of Water Pollution on Environmental Health in the Perspective of Environmental Law (Case Study of the Code River in Yogyakarta).")
- Purwoko, R.M. 2021. "Panglima Danau sebagai Model Pengelolaan Sumber Daya Berkelanjutan Berbasis Kearifan Lokal di Danau Aneuk Laot." *Jurnal Kebijakan Perikanan Indonesia* 13 (1): 11. ("Panglima Danau as a Sustainable Resource Management Model Based on Local Wisdom at Lake Aneuk Laot.")
- Rahma, D.A., and P. Permadani. 2024. "Dampak Sosial Masyarakat dari Pendangkalan Danau Rawa Pening." *Jurnal Ilmiah Mediasi* 3 (2): 141–153. ("Social Impact of Lake Rawa Pening Sedimentation on Local Communities.")
- Simar, Mata, and Rosdiana. n.d. "Partisipasi Masyarakat dalam Pelestarian Kawasan Danau Toba (Studi Kasus: Kecamatan Balige Kabupaten Toba Samosir - Sumatera Utara)." <https://repositori.usu.ac.id/handle/123456789/80309?show=full> ("Community

- Participation in Conserving the Lake Toba Area (Case Study: Balige Subdistrict, Toba Samosir District, North Sumatra)."*)
- Watania, H.A., E.E. Poli, and X.E. Lobja. 2021. "Partisipasi Masyarakat dalam Pelestarian Danau Tondano di Kabupaten Minahasa." *GEOGRAPHIA: Jurnal Pendidikan dan Penelitian Geografi* 2 (1): 104–109. ("Community Participation in Conserving Lake Tondano in Minahasa District.")
- Wawancara dengan Daud, S. 2023. Pawang Danau Aneuk Laot, 24 Oktober. (*Interview with Daud, Lake Aneuk Laot Guardian, October 24, 2023.*)
- Wawancara dengan Hajar, I. 2023. Pegawai Dinas Lingkungan Hidup dan Kebersihan, 24 Oktober. (*Interview with Hajar, Officer at Environmental and Sanitation Agency, October 24, 2023.*)
- Widyanto, T. 2017. "Kajian Parameter Kimia dan Mikrobiologi Danau Aneuk Laot sebagai Sumber Air Baku Masyarakat Kota Sabang Provinsi Nanggroe Aceh Darussalam." *Jurnal Limnotek: Parairan Darat Tropis di Indonesia* 24 (2): 87. ("Study of Chemical and Microbiological Parameters of Lake Aneuk Laot as a Raw Water Source for Sabang City, Aceh Province.")
- Yusuf Al-Qardhawy Al-Asyi. 2019. *The History of Aceh: Mengenal Asal-Usul Nama, Bahasa, dan Orang Aceh*. Banda Aceh: Yayasan Pena Banda Aceh. (*The History of Aceh: Understanding the Origins of Aceh's Name, Language, and People.*)