



Analysis of the form of local wisdom of the Selamat Village Community, Aceh Tamiang Regency in the management and conservation of water resources

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Abstract. *Water resources are essential in meeting living things' needs. Water resources management efforts are needed so that water resources are maintained in their sustainability. The community manages and uses water according to local wisdom to meet its water needs. Local wisdom is an effort to preserve water and the environment. This study analyzed the forms of local wisdom in Selamat Village and the community's implementation in preserving water resources. The methods in this study were qualitative, field observations, taking pictures, and direct interviews. The results of this study are a form of local wisdom that prohibits tourists from visiting the Alur Batu Waterfall and closes the access road to the Alur Batu Waterfall. The Selamat Village community does not want the stone groove to be used as a tourist spot by the government, thus closing the road access to the stone groove and using the stone groove as a source of water. This research informs readers about the forms of local wisdom in Selamat Village. In this study, there are still shortcomings in obtaining data due to limited time and suggestions from the author for the next researcher to present more accurate data.*

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INTRODUCTION

Water is a natural resource indispensable for human life, other living things, and the environment (Sulastriyono 2009). Almost all human activities in the world can not be separated from the element of water (Triastianti et al. 2017). According to Aulia and Dharmawan (2010), water resources are an essential element for the life of living things in continuing their lives, especially for humans; the existence of water has many benefits and plays a vital role that can be used for drinking water, washing, cooking, and irrigating agricultural land in rice fields. The available water resources on the earth's surface are limited in number (Antara 2021). According to Cosgrove and Loucks (2015), water resources are essential in creating everything we produce. They cannot be replaced even though they are renewable but limited.

The management of water resources found on the earth's surface is not going well. According to Widarmanto (2018), water management in Indonesia faces obstacles to meeting the needs of people's lives, thus causing people to manage water resources illegally. Weningtyas and Widuri (2022) argued that managing and utilizing water resources in various interests gave rise to various conflicts of interest, such as the seizure

of water resources for irrigation and industrial activities. Water resource management that is carried out well will improve human welfare and vice versa. If the management of water resources is carried out incorrectly will hurt humans in meeting their daily needs (Reza and Hidayati 2017). Based on *Undang-Undang Republik Indonesia No 17 Tahun 2019*, water resources management is a basic framework for planning, implementing, monitoring, and evaluating activities for conservation, utilization of water resources, and control of water damage. According to Saefudin et al. (2019), water resources must be maintained so that they are not polluted and cause disasters that affect human life.

The water resources management carried out by the community is different in each region. Good quality and good management of water resources must be balanced with wise use by humans in their activities (Fakhriyah et al. 2021). Water resource management must harmonize social, environmental, and economic functions to balance availability and demand (Antara 2021). Water resource management must be adapted to local conditions and the local wisdom of each region's community with different characteristics (Fasni et al. 2020). Hidayati (2017) argues that the community manages and utilizes existing water resources is carry. Siswadi et al. (2011) suggests that local wisdom can guide human behavior and attitudes in conserving water resources through various forms of physical activity and certain rituals. Location wisdom guides attitudes and behavior in conserving water resources in ritual, physical, and incidental activities (Siswadi et al. 2011). With local wisdom, the community can face various water resource crises they will face in the future (Weningtyas and Widuri 2022).

Local wisdom is unique to study, which can increase knowledge about various human behaviors in maintaining water resources and the environment according to their respective customs and cultures. According to Yuliani and Aprilina (2020), local wisdom is a positive human action in interacting with the environment and the surrounding nature that comes from the advice of ancestors and traditional values or local culture that are built naturally in a group to be able to adapt to their local environment. Local wisdom commonly found in the community includes beliefs, sanctions, special rules, and cultural values (Admojo et al. 2018). Local wisdom can be formed because of the need for values, norms, and rules to be a model in acting (Hilman and Hendriawan 2018). Local wisdom is essential in conserving water resources (Nugraha 2020).

This study examines the form of local wisdom of the Selamat Village community, Tenggulun District, Aceh Tamiang Regency. This research is essential because the people of Selamat Village have local wisdom that is different from other regions, namely the ability of the community to maintain sustainability in managing water resources by not allowing the flow. This study examines local wisdom in protecting water resources, "waterfalls of stone grooves." This study aims to determine the form of the local wisdom of Selamat Village in conserving its water resources and to analyze the local wisdom of the community in managing water resources.

RESEARCH METHOD

This research was conducted in Selamat Village, Tenggulun District, Aceh Tamiang Regency (Figure 1). This research is an observational study in the form of data collection, image documentation, and structured interviews with the community in Selamat Village to obtain facts based on understanding the research subject. This study uses a qualitative approach to identify local wisdom in Selamat Village and describe local wisdom based on scientific theory. It takes 5 (five) days to conduct research from September 15 to 20, 2021.

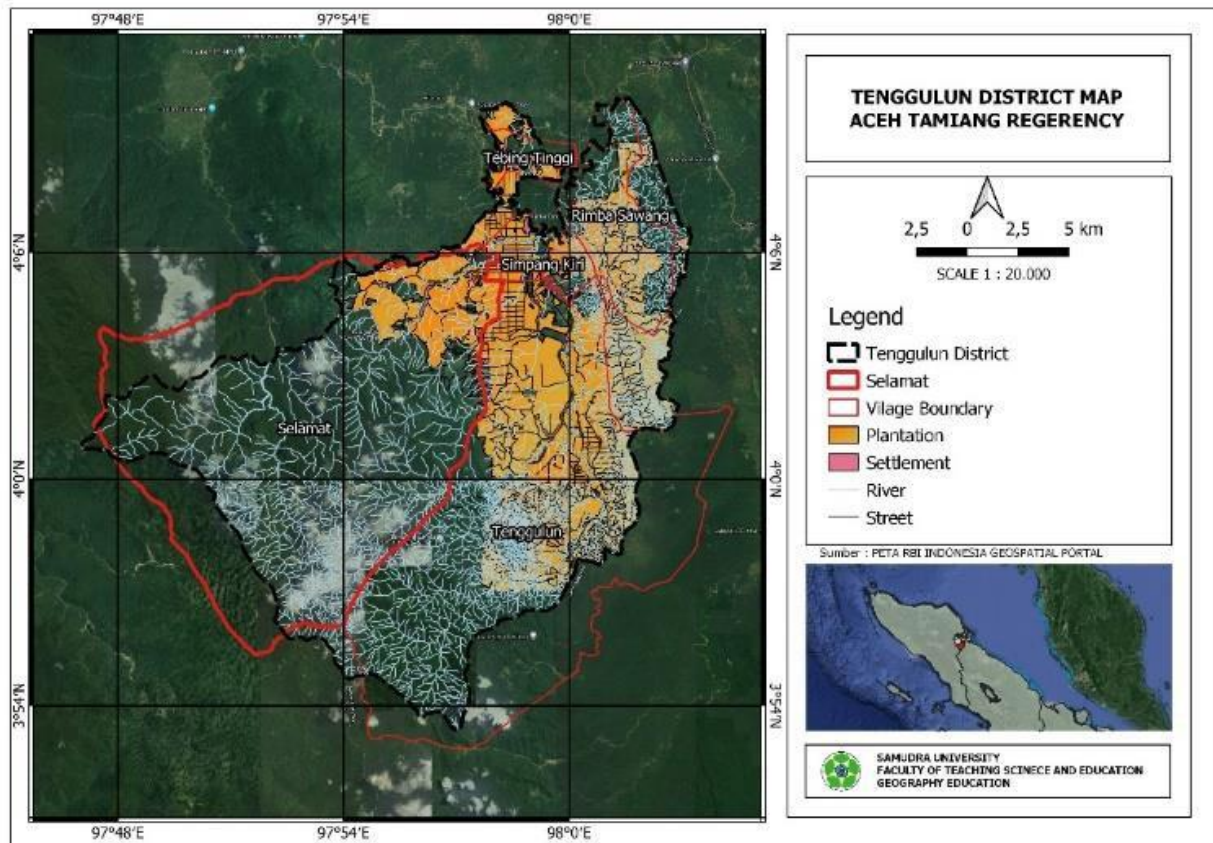


Figure 1 Research Map Location

RESULTS AND DISCUSSION

Alur Batu Waterfall is in the hamlet of Selamat Village, Tenggulun District, Aceh Tamiang Regency. Alur Batu Waterfall is at the foot of Awang Hill. Alur Batu Waterfall has two waterfall streams. The land status at the Alur Batu waterfall is still a protected forest area. The main attraction of the Alur Batu waterfall is its beautiful and incredible natural scenery. The water is also apparent and clean; to get to the stone groove waterfall takes about 45 minutes or the same as 4 km (Figure 2).

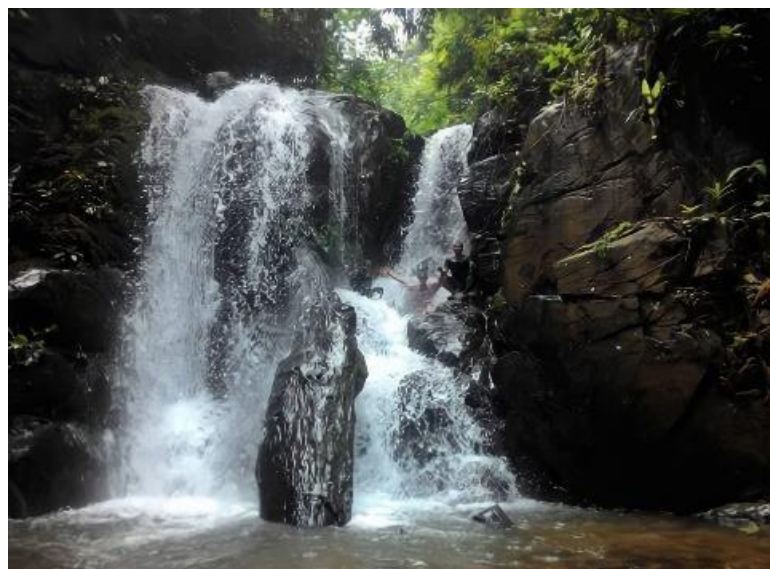


Figure 2 Alur Batu Waterfall

The closer to the Alur Batu Waterfall, the visitors will feel the wind blowing harder. When visitors come to the Alur Batu Waterfall, visitors will see large rocks around the waterfall and the combination of trees and sand on the riverbank, making this waterfall very beautiful when viewed up close and from a distance. During the rainy season, the Alur Batu Waterfall cannot be visited due to the large water discharge, which makes the water in the Alur Batu Waterfall flood it, endangering visitors who come. Still, this place is not dangerous to visit during the dry season because the water is evident. The scenery is also beautiful, making visitors not regret it if they arrive at the stone groove waterfall. This waterfall is also no less beautiful and exciting than other waterfalls. Selamat Village, located in the Tenggulun sub-district, Aceh Tamiang Regency, has water resources in the form of waterfalls that are still hidden and unknown to many people. Alur Batu Waterfall is a tourist area built by the Aceh Tamiang district government. Still, the community does not want Alur Batu Waterfall to be used as a tourist spot, so they closed the access road to the Alur Batu Waterfall. The closure of road access by the public is carried out without the knowledge of the government because people want to make the waterfall a source of water for the necessities of life, not a tourist spot.

The action of the survivors of the village community who closed the access road to the stone groove. Waterfall is a form of local wisdom of the survivors of the village community in preserving water resources. Because local wisdom is a positive human action in interacting with the environment and natural surroundings that comes from the advice of ancestors, local traditional or cultural values are naturally built within a group to adapt to their local environment (Yuliani and Aprilina 2020).

Community wisdom the safe village preserving water resources has been done from time to time; the goal of the safe village community is that their water needs are still met for daily life because the survivors of the village depend on the springs in the Alur Batu Waterfall before the villagers survived using stone grooves as a source of water, the survivors also had sprung, but during the dry season, they experienced a drought, or for that, the villagers survived the water crisis using what nature provided to meet their living needs. Funds for managing clean water sources in Alur Batu Waterfall come from the village fund budget from the surrounding community. The funds are used to buy equipment for clean water, such as water hoses, pipes, and ropes to channel clean water from the Alur Batu Waterfall to the residents' houses. Clean from the waterfall, the village community survived having to pay every month.

There is a large dam in the center of the height of Alur Batu, and the dam is used as a water reservoir. Then water is channeled into pipelines around the waterfall flow, and the pipe is used to channel water to residents' homes, even though the access road to the Alur Batu waterfall has been closed by the local community. But there are still visitors who are desperate to come to the Alur Batu waterfall. The reason visitors come to the Alur Batu waterfall is to see the beauty of the waterfall.

Interview Results

Based on interviews from the community, Alur Batu Waterfall is a place managed by the Regional Tourism Development Master Plan (RIPPARDA/*Rencana Induk Pembangunan Kepariwisata Daerah*) to be used as a tourist spot. However, the community took over the management because the community used the Alur Batu Waterfall as a water source. The community considers that if the Alur Batu Waterfall is used as a tourist spot, it will damage the sustainability of its springs. Hence, the community closes the access road to the Alur Batu waterfall. The community also said that the community pays monthly to get clean water from the Alur Batu waterfall; the village apparatus manages the funds. Then the funds are used for the needs of the village community so that the village community can safely get clean water from the Alur Batu Waterfall.

While conducting field observations of the Alur Batu waterfall, researchers found several oddities, such as the prohibition from the community "Don't go there, and it's flooded. If you go there, don't litter". It turned out that after the researchers arrived at the location of the Alur Batu waterfall, they did not see any flooding. It turns out that such a ban was made by the community so that the waterfall is preserved, and people are worried that the arrival of visitors will damage the sustainability of their clean water source.

Efforts of the Selamat Village Community in Preserving Water Resources

The survivors of the village community in the Tenggulun Subdistrict have taken various ways to preserve the existing water resources of the village. The way the community does this is to close the road to the Alur Batu Waterfall. The community also refuses the Alur Batu Waterfall to be used as a tourist spot by the Aceh Tamiang district government. Therefore, the community manages the Alur Batu Waterfall as a water source. The community also forbids visitors who come not to litter around the flow of the Alur Batu Waterfall; the reason the community does all that is that they want to preserve the spring resources at the Alur Batu waterfall; they don't want visitors who come later to damage the sustainability of the source. Springs and will pollute the surrounding environment; by closing the access road to the stone groove, it turns out that this place is not widely known to people; only a few people have come to the stone groove waterfall around the stone groove river; there is no trash or dirt found because The survivors of the village still take care of the surrounding environment and also take great care of the springs in the Alur Batu waterfall so that its sustainability is maintained, the Alur Batu Waterfall is very clean and also very clear, the viewer is also beautiful, no less attractive than other waterfalls.

The village survivors are still very concerned about preserving the environment around the stone. For that, the community also forbids cutting down trees because cutting down trees is considered to damage the environment; anyone who cuts trees will be subject to a fine, according to how many trees are cut; this is very important. It would be exciting to study more deeply how local wisdom has a good impact on environmental sustainability. Lestari et al. (2021) people also want their water resources not to be used for current needs but also for future needs for children so their grandchildren will not lack water. The community also believes that nature has provided many benefits for the needs of people's lives, and the community makes good use of what nature provides. The efforts of safe villagers in conserving water resources are the way for safe villagers to maintain the form of wisdom locally in the village of Selamat.

CONCLUSIONS

Selamat Village, which made the waterfall a stone groove into its water source, a local Wisdom Forms village, survived to conserve its water resources by closing the access road to the waterfall stone groove. The village survivors do not want the government to manage the Alur Batu waterfall as a tourist spot, for that, the community takes over the management of the Alur Batu waterfall without the knowledge of the government. The survivors of the village community manage Alur Batu Waterfall as a source of water in the safe village, in managing the Alur Batu waterfall, the village community meets to collect village funds, the funds are used to buy necessities in clean water management, such as water hoses, pipes, and ropes. To channel clean water from the stone groove waterfall to people's homes.

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