



Contents lists available at [Journal IICET](#)  
**JPPi (Jurnal Penelitian Pendidikan Indonesia)**  
ISSN: 2502-8103 (Print) ISSN: 2477-8524 (Electronic)  
Journal homepage: <https://jurnal.iicet.org/index.php/jppi>



## Local wisdom tradition of maintenance of the upstream river

Ine Kusuma Aryani<sup>\*)</sup>, R. Beny Wijarnako Kertopati

Postgraduate Basic Education Program, University of Muhammadiyah Purwokerto (53182), Indonesia

### Article Info

#### Article history:

Received Apr 24<sup>th</sup>, 2024  
Revised May 12<sup>th</sup>, 2024  
Accepted Jun 01<sup>st</sup>, 2024

#### Keyword:

Local wisdom,  
Upstream river

### ABSTRACT

Various local wisdoms are used as the center of life, obeyed, revered and given a special place by every individual. Until now, these individuals still adhere to local wisdom passed down from generation to generation as the community's cultural heritage, namely the tradition of protecting the upper reaches of the Logawa River for the people of Baseh Village. A form of local wisdom in improving community welfare by relying on the values of ancestral teachings. The aim of this research is to examine local wisdom in the maintenance and utilization of the upstream area of the Logawa River in Baseh Kedungbanteng village, Banyumas Regency, to reveal cultural character biases related to human actions related to the natural surroundings where the community resides. This research uses a case study method which focuses on one particular object to be used as a case. Baseh Village, Kedungbanteng District. Data was obtained through studying the interconnectedness of evidence from several data sources at once, namely documents, recordings, observations, open, focused and structured interviews, as well as documentation studies. The results of the research show that the true meaning is revealed, namely increasing the welfare of society both economically and for the common good. their daily needs. Research on local wisdom traditions in upstream river maintenance can be an important basis for development policies and sustainable practices in managing river ecosystems throughout the world.



© 2024 The Authors. Published by IICET.

This is an open access article under the CC BY-NC-SA license  
(<https://creativecommons.org/licenses/by-nc-sa/4.0>)

### Corresponding Author:

Ine Kusuma Aryani  
University of Muhammadiyah Purwokerto  
Email: [inepascapendas@gmail.com](mailto:inepascapendas@gmail.com)

## Introduction

In a community that has the same culture, culture is understood as a way of life that develops and is shared by an indigenous community and is passed down from generation to generation (Setiyawan, 2020). Culture is the result of creativity, initiative, and taste. Culture is owned by every nation, therefore the culture of each nation is different from each other (Rosana, 2017). The form of culture, which is quite a lot, is divided into several elements of culture universally, which include belief systems (religion), knowledge systems, livelihoods, tools and equipment for human life, social systems, language, and the arts. Culture continues to develop from generation to generation considering the increasing human needs and also continue to develop in various aspects of life. The culture that continues to develop eventually influences cultural changes in each region. Most of the ancestral cultural values have been abandoned because they are considered not in accordance with the times (Ridwan, 2015). However, in some areas there are still groups of people who adhere to their ancestral culture (Fakhri et al., 2021; Firdaus, 2017). In fact, this culture has been preserved until now, the people of Baseh Village, Kedungbanteng Banyumas District, are projected in a form of tradition of environmental care and customary rituals that are still adhered to from generation to generation until now, to become a local wisdom.

Conceptually, Indonesia is blessed with a lot of wisdom values that originate both from traditional society and from existing religions (Fikri, 2018). The ethical and moral teachings that grow in traditional societies have a very strong context in relation to environmental preservation (Utsman, 2018). Traditional wisdom is basically a habit that lives in society which is passed down from generation to generation and becomes the practical value of that society to preserve the environment, including their cultural environment. Each community group generally has wisdom so that a study of it will provide benefits in the process of community development (Mujahidin, 2017). Traditional knowledge systems especially those developed to manage natural resources are usually very concerned about the sustainability and balance of the natural environment. In the belief system of ancient society and today's society whose traditions are still strong, nature is highly respected, even tends to appear to be revered (Kaltsum et al., 2022). Local wisdom will always be connected to human life living in a wise environment. Because the environment is a unitary space with all the objects in it, both living and inanimate things (Sartini, 2004). In the Law of the Republic of Indonesia Number 23 of 1997 concerning the main provisions for environmental management it is stated that the environment is a spatial unit with all objects, natural resources, and living things, including humans, and their behavior which affects the continuity of life and human welfare and other living things.

A harmonious and balanced living environment is needed as a determinant of the life of a nation. Ideally, the utilization of the environment must pay attention to the maintenance and preservation of the environment so that it can be passed on to future generations. Every utilization of the environment must have a purpose, such as achieving harmony, harmony and balance between humans and the environment (Rochman, 2020). The realization of Indonesian people as environmental people who have attitudes and actions to protect and foster the environment (Silam et al., 2023). Ensuring the interests of the present and future generations (Sugirman, 2023). Achieving sustainability of environmental functions; controlled use of resources wisely; protection of Indonesia against external impacts that can cause environmental pollution or damage (Dadi, 2022).

Environmental sustainability is influenced by an environment that is dominated by man-made structures which are a maintained environment (Liu et al., 2022). Man-made buildings and infrastructure are responsible for the majority of energy use, use much of the water that comes from rivers, and generate large amounts of waste. Ideally, a building should operate as efficiently as possible (Hussin et al., 2013). Efficiency is one of the foundations of sustainable design, which affects all aspects of a project, from location determination, space planning, material use, and systems (Akadiri et al., 2012). Therefore, the planners and designers of the river flow apart from creating beauty, sustainability and use of water with due regard to efficiency, convenience and the influence of the existence of the use of the river flow on the surrounding environment. Energy efficiency is at the heart of today's green design practices (Qaisra et al., 2024).

Development that meets the needs of the present without compromising its ability to meet the needs of future generations is sustainable development (Husaini et al., 2023). Sustainable development must pay attention to the utilization of the environment and environmental sustainability so that environmental quality is maintained (Febriani et al., 2023). Environmental sustainability that is not maintained will cause the carrying capacity of the environment to decrease, or even disappear. Sustainable development means that social justice has been achieved from generation to generation (Langhelle, 2000). Viewed from another understanding, sustainable development is national development that preserves the functions and capabilities of ecosystems (Holden et al., 2017).

The principle in productivity management is to be effective in achieving goals and efficient in using natural resources, especially river water. The elements contained in productivity include efficiency, effectiveness, and quality (Sarjono, 2001). Efficiency is a measure in comparing the planned use of inputs with the actual use of inputs implemented. The definition of efficiency is oriented to input (Gusti & Susanti, 2019). Meanwhile, effectiveness is a measure that gives an idea of how far the target can be achieved both in terms of quantity and time. The greater the percentage of targets achieved, the higher the level of effectiveness (Dua & Rumerung, 2022). And quality is one measure of productivity. Although quality is difficult to measure mathematically through the output/input ratio, it is clear that the quality of the input and the quality of the process will improve the quality of the output. Increased productivity in the community sector increases environmental productivity (Muhammad et al., 2014). Improvement in the government sector increases the productivity of institutions and in the private sector increases the productivity of companies.

The results of increasing company productivity have proven to have benefited all stakeholders, starting from the traditional leaders or stakeholders themselves as policy holders to users, namely the community as consumers. Increasing the productivity of river flow utilization also provides great benefits to the government in terms of increasing usability and expanding usability opportunities which are urgently needed in line with the growing demands of society. Therefore, the government is continuously trying to encourage and facilitate increased productivity in the use of river water such as economic value, government productivity such as

establishing mandatory clean-living rules by not making river flows as garbage dumps, and community productivity such as maintaining the environment around river basins.

The productivity of the community in the river basin environment is carried out wisely. By utilizing natural resources in ecosystems productively and carrying out environmental conservation wisely, it can create a productive environment with sustainable local wisdom. Another local wisdom is in the form of pamali culture which is well known and is a mandate that has been passed down from generation to generation since hundreds of years ago. This local wisdom is a belief of the people of Baseh Village, Kedungbanteng District, Banyumas regarding the tradition of protecting the environment which has developed into a norm that regulates the behavior of local people. Taboo or pamali is expressed in expressions which are the main principles put forward by kuncen as customary rules that must be obeyed and believed to be true. Local wisdom and culture are carried out wisely, for example; Trees have benefits not only as greenery but also as a good source of life for the purpose of firewood, for boiling water, cooking food, even certain plants contain medicinal substances, food, dyes, and so on. Elsewhere, certain species of trees can be used as shade for family picnics. This means that plants are a source of life, and are then continuously maintained through local wisdom. However, in some areas there are still groups of people who adhere to their ancestral culture.

Even that culture is still preserved until now. In Baseh Village, Kedungbanteng District, which is the headwaters of the Logawa River, they still believe in taboos on cutting and carrying trees at the Baturagung ancient site, a tradition that is still adhered to from generation to generation until now. in the form of abstinence which are the main principles put forward by the traditional leader and kuncen as customary rules that must be obeyed and believed to be true. These community norms and behaviors become a form of local wisdom. In general, the formulation of the research problem in this research is to reveal the meaning of the tradition of maintaining the upstream of the river for the people of Baseh Village, Kedungbanteng District, Banyumas Regency. The aims of this study are as follows: a) to analyze the form of local wisdom in improving people's welfare, b) to analyze the background of the people of Baseh Village, Kedungbanteng Sub-District, who are persistent in maintaining the headwaters of the Logawa River, c) To analyze how far the knowledge of the people of Baseh Village, Kedungbanteng District, upstream of the Logawa River .

The urgency of this research is expected to be useful both theoretically and practically, namely as follows: The results of this research are expected to be useful in contributing to related parties, including as a medium for indigenous education and the development of local wisdom patterns. So researching the process of traditional leadership succession is considered urgent. Referring to a research on water and environmental conservation based on local wisdom in the Motoindro Djoko Rahardjo and Aniek Prasetyaningsih Faculty of Biotechnology UKDW area aniek@staff.ukdw.ac.id,djoko@staff.ukdw.ac.id (2015), where Lake Motoindro is a very important lake for the Girisuko community, especially Padukuhan Temuireng II as a source of clean water. During the rainy season, this lake is full of water but in the dry season the lake water seems to disappear and overnight the lake water has started to run out. This incident has occurred since 2012, which is thought to be due to natural disasters (earthquakes) and damage to the environmental conditions around the lake area due to the practice of changing land use and logging of trees. Considering this, it is urgent to immediately carry out a water and environmental conservation program in the Motoindro lake area, with the aim of raising awareness, community participation to protect the lake area and consciously carry out environmental conservation movements and restore environmental conditions in the lake area and water conservation.

The program was carried out for 4 months, starting from observing and identifying needs, assisting community groups, preparing programs, developing partnerships, implementing conservation actions around the area and training and forming conservation cadres. From this program, the community, represented by youth groups and several community leaders, realized that it was the community that had to be responsible for restoring the environmental conditions of the lake, and through mentoring of the community service program, the community was able to develop programs, establish partnerships and have skills in carrying out lake conservation as shown. with the establishment of conservation cadres. The conservation of the lake is carried out by planting various fruit plants which will be carried out in two stages, namely the symbolic planting of 300 fruit tree seedlings and for the next stage, 1200 fruit plant seeds will be available as assistance from the Djarum Foundation. For symbolic planting carried out by partners and sponsors, including the District Government, District, Village Head, Oikomune Foundation, Chancellor, Dean of the Faculty of Biotechnology and Dean of the Faculty of Architecture and Product Design, Public Relations Plaza Ambarrukmo.

The next stage of the planting program will be carried out by community members coordinated by the Head of Girisuko Village and Pastor Yusak Mardiko. Meanwhile, for the assistance of forest plant seeds, as many as 3,750 donations from BP Serayu watershed, Opak Oya and the Yogyakarta Special Region Provincial Forestry Service will be coordinated by the Panggang sub-district head and specifically allocated to the forest area around the motoindro lake area. Adding to the repertoire of this research is supported by research on environmental

management studies in the Sindoro Cleft Mountain area (Case Study in Need Village and Sigedang Village, Wonosobo Regency) (Redjeki et al., 2008). The study in this study aims to reveal the Environmental Management of the Mount Sindoro Sumbing Area as a conservation area contained in the 2007 Wonosobo District Spatial Plan (RTRW). There is. Land management that is not in accordance with conservation principles is suspected as one of the causes of environmental damage in the Mount Sindoro Sumbing area. In order to identify the level of land damage, to analyze the factors that cause land damage and to recommend improvements in the management of the Mount Sindoro Sumbing Area, research was carried out related to the several aspects mentioned above.

The research was conducted in 2 (two) villages in the Mount Sindoro Sumbing area in Wonosobo Regency, namely Sigedang Village, Kejajar District, and Need Village, Kalikajar District. By using a sampling technique that is purposive sample, taken from groups of community leaders, government officials, religious leaders and farming communities. Data collection techniques used are interviews and observation. By performing calculations using the USLE (Universal Soil Loss Equation) approach, it can be seen that the condition of the land in the Sindoro Sumbing area has been damaged with an erosion rate of 108.12 tons/ha/year and an erosion hazard level of 11.26 which is included in the very high category. The condition of the Mount Sindoro Sumbing area is also influenced by land management factors as well as socioeconomic and cultural factors of the local community, including land management patterns that are not suitable for their designation, lack of public knowledge about the importance of the environment, and low community participation in environmental management. With environmental conditions that have been damaged, it is necessary to have a management, one of which is by preparing a detailed management plan for the Sindoro Sumbang area (Action Plan) from existing Regional Spatial Plan.

The implementation carried out must be based on and initiated from a comprehensive economic, social and cultural approach and it is necessary to prepare post-activity concepts so that they are able to shift conventional mindsets to more advanced and wiser ones. In addition, it is necessary to establish a special agency to handle and manage the Sindoro Sumbing area at the district level, which consists of related agencies and/or community organizations related to management activities under the coordination of the Environment Office as an Official Institution appointed and elected by the Regional Government. Landslide disaster mitigation with a noble values approach to the community in the Logawa sub-watershed area, Banyumas Regency. Suwarno\*, Sutomo\*, and Osa Ponco B. (2016) Email, stakeholderlongsor@yahoo.co.id. Community knowledge already knows things that can reduce the incidence of landslides, including if you make pools with cast cement or use tarpaulins, planting perennials with taproots. The value aspect of the launching of the Disaster Care Community Program whose members are spread in several villages. Formation of disaster volunteers starting from the RT level to the village level.

The community is diligent in carrying out greening independently. Aspects of community ethics planting slopes with bamboo trees. Fibrous roots, like those found in bamboo trees, can be used to mitigate floods and landslides, because fibrous roots can firmly grip the ground, absorb water quickly, and are able to withstand soil movement. The community made a slope barrier in the form of sacks filled with sand arranged vertically and horizontally to cover the slope. Many people plant bamboo trees on the slopes. This noble value is a distinctive tradition found in various regions and serves as a guide in people's lives. This study aims to determine the noble values in the community for landslide disaster mitigation efforts in the Logawa sub-watershed area, Banyumas Regency. The method used in this research is a survey method. Sampling using snowball sampling. Types of data include primary data and secondary data. Data collection technique by means of in-depth interviews with a sample of 15 people, and spread in each class of landslide hazard. The data processing technique uses Miles and Huberman, while the data analysis uses descriptive qualitative. This data analysis refers to 4 (four) aspects, namely knowledge of values, norms and ethics. The results of the research are that the noble values that are still maintained by the community for efforts to mitigate land landslides are "knungrumat alam ngrumat tradition karo pranata prey".

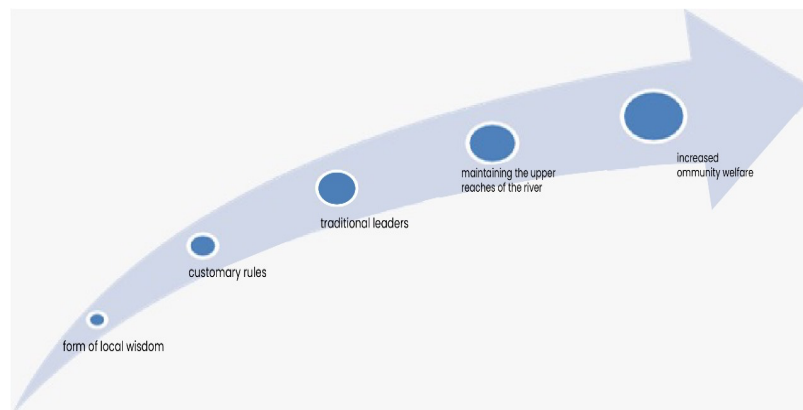
## Method

The subjects in this study or participants were leaders, figures or people who were considered elders in the village of the Baseh Village community and several community members who were willing to be asked for information during the interview process. For data sources, 1) Primary Data is needed, namely a form of local wisdom in improving people's welfare, the background of the people of Baseh Village, Kedungbanteng District, is steadfast in maintaining the headwaters of the Logawa river, knowledge of the people of Baseh Village in maintaining the upstream of the Logawa river; 2) Secondary data, namely the role of leaders, figures or elders or people who are elders of the Baseh village community, in the utilization of the upper reaches of the Logawa river. The subjects in this research or participants were figures, figures or people who were considered elders in the Baseh Village

community and several community members who were willing to be asked for information during the interview process. The village figures or elders or also called "kokolot" are accompanied by the supervision of the Village Head and the local RW, a total of 10 people.

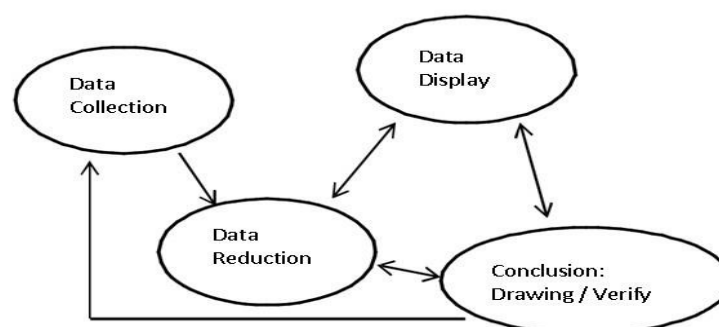
The research subjects or participants were selected based on their understanding of Baseh village, starting from the history of Baseh village to the principles of local wisdom that they adhere to, regarding prohibition culture or "pamali". The research process was carried out for 6 months or until the researcher received information about the research required. For data sources, 1) Primary data is required, namely a form of local wisdom in improving community welfare, the background of the people of Baseh Village, Kedungbanteng District, steadfastness in protecting the upper reaches of the Logawa river, knowledge of the community about Baseh Village in protecting the upper reaches of the Logawa river; 2) Secondary data, namely the role of figures, figures or elders or people who are elders of the Baseh village community, in utilizing the upper reaches of the Logawa river.

The procedures for carrying out the research were: starting from preparation, licensing in accordance with applicable regulations, compiling a research proposal including an introduction, reviewing research theory and methodology, reviewing research sites, compiling research protocols and guidelines for data collection and a detailed schedule. The data collection carried out in this study were: collecting data in the field through observation, interviews and documentation, discussing the data by compiling reflection and reduction, collecting the following data for completeness, and focusing more. The road map in the field under study can be illustrated in Figure 1 below, which is the direction for our research on the local wisdom of using the upper reaches of the Logawa river, Baseh village, Kedungbanteng, Banyumas, namely:



**Figure 1.** Roadmap in this research area

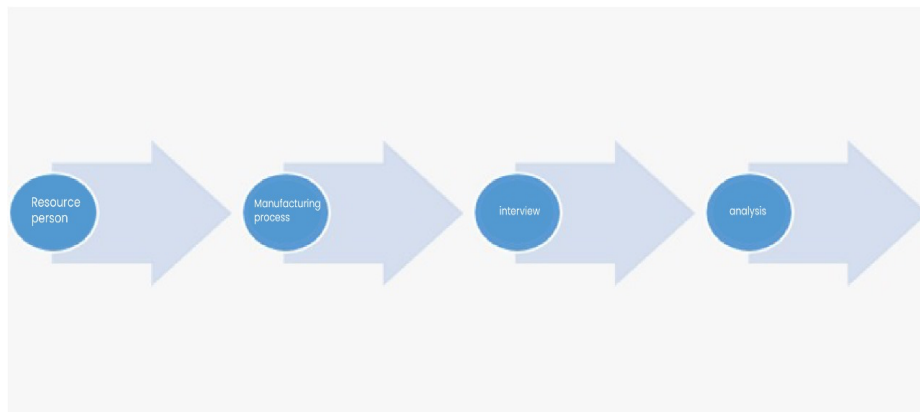
Data analysis in this research is organizing data, sorting data, grouping data so that data can be presented clearly and in detail. If in the preparation of the analysis it turns out that there are unclear and incomplete data, it is necessary to carry out another in-depth collection step. Followed by the preparation of a research report as the last step is to formulate a final conclusion as research finding and compile it in the form of a research report. This research uses a qualitative approach, so this research is an interactive analysis (Sugiyono, 2017). This technique is useful for getting answers to the problems found and then connecting with theories that underlie local wisdom upstream of the Logawa river in improving people's welfare. This analysis technique model starts from the stages of data collection, data analysis, data reduction, data presentation and drawing conclusions or verification. Figure 2 shows the process of analysis with an interactive model as follows:



**Figure 2.** Miles and Huberman Interactive Data Analysis 1

Data Collection, data collection from various sources resulting from observations, interviews and documentation studies. The observations made were examining the headwaters of the Logawa river from the beginning of the upstream up to 15 km following the Logawa river channel to villages that were passed by the Logawa river channel. Interviews were conducted in an open, focused and structured manner with 10 residents who live in villages around the Logawa river channel, including community leaders and elders in Baseh village. The Documentation Study carried out was as evidence for documentation of pictures of the Logawa river channel, during interviews with residents, as well as documentation in the form of references. Data Reduction, reducing data means summarizing, choosing the main things, focusing on the important things, looking for themes and patterns. Thus, the reduced data will provide a clearer picture, and make it easier to carry out further data collection, and look for it when needed. The data collected is the result of interviews with participants, and the results of observations that have been made.

Presentation of Data (Data Display), after the data is reduced, the next step is presenting the data. Data research is presented in narrative text, by displaying data, it makes it easier to understand what happened, plan further work based on what has been understood. Conclusion (Conclusion Drawing), the third step in qualitative data analysis is drawing conclusions and verification. At this stage the researcher drew conclusions and verified data analysis of data from residents including leaders, elders and the Baseh village community. Then, in simple terms, the analysis phase is depicted in Figure 3 as follows:



**Figure 3.** Analysis Stage of Figures, Elders and the Baseh Village Community

Data obtained from the field in the form of interviews and direct observation as well as from documentation studies were analyzed by looking at the maintenance of the upstream of the Logawa river so that they could understand the local wisdom values of the people of Baseh village.

## Results and Discussions

### Forms of local wisdom in improving community welfare

Baseh is a buffer zone for water sources for the downstream areas, namely Purwokerto, Karanglewas and Kedungbanteng. The result of local wisdom in Baseh Village is that the area on the southern slopes of Mount Slamet is maintained. This makes water sources in the Baseh area and its surroundings always abundant in every season. Based on the existing local wisdom principles, there are four things that are prioritized in the forbidden culture which are proven to be maintained, guarded, and implemented by the people of Baseh Village. These four things are forest conservation in Baseh Village, the prohibition on the construction of wells, and the preservation of sacred forests based on these pamali rules. These four things become customary norms that bind the community because they originate from the spiritual beliefs of the people of Baseh Village. Apart from the village head, traditional leaders whose existence is considered important in the Baseh village community are "Youth Leaders" who play a role especially in the maintenance of the natural environment and the upstream water sources of the Logawa River, Banyumas, who seek to conserve water and soil in the motoindro lake area in efforts to increase land productivity, agricultural productivity as well as improve environmental quality and the ability of the environment to absorb and store rainwater.

The background of the people of Baseh Village, Kedungbanteng District, is steadfast in carrying out the ancestral teachings. The noble values taught to the Baseh village community have become a firmly held norm in the form of local wisdom, the community has also understood the conditions and signs taught by their ancestors for generations, including signs of impending landslides. These values teach "alam kueku derumat ben



ora ngawe cilaka" (nature must be cared for and guarded so as not to cause disaster). Knowledge of the Community of Baseh Village, Kedungbanteng District on the Upper Logawa River There is a customary regulation that the community must preserve the watershed (watershed), that is, a distance of 50 meters from a spring cannot be damaged.



**Figure 4.** Protecting nature for the preservation of Ancestral nature and Construction of irrigation troughs upstream of the Logawa River in Baseh Village

The rule is that large trees that are old and located near tabet or makom may not be approached, let alone damaged, because it is considered that the tree has guardians, namely supernatural beings, so if you approach, you are worried that something will happen. Likewise, mutual cooperation activities to clean irrigation canals, grass and trash in the environment and treat trees using natural pesticides using papaya leaves, tree maintenance is carried out routinely between October and November. The community also knows the institution of prey associated with agricultural business activities as a guide in farming activities or self-preparation for disasters. Vegetative soil management can guarantee the continuity of the existence of soil and water because it has the property of maintaining the stability of soil structure through the root system by increasing soil granulation, increasing land cover by litter and crowns thereby reducing evaporation, increasing the activity of microorganisms which results in increasing soil porosity, thereby increasing the amount of infiltration. and preventing erosion, providing economic value to the community so that it can increase income (Hamilton, et.al., 1997).

Communities in the Legawa River Basin area utilize river water as a source of clean water and a source of water for aquaculture. Therefore, efforts are needed to conserve water and soil in the village forest area of Baseh in an effort to increase land productivity, agricultural productivity as well as improve environmental quality and the ability of the environment to absorb and store rainwater. According to Arsyad (2018), soil conservation efforts are aimed at: (1) preventing soil damage by erosion, (2) repairing damaged soil, (3) and determining soil capability classes and actions or treatments so that the land can be used for an unlimited time (continuous).



**Figure 5.** Greening activities in Baseh Village, Kedungbanteng District

Forms of local wisdom in improving people's welfare, that local wisdom and culture are carried out wisely, for example; Trees have benefits as a good source for greening purposes, protecting against landslides, dry branches that can be used as firewood, for boiling water, cooking food, even certain plants contain medicinal substances, food, dyes, and so on. Elsewhere, certain species of trees can be used as shade for family picnics. This means that plants are a source of life, and are then continuously maintained through local wisdom. The background of the people of Baseh Village, Kedungbanteng Sub-District, is steadfast in maintaining the headwaters of the Logawa River, namely the expression "together, throw away the ben miline avalanches smoothly" (if the occurrence of landslides can be prevented or eliminated, the community's life activities will run smoothly, safely and peacefully, just like the flowing river flowing smoothly). "to build a jere rehab building, start all the mayuh together in the fall of the mountain" (if there is heavy mutual cooperation work, such as cleaning up landslides, reforesting forests, making roads and so on, it must be done together, everyone will come down to help, because of something work done together will feel light and quickly completed).

The community is also looking for alternative plants for their lives and for the preservation of nature, namely by making more use of their land to plant coffee trees. The reason is because the strong and fibrous roots of the coffee tree plant can withstand soil erosion by rainwater. Village officials always make persuasive efforts for people who have empty or bare land to be planted with other productive trees. The community believes that by understanding and practicing the teachings of their ancestors they will receive guidance to prevent and deal with disasters if a disaster occurs, with the phrase "Tanggap maring Tandaning alam" (meaning that the community must be responsive to signs that exist in nature).



**Figure 6.** The Logawa Watershed Stores a Lot of River Biota Wealth

The knowledge of the people of Baseh Village, Kedungbanteng Subdistrict, about the headwaters of the Logawa River, that in maintaining the Watershed (DAS) of the ancestors uttered the phrase "kabeh must be fair, nek utane is sustainable, ngkene manganese banyune is clean, ngkana manganese is clean, hawane dadi adem ayem" (if the forest is maintained and sustainable, the availability of water for the upstream community will still be available and sufficient, as well as the people downstream of the river will also enjoy sufficient and clean water because the condition of the upstream river is maintained, so that life will feel more comfortable. expresses "Angger arep njaga wit kudu dipager wall" (meaning the wall is solid, meaning if we plant a tree we must be strong ourselves, don't be easily tempted to cut it down if it's not the right time, and must always protect the tree somehow so that it is not damaged by other people and not damaged by pests). The community always coordinates in advance with village elders and village officials to discuss good and suitable plants to be planted in the forest. The community planted the slopes of the paddy fields with elephant grass. In the Norm aspect, there are customary regulations that for people who have rice fields with an area of 2800 m<sup>2</sup> (200 tiles) are obliged to work together to regulate the stability of the watershed every 5 days, applicable to multiples of the land area.

The results of this research analysis formulate 5 (five) implications. First, maintaining the preservation of nature through the Logawa watershed in Baseh village is carried out from generation to generation, and no community may disobey these rules, so that the natural preservation of the upper reaches of the Logawa river is maintained properly, in the sense that the community is truly steadfast in maintaining the teachings and ancestral rules. Based on the existing local wisdom principles, there are four things that are prioritized in the forbidden culture which are proven to be maintained, guarded, and implemented by the people of Baseh Village. These



four things are 1) forest conservation in Baseh Village, 2) prohibition of making wells, 3) preservation of sacred forests based on pamali rules, 4) always planting trees in river basins. These four things become customary norms that bind the community because they originate from the spiritual beliefs of the people of Baseh Village.

Second, that trees have extraordinary benefits for humans, apart from being the heart of the environment because they provide fresh oxygen, trees are also a good source for the purpose of firewood, for boiling water, cooking food, even certain plants contain medicinal substances, food, dyes, and others. Certain species of trees can be used as a shady, beautiful, green, fresh, shade for humans and animals, of course. This means that plants are a source of life, and are then continuously maintained through local wisdom. Third, the value of gotong royong in the implementation of cleaning up the former avalanche, reforestation of forests, building roads and so on must be done together, all of them come down to help, because something done together will feel light and quickly completed. Fourth, the value of justice in sharing Logawa river water for the source of life for the surrounding community, whether used for greening rice fields, gardens, cooking, washing and so on. Fifth, the aspect of norms based on customary regulations that have been passed down for generations that people who have a large land area of 2800 m<sup>2</sup> (multiples apply) are required to carry out voluntary work to regulate the stability of the watershed every 5 (five) days.

## Conclusions

Based on the existing local wisdom principles, there are four things that are prioritized in the forbidden culture which are proven to be maintained, guarded, and implemented by the people of Baseh Village. These four things are forest conservation in Baseh Village, the prohibition on the construction of wells, and the preservation of the Sacred Forest based on these pamali rules. These four things become customary norms that bind the community because they originate from the spiritual beliefs of the people of Baseh Village. Local wisdom and culture are carried out wisely, for example; trees have benefits as a good source for the purpose of firewood, for boiling water, cooking food, even certain plants contain medicinal substances, food, dyes, and others. Elsewhere, certain species of trees can be used as shade for family picnics. This means that plants are a source of life, and are then continuously maintained through local wisdom

Apart from the village head, traditional leaders whose existence is considered important in the Baseh village community are "Youth Leaders" who play a role especially in the maintenance of the natural environment and the upstream water sources of the Logawa River, Banyumas, who seek to conserve water and soil in the motoiadro lake area in efforts to increase land productivity, agricultural productivity as well as improve environmental quality and the ability of the environment to absorb and store rainwater. Vegetative soil management can guarantee the continuity of the existence of soil and water because it has the property of maintaining the stability of soil structure through the root system by increasing soil granulation, increasing land cover by litter and crowns thereby reducing evaporation, increasing the activity of microorganisms which results in increasing soil porosity, thereby increasing the amount of infiltration. and preventing erosion, providing economic value to the community so that it can increase income. Soil conservation efforts are aimed at: (1) preventing soil damage by erosion, (2) repairing damaged soil, (3) and determining soil capability classes and actions or treatments so that the land can be used for an unlimited time (sustainable).

This research is generalized in the context of the socio-cultural culture of the community that occurs in the Logawa watershed, Baseh Village, Kedungmalang District, Banyumas Regency, Central Java, Indonesia, so that the culture that emerges and is internalized is in accordance with the habits and cultural characteristics of the Indonesian people. This research uses a case study qualitative research method, which involves a limited number of participants, so that this research occurs in depth or does not expand so as to obtain accurate and in-depth research results. With these two statements, the level of research generalization cannot be equated or occurs in research results in the context of research in other regions or other countries in general.

## References

- Akadiri, P. O., Chinyio, E. A., & Olomolaiye, P. O. (2012). Design of a Sustainable Building: A Conceptual Framework for Implementing Sustainability in the Building Sector. *Buildings*, 2(2), 126–152. <https://doi.org/10.3390/buildings2020126>
- Dadi. (2022). How does Environmental Law View Sustainable Ecological Development in Indonesia? *LEGAL BRIEF Journal*, 11(2), 788–798.
- Dua, I. L., & Rumerung, J. J. (2022). Kajian Efisiensi dan Efektivitas Kerja Karyawan Bidang Administrasi Pada PT. Manado Media Grafika. *Jurnal MAPB*, 4(1), 118–132. <http://jurnal.polimdo.ac.id/index.php/mabp/article/view/329>

- Fakhri, J. M., Sapari, M., Hadian, D., & Nugraha, A. (2021). Identifikasi Pelaksanaan Tradisi Masyarakat Adat Ditinjau dari Pengembangan Pariwisata di Kampung Naga. *Jurnal Hospitality Dan Pariwisata*, 7(2), 10–21. <https://doi.org/http://dx.doi.org/10.30813/.v7i1.2605>
- Febriani, F., Zahrah, I. F., Pramudia, A. K., Putri, W. N., Permadi, B. R., & Latuconsina, R. (2023). Sustainable Development Strategy: Review of Government Policy in Maintaining the Environment. *Kybernology: Jurnal Ilmu Pemerintahan Dan Administrasi Publik*, 1(1), 26–36.
- Fikri, H. K. (2018). Agama dalam Eksistensi Pemahaman Tradisionalis Masyarakat Indonesia: Upaya Membedah Agama Perspektif Tradisional Ektrem dan Antisipasi Konflik Bermotif Agama. *SANGK&P: Jurnal Kajian Sosial Keagamaan*, 1(1), 49–60. <https://doi.org/10.20414/sangkep.v1i1.604>
- Firdaus, D. W. (2017). Pewarisan Nilai-Nilai Historis dan Kearifan Lokal Masyarakat Kampung Adat dalam Pembelajaran Sejarah. *Jurnal Artefak*, 4(2), 129–134. <https://doi.org/10.25157/ja.v4i2.906>
- Gusti, L., & Susanti, N. (2019). Analisa Pengukuran Produktivitas Mesin Cnc Milling Dengan Menggunakan Metode Data Envelopment Analysis Di Pt . Pal Indonesia. *JPTM. Volume 09 Nomor 01 Tahun 2019*, 9(1), 151–156.
- Holden, E., Linnerud, K., & Banister, D. (2017). The Imperatives of Sustainable Development. *Sustainable Development*, 25(3), 213–226. <https://doi.org/10.1002/sd.1647>
- Husaini, Q. M., Ruswandi, U., & Erihadiana, M. (2023). Sustainable Development As The Basis for Environmental Education in Developing Green Schools. *Jurnal Studi Pendidikan Agama Islam*, 5(1), 295–305. <https://doi.org/10.54437/ilmuna>.
- Hussin, J. M., Abdul Rahman, I., & Memon, A. H. (2013). The Way Forward in Sustainable Construction: Issues and Challenges. *International Journal of Advances in Applied Sciences*, 2(1), 31–42. <https://doi.org/10.11591/ijaas.v2i1.1321>
- Kaltsum, L. U., Dasrizal, & Tsauri, M. N. (2022). Kepercayaan Animisme dan Dinamisme dalam Masyarakat Muslim Nusa Tenggara Timur. *Jurnal Masyarakat Dan Budaya*, 24(1), 15–34. <https://doi.org/10.55981/jmb.1281>
- Langhelle, O. (2000). Sustainable Development and Social Justice: Expanding the Rawlsian Framework of Global Justice. *Environmental Values*, 9(3), 295–323. <https://doi.org/10.3197/096327100129342074>
- Liu, T., Chen, L., Yang, M., Sandanayake, M., Miao, P., Shi, Y., & Yap, P. S. (2022). Sustainability Considerations of Green Buildings: A Detailed Overview on Current Advancements and Future Considerations. *Sustainability (Switzerland)*, 14(21), 1–23. <https://doi.org/10.3390/su142114393>
- Muhammad, Anwar, & Indriana. (2014). Upaya Peningkatan Produktivitas Kinerja Lingkungan dengan Pendekatan Green Productivity pada Pabrik Kelapa Sawit PT . Mopoli Raya. *Malikussaleh Industrial Engineering Journal*, 3(2), 10–15.
- Mujahidin, A. (2017). Peranan Kearifan Lokal (Local Wisdom) Dalam Pengembangan Ekonomi Dan Perbankan Syariah Di Indonesia. *JURIS (Jurnal Ilmiah Syariah)*, 15(2), 153–168. <https://doi.org/10.31958/juris.v15i2.496>
- Qaisra, Mustafvi, J. B., Ahmad, H. M., & Khan, M. (2024). Quantifying the Impact of Green Building Practices on Energy Efficiency in Urban Architecture. *International Journal of Contemporary Issues in Social Sciences*, 3(1), 1179–1185.
- Redjeki, R. S., Hadi, S. P., & Hendrarto, B. (2008). *Kajian Pengelolaan Lingkungan pada Kawasan Gunung Sindoro Sumbing (Studi Kasus di Desa Sigedang dan Desa butuh Wonosobo)*. Universitas Diponegoro.
- Ridwan. (2015). Problematika Keragaman Kebudayaan dan Alternatif Pemecahan. *Jurnal Madaniyah*, 2(9), 254–270.
- Rochman, A. (2020). Penilaian Masyarakat dalam Pengelolaan Lingkungan pada Akomodasi Perhotelan untuk Mewujudkan Green Hotel. *Jurnal Green Growth Dan Manajemen Lingkungan*, 8(2), 119–127. <https://doi.org/10.21009/jgg.082.05>
- Rosana, E. (2017). Dinamisasi Kebudayaan dalam Realitas Sosial. *Jurnal Studi Lintas Agama*, 12(1), 16–30. <http://ejournal.radenintan.ac.id/index.php/alAdyan/article/view/1442>
- Sarjono, H. (2001). Model Pengukuran Produktivitas Berdasarkan Pendekatan Rasio Output Per Input. *The Winners*, 2(2), 130–136. <https://doi.org/10.21512/tw.v2i2.3821>
- Sartini. (2004). Menggali Kearifan Lokal Nusantara. *Jurnal Filsafat*, 37(2), 111–120. <https://jurnal.ugm.ac.id/wisdom/article/view/33910/20262>
- Setiyawan, I. (2020). Harmoni Sosial Berbasis Budaya Gugur Gunung. *Empirisma: Jurnal Pemikiran Dan Kebudayaan Islam*, 29(1), 29–40. <https://doi.org/https://jurnalfuda.iainkediri.ac.id/index.php/empirisma/article/download/414/292>
- Silam, A. A. S. G., Khristhy, M. E., Sibot, Y. S., & Halim, S. (2023). Community Participation in Indonesia in Preservation and Continuation of Environmental Protection and Management. *Protection: Journal Of Land And Environmental Law*, 1(3), 207–220. <https://doi.org/10.38142/pjlel.v1i3.813>
- Sugirman, A. (2023). The Principle of Intergenerational Justice in Environmental Management and Its Relation

- to the Concept of Sustainable Development. *Al-Bayyinah*, 7(1), 117–130. <https://doi.org/10.30863/al-bayyinah.v7i1.4367>
- Sugiyono. (2017). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Alfabeta.
- Utsman, H. (2018). Basis Etika Lingkungan Hidup Masyarakat Tradisional Madura. *Al-A'raf: Jurnal Pemikiran Islam Dan Filsafat*, 15(1), 59–78. <https://doi.org/10.22515/ajpif.v15i1.1203>