

## Local Wisdom of the Sodong Buddhist Village Community in Water Resources Management

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### Abstract

*This study aims to describe and explain the local wisdom of the people of Kampung Budha Sodong in managing water resources. The research was conducted using an ethnographic approach. The research was conducted for one year in Sodong Hamlet, Braceletkulon Village, Sampung District, Ponorogo Regency, East Java Province, Indonesia. Collecting data by observation, interviews, and recording documents. The validity of the data used a source triangulation technique, while the data analysis used a qualitative interactive model technique. From the research carried out, it can be found that the local values of the people of Kampung Budha Sodong in managing water resources are in the form of a philosophy of life, inner teachings, noble pitutur, unen-unen, and pamali. The local wisdom is the driving force, community guide and reference in planning, implementing and evaluating water resources and their utilization. So that the availability of water in this village is sustainable. This is one of the factors that make the lives of the people of Kampung Buddha harmonious.*

### Keywords

local wisdom; sodong; water resources



## I. Introduction

Water for the people of Kampung Buddha Sodong in particular and the living creatures of the world in general are an important and basic natural resource. Water as a vital natural resource and controls the needs of all living things needs to be managed properly. The purpose of water management is so that all parties have equal access, both in meeting basic needs such as drinking, cooking, sanitation, as well as to meet the needs for their plants and livestock (John, 2013). If management is not carried out in a balanced, comprehensive and simultaneous manner, there will be a water crisis. The water crisis generally occurs due to climate change, poor land use systems, and damage to the rainwater catchment ecosystem, and the need for uncontrolled water consumption. For example, lack of water in the dry season, flooding in the rainy season and the occurrence of water pollution (Maridi, 2015). This was confirmed by Niman (2019) that the water crisis, damage to the natural environment that is prolonged and ongoing has a negative impact on the survival of living things, including humans.

The water crisis as described above was experienced by the people of Kampung Buddha Sodong in the 1980s. When the dry season arrives, water sources on the slopes of Mount Bungkus and Mount Deng experience a significant decline and some even dry up. So people have to queue for water to cook and drink. This is different from the reality that is happening today. Despite the long dry season, water is still available in sufficient quantity. The available water is not only sufficient for cooking and drinking but also for bathing,

washing, raising livestock and cultivating fields. This of course invites various questions, especially about what values are entrenched,

The values of life that are entrenched, guide and predispose the residents of the Sodong Buddha Village community in managing water sources are referred to as local wisdom. Therefore, it is interesting and needs to be researched with the hope that the results can be used as provisions and inspiration for the next generation of Sodong Buddha Village itself as well as for people outside this village and readers can be used as a source of inspiration and reference in conserving water resources.

## **II. Review of Literature**

Society and culture have a close relationship and it contains a treasure trove of cultural values in adapting to the social environment and the natural surroundings that are regularly arranged in the form of customary norms. (Sufia, R., Sumarmi., Amirudin, 2016). Society is defined as people in general, living together in communities, whereas language is a means of communication to express our feelings, thoughts, ideas, etc. The language and the society are closely related and could not be separated. (Ramlan, 2018) These values are crystallized in a local wisdom, namely wisdom based on the philosophy of values, ethics, ways that are guided by the community in certain localities in behaving, acting and behaving.(Rahma, 2016). Local wisdom is the wisdom or original knowledge of a community that comes from the noble value of cultural traditions to regulate the order of people's lives. Local wisdom can also be defined as local cultural values that can be utilized to regulate the order of people's lives wisely or wisely. Local wisdom belongs to the community whose attitude and personality are mature to be able to develop local potential and resources in making changes for the better. (Sembiring, A. et al. 2019) Local wisdom as a socio-cultural order contains the knowledge, norms, rules and skills of the people in an area to meet the needs of (living) together which are passed down from generation to generation. This local wisdom becomes social capital developed by the community to create order and balance between the socio-cultural life of the community and the preservation of the surrounding natural resources.(Hidayati, 2016).

These views as the embodiment of local wisdom are interpreted as principles of living a life that are guided and implemented by certain local communities.(Mujahideen, 2016). These principles are embodied in values and norms that function as a form of conservation and preservation of natural resources, human resource development, to develop culture and science, as advice, beliefs and taboos. (Yuliani, E., Aprilina, 2020). This local wisdom not only maintains traditions or customs that have been passed down from generation to generation but also provides a number of good life governance and in harmony with the social and natural environment, as well as with the Creator.(Panggabean, H., 2015;Ismail, N., Bakhtiar, B., Yanis, M., Darisma, D., Abdullah, 2020). One of the natural environments that challenges humans to be answered with wisdom is water resources.

Water resources are natural and/or artificial water places or containers that are above or below the ground surface. This water is a resource because water contains potential that can provide benefits or losses for human life and the environment. The form is in the form of springs, groundwater, rivers, lakes, lakes, and so on (Law of the Republic of Indonesia Number 17 of 2019 concerning Water Resources). So it is necessary to manage water resources properly so that sustainability, continuity, capacity and quality are maintained properly(Sarbini, 2014). In management there is a process of activities to determine actions to be carried out in a coordinated and directed manner. These activities include regulation, implementation, maintenance, monitoring, and evaluation with the hope that water

availability is sustainable and remains adequate, both now and in the future.(Buwono, N., Muda, G., and Arsad, 2017).

Water resources management is essentially an effort to plan, implement, monitor, and evaluate water management. Planning is the activity of creating and compiling concepts. Implementing is carrying out activities that have been designed and decided. While monitoring is observing or checking carefully, especially for special purposes, supervising, monitoring (Reza, M., Hidayati, 2017). The management is not the ultimate goal but strategic planning which involves identifying the needs of the stakeholders in an area (Purwanto, MYJ, Susanto, 2014). Management of water resources in an area can be carried out properly if the elements in it can function properly and in operations do not only consider technical but also non-technical aspects. Anita Firmanti, Head of Center for Settlement Research and Development (in Sarbini, 2014) conveyed that the non-technical aspects needed in the operation and maintenance of water resources so as not to be damaged were in accordance with local wisdom. This is as stated Mawardi (2012) that local wisdom in managing nature that is oriented towards environmental sustainability is a very important social capital in the management of water resources in an area.

### **III. Research Methods**

This type of research is qualitative using an ethnographic approach. The ethnographic approach is a process to examine the culture of a group of people naturally and deeply (Creswell, 2014). In this study, what was revealed and explored were the values of local wisdom of the Sodong Buddhist village community in managing water resources.

This research was conducted in Sodong Hamlet, Braceletkulon Village, Sampung District, Ponorogo Regency, East Java Province, Indonesia. Implementation for one year (June 2020-May 2021). Research sources use primary sources in the form of information from informants and direct observations, as well as secondary sources in the form of documentation, activity reports, and the like. The determination of informants using purposive sampling technique, namely the technique of taking informants according to the purpose or theme of the research and is considered to have the information needed for research. While the data collection using interviews, observation, recording documentation. The extracted data was validated by source triangulation technique. While the data analysis using interactive model qualitative analysis techniques (Miles, Huberman, & Saldana, 2014).

### **IV. Result and Discussion**

#### **4.1. Sodong Buddhist Village Overview**

Sodong Buddha Village is one of the hamlets in the area of Gelangkulon Village, Sampung District, Ponorogo Regency, and East Java Province. This village is located at coordinates 111° 17' - 111° 52' East Longitude and 7° 49' - 8° 20' South Latitude with an altitude of 1,153 to 1,263 meters above sea level and has an area of 3,780 km<sup>2</sup>. The residences (houses) of the villagers are located on the slopes of Mount Deng and Bukit Sangha 1.1 km<sup>2</sup> while 2,680 km<sup>2</sup> are fields and forests.

The area of Kampung Buddha Sodong is separated from the central government of Gelangkulon Village and the surrounding villages. There are only two access roads to get to this village, namely the north hamlet road and the south hamlet road. The mobilization of the population in and out of the Sodong Hamlet area is generally through the northern route to Pagerukir Village, Sampung District, because the road is gentler and some of it has been cemented. This is different from the southern route, which is steep and damaged, so that

people rarely pass it, even though it is closer to the center of the Gelangkulon Village government.

The population of Sodong is 482 people and the majority of the education level is junior high school. This Sodong hamlet is known as the "Buddhist Village" because in the 1950s 95% of the population was Buddhist. This is different from current conditions, the number of people who embraced Buddhism as many as 122 people (22%) while those who embraced Islam were 426 people (78%)(Team, 2020). Even though they have different religions or beliefs, the people of Kampung Buddha Sodong still interact socially in a harmonious and tolerant manner. This harmonious life is reflected in various aspects of life, including the fulfillment of the necessities of life in the form of water.

The water used by the people of Kampung Buddha Sodong for cooking, drinking, bathing, and other sanitation comes from water sources located on Mount Deng. The water comes from rainwater that falls on the mountain then flows to the ground and finally gradually reappears to the ground through water sources that are around the tree roots and rocks on the slopes of Mount Deng. Around the water source, a water reservoir was built made of red plastered bricks. From the reservoir, the water is then channeled to people's homes through plastic hoses and paralon. In addition, water from the slopes of Mount Deng is also channeled into the people's fields and rice fields.



*Figure 1. The residents of Sodong Buddha Village search and find a water source on Mount Deng then carry out the salvation ritual*



*Figure 2. Community members carry out mutual cooperation to install paralon to distribute water to people's house*

The management is as shown in the table below

**Table 1.** Water Management in Sodong Ponorogo Buddhist Village

Plan	Doing	Monitor
<p>Residents in groups whose houses are close together conduct consultations (deliberations) to find water sources whose water will be channeled to their homes, materials and funds for the construction of water reservoirs and drains.</p> <p>In addition, the group also asked the village poet for instructions about the source of the water and led the ritual of salvation.</p>	<p>Residents in groups look for and choose prospective water sources. After the water source is obtained and selected, then the residents perform a ritual (kenduri) so that the water source is sustainable and blessed.</p> <p>Furthermore, the residents carried out community service work and gotong royong to clean water sources, build water reservoirs and install/make water channels to the houses of the community groups.</p>	<p>Residents in a water reservoir group take turns and periodically monitor water sources.</p> <p>If there is a problem with the water flow in one or more of the neighbors, the neighbors help each other to solve it, such as checking the water flow from the house to the source. If the resident does not have the material, then the resident who has the material is happy to help.</p> <p>In addition, the residents of this village are very caring, do not damage water sources and channels, and help each other. For example, when residents find the water line is loose or disconnected, they are not asked to fix it.</p>



**Figure 3.** The community performs a ritual of salvation in the form of “cok bakal” at a water source when holding a celebration (wedding, circumcision, etc.)

Communities carry out water resource management as listed in the table above, driven and guided by wise values, cultured and passed down from generation to generation. The values are as listed in the table below.

**Table 2.** Value of Local Wisdom in Water Resources Management

No	Value of Local Wisdom	Actions/Activities
1	<p><i>Memeyu hanyuning congenital.</i></p> <p>This conception of life as an expanse of the little universe (humans) and <i>jagad gede</i> (universe) which originates from <i>Sangkan Paraning Dumadi</i> (humans must always remember their origin as the creation of the Almighty and will return to Him).</p> <p>This conception contains the dimension that to maintain the welfare of the world, prosper the universe and maintain the universe, it is necessary to harmonize humans with humans, humans with nature, and humans with God.</p>	<p>Carrying out the slametan ritual (kenduri) <i>keblat papat lima pancer</i> as a manifestation of the unification of humans and the universe. The universe and soul are the center of human sense. This activity is not only carried out at the beginning of the construction of water reservoirs but also carried out when residents hold a celebration. The goal is to be protected by God or <i>Sing Mbau Rekso</i> and the water debit is sustainable.</p> <p>The community also cleaned water sources, planted trees around the springs and reforested the forest on Mount Deng</p>
2	<p><i>Consultation</i></p> <p>In deliberation (deliberations) contains the value of openness, the spirit of mutual acceptance, willing to provide information, willingness to discuss something and do not feel right.</p> <p>In the deliberation of the parties who imprison the devil (imprison the devil). The term has the meaning of controlling lust. In addition, without going through deliberation, decisions and actions are not strong and invalid.</p>	<p>Residents carry out consultations in planning, implementing and monitoring water resources. If there is a problem, residents hold consultations so that disagreements can be parsed and resolved. For them, <i>rukun agawe santoso, congkrah agawe bubrah</i> (rukun makes peace or strength, fights make damage or cause destruction).</p>
3	<p><i>Mutual cooperation</i></p> <p>In gotong royong, there are values of togetherness, unity, self-sacrifice, mutual assistance and socialization</p>	<p>Residents carry out water resource management together, including in funding. Contributions are voluntary and material joint so that activities can run smoothly, easily and lightly. For example, in the manufacture of water reservoirs and the purchase of plastic or paralon hoses.</p>
4	<p><i>Pitutor luhur</i> and <i>unen-unen</i></p> <p>In the <i>pitutor luhur</i> and <i>unen-unen</i> contained the value of life lessons and advice that is the main, noble or good. <i>Pitutor luhur</i> is used as an enculturation method and medium. <i>Pitutor luhur</i> that are entrenched include</p> <ul style="list-style-type: none"> <li>- <i>Sepi ing pamrih, rame ing gawe</i> (Doing a job without feeling self-serving)</li> <li>- <i>Ngundhuh wohing pakerti</i> (Whatever we do will pay off commensurate)</li> <li>- <i>Ngundhuh wohing pakerti</i></li> <li>- <i>Mother earth, father sky</i></li> </ul>	<p>Community members do <i>gugur gunung</i> (voluntary work) in the management of water resources.</p> <p>Residents also clean water sources and carry out water resource conservation activities in mutual cooperation, voluntarily and without asking/receiving wages. For example, residents voluntarily provide food for people who do community service.</p> <p>Residents conserve water resources and carry out conservation.</p>
5	<p><i>Abstinence (Pamali)</i></p> <p><i>Pamali</i> contains the value of taboos or prohibitions on polluting, damaging water sources and their flow. The <i>pamali</i> was</p>	<p>Residents do not destroy water sources or close water sources belonging to themselves and their groups. Residents also do not damage or imprison other people's water</p>

<p>conveyed with the advice that <i>Sapa sing ora ngerteni lan ngrusak sumber bayu, dheweke bakal mati sandhang lan pangane</i> (whoever is ignorant, does not want to know and destroys water sources will die of food and clothing sources).</p>	<p>sources and waterways. But instead take care of it or repair it. One example is without being asked when he encounters a broken water line (slang) then connects it even though it is not his. Residents do not defecate or urinate in water sources</p>
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**Figure 4.** *The residents of Sodong Buddhist Village carry out mutual cooperation to clean the water source environment when the rainy season approaches*



**Figure 5.** *Suratno (46 years) and Fandi (11 years) connecting the hose they found even though it was not a water line to their house*

The ability of the people of Kampung Buddha Sodong to manage and conserve water resources as stated above cannot be separated from the values of their local wisdom. The values of local wisdom that are entrenched and passed down from generation to generation encourage, predispose and guide communities in managing and conserving water resources. The local wisdom takes the form of a philosophy of life, inner teachings, customary norms, pitutur, taboos, pamali, and expressions (*unen-unen*). People realize that there must be something that lives that gives life, including water as a source of life, there must be someone who gives, namely God or Sing Mbau Reksa (The One Who Wants). Therefore, people carry out rituals as a process of building relationships and requests.

*Mamayu Hayuning Bawana* which is the philosophy of life and the inner teachings of the people of Kampung Buddha Sodong cannot be separated from the traditional Javanese belief, namely Mother Earth, Father Aksa (mother is earth, father is sky). Earth is a symbol of the mother who gives fertility to the soil. The sky is a symbol of the father who gives blessings through the rain. This teaching teaches humans to love, protect, and respect the

earth and sky as people does to their parents. If you destroy the earth, the sky will be angry too. Just as if you do something bad to your mother, your father will be angry, and vice versa. For example, the destruction of water resources, if damaged then the source is dry or cloudy and so on. Therefore humans are taught to be united. Manunggal is not only manugaling kawula-gusti but also manugaling kawula with many things including water resources. If humans are united with nature, then humans will not dare to destroy nature. If that is done, then it is the same as self-destructing.

*Pitutur*, *unen-unen*, and *pamali* give many good lessons in living and living. *Pitutur* sublime and *unen-unen* contain teachings and moral values that can be used as guides and references in dealing with various problems, including attitude towards nature. For example, just nggugu karepe dhewe (don't do what you want). This *Pitutur* teaches about how we must control ourselves not to do anything wrong to others. *Pamali*; whoever sings or destroys the source of the wind, *dheweke* will die sandhang and food. This *Pamali* teaches us how to manage lust, control lust, and not be controlled by lust. Not doing arbitrarily to others means not doing arbitrarily to nature. If you do so, the damage to water resources due to human activities for personal gain will also have an impact on other people.

## V. Conclusion

The local wisdom of the people of Kampung Buddha Sodong in managing water resources is in the form of a philosophy of life, inner teachings, *pitutur luhur*, *unen-unen*, and *pamali*. This local wisdom becomes a driver, guide and reference for the community in planning, implementing and evaluating water resources and their utilization. So that the availability of water in this village is always adequate even in the dry season and the water source is sustainable. This is one of the factors that make the lives of the people of Kampung Buddha peaceful, serene, happy and harmonious.

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