Water Conservation Through Local Wisdom As A Manifestation Of Social Justice And Ecological Justice

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Abstract. In all its manifestations, the ecological crisis include water crisis, threatens our world’s ecosystem. The primary cause of the crisis is human attitudes and behaviours that objectify nature. In specific cases, the water resource crisis is as a consequen ce of tourism expansion that ignores the environment. Revitalizing local wisdom is one method for restoring nature’s stability especially on water sustainability. There are numerous rites in our local community’s that support efforts to conserve water sources. This article discusses the traditional practises of the Batu people of East Java for conserving water sources called Metri Banyu as an alternative to seeks the ecological and social justice. Through this rites the community of Pesanggrahan Village in Batu City honours water as the fundamental element of human existence. The revitalization of indigenous knowledge is critically important for Batu City’s massive tourism expansion and other location which face similar situation. In addition to pre venting natural damage and the depletion of water resources, it is a viable alternative for the development of tourism founded on culture. This research applies a qualitative approach. Interviews and observation were used for data collection. The findings of this study demonstrate that reviving local knowledge in contemporary society influences the creation of a balanced and harmonious relationship between humans and nature, one another, and their creators.

1 Introduction

Climate change is a crucial issue that is always discussed in global forums. This departs from the fact that climate change brings many impacts that disrupt the lives of all creatures on this planet. Drought calamities are caused by climate change in numerous of locations on earth. The modern human lifestyle that appears in the expansion of the capitalistic economy does not pay attention to the sustainability of life on earth. One of the causes of climate change is
the expansion of tourism, which is purely profit-oriented. The samples for this study were collected in Pesanggrahan village, Batu city, East Java, Indonesia, especially in the local wisdom called the Metri Banyu ceremony. As a tourist destination, Batu City is also not spared from the threat of environmental damage due to tourism expansion. Batu City is one of the regencies in East Java, which is located at an altitude of 700 to 1700 meters above sea level. With this altitude, Batu City has a calm and cold climate. Since the 10th century, the town of Batu has been a resting place for the Medang royal family, led by King Sindok[1]. This natural condition and historical background make the city of Batu today an attractive tourist destination for many people. The rapid development of tourism in the town of Batu currently offers natural coolness and cultural tourism that combine with educational tourism. This tourism potential makes Batu City an autonomous pilot region in Indonesia in terms of developing regional potential.

This developing tourism model has many impacts on human survival and natural resources. Climate change, natural disasters, depletion of natural resources, and a series of other hazards have forced the city of Batu to review the concept of tourism being developed. Sumarmi's study proves that the agro-tourism design for the town of Batu, even though it has a positive impact on the number of tourists, makes the city's temperature even hotter [2]. The conversion of forests into agricultural land and the construction of resorts and villas have caused the temperature in the town of Batu to rise. Abbas's study in the 2015–2019 period on the concept of sustainable tourism in the city of Batu, which focuses on economic growth, nature conservation, and social-environmental sustainability, has concluded that sustainable tourism policies are still short-term in nature because they rely on regional revenues from the State Revenue and Expenditure Budget (APBN) [3]. Thus, the approaches taken were not considered comprehensively for all areas in the city of Batu. The development of tourism-supporting facilities to accommodate the swift flow of tourists has a double impact. In the short term, it benefits local communities because it stimulates the economy, but it will deplete their resources for a long time, especially for future generations. The idea of a green economy is one of the solutions for preserving the existing resources in the city of Batu. In another direction, Hakim and Nakagoshi's study emphasizes that East Java, in general, and the town of Batu, in particular, are facing severe problems related to environmental standards due to tourism expansion. Hakim and Nakagoshi pay attention to the involvement of local residents as the main actors if they want to develop sustainable tourism in the city of Batu [4].

From the historical background and the current situation of Batu City's tourism development, we see that cultural tourism is another side that must be a balancing point in tourism expansion. Cultural tourism involves local communities as the main actors in reducing climate change caused by tourism expansion. As an inseparable part of the Javanese, the Batu people have a culture that is very close to nature. One of them is the water source salvation ceremony. The salvation of this water source is the life and way of being of the Javanese people in general. In this research, we took the tradition of salvation from the village of Pesanggrahan. This tradition describe how local wisdom saving nature and keep water for their existence. They maintain ecological and social justice to remain sustainable. One of the fundamental principles of social justice is the recognition of local communities and their sustainability. The Metri Bayu tradition ensures the survival of local culture in the face of capitalism's expansion. Preserving local culture is an effort to achieve justice for both nature and those who rely heavily on nature's generosity.
2 Literature Review

2.1 Social Justice

The idea and discourse about social justice have become an issue discussed throughout the history of human civilization. The theme of social justice goes hand in hand with human awareness of their noble worth and dignity in their interactions with others. Since ancient Greece, Aristotle has defined justice as an attempt to give someone what is due. Therefore, Aristotle's idea is called proportional justice. Thomas Aquinas continued this view of Aristotle. According to Aquinas, applying the principle of justice is directed toward a better life together. Therefore, justice is a virtue that everyone must develop in addition to the other three virtues, namely simplicity, firmness, and wisdom. In a strong sense of Christianity, Aquinas said that denying justice is an act of sin. Realizing justice is necessary because humans have been endowed with the wisdom to distinguish between good and evil.

In the discourse of this contemporary era, John Rawls defines social justice as equality (fairness) [5]. Social justice, as equality, is a condition when people accept and comply with social provisions in ordinary life. Rawls sees that humans are individuals who have moral abilities. With this capacity, he has two capabilities: the ability to understand and create justice, and the ability to strive continuously.

The starting point for public acceptance of these social provisions is the fulfillment of rights and obligations that are actualized in a balanced way. Discussions and agreements must be made so that the relevant parties involved in living together have a common consensus. The basic form of joint peace is a constitutional institution. Amartya Sen perfected Rawls's idea of justice; for Sen, the problem of justice is not in reforming and establishing institutions but in the actual situation of human life [6]. Establishing an institution as a system that guarantees justice is urgent. However, it must still depart from the realities of the concrete lives of the people who are the subject of the enactment of justice.

2.2 Ecological Justice

The environmental crisis, which is now having an impact on humans and endangering the sustainability of all creation, gave rise to ecological justice. The lower classes of society experience double suffering as a result of objectification in the form of environmental exploitation. In small grassroots-class communities, children and women are the victims who feel the most affected by the current ecological crisis because they can only survive with limited resources. Allan Marshall calls the present environmental problem ecological fascism. In ecological fascism, welfare is seen from the economic side, so humans exploit nature [7]. Such misguided thinking will make humans use logical reasons, such as sustainable development, for their greed for nature. With the concept of deep ecology, Arne Naess provides a solution to the ecological crisis. For Naes, the idea of the deep ecology movement must first place the environment as a subject that becomes an inseparable part of human life [8]. In other words, human survival is also determined by nature.

The pattern of life of all creatures in nature is in the form of a network that needs each other. The culmination of this deep ecology movement is the change of the human paradigm towards nature. Humans must have ethical and spiritual awareness that nature is an integral part of their lives. In his moral and spiritual awareness, Hendryk Skolimowsky puts forward eco-spiritual [9]. Eco-spiritual is an invitation to re-appreciate the intrinsic values that exist in nature. One concrete example of eco-spiritual turning on local wisdom in people's lives. Local knowledge always implies respect for nature, others, God, and other creations. Nowadays, local understanding is missing from modern human civilization, ruled by capitalist logic.
Ecological justice wants to restore nature as the correct place for the survival of humans and other creations, both now and in the future. Humans have a moral responsibility for the sustainability of future generations and the results of nature. The meeting point between social justice and ecological justice is that social justice is a prerequisite for creating ecological justice [10]. With the creation of social justice, where people feel and are given access to welfare, all efforts towards preserving critical natural resources through repair will realize replacement and protection. So social justice and ecological justice are two things that must always live in the dynamics of modern society. The basic principles of ecological justice are an equal distribution of natural resources (distributive justice), the restoration of any kind of natural damage that occurs (corrective justice), and the right of a generation to survive on the earth in secure allowed from the burdens of the problems of previous generations [11].

3 Method

The Metri Banyu tradition in Pesanggrahan, Batu City, is part of the clean village ceremony, which is held on every village anniversary. The pure village tradition is generally part of a Javanese cultural ceremony passed down from generation to generation. Clean the village means gratitude from the villagers for life events that have occurred for a year. In general, this ceremony is carried out after the harvest season ends. Each tribe in Java has its own calendar for determining the time of the clean village ceremony. Blitar Village in Blitar City, East Java, for example, carries out village clean-ups on Friday Pahing, Rengel Village, Tuban, held on Kliwon Sunday, Dukuh Jatimalang Village, Blitar City, being held on Legi Friday, Sela month, etc. [10]. Pesanggrahan Village, the locus of this research, carries out a clean village ceremony on Monday Legi in the big month according to the calculation of the Javanese calendar. Some of the essential rites in the pure tradition of this village are: 'gugur gunung,' namely community service with all villagers to clean the environment, tombs, and some public places that are often used together. According to the traditional shaman of

4 Result and Discussion

4.1 Metri Banyu in Javanese Culture

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Pesanggrahan, the purpose of this rite is to clean up everything that can hinder the village cleaning ceremony [13]. In addition, there is a sowing of flowers on the graves of the ancestors of the village's founders and a prayer with all the villagers to thank God (istiqosah). This tradition aims to remind village residents that all of the good they have received has a fundamental connection to their community. Because it must be celebrated collectively. In addition, the series of ceremonies expresses the joy of all village residents. Nature, a gift from God, is maintained and preserved so that it keeps providing advantages to village residents.

In the evening before the peak event, a Bulu Bhekti carnival is held, namely a carnival and the presentation of offerings from all the hamlets in the village. In the Bulu Bhekti carnival, each hamlet brings offerings in the form of food, or tumpeng, as offerings for all villagers. At the Bulu Bhekti carnival night, everyone later enjoys the offering, or tumpeng. All village salvation events end with the tradition of handing over offerings at the water source or saving the water source. In the tradition of the Pesanggrahan community, this water source is called Metri Banyu. Metri Banyu, or water source salvation, is the ultimate event of the clean village tradition. In the Metri Banyu event, the community expressed their gratitude by bringing a cone to be presented to the main spring in Pesanggrahan village. This respect for water sources aims to appreciate nature and express gratitude for water as a blessing that gives life grace to all villagers [14].

4.2 Meaning of Metri Banyu Rite

Water is an essential element in human life. In the ancient Greek tradition, Thales said that life's origin was water. Placing water as one of the vital elements of human life is also part of the tradition of the Pesanggrahan community. With an agricultural background and culture, the people of Pesanggrahan village make water their primary life support. The sustainability of water sources is a marker of the sustainability of community life from generation to generation. The Metri Banyu tradition is carried out at dawn or before sunrise. It chose this time because, at that time, the natural atmosphere was so calm that people could hear water ripples from the water source.

From the waves of water, humans can absorb energy for their survival. At that time, prayers are recited, and offerings are made. The ritual of surviving the water source is a tribute to the mother of the earth as the source of life. As a source of energy, water has given fertility to all plants that support people's lives both economically and socially. Therefore, in the prayer at the water source (ujub-ujub), gratitude to the mother of the earth, who has given fertility, becomes the main thing. The prayer also thanks God, who has given life through
water. The tradition of saving water sources also makes springs a sacred place that must preserve their ecosystem. There is an unwritten norm or rule for the villagers that the main spring has a guardian. This tradition would align with the research in Malawi, which says that the environment around water sources must be free from disgraceful acts and harmful actions. Cutting down trees, killing animals, and committing immoral acts are prohibited around water sources. The villagers and the "watchman" in the spring make a request and an agreement through the prayer that religious leaders bring. Thanksgiving and prayers for the water source ended with the delivery of offerings in the form of tumpeng rice.

4.3 **Ujub-Ujub as Traditional Prayer in Metri Banyu and Its Implication**

*Ujub-ujub* is an ancient Javanese 'mantra' prayer recited by a traditional leader at a spring. All the *Ujub-Ujub* blessings at the water source were closed with a string of religious prayers delivered by the religious leaders who had participated. So, the culmination of *Ujub-Ujub* is a prayer recited Islamically at a water source by a spiritual leader. A summary of the *Ujub-Ujub* prayers delivered by traditional leaders during the Metri Banyu ceremony is as follows:

<table>
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<th>Table 1. Traditional Prayer in Metri Banyu</th>
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<td><strong>Ujub-ujub</strong></td>
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<tr>
<td>The Spirit whose control and guard the water springs in Pesanggrahan</td>
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*Ujub-ujub* means that, with safety, it is intended to respect and ask the ruler or guardian of the spring to keep the flow of water flowing, which is used every day. Based on the traditional prayer (*Ujub-Ujub*) above, the primary purpose of Metri Banyu is as follows: First, a harmonious relationship with nature. Javanese cosmology views nature in two dimensions: the visible (empirical) underworld and the invisible (meta-empirical) realm. Both practical and meta-empirical, nature is an integral part of human life because it is an obligation to maintain the balance of the universe. The people of Pesanggrahan and Javanese generally view springs as sacred places to respect. The water source environment is guarded and protected by the ancestors, who are invisible but whose influence is visible. From a historical point of view, the founders of villages or villages around the city of Batu, where they lived or their graves, were always close to water sources. Nature will repay humans if humans do not treat the environment somewhat.

In cases where natural disasters occur, people believe that it is human actions that make the 'guards'/ancestor around the springs angry by causing floods, landslides and so on. Concerning environmental harm, one of the principles of ecological justice is restitution justice, which teaches people regarding the causes of natural damage and helps the recovery process. The smooth flow of water from the spring is also believed to be part of the intervention of the ancestors. In an agrarian society, the absence of a water source due to human actions can be seen as a catastrophe and misfortune. After the Metri Banyu ceremony, the community should plant trees around water sources so that the water sources remain sustainable.
Second, thanks be to God. Most Javanese people are Muslim (monotheistic); therefore, all prayers and thanksgiving are directed to God as the creator and organizer. Springs are a source of life that God has given; therefore, in salvation, a source of a symbolic language other than ujub-ujub. Cok bakal (see figure 1) will be interpreted as the origin of human life and as an awareness and acknowledgement of the existence of a creator. The use of cok bakal is commonplace in big Javanese traditional ceremonies such as births, Thanksgivings, and weddings.

Third, the Metri Banyu tradition symbolizes the togetherness and cooperation of the villagers. This togetherness and collaboration can be seen in the participation of all residents in a series of ceremonies starting from the mountain's fall to the source's salvation. This cooperation and togetherness are symbolically seen through the tumpeng offerings. The ingredients and elements of the tumpeng are collected from each family according to their respective abilities. In addition, in a series of clean village ceremonies at the moment of the mountain fall, the community interacts with the environment around the water source by cleaning the surrounding environment. This indicates a model of close interaction between the environment around the water source and the creatures in it.

Fig. 2. Cok Bakal as a ‘symbolize of life’ in Javanese culture

5 Conclusion

For the Javanese, water is a manifestation of existence. The efforts in establishing Batu City a destination for tourists must be in conjunction with efforts to safeguard the ecosystem, specifically its water sources. Developing a tourist city is based on an in-depth study of the area around the destination so that the ecosystem is maintained. The ecotourism developed is a community-based model. In the community-based tourism model, the local community is the leading actor in tourism development. The principles of ecological justice and social justice require the continued existence of alternative economic systems that are capable of contributing to sustainable development while also promoting societal liberation politically, economically, and culturally. Local community involvement in protecting the ecosystem occurs by preserving the local culture that has become part of their lives. Tourism potential must go hand in hand with the culture and habits of the people. Metri Banyu traditions and other local wisdom rituals are cultural heritages that provide the basis for ethical attitudes and policies towards the environment and all creation. The formation of ethical awareness to do justice to the environment is spread in various community traditions owned by tribes and cultures in all corners of the world. Besides, the Metri Bayu tradition is an efforts to preserve the conservation and sustainability of water sources that are advantageous to everyone and for everything around the spring. When most of the world's population is focused on an economic logic that sacrifices nature, one of the important strongholds of the deep ecology movement is a cultural tradition. The Metri Banyu ritual, with all its provisions in the Javanese tradition, has been proven to enrich the virtues of preserving the natural environment, especially spring water. Reviving cultural traditions is an effort to return to
nature and discover sacred and mystical values from the heart, which also function to restore the balance of the ecosystem.

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