

Utilization of Local Wisdom Values of Kampung Naga to Develop Student's Ecological Intelligence in Social Studies Learning

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Abstract: The development of ecological intelligence is a collective responsibility, so it requires a social skill that can strengthen this ecological intelligence to become more concrete in daily activities. One of the efforts that can be made is through learning at school. Environmental conservation is a serious issue. Based on the Environmental Performance Index 2022 report, Indonesia scored 28.2 out of 100. This score places Indonesia as one of the countries with the worst environmental conservation on a global scale, even in the Asia Pacific regional scale, ranked 164th out of 180 countries. The indicators used to measure the level of environmental sustainability are summarized in three central pillars: environmental health, climate, and ecosystem viability. Therefore, the author is interested in raising this issue into a study that aims to describe the values of local wisdom in Kampung Naga as an effort to preserve the environment. Then, the values of local wisdom were developed into one of the social studies learning resources to develop students' ecological intelligence. The study results show that the local wisdom of Kampung Naga positively impacts environmental sustainability in the area.

Keywords: Local Wisdom, Kampung Naga, Ecological Intelligence, Social Studies Learning

Introduction

The study of local wisdom values is needed in line with the emergence of various environmental problems, which have become critical issues because of their impacts. Human activities often cause environmental problems. Therefore, the growing global era needs to be balanced with ecological intelligence so that humans can maintain the environmental sustainability. Supriatna (2016, p. 24) suggests that someone who has ecological intelligence will realize that nature is where all living things, including humans, can continue and improve their lives for the better on this planet. The development of ecological intelligence is a collective responsibility. Therefore, it takes a social skill that can strengthen this ecological intelligence to be more concrete in everyday life.

One of the efforts to build ecological intelligence is through the use of local wisdom. Local wisdom can be used as a learning resource to build students' ecological intelligence, including in social studies learning. One example of local wisdom that can be learned and applied to build ecological intelligence is the indigenous people of Kampung Naga. Kampung Naga is one of the traditional areas where the community still upholds their ancestors' customs, culture, and beliefs. Kampung Naga is located in Neglasari Village, Salawu District, Tasikmalaya Regency, West Java Province. Customary regulations maintained and obeyed by all elements of the Kampung Naga community indirectly impact the preservation of nature which is still maintained.

One of the traditional prohibitions of Kampung Naga is entering the forbidden forest area and taking everything that comes from the forest. The impact of the customary prohibition has made the forest area still maintained. Environmental problems that continue to emerge are inseparable from various irresponsible human activities. A real example that has become a public spotlight related to environmental problems is the Citarum river which was once named the dirtiest river in the world by the World Bank (Kompas, 2017). Based on the data, 1,500 tons of waste are dumped daily into the Citarum river, both household and industrial waste.

Efforts to change the Citarum river to be clean and free from pollution continue to be carried out. However, this fact proves that human activities cause environmental damage, as stated by Iswari & Utomo (2017, p. 37). Based on the description above, the author is interested in raising this issue in a study that aims to describe in depth the values of the local wisdom of Kampung Naga. Then, the values of local wisdom were developed into one of the social studies learning resources as part of the ecopedagogy program to develop students' ecological intelligence.

Methods and Research Design

Methods. This study uses a qualitative approach, that explores and understands the situation or condition that is considered to come from social or humanitarian problems (Creswell, 2013, p. 4). The researchers' rationale for using a qualitative approach is related to the focus on this study in order to examine the customary rules of indigenous society in Kampung Naga in an effort to preserve nature therefore descriptive data are needed from the findings in the field, and the problems in this study were not absolute because they are adjusted to the condition in the field, this reason becomes one of the characteristics of qualitative research. The research method used in this research is the descriptive qualitative method.

Thus, researchers become research instrument that must go directly to the field. The approaches and methods used in this study are intended in order to make the problems found can be answered and the research objectives can be achieved, which is to describe in-depth the traditional values of Kampung Naga as an effort to preserve natural sustainability, which includes content, implementation, and the impact of customary rules or pamali in the Kampung Naga society for the preservation of the environment.

Research Design. This research's site is Kampung Naga, Neglasari Village, Salawu District, Tasikmalaya, West Java Province. The researchers chose this location because this study focused on the indigenous society of Kampung Naga. The data collection techniques used by researchers are interviews,

observation, and documentation study. This study used semi-structured interviews as a data collection technique in order to obtain valid information or answers in accordance the focus of the study and find problems more openly, where the participants who were interviewed were asked for their opinions and ideas. This present study examined the environment of Kampung Naga society and their behavior in carrying out their daily life, especially the behavior related to natural sustainability. The observation in this study is non-participatory observation, where the researcher acts as an observer and is not directly involved with the daily activities of the person being observed or who is used as a source of research data. The documents used in this study are a map of Kampung Naga area, written customary rules (if available), and photos taken in the indigenous society area.

The data analysis in this study used a model of data analysis by Miles and Huberman, which was carried out interactively and continuously until it was completed that resulted into saturated data. Activities in data analysis, include data reduction, data display, and conclusion drawing/verification. The test for the credibility and validity of the data used in this study was through the triangulation, besides the interviewee involved in this study were customary stakeholders, local guides, and local residents.

Results and Discussion

The Content and Implementation of the Customary Rules of Kampung Naga as an effort to preserve Natural Sustainability Customary rules, taboo, or prohibition in Kampung Naga`s beliefs exist in a large number and are not documented in writing. Based on interview result with Lebe as one of the customary leaders of Kampung Naga, there are so many of customary rules that considered taboo, but they are not written down and conveyed orally. The concept of taboo for Kampung Naga society is prohibitions, restriction, and taboos to be violated because the can cause bad things. Pamali or customary rules were formulated by the ancestors and used as behavior guidelines that must be obeyed, guarded, and must not be violated. Nurdiansah (2017, p. 59) argues that pamali has become a sign of Kampung Naga`s behavior in managing

nature so that nature becomes a good friend and provides prosperous benefits for them as follows.

Implementation of Limitation on Number of Houses and Buildings

Unwritten rules govern the boundaries of residential areas that have been determined by customary rules with a fence made of bamboo. These restrictions are made so that the balance of nature is maintained. The total number of buildings in Kampung Naga is 112 buildings. This is in line with information from one of the customary leaders, namely Lebe. He informed that for now, the number of houses in Kampung Naga is 109 houses, plus a mosque, bale, and rice barn. Due to limited residential land, if people want to build a new house, they must leave Kampung Naga, they are prohibited to take the land land from outside the fence.

Houses are built using materials available in nature. Quoted from Armiyati (2015, p. 14), the roof is made of two layers, which are reeds leaves, tepus, and palm fibers. The use of this material has the advantage of absorbing hot and cold air so that the house residents feel comfortable when they are inside. Another fact that can be found is that no house is painted using a color other than white which comes from chalk. The journal reinforces from Wiradimadja et al. (2018, p. 6) that every house has a terrace in front of the door and is usually used to sit back and relax while chatting with family or neighbors.

Implementation of Zoning/Regional Governance

The society of Kampung Naga divide their territory into three areas: the upper area or the holy area, the middle area, which is filled with settlements, and the lower or dirty areas used for bathing, washing toilets, and fish ponds. This also fits with the top-middle-down world concept. The upper area is a protected forest area and is a water source for the society of Kampung Naga. This sacred forest cannot be entered carelessly, and its location also borders people's land or gardens. In this area, too, there is a cemetery that is the final resting place for Kampung Naga's people.



Figure 1 The Concept of Luhur-Handap

The central area is a zone used by residents to build houses and public buildings such as mosques, bale (hall), and leuit (rice barn). In this area, there is also a large yard that can be used for various things such as a children's play zone, drying the harvested rice, etc. The central area or residential zone is bordered by a fence of bamboo trees, which signifies that it is not permissible or *pamali* to build new houses beyond the predetermined limit since ancient times. The houses are built parallel to and have the same area from one house to another. The houses in Kampung Naga are made in steps following the contours of the land because the contours of the land vary from place to place; some are lower than another place. Besides, each swale is equipped with a stack of stones arranged in a way that strengthens the earth wall. Supported by Hendriawan & Astuti (2017, p. 169), this strategy makes land in a higher position less prone to landslides even though houses are built on it. The lower area or dirty zone is where bathing, washing toilets (MCK) facilities were built. The area below is located next to residential areas. Because toilet facilities were not built in each house, they meet toilets' needs in the lower / dirty zone.

Implementation of Prohibitions in Certain Places

Kampung Naga has certain taboo places or prohibited place to be entered, harassed, or even photographed. This has been regulated and derived from generation to generation to be maintained and obeyed by the residents. These places are forbidden forests (*leuweung larangan*) located on the other side of the Ciwulan river. The forest is completely forbidden to enter; its natural resources, firewood, tree branches, and even leaves that fall from the forest cannot be

taken. One respondent even said that if a tree trunk from the forest fell into the river, no one would dare to take it and the fallen tree trunk would be better left to rot. The prohibition to enter or exploit leuweung karamat has the aim of creating harmony between humans and nature. Leuweung Karamat has a role as a protector of residential and agricultural areas underneath from landslides and floods.

The philosophical value contained in the proverb of the people of Kampung Naga, that states "leuweung mah imah kai, kai mah imah cai," which means that the forest is the suitable place for trees, and the trees are the source of water, this proverb shows people's understanding of the function of leuweung prohibitions which can regulate water supply in the rainy season and the dry season (Dewi & Istiadi, 2016, p. 133). The concept of leuweung karamat and leuweung larangan is following the function of protected forest in Government Regulation no. 24/2010 concerning the Use of Forest Areas Article 1 point 4, which plays as protector of life support systems to regulate water systems, prevent flooding, control erosion, prevent seawater intrusion, and maintain soil fertility.

The Impact of the Kampung Naga Customary Rules on the Preservation of Nature in the Environment of Kampung Naga

Customary rules and pamali, which become the local wisdom of Kampung Naga, have a role in maintaining the natural balance in Kampung Naga, which prevents natural disasters such as floods and landslides and the resistance of houses to earthquakes. Local wisdom can be said as knowledge, life's standpoints, and attitudes in the form of community activities in solving a problem wisely and by considering the conditions of existing natural resources and human resources (Fajarini, 2014; Suparmini et al. 2013). There are several facts that become the major consideration between the implementation of customary rules and pamali, which is the local wisdom of Kampung Naga towards the balance of nature in Kampung Naga. The following is the impact of implementing customary rules or obeying everything that is considered illegal by the society of Kampung Naga for the environment sustainability.

1. The Availability of Clean Water

The availability of clean water from springs is maintained even in the dry season. For example, the water that flows and is collected in a mosque comes from the upper area, also known as the protected forest (leuweung tutupan). This is supported by the prohibition of entering protected forests (leuweung Tutupan), where Kuncen can only enter the area at certain times. The ancestors had a way to keep the forest sustainable by being restricted. " When indigenous society hear the word 'pamali' or the restricted activity to be done, they will obey it due to the fear of bad consequences if it is violated." Kampung Naga's local wisdom in protecting forests and the environment is in line with Law Number 41 of 1999 concerning Forestry, which states:

Natural resources, which include, among others, production forests, protected forests, natural reserves, nature preservation areas, hunting parks, forest products, plants, and animals, must be conserved and utilized with a complete sense of responsibility because they have a production function, protection functions include water regulation management, prevention of floods and erosion, maintaining soil fertility, environmental preservation, and the function of biodiversity conservation, which becomes the life support and serves as the place for tourism and utilization of environmental services (Law Number 41 the Year 1999 Concerning Forestry).

2. Disaster Mitigation

Kampung Naga's Society believe in the concept of customary rules, wills, and consequences. If the customs and wills are guarded, the consequences will be good, and vice versa. Natural disasters such as floods and landslides were not reported to have occurred in Kampung Naga, even though the location of Kampung Naga is in a valley surrounded by highlands and only a few tens of meters from the bank of the Ciwulan river. The residential area of Kampung Naga is made in steps so that the position of the houses varies, and some are lower than others. This is also supported by the

existence of a rule not that disallow the increment of the number of houses because the allocated space is already full, and there is no need to expand it so that it can create a natural balance.

In another word, the prohibition of not building more than a predetermined limit is one of the disaster mitigation efforts. The definition of disaster mitigation quoted from Nursa'ban et al. in Dewi and Istiadi (2016, p. 130) is an effort to reduce and prevent the risk of loss of life and property through both structural and non-structural approaches. The mitigation carried out by the society of Kampung Naga is non-structural mitigation because it is rooted in local wisdom.

a. Ecological Intelligence

According to Goleman (2010, p. 37), ecological intelligence is a human ability to adapt to the surrounding environment. Supriatna (2016, p. 24) states that the ecological intelligence possessed by individuals is based on knowledge, awareness, and life skills in harmony with nature conservation. Furthermore, Supriatna stated that an ecologically intelligent person is a person who understands that every behavior and action does not only have an impact on himself and others but also on the natural environment in which he lives. It is built by the understanding that the nature in which we live must always be maintained so that it remains stable. have the carrying capacity for the lives of themselves and others. Gardner (2013) calls ecological intelligence with naturalist intelligence.

According to him, naturalist intelligence is the human ability to understand natural phenomena, show ecological awareness, and show sensitivity to natural forms. Goleman explained a lot about the human brain and mental maps as part of intelligence and how ecological intelligence began to form. Goleman (2010, p. 1-247) explains, "the concept of human ecological intelligence can be measured through: (1) knowledge about the impact of human activities, including knowing the impact we cause (knowing how the environment impacts) on a) Geosphere (spatial impact); b) Biosphere

(impact on organisms); c) Socio-sphere (social impact); (2) Favor improvements attitude, namely caring for the environment, including transmitting their understanding to others (share the new knowledge with others); (3) Skills in environmental conservation and various participatory-based environmental activities.

If everyone has ecological intelligence, his hope in fulfilling human needs will later be based on green consumers. Consumption is one of the human activities in meeting the needs of life. People who carry out activities to consume goods and/or services available in the community, both for the benefit of themselves, their families, other people, and other living creatures, and are not traded, are called consumers. According to Kotler and Keller (2012, p. 173), several factors cause activities to consume goods and services, including: (1) cultural factors are social class or social class; (2) social factors are social status or social status; (3) personal factors are lifestyle or lifestyle; (4) psychological factors are motivation or motivation.

Developing ecological intelligence is a collective responsibility, so it requires a social skill that can strengthen this ecological intelligence to be more concrete in everyday life. It can be developed through various efforts, one of which is through learning at school, one of which is through social studies lessons in Social Sciences.

Discussion and Recommendations

The contents of the customary rules or things considered pamali by the indigenous society of Kampung Naga cover many things. However, they are not documented because of the burning of Kampung Naga in the past. The society of Kampung Naga implement customary rules derived by karuhun (ancestors) in various aspects of life. The implementation of customary rules and everything that is considered pamali by the society of Kampung Naga has the implications for the physical and environmental conditions Kampung Naga village, the availability of clean water, the avoidance of Kampung Naga's settlements from floods and landslides, and the fulfillment of the basic needs of residents from

the natural products they manage.

The implication of this research is the expand knowledge and insight into how traditional values, Especially Kampung Naga village in this research, positively impact their physical and environmental conditions. Another implication of this research is that the general public can implement their knowledge and insights regarding how traditional values can positively impact their physical and environmental conditions to be implemented them in everyday life. This is because the local wisdom of indigenous society relies on good relations with nature to create harmony between humans and the environment.

Further researchers can complement this research by conducting research related to how traditional or pamali values believed by Kampung Naga society can have an impact on environmental sustainability and balance by conducting in-depth observations and interviews accompanied by field data that support the fact research findings.

References

Books:

- Creswell. (2013). *Research Design : Pendekatan Kualitatif, Kuantitatif, dan Mixed*. Yogyakarta: Pustaka Pelajar.
- Goleman, D. (2010). *Ecological Intelligence. Kecerdasan Ekologis. Mengungkap Rahasia di Balik Produk-Produk yang Kita Beli*. Jakarta: PT Gramedia Pustaka Utama.
- Kotler, P. and Keller, K.L. (2012). *Marketing Management*. Edition 14. England: Pearson Education.
- Supriatna, N. (2016). *Ecopedagogy: Membangun kecerdasan ekologis dalam Pembelajaran IPS*. Bandung: PT Remaja Rosdakarya.

The formal of documect:

- Kementerian Lingkungan Hidup dan Kehutanan. Undang-Undang Republik Indonesia Nomor 41 Tentang Kehutanan 1991. Jakarta.
- Pusat Pembinaan dan Pengembangan Bahasa. 1978. Pedoman Penulisan Laporan Penelitian. Jakarta: Depdikbud. Undang-undang Republik Indonesia Nomor 2 tentang Sistem Pendidikan Nasional 1990. Jakarta. PT. Armas Duta Jaya.

Translation book:

- Gadner, Howard. (1983). *Multiple Intelegence*. Terjemahan oleh Yelvi Andri Zaimur. 2013. Jakarta: Daras Books.

Internet (creation of an individual):

- Kompas. (2017). Sungai Terkotor di Dunia Pasok 80 Persen Air untuk Jakarta, (Online),(<https://regional.kompas.com/read/2017/11/22/20092611/sungai-terkotor-di-dunia-pasok-80-persen-air-untuk-jakarta> diakses 26 Desember 2020).

Internet (artichels in the online journal):

- Armiyati, L. Q. dan L. (2015). Nilai-Nilai Kearifan Lokal Masyarakat Adat Kampung Naga Sebagai Alternatif Sumber Belajar. *SOCIA: Jurnal Ilmu-Ilmu Sosial*. (Online), Jilid 10 no 1,

- (<https://doi.org/10.21831/socia.v10i1.5338>, diakses 11 November 2020).
- Dewi, I. K., & Istiadi, Y. (2016). Mitigasi bencana pada masyarakat tradisional dalam menghadapi perubahan iklim di Kampung Naga kecamatan salawu kabupaten tasikmalaya (disaster mitigation on traditional community against climate change in kampong naga subdistrict salawu tasikmalaya). *Jurnal Manusia dan Lingkungan*. (Online), Jilid 23 no 1, diakses 11 November 2020.
- Fajarini, U. (2014). Peranan Kearifan Lokal dalam Pendidikan Karakter. *SOSIO DIDAKTIKA: Social Science Education Journal*. (Online), Jilid 1 no 2, (<https://doi.org/10.15408/sd.v1i2.1225>, diakses 11 November 2020).
- Hendriawan, N., & Astuti, Y. S. (2017). Proses Enkulturasasi Sebagai Pendidikan Kecakapan Hidup (Life Skill Education) pada Masyarakat Kampung Naga Desa Neglasari Kecamatan Salawu Kabupaten Tasikmalaya. *Jurnal Siliwangi Seri Pendidikan*. (Online), Jilid 3 no 1, diakses 11 November 2020.
- Iswari, R. D., & Utomo, S. W. (2017). Evaluasi Penerapan Program Adiwiyata Untuk Membentuk Perilaku Peduli Lingkungan di Kalangan Siswa (Kasus: SMA Negeri 9 Tangerang Selatan dan MA Negeri 1 Serpong). *Jurnal Ilmu Lingkungan*. (Online), Jilid 15 no 1, (<https://doi.org/10.14710/jil.15.1.35-41>, diakses 11 November 2020).
- Nurdiansah, N. (2017). Budaya Pamali Sebagai Landasan Pembelajaran Lingkungan Di Sekolah Dasar (Studi Kasus pada Masyarakat Adat Kampung Naga Tasikmalaya). *Pedagogi: Jurnal Penelitian Pendidikan*. (Online), Jilid 4 no 1, diakses 11 November 2020.
- Suparmini, Setyawati, S., & Sumunar, D. R. S. (2014). Mitigasi Bencana Berbasis Kearifan Lokal Masyarakat Baduy. *Jurnal Humaniora*. (Online), Jilid 19 no 1, diakses 11 November 2020.
- Wiradimadja, dkk. (2018). Kearifan Lokal Masyarakat Kampung Naga Sebagai Konservasi Local Wisdom of Kampung Naga Community As a Natural. *Sosiologi Pendidikan Humanis*. (Online) Jilid 3 no 1, diakses 11 November 2020).