

Internalization of Ecological Wisdom Tradition of Tangkap Ikan Pakai Lumpatan Empat Lawang Society in Social Studies Learning

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Abstract: Lumpatan is a fishing gear in the shape of a giant trap that is used by the society and is a cultural heritage of the Empat Lawang area, South Sumatra Province. The aim of this article is to describe the value of ecological wisdom from the tradition of tangkap ikan pakai lumpatan as a material for developing environment-based education in social studies learning. The research used is a qualitative approach by collecting data through interview, observation and document studies. The results of the study is to illustrate that in the tradition of tangkap ikan pakai lumpatan which is carried out by the Empat Lawang society has significance in social studies learning, beside there is a mutual cooperation activities, this tradition places a great concern for the environment and also environmental preservation which can be linked to the goals of sustainable education. With the development of ecological awareness education, students have an understanding and skill to support sustainable development and the ability to adapt in an environment that is increasingly changing.

Keywords: Ecopedagogy, Tradition of Tangkap Ikan Pakai Lumpatan, Social Science Learning

Introduction

Humans cannot be separated from the universe that guarantees them in their further life. The sustainability of human life depends on the availability of soil, water, flora and fauna. On the other hand, the availability of land, water, flora and fauna is also very dependent on human behavior. In fulfilling the needs of life may create a balance or gap. The meaning of the gap is there is no standard regarding sustainability so it's causing problems. When this gap occurs, it means that this condition reflects the low ecological awareness of the society. However, the facts that happen are often considered only as a problem and there are not many questions to ask related to the environment and how to react (Pratiwi, et al, 2020). Therefore, as a part of humanity who is responsible, we must determine the attitudes as individuals or groups that are responsible for the preservation of human life now and in the future. Therefore, the development of ecological education is urgently needed to overcome the problems that arise. It is understandable that ecological education aims to raise ecological sensibility and awareness of the existence of the environment as part of an ecosystem that influences human life (Yunansah & Herlambang, 2019).

Ecological intelligence by Goleman (2010, p. 38) is expressed as the human ability to adapt to the environment in which humans are located. Someone who has ecological intelligence will realize that the nature where all living things exist must be preserved so that all living things can continue and improve their lives for the better (Supriatna, 2019). Ecological intelligence describes a person's ability in taking conformable action with the preservation of nature. Ecological intelligence can be developed through a learning process using local society traditions.

One of the societies that still maintains a tradition that preserves the environment is the Empat Lawang society. Empat Lawang is one of the regencies in South Sumatra. In general, People in Empat Lawang Regency are vegetable farmers and rubber gardeners. This regency has many traditions that are carried out, one of them is the tradition of tangkap ikan pakai lumpatan. This tradition has been carried out for a long time until now. The traditions of the

Empat Lawang society need to be transmitted to the younger generation on a continuous basis so the values contained in them can be sustainable in the context of coping with environmental damage.

One of the subjects that holds significance in transmitting and internalizing these values is social sciences learning (IPS). This is because social studies learning aims to help students find solutions to the problems they face, so that students will be able to understand the social environment of their society (Anggraeni, et al, 2022). As a medium for developing values and character, IPS has a great role in inspiring, motivating, and introducing students to their environment. Learning will be more meaningful by optimizing the ecological wisdom of the local society as a source of learning. In this case the use of ecological wisdom in school learning requires a creative teacher to develop it. Creative teacher can imaginatively design unlimited learning on his lesson plans, but further developed through the understanding or style of the teacher. Teacher creativity in the teaching and learning process has an important role in motivating students to learn (Huda, 2017).

Internalization of ecological intelligence in learning actually has been developed a lot. One of the related studies is Ramadhani & Citra (2019) entitled Analysis of Local Wisdom Value-Based Character Education for Creating Sukabumi in Developing Ecological Intelligence. This study describes that there are good values contained in the local wisdom of the Kesepuhan Cipta Gelar Culture which contain balance between humans and the environment. One of these values can be preserved through classroom learning by integrating local wisdom in learning, exemplary and through extracurricular activities.

Regarding the research conducted by previous researchers, ecological intelligence can be developed through society traditions and can be used as a guide in managing the environment. By believing in the possibilism that humans are seen as capable creatures of exploiting nature according to all possibilities that nature can offer. Humans with their cultural abilities can choose activities according to the possibilities provided by their environment (Ruhimat, 2019). The development carried out by the community is expected to be able to

enhance human dignity while still paying attention to the preservation of nature.

Methods and Research Design

Methods. This study aims to describe the ecological wisdom of the tradition of tangkap ikan pakai lumpatan in the Empat Lawang society, South Sumatra Province, in Terusan Lama Village, Tebing Tinggi District, Empat Lawang Regency. The results of this study are used as material for the development of environment-based education. This article uses the qualitative approach. Data collection is held through interviews, observation and document study. Interviews were conducted through oral communication with research subjects related to the lumpatan tradition. The subjects are determined by purposive sampling, taken from several figures who are considered to understand the purpose of the research, including: the head village, the elders who are following the tradition, and the people around the lumpatan. They are:

No	Name	Age	Occupation
1	Hadi Yanto	40	Head Village (Terusan Lama Village)
2	Ahmad	32	Farmer
3	Sarwilah	47	Farmer
4	Tri Cahyo Purnomo	41	TNI (<i>Lumpatan</i> tradition members)
5	Beliau	57	Farmer

Table 1. list of Subject

Observation in this research was carried out by visiting the location of the lumpatan. The document studies were held by digging up information from various important records owned by research subjects. Data analysis techniques are using data triangulation.

Research Design. This research does not manipulate or give certain treatments to variables or design something that is expected to happen to variables, but all aspects and components or variables run as they are. The data analysis was

carried out using Miles and Huberman data analysis which consisted of data collection, data reduction, data presentation, conclusion and verification. Validity checking of the data is done by triangulating, including sources, time, and technique. In addition to interviews and observations, the data sources used are articles, journals, and books.

Results and Discussion

The Tradition of Tangkap Ikan Pakai Lumpatan in the Empat Lawang Community

Empat Lawang Regency, is one of the districts in South Sumatra. In general, people in Empat Lawang Regency are vegetable farmers and rubber gardeners. This regency is flowed by a large river, namely the Musi River which flows through most of South Sumatra and Bengkulu. The upstream of the river is near Curup, Rejang regency, Bengkulu, while the downstream of the Musi River is in Banyuasin regency, South Sumatra, in the Selat Bangka. The settlement pattern of the Empat Lawang population is much influenced by the existence of the Musi River. The society builds houses close to the Musi River and even the orientation of the building faces the Musi River. The Musi River is widely used by local people to catch fish for their consumption or sale. Apart from fishing and using nets, the society has a tradition of fishing which is carried out once a year which is carried out from August to January, during the rainy months, namely the tradition of tangkap ikan pakai *lumpatan*.

The name *lumpatan* is taken from the fish that jumps into the trap. Making the lumpatan is done by a group of residents by mutual cooperation. This is happening because to make one lumpatan costs quite a lot around 25-50 million, therefore a group is formed. Each group ranges from 15-20 people. The lumpatan mutual cooperation group system, which is carried out here is in the form of joint ventures or commonly referred to as donations. To build lumpatan, there are people who donate materials in the form of bamboo and rattan, there are people who donate money to buy nails that are used to build the roof of the hut which would later be used to maintain the lumpatan. There are also people

who contribute labor to build lumpatan as well as preparing food for building lumpatan activity. People who have not been able to become part of the group, later can enjoy the fish from the lumpatan by buying from the lumpatan group during harvest.

People usually install lumpatan before the rainy season or around August-September. In this month, the water of the Musi River where the lumpatan is placed is still receding and not so heavy that it makes it easier for the lumpatan group to install the lumpatan. It coincides in the dry season with small fish swimming upstream, and when the rainy season starts around October the fish swimming downstream, and also the fish are already big. The peak is in November and December, lumpatan will harvest a lot of fish. Lumpatan is installed near the rainy season because it cannot last long, until after December it starts to become brittle and drifts away.

The form of the lumpatan can be seen from the following picture:



Figure 1. The shape of the giant lumpatan in the Terusan Lama village

The lumpatan is guarded alternately, those guarding the lumpatan will spend the night on the lumpatan. Those guarding the lumpatan must be able to swim because the current in the Musi River where the lumpatan is installed is quite swift. Regarding the results of the catch, the amount cannot be ascertained, because each time the amount harvested varies from tens to hundreds of kg,

sometimes reaching 500 kg. The results of the lumpatan are divided equally according to the number of groups, for example for 15 people, then the results will be divided to 15 poles in a term commonly used by the Empat Lawang society. Poles can be interpreted as a part, meaning that the results will be divided into 15 parts. Lumpatan is installed in several villages and those villages who still often install it, are Terusan Lama, Tebing Tinggi District, and some are installed in Ujung Lagi village, Talang Padang sub-district.

Lumpatan is a cultural heritage of the Empat Lawang area which has lasted tens or even hundreds of years and it is still sustainable to today. To preserve and further enliven this tradition, the Empat Lawang Regent plans to hold the lumpatan festival every year, this is recommended in early 2021 and is trying to be realized in 2021 (Sumeks, February 2021).

The Ecological Wisdom Value of the Tradition of Tangkap Ikan Pakai Lumpatan

The Tradition of tangkap ikan pakai lumpatan carried out by the Empat Lawang society provides benefits for fulfilling the needs of the surrounding society, especially those included in the pillars (parts/members) of the tradition, because the result gained really helps increase the income of its members. Ecological wisdom in this tradition is in harmony with the environment, which can be seen from the materials used to make lumpatan. Researchers found that the materials used to make the lumpatan which can be called a giant fish trap are mostly made of bamboo and rattan. Bamboo is woven with rattan in the form of a cage in the form of a long ladder. Bamboo and rattan are very environmentally friendly, when the rainy season is over, the lumpatan will crumble and drift away and eventually the water will break down on its own. So it will not leave residue that cannot be decomposed which damages the Musi River.

The following are the values of local wisdom contained in the tradition of tangkap ikan pakai lumpatan which can be internalized in social studies learning as follows:

1. Appreciation to Nature

After the lumpatan is successfully installed which takes around 20-40 days, the lumpatan is prayed (thanksgiving) before it is fully completed 100% with a prayer ritual with members or poles who participate in the group above the lumpatan with the hope that a strong lumpatan will not easily collapse or drift and get a lot of fish and blessings. This is meaningful as a reminder that we must always pray to the creator. Apart from that, there are also offerings (sesajen) presented to water guardians (who are believed to be river guardians) who must be respected by asking for permission to take advantage of the river.

2. Care for the Environment

This is related to the use of materials used to catch fish made from nature, which are mostly made from bamboo and rattan. In this era of modern technology, there are many choices that can be used to carry out activities that make things easier, but these people prefer to use materials that are environmentally friendly. This activity does not leave trash because after the lumpatan season is over, the materials used will become brittle and decompose by water. This shows attitudes and actions that seek to prevent damage to the environment.

3. Environmental Preservation

Catching fish using materials that do not damage the ecosystem such as putas and other toxic chemicals is an effort to maintain the sustainability and cleanliness of the Musi River where the lumpatan is installed. This character is needed to deal with global issues regarding environmental damage and to support sustainable development.

Internalization of Ecological Wisdom in Social Studies Learning

Ecological intelligence allows humans to understand systems with their complexity, as well as the interplay between nature and the human-created world (Rahayu, GD & Setiyadi, R, 2018). Ecological wisdom values that can be developed as material in social studies learning are chosen based on their uniqueness which are considered capable of helping students see and learn the meaning of life and apply it in their daily life. Ecological wisdom values can be extracted from local wisdom or traditions from the environment of the students

themselves. Local wisdom thus relates to all local culture, including ethnicity, customs, arts, and the local society's outlook on life in various local society activities in fulfilling the needs of all aspects of society life (Harmawati, Abdulkarim, & Rahmat, 2016). Social science education and its relation to local wisdom is a collaboration and combination that should not be separated, where the essence of social studies learning is to integrate the values of local wisdom in learning activities that teach ecological knowledge, which is past wisdom and becomes very important in the role of education in the present (Setiawan & Mulyati, 2020; Kurniawan, I & Hanggara, A, 2019).

The researcher identified the values of ecological wisdom contained in the tradition of *tangkap ikan pakai lumpatan* and integrated them with the social studies subject on Humans, Places and the Environment, and Human Activities in fulfilling needs. Ecological wisdom values that are relevant to social studies learning materials, they are respect for nature, environmental preservation, and environmental concern.

The values that can be developed from the tradition of *tangkap ikan pakai lumpatan* are:

No	Value of ecological wisdom	Development in social studies learning
1	Development in social studies learning	<ul style="list-style-type: none"> - Humans are part of nature. So humans must maintain harmony with nature by caring for and protecting the environment - Loving the neatness and cleanliness of

			the environment
2	Concern for the Environment		<ul style="list-style-type: none"> - Empathy for all forms of life around - Using water as necessary
3	Environmental Preservation		<ul style="list-style-type: none"> - Garden maintenance by each class - Caring for plants in the school environment - Participate in planting activities

Table 2. Development of ecological wisdom values

Teachers as curriculum developers have the authority to design learning in such a way for the benefit of developing ecological wisdom values for students. One of them is by building ecological awareness through local wisdom around students. The development of this ecological awareness intends to prepare students to have the understanding and skills to support sustainable development and empowered to have a critical view of limited natural resources, as well as the ability to adapt to an increasingly changing environment.

Discussion and Recommendations

Ecological intelligence is needed to deal with many environmental issues that occur in modern times. Ecological wisdom from community traditions that are available and close to the ongoing process of education is something that deserves to be empowered and utilized as well as possible so that social studies lessons presented by teachers are contextual. Something that happens and it is seen by students as their daily life experience is used as a source of learning, therefore teachers need to integrate wisdom values so that in the end they are able to transform great traditional values to their students. The tradition of tangkap ikan pakai lumpatan is a tradition that has ecological wisdom that is relevant to the objectives of social studies learning about environmental care. This tradition is a way for people to get products from nature that are environmentally friendly. From this tradition social studies teachers can provide understanding and experience to students to learn to live in harmony with nature and take environmentally friendly actions.

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