Investigating Local Wisdom Values of *Talang Mamak* Tribe Community in Social Studies Learning to Enhance Junior High School Students' Ecological Intelligence

Fanny Suci Fadillah

fannysucifadillah@gmail.com Universitas Pendidikan Indonesia

Rohani

hanirohani22@yahoo.com Universitas Islam Negeri Sultan Syarif Kasim

Mahdar Ernita

mahdarernita@gmail.com Universitas Islam Negeri Sultan Syarif Kasim

Abstract: At this time many environmental conditions often occur in various regions in Indonesia. This happens due to imbalance and damage to the ecosystem. One of the environmental problems that occurred was forest fires in Riau which caused an oxygen crisis. The factor that becomes this problem is the lack of awareness of the importance of the balance of nature and the low level of ecological knowledge among the community for the importance of increasing ecological intelligence. This research was conducted to contribute ideas, and readings, and to improve the ecological intelligence of junior high school students by exploring local knowledge of the Talang Mamak tribe in social studies learning. The research approach used is a qualitative approach and qualitative methods supported by literature studies (library research). The data collection technique in this research is using relevant literature studies such as journals, theses, and various other sources.

Keywords: Local Wisdom, Talang Mamak Tribe, Social Studies Learning, Ecological Intelligence

Introduction

Environmental problems occur continuously in every region in Indonesia. This is due to the imbalance and damage impacting the ecosystem. One of its problems is wildfire in Riau which has caused oxygen crisis. The wildfire in Riau has become an annual agenda every dry season. This wildfire causes serious damage to the environment, impacting the health of citizens as well. In accordance with the Ministry of Health (2015), the most disastrous wildfire happened in 2015 in numerous provinces including Riau, Jambi, and South Sumatera. This wildfire had become the worst disaster in the last 18 (eighteen) years which resulted in extreme weather.

During dry season, peatlands became incredibly parched, added with land clearing conducted by irresponsible cooperatives, ensuing severe air pollution in several South East Asian countries. Furthermore, farmers cleared lands through wildfire. However, through the scope of ecology according to Bahruni (2007), the decrease of forest area and the land degradation because of wildfire cause increase of risk and uncertainty of nature ecosystem recovery. This may lead to the loss of both wood and non-wood-related forest values in the future and the loss of values in unused biodiversity (Yusuf, et al., 2019).

The aforementioned conditions are truly concerning. The impacts caused are varied, one of them being Acute Respiratory Infections (ARI). The most recent data show that the number of people impacted by the wildfire in forests and lands until September is listed as 919.516 people. This was delivered by the Acting Head of Data, Information, and Public Relation Center of the National Disaster Management Authority (BNPB – Badan Nasional Penanggulangan Bencana), Agus Wibowo (2019). The factors causing this problem are the low level of awareness towards the importance of balance in nature and the lack of ecological knowledge.

Ecological intelligence should be comprehended by everyone. As stated by Supriatna (2017, p. 24), ecological intelligence should include the aspects of knowledge, awareness, and life skills as its base, which should be in line with



the nature sustainability. An individual who has acquired ecological knowledge, even indirectly, will understand that their every behavior will not only cause impact on themselves but also on their natural environment. This is in line with Hultkrantz, that ecological knowledge is reflected upon attitude and behavior that are real with multiple ecological capabilities in consideration, followed by building a good relationship between human and nature (as cited in Sternberg, 2004).

In social life, we are inseparable from values of culture or local wisdom. Local wisdom is defined as the value in which a community believes its truth, reflected upon real activities, attitudes, and behaviors towards the environment. The value of local wisdom is hereditary, formed by habits which grow and develop in line with the community closeness and challenges they encounter. The Indragiri Hulu Regency is one of 12 (twelve) regencies in Riau Province. In this regency resides the most alienated tribes in which the communities maintain a lifestyle that has yet to be influenced by modern culture.

Their underdeveloped condition may be identified in terms of the aspects of life, including economic, political, social, cultural, and religious conditions. One of the more recognizable tribes is Talang Mamak tribe. The Talang Mamak tribe is included into the Remote Indigenous Community (KAT – Komunitas Adat Terpencil). This tribe stays around the Rantau Langsat Village (Suwondo, et al., 2019, p. 133). The Talang Mamak tribe community is famous due to their natural resource management. The values of local wisdom in this community are effective in enhancing ecological intelligence which results in positive actions for environmental damage prevention.

This is also supported by applying customary laws in managing the forest. This may become a learning resource in schools. By integrating local wisdom values through beneficial learning implementation in order to enhance ecological intelligence, students may be able to comprehend the environment they live in. Ecological intelligence is an ability or competence possessed by students in responding to situations occurring around them. Moreover, the students may be able to apply them in their daily life as well. Nonetheless, the implementation is

limited to mere theory and memorization in the school. Whereas the learning implementation will hold more meaning and is possible to be developed in matter of values sustainability and hereditary to the next generation.

The implementation of 2013 Curriculum in schools provides opportunities for teachers and educational practitioners to include local wisdom values that are constructive in order to increase comprehension on ecology, social studies in particular. The purpose of social studies is to equip students with the awareness towards positive mental attitude, followed by good level skills in regard to the environment they live in. With the aforementioned issues as a foundation, the researcher wishes to investigate local wisdom values of the Talang Mamak tribe community in environment sustainability and ecological intelligence enhancement through the utilization of those local wisdom values in social studies learning.

Research Methods and Design

Methods. This study employed qualitative method which was supported by library research. Strauss and Corbin (2007, p. 1) describe qualitative method as a method that may be utilized to study community in relation to life, behavior, functionality in organization, social movement, and kinship. In terms of library research, Nazir (1988, p. 112) defines it as a data collection technique by examining books, literature, notes, and various reports that are related to the research topic.

Research Design. The research design applied in this study was qualitative research, descriptive with the support of literature study. Qualitative research results in numerous discoveries that may not be achieved through statistical procedures and other quantitative methods. This is in agreement with Strauss and Corbin (2007, p. 1), which state that qualitative research is a study that is employed to explore life in society, history, behavior, functionality in organization, social movement, and kinship. This is in line as well with Bogdan and Taylor (1992, p. 21), in which they disclose that procedures in qualitative research may produce descriptive data in the form of spoken, written, or



behavioral data that come from subjects.

Results and Discussion

Local Wisdom Values of Talang Mamak Tribe Community

Indragiri Hulu is one of the regions which has an authentic indigenous tribe that is the Talang Mamak tribe. The Talang Mamak tribe is included into the group of Proto-Malay, better known as the Older Malays. The Talang Mamak tribe community refer to themselves as Suku Tuha which has the historical meaning as the first group of indigenous people that arrived in Indragiri Hulu; these people believe they have the right to manage the resources in their environment. The Talang Mamak tribe community exists along the Indragiri River (Charin, et al., 2019).

In the Indragiri Hulu Regency, this community is spread into four districts, namely the districts of Batang Cenaku, Kelayang, Seberida, and Batang Gasal. The two of four districts, Kelayang and Batang Cenaku, is occupied by two particular villages for the Talang Mamak tribe to settle. They are the villages of (1) the Community Area of Talang Mamak Tiga Balai in the Kelayang District and (2) the Community Area of Melayu in the Batang Cenaku District. The term Talang Mamak comes from talang which means field in Old Malay and mamak which is used to refer a mother.

Based on the aforementioned statement, the tribe possesses the matrilineal trait, defined as obtaining the inheritance from the maternal side. This results in Talang Mamak being described as "the mother's field." In line with the definition, a particular custom is formed, in which later it becomes a custom of the Talang Mamak tribe. This custom may be observed through families that continuously moves their field (area of living) or the ways of growing crops in which they adapt to circumstances (not always staying). Due to the Talang Mamak tribe being matrilineal, dividing rights—properties—is conducted by the chief or tribe leader that is referred to as Batin, Penghulu, Mangku, and Monti.



On the inheritance law, their properties are only able to be inherited to daughters. This tribe community forms a nuclear family that creates their own house around the maternal in-laws (uxorilocal). Their unity and solidarity are akin to a village and every village is led by a Batin or Penghulu. Moreover, the community obtains a charismatic and influential leader with the title of Datuk Patih (Tabrani, 2002, p. 15-18). On the history of the community spread, there are numerous stories that expand verbally from a person to another. The most famous stories among the community are inherited from ancestors to their descendants.

One of the stories narrates the Talang Mamak tribe as the third generation of Adam. This is not without evidence, proven by the existence of a footprint on a large rock which is located around the Tunu River, Rakit Kulim Village; the footprint is believed to belong to a chief of the Talang Mamak tribe community (Agustina, 2017). Generally, the Talang Mamak tribe community is divided into two groups. The first group believes in a religion they call as Old Islamic Movement, which nowadays is known as Melayu people. The Talang Mamak tribe community that still believes in Old Movement recognizes Islam, however they have yet to practice the sharia entirely according to Islamic Law. The Old Movement community still believes in several myths coming from their ancestors.

Various developed myths are renowned and has become a source of knowledge, value, norm, and ethics in their life. The chief of the Talang Mamak tribe community, a batin named Jamin, revealed that in the life of their tribe community, they always inquire for permission from their ancestor so their religious practice may proceed accordingly, because the conduct in culture may be sustained only if the descendants possess the knowledge in what is mandatory to hold, resulting in ancestors continuing to provide natural resources overflowingly (Agustina, 2017). All the authentic Indonesian culture fundamentally employs rules in which they are in line with their point of view towards environment (pro towards the balance in nature).

This is based on several culture that possess customary law which is in

accordance with the environment sustainability and verbal literature, well known as petatah-petitih. Petatah-petitih is depicted by Djamaris (2002, p. 32) as a sentence or expression containing an in-depth, broad, concise, soothing definition; diction containing advice or satire. In Malay society, there is a famous petatah-petitih saying, "Kalau tidak ada laut, hampalah perut; bila tidak ada hutan, binasalah badan." (If there is no sea, [our] stomach will be empty; if there is no forest, [our] body will be extinct.)

The meaning of this petatah-petatih is that if the forest and nature were destroyed, culture would have been destroyed as well; this should be understood by the community. In consonance with the previously stated petatah-petitih, the depiction of life in Malay society, especially in the Talang Mamak tribe, puts nature as its center. This is based on the demand of society which comes from utilization of nature; the sustainability of nature requires to be maintained. Values of the Talang Mamak tribe may provide source and guidance in order to create a well-sustained environment. These are contained in every aspect of culture they own, both verbally and behaviorally towards nature.

The ecological culture which develops in the Talang Mamak tribe is a system of norms and values that emphasize the aspect of continuity. This situation becomes a primary asset for the society in establishing themselves without having to destroy the social arrangement that is adaptive towards the surrounding environment. The maintenance of forest by the Talang Mamak tribe may include several components (Yunus, 2017, p. 211-212).

Namely (1) planning, in which the Talang Mamak tribe acquires local knowledge about landscape involving residential area, field, plantation, sacred land, and traditional season calendar; (2) utilization of natural resources through considering continuity in function and productivity of forests which is referred to as agroforestry system; (3) management on forests supported by the attempt in prevention, countermeasure, and restoration through prohibitions issued by the tribe chief; (4) maintenance, in which the forest maintenance consists of the forest conservation, reservation, and preservation through mutual cooperation system and belief in myths; (5) supervision, in which the structure and function

of tribe leaders plays a significant role towards the supervision of environment; and (6) enforcement, in which the law of the Talang Mamak tribe rules on the existence of sacred land.

On the contrary, the equipment or tools used by the Talang Mamak tribe community have been designed and utilized based on nature as their fundamental base. The equipment used are beliung (to chop down), kampak (to split), parang (to slash), tajak (to weed), sabit (to mow the lawn), and tembilang (to dig). These equipment and tools carry no potential harm to the environment because of their low level of reaching area and dependency on power of human using them. Based on the ecological culture of the aforementioned tribe community, for the Talang Mamak tribe community, forest and its contents do not only become a source of livelihood, but also a source of culture and philosophical symbols in which they are the identity and dignity of the community.

On utilizing the forestry resources, the Talang Mamak tribe always undergoes various considerations. This is in line with the life continuity, role and function, and productivity of the forest. Numerous forestry resources that are utilized by the Talang Mamak tribe community result in sacred and fallow land, in which the latter is defined as an agricultural land that has yet to be planted for a particular period. This is due to a purpose to restore its fertility. A large part of utilization is merely subsistent (used for daily necessities). Indirectly this may cause continuity, function, and productivity of the forest, because then it will prevent excessive forestry resource exploitation.

The forest management conducted by the Talang Mamak tribe community involves all society components and tribe leaders. This management is led by a Batin and their ranks. The customs that have been inherited for generations are based on norms and penalties, which are conducted with proper rules and orders as its fundamental bases. This implies that every violation of rules should be handled by the lowest level of ranks. If the case cannot be solved immediately, it should be handled by the higher ranks. In the law of Talang Mamak tribe community, if a decision has to be created, it should be based on discussion and

agreement between the tribe leaders, in which they also obtain the right to decline or accept the said decision.

The truth of every decision that relates to the public interest may be examined whether it is fair and appropriate, so the tribe leaders will not lose the trust of their own community; the tribe leaders should be fair and appropriate in decision-making. The custom law has been applied strictly and indiscriminately. The custom law is also in the form of written and verbal law, in which the latter is referred to as petatah-petitih. The community member that commits deforestation such as felling, land clearing, and excessive wild animal hunting will be handled and processed gradually beginning from the village level to the tribe level. The custom law of Talang Mamak tribe community rules the existence of sacred land; the one taking forest resources or chopping trees will be fined in accordance with pancung alas.

Enhancing Ecological Intelligence in Social Studies Learning Through Local Wisdom Values of Talang Mamak Tribe Community

The ecological intelligence may be described as the ability of human in understanding the nature system and comprehending the change in the surrounding environment. This is in accordance with Goleman (2010, p. 38), stating that ecological intelligence is a human ability to adapt in terms of ecology in the place they are staying. In its concept, ecological intelligence is based on thinking ability and acting holistically as disclosed by David W. Orr (as cited in Supriatna, 2017, p. 253). In the traditional society such as the Talang Mamak tribe community, the ecosystem according to them does not only relate to the relationship between nature, but also other creatures including humans, animals, and plants, dependent to each other.

Various cultural inheritance in terms of nature sustainability cannot be separated from the challenges they encounter; this is a depiction of ecological intelligence in traditional society. Based on the aforementioned statement, ecological intelligence is a requirement for students in responding to situations happening in their environment. Moreover, the students should apply it in their daily life.



Ecological intelligence must be shaped through cognitive, emotional, and social intelligence. This may be useful in developing students' comprehension regarding the importance of establishing a harmonious relationship with their environment.

The subject of social studies is a proper facility to enhance students' comprehension in the matter of ecological intelligence. This is based on the purpose of social studies subject. According to Mursyid (as cited in Surahman, 2017, p. 3), social studies aims to develop students' potential in order to be aware of social issues occurring in the society, supported by positive mental attitude towards every issue and being creative in countering problems happening in daily life. The 2013 Curriculum provides many opportunities for the social social studies teachers to include ecological values in order to increase students' ecological intelligence. The ecological intelligence will influence how students view their environment and appreciate the area they are staying in, in accordance with the continuity of life development.

Discussions and Recommendation

The issues revolving environment that occur in various regions in Indonesia are due to imbalance and damage in the environmental ecosystem. Factors causing these issues are the low level of awareness towards the importance of balance in nature and the low level of ecological knowledge. Ecological intelligence becomes a requirement for every individual in responding to situations in their environment. Local wisdom values in the Talang Mamak tribe community are considered effective in enhancing comprehension on ecological intelligence which ensues positive actions in preventing real harm to the environment.

The social studies subject is a proper facility to enhance ecological intelligence so students may apply it in their daily life. This is in line with the purpose of social studies learning, which is to develop students' potential in order to be aware of social issues occurring in society. Based on the explanation, the researcher recommends enhancing knowledge in terms of ecological intelligence, particularly for students, through investigating local wisdom values to comprehend changes in surrounding environment.

References

Books:

- Al-Mudra, Mahyudin. (2008). Redefenisi Melayu. Pekanbaru: Lembaga Keadatan Melayu Riau.
- Ayatrohaedi. (1986). Keperibadian Budaya Bangsa (Local Genius). Jakarta: Pustaka Jaya.
- Bogdan, Robert dan Steven Taylor. (1992). Pengantar Metode Kualitatif. Surabaya: Usaha Nasional.
- Djamaris, Edwar. (2002). Pengantar Sastra Rakyat Minangkabau. Jakarta: Yayasan Obor Indonesia.
- Husni Thamrin. (2007). Etnografi Melayu: Tradisi dan Modernisasi. Pekanbaru: Suska Press.
- Husein, Ahmad, et. al. (2017). Manajemen Bencana. Jakarta: Kementrian Kesehatan Republik Indonesia.
- Koenjtaranigrat, dkk. (2012). Masyarakat Melayu dan Budaya Melayu dalam perubahan. Yogyakarta: Balai Kajian dan Pengembangan Budaya Melayu.
- Makmur Hendrik, et. al. (2005). Tegak Menjaga Tuah, Duduk Menjaga Marwah: Mengenal Sosok, Pikiran dan Pengabdian Tenas Effendy. Yogyakarta: Balai Kajian dan Pengembangan Budaya Melayu.
- Nazir, Moh. (1988). Metodologi Penelitian. Jakarta: Ghalia Indonesia.
- Sapriya, et. al. (2007). Pengembangan IPS di SD. Bandung: UPI PRESS.
- Sapriya. (2014). Pendidikan IPS. Bandung: PT Remaja Rosdakarya.
- Supriatna, Nana. (2017). Ecopendagogy. Bandung: PT Remaja Rosdakarya.
- Sibrani, Rian. et. al. (2021). Masyarakat Adat Talang Mamak. Pekanbaru: Yayasan Lembaga Bantuan Hukum Indonesia.
- Strauss, A. dan Corbin, J. (2007). Dasar-Dasar Penelitian Kualitatif. Yogyakarta, Pustaka Pelajar.
- Suwondo, dkk. (2019). Pendidikan Lingkungan berbasis potensi sosial. Pekanbaru: Universitas Riau Press.
- UU Hamidy. (2014). Jagad Melayu Dalam Lintasan Budaya di Riau. Pekanbaru: Bilik Kreatif Press.



Yunus, Mohd. (2017). Budaya Ekologi Suku Talang Mamak dalam Pengelolaan Hutan (Bunga Rampai). Bandung: ITB.

Journal Articles:

- Charin, Rizky Octa Putri. et. al. (2019). Usaha Masyarakat Suku Talang Mamak untuk mempertahankan Eksistensinya di tengah perebutan Sumber Daya Hutan Adat. Vol. 7. No. 1. Hlm. 25-26.
- Titisari, et. al. (2019). Local wisdom of Talang Mamak Tribe, Riau, Indonesia in supporting sustainable bioresource utilization. Vol. 20. No. 1.
- Thamrin, Husni. (2014). Revitalisasi Kearifan Lokal Melayu Dalam Menjaga Harmonisasi Lingkungan Hidup. Vol. 6. No. 1. Hlm. 91-98.
- Yusuf. A. dkk. (2019). Analisis Kebakaran Hutan Dan Lahan Di Provinsi Riau. Vol. 6. No. 2.

Thesis:

Agustina, Ella. (2017). Perubahan Identitas Suku Talang Mamak Melalui Kontruksi Sosial di Desa Talang Jerinjing Kecamatan Rengat Barat Kabupaten Indragiri Hulu Riau. Jakarta: Universitas Islam Negri Syarif Hidayatullah.

Internet:

- Badan Pusat Statistik. (2019). Data Kabupaten/Kota Indragiri Hulu. Indragiri Hulu: Badan Pusat Statistik.
- Dinas Penanaman Modal dan Pelayanan Terpadu Satu Pintu (DPMPST). http://dpmptsp.inhukab.go.id/index.php?com=halutama&link=profil i nhu Profil Indragiri Hulu (diakses pada 17 Desember 2021).
- Ruben, (2009). Selayang Pandang Talang Mamak {Online} Tersedia: http://talangmamak.blogspot.com/2009/10/selayang-pandangtalangmamak.html (diakses pada 19 Oktober 2022).
- Saturi, Sapariah (2019). Orang Talang Mamak Bertahan Hidup di Hutan Yang Tersisa. https://www.mongabay.co.id/2019/11/20/orang-talangmamak-bertahan-hidup-di-hutan-tersisa/ (diakses pada 19 Oktober 2022).



- Sapariah (2019).Beginilah Orang Talang Saturi, Nasib Mamak. https://www.mongabay.co.id/2016/07/24/beginilah-nasib-masyarakatadat-talang-mamak-bagian-1/ (diakses pada 19 Oktober 2022).
- Tanjung, (2010).Banda H. https://news.okezone.com/read/2010/02/17/340/304599/banjir-sukupedalaman-riau-terisolir. (diakses pada 17 Oktober 2022).