



Changes Social of Environmental Education in Indigenous Peoples of the Jungle Jambi Province, Indonesia

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Abstract: This research aims to reveal the change and continuity of environmental education in the Indigenous people of the jungle Jambi Province, Indonesia. The method used was qualitative research method with the type of phenomenological research. The subjects of this study were the indigenous people of the jungle, namely: Temenggung, Tenganai, traditional leaders, and traditional youth. Data was collected by participatory observation and in-depth interviews using an unstructured interview draft. Data analysis was carried out using techniques: data reduction, display, and verification. The results of this study were (1) Changes in Environmental Education in the Indigenous people of the jungle Indigenous Peoples of Jambi Province referring to a sociological perspective could be categorized as social dynamics. Changes in the local jungle community have a social statistics category. The category is most of the jungle population which recognizes the oneness of gods who take good care of nature without any destruction from humans. It aims to sustain a prosperous life in the eyes of the jungle tribe (2) The continuity of environmental education in the jungle community was based on historical facts that were easily refuted. The sustainability of this environmental education was based on the community's awareness, solidarity, and survival. Indigenous people of the jungle believe that the forest is their home. The continuity of Indigenous people of the jungle environmental education occurs in two areas, structural or customary law and cultural education within the family.

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Introduction

Environmental problems have occurred in many areas, resulting in various damage to nature and depriving the rights of some people who depend on the environment, forest, or nature. It is, of course, the result of environmental pollution, climate change, and the over-exploitation of nature (Effina & Mahyati, 2022). Without realizing it, humans and the environment are very closely related. All living things are related to their environment, breathing, looking for life, and preserving the environment.

Environmental education is an effort to change behavior and attitudes carried out by various parties or elements of society. It aims to increase knowledge, skills and public awareness about environmental values and environmental issues, which in turn can move the community to play an active role in efforts to conserve and environmental protection for the benefit of present and future generations. Environmental education can be carried out outside of school which can be carried out in a structured and tiered manner, as in indigenous peoples (Henita Rahmayanti & Wihardjo, 2021).

The indigenous people of the rimba are indigenous communities in Jambi Province who live in the jungle. They generally move around from one place to another to survive



(Saputra et al., 2018). The traditional people of the famous jungle people uphold the sustainability of nature; their lives depend on nature, and nature is the past and future life for the Indigenous people of the jungle. Historically, the community has lived in the jungle since their ancestors and inherited nature as a provision for life and community (Itmam, 2020).

The Indigenous people of the Jungle in Bukit Dua Belas National Park, Jambi, attend schools or remote classes organized by observer organizations such as the Indonesian Conservation Community (KKI) Warsi said that the total number of Indigenous people of the jungle in Bukit Dua Belas National Park is 1,689 and 600 of them are children. About 350 can already read and write through the remote class program. The process of approaching the Indigenous people of the jungle Jambi is quite long, namely the last ten years, even inviting Indigenous people of the jungle to study intensively has only been done in the last three years (Ahad & Auliahadi, 2019).

Various types of plants in the TNBD are used to meet the needs of the Indigenous people of the jungle. The use of plants for food, traditional medicine, building materials, handicrafts, traditional rituals, and household utensils has been passed down from generation to generation in daily life with binding customary rules. This local wisdom generally contains teachings to maintain and utilize natural resources in a sustainable manner (Sriyati et al., 2022). The Indigenous people of the jungle belief system has a vital function and role in preserving the environment. The belief system of the jungle people is able to live and succeed in keeping the existing environment sustainable and healthy for the inhabitants to live in. The religion they profess is able to transform into a machine of self-control as a guardian of nature. The belief of the jungle people in the existence of the curse of the gods on these "abstinenes" that are violated is what grows and is firmly rooted in their beliefs (Saleh, 2014).

The existence of social change is a change in the relationship of interaction between individuals, organizations or communities related to social structures or patterns of values and norms. Thus the change in question is a "socio-cultural" change because humans are social beings who cannot be separated from culture (Chabibi, 2019). Changes have occurred in the habits of the Indigenous people of the jungle indigenous people in maintaining and providing environmental education. It can at least be seen in their health and their daily activities. The peak of disease attack occurs at the peak of the fruit season in the forest, called the godong annual season. Indigenous people of the jungle have the knowledge and culture to prevent malaria by making smoke around the huts at night, consuming traditional medicines from the forest and increasing the frequency of mobilization to forest areas (Kristiawan et al., 2022). Kristiawan et al, (2022) concluded that the Indigenous people of the jungle environment affected malaria, especially for people of reproductive age.

In addition, they have spread various types of plants that previously did not exist in the forest or their community. The Indigenous people of the jungle are currently interested in planting crops in agriculture, such as rubber and oil palm plantations. It is confirmed by research confirming that since rubber and oil palm plantations have become a promising market commodity in Jambi, the lifestyle of the Indigenous people of the jungle has changed and been replaced by cultivation in oil palm and rubber plantations (Prasertijo & Sutningsih, 2021). Despite the lack of recognition of the Indigenous people of the jungle's territory and the narrowing of the forest area, the Indigenous people of the jungle both hunt, gather and collect forest products (Tresno, 2022). Changes and continuity of the Gondang and Tortor customs in the Batak indigenous people are the impact of changes in lifestyle and association of people with modern society (Simangunsong, 2013). Likewise, for the Dayak people in West Kalimantan, changes in behavior and views the Dayak people addressing customary

forests as assets. Customary forests are now used as a means of income for residents through the implementation of distorted customary law (Ilhami, 2016).

This research seeks to reveal changes and sustainability of environmental education in the Indigenous people of the jungle community in Merangin District, Jambi Province. The Indigenous people of the jungle are a society that is consistent and persistent in implementing customary rules and protecting the environment. The changes are the latest phenomena and shift due to association and interaction with the outside community, private institutions and the government (Yenti & Zahara., 2021). Several relevant studies show that research on changes in environmental education is increasingly relevant to maintaining, on the one hand, the survival of the Indigenous people of the jungle and, on the other hand, nature, and forests in their belief that they are inseparable from the lives of indigenous peoples.

Research Method

This research was conducted using qualitative research methods with phenomenological (YF, 2017). Phenomenology is research that focuses on phenomena that occur in the lives of research subjects (Sugiyono, 2019). So that he is required to explore, understand, and interpret an event under study. The subjects of this research were central figures in indigenous peoples, such as Temenggung, Tengganai, traditional leaders, and traditional youth. Data was collected using participatory-observation and in-depth interviews using an unstructured interview draft. Data analysis was done with data reduction, presentation, and verification (Sugiyono, 2019). These stages can work in tandem to strengthen and deepen the analysis to obtain comprehensive research results and conclusions. These stages can strengthen the analysis to obtain comprehensive research results and conclusions.

Results and Discussion

The analysis of student perceptions about online and real practicums in Table 3 shows that most students are more inclined and happy to participate in real practicums than online practicums. In the aspect of understanding, students in real practicums argue that they understand more about work procedures and materials than in online practicums. From the aspect of flexibility, real practicums give students a feeling of pleasure because they can interact directly with practicum materials. In contrast, in online practicums, students tend to

Changes in Environmental Education for Indigenous Peoples of the Jungle

Indigenous people or jungle people Merangin Bukit Dua Belas National Park (TNBD) are nomadic peoples or indigenous peoples in the forest area of Bukit Dua Belas National Park (TNBD) Jambi Province. The Jambi Province Central Statistics Agency said 436 men and 429 women from the jungle lived in the Merangin district. Merangin district is the second district with the most population of Jungle people after Sarolangun district, which has 1093 jungle people. Currently, based on the geographic location of the jungle, people who are in Merangin, adjacent to the Kerinci forest area (Saleh, 2014).



Picture 1. Geographical location of the jungle tribe in the Merangin Regency area



In daily life, the Indigenous people of the jungle usually do not wear clothes, only a loincloth to cover their genitals. However, if they leave the forest area, some wear ordinary clothes, but their subordinates still wear loincloths or underpants, while the women wear sarongs connected to the chest. In terms of food, they already use rice as their main meal every day, like other ordinary citizens (Saleh, 2014). To maintain survival in the forest, the Rimba people carry out economic activities as the basis of life, including farming, looking for food, gathering food (worked by women) from gardens, hunting, fishing, and trading by leaving the area and selling it to the outskirts of town. In doing business or dealing with outsiders (suitors), the Rimba people use intermediaries (suitors). A suitor is a person trusted by Rimba residents as a go-between to talk to outsiders. So whenever talking or dealing with outsiders, the Jungle people involve suitors to accommodate buying and selling transactions (Saleh, 2014).

On the side of the jungle, people's lives highly uphold civilization and care for forests and the environment. The environment of the jungle people has its peculiarities, considering they live in the middle of the forest. Every member of the indigenous community holds the jungle people in their lives. One of the customary laws in the Indigenous people of the jungle community is that women are not prohibited from changing religions, whereas men are allowed to change religions. In this context, indigenous peoples, especially women who want to choose a new religion, will be expelled from their community (Effendi & Purnomo, 2020).

On the environmental side, the utilization of the local ethnobotanical wisdom of Indigenous people of the jungle in Jambi Province in the last 15 years has been quite good. However, the efforts of the jungle people to carry out environmental care in the last two years have seen quite significant changes. The jungle people now have the ambition to map fields and gardens. Driven by the food and livelihood needs of the jungle people in the Merangin area, some also clear land for farming. Non-formal education from the volunteers also no longer dominates the thinking of the jungle people. Where forest people have widely used the pure and natural environment of the forest for their economy and food (Saleh, 2014).

This change is undoubtedly a phenomenon different from the jungle culture itself. The customary rules that apply to the jungle's Indigenous people regarding the plants in the forest have begun to fade. The government's plant conservation efforts also no longer support the understanding of the jungle people. So, the feeling of love for caring for the environment of Jungle people began to fade with the situation. Although some jungle people, especially in Merangin, still adhere to effort to purify the forest.

The response from one of the Rimba people in Merangin on behalf of the Penyuruk in an interview on 13 November 2022 is as follows:

Dak ado lagi, cuma sejarahnya hutan ini kamilah yang jago, tapi tempat ni ibaratnyo tempat kami hidup. Buah pelumpang dulunyo banyak nian disiko, buah pelumpang besar itu ado, ado tempatnyo di sungai dekat muaro sungai napok ini sekarang. Sekarang cari pelumpang tu payah nian. Banyak kebun tanam karet, sawit jugo. Hari-hari melewati sungai cari buah pelumpang tu baru jumpo di dekat sungai tu. Tumbuh tumbuhan sekarang harus jauh ke dalam hutan. (Interview with Penyuruk a local jungle resident in Merangin on 13 November 2022).

According to one of the forest residents, the environmental changes are currently being used for oil palm and rubber plantations, so it is challenging to find pelumpang fruit or what is known as *kapok* (*kapuk randu*). They usually use *Pelumpang* fruit to make pillow and mattress crafts. It indicates that the standard policies themselves have changed a lot. The inadequate natural environment, as it used to be, has become a concern for some jungle



people. There is another comment from Mijak as a local jungle resident in addressing this as follows:

Iyo aku lagi kecil tu dipanggil tampung, kalau anak itu masih kekecik, misalnya megang tampung, nah itu kalau lagi kecil, dianggap anak kecil itu dipanggil tampung, kalau udah besar baru dipanggil mijak, jadi ada nama kecilnya ada nama dewasanya gitu. "bebalai, na bebabai ini banyak bedikirnyo misalnyo kedewa padi, kedewa madu, kedewa buah-buahan, atau malekat orang meru, dio percayo jugo ado malekat orang meru, malaikat orang meru itu malekat orang luar artinyo, malekat orang meru itu yang paling tinggi karno dipecayo kito banyak malekat, didalam setiap manusia itu diawasi beberapa malekat, ada 7 malekat yang mengawasi kito, buruk baik kito diawasi. Ha itu yang tukang catat dosa, kebaikan itu yang tukang catat malekat. Itu tugainyo malekat. (Wawancara bersama Mijak warga lokal rimba di Merangin pada 13 November 2022).

Mijak's explanation is that nature is guarding it. Specifically, the god of fruits differs from the god of rain and others. Indigenous people of the jungle believe that the god they believe in is there in the tradition of caring for nature. Human error for not caring for nature has a sanction in the form of believing that some of them are sick or that a disaster may come. The standard of thinking of the local Rimba residents has strengthened their beliefs when changing the shape of nature. However, on the other hand, their economic needs and necessities of life make them clear land for farming. In addition, education to protect and care for nature from the volunteers and the government is more relaxed than in the last 15 years. So, some of them or the jungle people are aware of the changes in life from the jungle people's actions themselves.

Tracing the theory of change from a sociological perspective can be categorized as social dynamics. Following the view of August Comte (1798-1857M), in understanding the social order, two concepts can be used, namely social static (social statics) related to the structural building of society and social dynamics (social dynamics) related to structural dynamics (Chabibi, 2019).

In this context, the local jungle people have a category of social statistics in which most of the jungle population recognizes the oneness of a god who takes good care of nature without any destruction from humans to sustain a prosperous life in the view of the jungle tribe. So that natural buildings remain sustainable and can be enjoyed far in the future no matter how the times' change. While the social dynamics occur, there needs to be more government strategy in creating an educational structure that consistently maintains a jungle mindset that loves nature so that the emergence of local forest residents turned around to open gardens for economic needs.

The reality in the indigenous tribes of the Indigenous people of the jungle is also relevant to the theory of social change, which is part of sociological studies influenced by the ideas of Comte and Spencer (19th century) regarding systems theory and functional or structural-functional theory. In this case, researchers will rely on the theory of social change in the form of systems theory because this theory has conceptual tools that can be applied to analyze the social change in forest communities in the Merangin district. With the patterns of environmental changes, the current situation of the jungle people's life becomes normal if there is a change and functional system in the Rimba community in Merangin Regency.

Social of Environmental Education for Indigenous Peoples of the Jungle

The Rimba people are unique in that they live in the middle of the wilderness, making them believe that the forest is a large house. So that forests and their living systems cannot be



separated. *Seloko pesemian* jungle is the fruit of thought, contemplation, and observation of the Indigenous people of the jungle on the dynamics of life they lead in the forest. Nature conservation is a big theme for them and is always maintained in indigenous peoples who adhere to certain legal system beliefs.

Indigenous people of the jungle believe in gods and supernatural beings, and ancestors will curse anyone who violates or destroys nature. Their belief in gods controls and controls the behavior of the jungle people in utilizing nature, the forest and everyday life. Rivers, forests, and land for farming are managed according to customary rules that do not violate their belief system in gods.

The customary laws of the jungle people are comprehensive; set about girls and bachelors, people to people, and people and the environment. This customary law is firm; few cases, demands, and appeals exist. The customary law forms of the Indigenous people of the jungle are four *depi*, four *debewo*, and a couple of percussions. Four degrees, such as murder, rape, and cheating, and cases like this are punishable by death. This form of law is a severe case. Moreover, those who are obliged to resolve this matter are *Tengganai* and *Temenggung* (Wawancara *Temenggung Tarim*, 14 November 2022).

Empat debewo includes theft, beating, and fighting. Laws like this are light cases. *Tomonggong* generally resolves cases like this. *Teliti nang duo beleh* is a trial in Indigenous people of the jungle law. *Teliti nang duo beleh* will investigate whether it is true or false, facts or not, to obtain a decision from the *Temenggung*. One of the sanctions from this court, for example, is playing dead, not playing dead. For example, some murders are prosecuted according to custom, not according to the government. The perpetrator can pay a fine or be sentenced to death. It means that the choice for this sanction is equally severe (Wawancara *Temenggung Tarim*, 14 November 2022).

Meanwhile, regarding the structure of traditional institutions, Indigenous people of the jungle recognize a hierarchy consisting of three layers: the highest is *Jenang*, below is *Tumenggung*, and at the level below *Jenang* and *Tumenggung* are *Depati*, *Menti*, *Tengganai*, *Anak Dalam*, and *Debalang*. In detail, the customary structure of the Indigenous people of the jungle has the following tasks (Hermansyah, 2019):

- a) *Jenang*; Advisors and Liaison of Indigenous people of the jungle with the outside community
- b) *Temenggung*; Highest leadership (as *Rajo*), Law enforcers who decide cases, Leaders of ritual ceremonies, People who have the ability and supernatural powers.
- c) *Depati*; Overseer of *Temenggung* leadership.
- d) *Mangku*; Untuk To lead all the people or groups and give the rules and decisions weighers in the customary assembly.
- e) *Menti*; Tried people according to adat/judges.
- f) *Anak Dalam*; *Mangku*'s confidant, examines the people's mistakes.
- g) *Debalang Batin*; The person who served as *Tomonggong*'s bodyguard.
- h) *Tengganas/Tengganai*; Advisor, the highest decision holder in the custom assembly that can overturn decisions.

For the Indigenous people of the jungle, the forest is home. The house that provided them everything they needed was now in disrepair and getting smaller. Their daily food is tubers that grow in the forest, such as taro, cassava, sweet potatoes, silung tubers and game animals, such as wild boar, deer and mouse deer (wawancara, *Adomelak*, 20 November 2022). Continuity of environmental education until now continues to be maintained in environmental knowledge, which refers to the belief that the prohibition against river



pollution is because it will be cursed by the ancestors where the Indigenous people of the jungle people will experience year-old diseases.

That is because the excrement dumped in the river causes the gods to be angry. After all, the water is their source of life and is polluted. Thus the Indigenous people of the jungle bathe and wash clothes still using plants such as bidara leaves, and orang aring leaves because soap pollutes the environment (Interview with Temenggung Pemumbar, 20 November 2022). It shows that, within the Indigenous people of the jungle community, environmental education continues to be passed down from one generation to the next through customary rules taught by traditional leaders and families to live clean for the sake of the health and quality of life of the community.

Apart from the prohibition against polluting the river, another taboo is catching fish using poison. Anyone who violates the taboo will immediately face the leader of the Indigenous people of the jungle, Tumenggung. This prohibition is because, in addition to small fish, they also die, and the water, which is the source of life for Indigenous people of the jungle, is also polluted (Interview with Mintel, 20 November 2022). That is why they strictly prohibit fishing with poison or anaesthetic.

The forest man has hanged his life in the jungle, be it from hunting and fruits in the forest. If damage occurs to the source of his life, the life of the people's forest is under threat. It is very thing afraid of the forest. Forest people are apprehensive about more and more forest destruction because the forest is home. Forest is the only place to live for human's forest. Jungle people cannot live outside the forest like an outsider in general. It was proven when the Jambi government provided housing intended for jungle people on the border between the village and the forest Kedundung Youth Group in TNBD. In 2013, the Provincial Government of Jambi provided about thirty houses for the forest people. However, until then, these jungle people still have challenges living in him. They prefer to make huts, the tiny houses with coconut leaves as the roof. They are more comfortable coexisting with nature though full of simplicity. It signifies that teaching forest people to live like outsiders is still difficult.

The first taboo discussed in this research is the taboo defamation environment. Some restrictions exist in the belief system of the jungle people, which must be strictly adhered to. Prohibition pollutes the environment. The environment in question is the forest and rivers. Jungle people have rules or a ban on the disposal of plastic waste on land and water. Based on forest people, if there is trash or excrement (plastic), it must be burned immediately on the spot based on Interview with Meranggai in Kedundung Muda TNDB in December 2013. Although like trash is a small candy wrapper.

They catch fish in small rivers, tributaries of the Batang Hari river and other rivers. It is usually done by hitting large rocks with fish under them. By doing so, the fish died. They also dredged rock holes with fish hidden in them and caught them. Another way of catching fish is *menubo* or poisoning the fish. More details can be seen in the following expression:

Menubo mereka lakukan dari akar-akar tuba atau rumput yang dapat memabukkan atau mematikan ikan. Tuba-tuba atau rumput tersebut dipukul-pukul sampai lumat, dan setelah lumat lalu dikincak-kincak dalam air sungai, sehingga air sungai itu mengandung racun yang dapat memabukkan dan mematikan ikan-ikan (Interview with Mijak, 13 November 2022).

The above facts show the continuity of their customs and beliefs unite as a binder and controller of their behavior in life. Economic activity cannot dominate or violate customary rules firmly held by the Indigenous people of the jungle. As a result, the continuation of environmental education works through the phenomenon of nature's sacredness, blending



with their beliefs or beliefs. They will receive various sanctions or punishments from gods and customs, individually or collectively, if their laws are violated.

The continuity of Indigenous people of the jungle environmental education occurs in two areas, structural or customary law and cultural education within the family. The continuity of environmental education for the indigenous jungle community occurs in two areas, namely structural or customary law education and cultural education within the family. In traditional education, the jungle people must be accustomed to keeping nature clean by obeying the environmental god according to their beliefs. In family education, jungle people must get used to realizing that taboos that are believed to be kept away, such as polluting plastic waste and throwing garbage into rivers. The continuity of this structure can be seen in the existing customary structure and its function as an organization of customary institutions. Traditional leaders become cultural agents, both formal and conventional. Formal cultural agents continue the customary organizational structures formed by their ancestors.

Anthropologists tend to view continuity as an argument for social persistence, although it is also recognized that some changes have occurred. Thus, what people experience as new is perceived through the old or conventional and accommodated to see change as an 'eternal process' rather than generating events and discontinuities. Anthropologists prioritize continuity over discontinuity (Bammer, 2015). Continuity of environmental education in the Indigenous people of the jungle community occurs when cultural agents or sub-agents of the head of the family and the community are in one group. In the context of Indigenous people of the jungle, this occurs because of strong relationships between families, cultural agents, traditional leaders, and the community, which is described as a social structure. With this awareness, the community will maintain and continue the legacy of their ancestors in their daily life because a community will be aware of their values, rules and customs that have been regulated in customary law and the Indigenous people of the jungle belief system (Saleh, 2014).

Conclusion

The conclusions drawn from the results of this study are as follows: (1) Changes in Environmental Education in the Indigenous people of the jungle Indigenous Peoples of Jambi Province, referring to a sociological perspective, can be categorized as social dynamics. Changes that occur in the local jungle community have a social statistics category that most of the jungle population recognizes the oneness of gods who take good care of nature without any destruction from humans and sustain a prosperous life in the view of the jungle tribe (2) Continuity of environmental education in the jungle community is a historical fact that is not difficult to refute. The sustainability of this environmental education is based on the community's awareness, solidarity, and survival. Indigenous people of the jungle believe that the forest is their home. The continuity of Indigenous people of the jungle environmental education occurs in two areas, structural or customary law and cultural education within the family.

Recommendation

The researcher provides recommendations for further researchers in the future who focus on environmental education studies to raise environmental issues that are formally legal to indigenous jungle people in Indonesia. Legally speaking, many indigenous peoples of the jungle still do not get a severe position of environmental structures. There are still many of their territories taken over by the government for garden areas. It is essential to consider that



the indigenous people of the jungle have a wealth of tradition and culture in protecting nature in Indonesia.

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