HUMAN-NATURE IN INDONESIA-MALUKU *HYGERA LAI*: HERITAGE TO ECOLOGY PROTECT IN LUANG ISLAND

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Abstract:

Luang Island is a small island located near Timor Leste and southwest of Australia. Geographical location, global economic considerations, global climate, and the policies of the Indonesian government all have an impact on the existence and culture of the Luang Island people. The people of Luang Island have local wisdom called Hygera Lai that assists them in developing a relationship with nature. The purpose of this study is to examine the relationship between Hygera Lai and the environment among Luang Island residents. This is a qualitative study using an ecological anthropological lens. Content analysis was used to analyze the data collected. This study establishes a link between Hygera Lai and the Luang people's natural environment.

Keywords: Hygera Lai, Ecology, Sea, Luang Island
Discipline: Ecology

EMBER-TERMÉSZET INDONÉZIA – MALUKUBAN
HYGERA LAI: ÖRÖKSÉG AZ ÖKOLÓGIA VÉDELMÉHEZ LUANG-SZIGETEN

Absztrakt:

Luang-sziget egy kis sziget Kelet-Timor közelében, Ausztráliától délnyugatra. A földrajzi elhelyezkedés, a globális gazdasági megfontolások, a globális éghajlat és az indonéz kormány politikája egyaránt hatással van a Luang-szigeti nép létezésére és kultúrájára. A Luang-sziget lakosságának van egy Hygera Lai nevű helyi bölcsessége, amely segíti őket a természettel való kapcsolat kialakításában. A tanulmány célja, hogy megvizsgálja a Hygera Lai és a környezet kapcsolatát a Luang-sziget lakói között. Jelen kutatás egy ökológiai antropológiai lencsét használó kvalitatív vizsgálat.

Kulcsszavak: Hygera Lai, ökológia, tenger, Luang-sziget
Discipline: kulturális antropológia

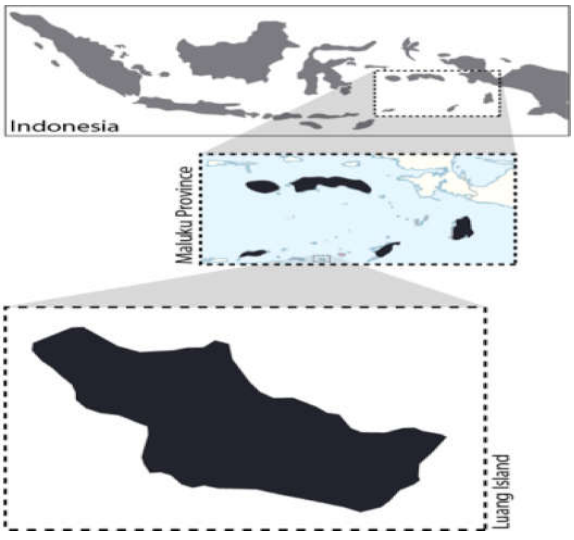
Location on the Spot

Indonesia is one of the world's archipelagic countries. According to UNCLOS 1982 (Article 46), an archipelagic state is a group of islands, including parts of islands, the waters between them, and natural forms that are inextricably linked (Mulya, 2013; Sunaryo, 2019). With the passage of Law N0.27 of 2007 on Coastal Areas and Small Islands Management, it is now clear that the marine and fisheries sectors, as well as coastal area and small island management, are all part of the national development agenda (Lasabuda, 2013).

The Indonesian maritime region is particularly vulnerable to climate change's effects. As a result, events associated with climate change in this region will have an effect on global climatic conditions. On the other hand, global climate change events will have an effect on the maritime continent's climate (Aldrian, 2014; Robertson et al., 2011). Indonesia is located on the equator, sandwiched between the Asian and Australian continents, as well as the Pacific and Indian oceans. The sea area consists of territorial seas, archipelagic waters, and inland waters covering approximately 2.7 million square kilometers, or approximately 70% of the total land area of the Republic of Indonesia, plus the Indonesian Exclusive Economic Zone (ZEEI) covering 3.1 square kilometers, bringing the total marine area under Indonesian national jurisdiction to 5.8 million square kilometers (Astuti et al., 2018). As an archipelagic country, Indonesia is comprised of 17,504 islands, each with a distinct culture and resource base based on its geography. Maluku is one of Indonesia's archipelagic provinces. Maluku has a long history of producing cloves and nutmeg. These two commodities link Maluku to global trade networks that date all the way back to the sixteenth century (Abdurachman, 2008; Andaya, 1993; Ricklefs, 2007). Maluku has played a significant role in world history, as history demonstrates. One could even argue that Maluku's spices have become a magnet for European nations interested in the Eastern world. The Portuguese, Spanish, British, and Dutch all claimed control of areas in the Maluku islands (Andaya, 1993; Fraassen, 1981; Kutoyo, 1977; Leirissa, 1982).

Maluku's regulation as an archipelago province following the enactment of Law No. 23 of 2014. Maluku's sea area is significantly larger than its land area, accounting for approximately 92.4 percent of the ocean and 7.6 percent of the land (Badan Pusat Statistik Maluku, 2021). Sea cucumbers, shark fins, skipjack tuna, live and fresh reef fish, top shells (*Trochus Niloticus*), and pearls are the primary marine commodities exported from Maluku (Adhuri, 2004). Maluku is an archipelagic province with approximately 13,000 islands, abundant marine resources, and an inseparable culture. Luang Island is one of them. See figure 1.

Figure1. Indonesia, Maluku Province dan Luang Island Map. Resource: Made by Fernanda Luis Maes. February, 2022



Luang Island is one of the islands in Southwest Maluku Regency, Mdona Hyera District, which is

home to the capital city of Lelang. Luang Island in Luang's old language is called *Lgona Mdona.* Luang Island is referred to as *Lgona* (Comment: regarding *Lgona,* the author learned through interviews that *Lgona* is an old Luang language word for "island," while *Mdon*a means "Luang." *Lgona Mdona* translates as Luang Island. *Lgona Mdona*, when loosely translated, refers to an island or territory that is solid, hard, and as firm as a rock. The people of Luang Island is divided into two tribes: the *lgona* and the Malay. The *Lgona* are Luang Island's indigenous population, while the Malays are from Timor Island).

Mdona in Luang's indigenous language. *Lgona* is classified as an Austronesian language family in the article of gods and monsters Indigenous sea cosmologies, promiscuous geography, and the depth of local authority (Pannell, 2007). Luang Island is one of a chain of islands that connects Australia's south coast to the Timor Sea's west coast (Estradivari, Damora, et al., 2016; Karuna & Serpara, 2021). Luang Island is located along the coast and is comprised of two villages, Luang Barat and Luang Timur. Luang Island has a land area of approximately 21.56 km2 (BPS Kabupaten Maluku Barat Daya, 2021). Luang Island is surrounded by shallow water conditions/low tide or'meti' wide and covered in quite high coral heads, with a shallow area (15.3 miles) (Comment: according to an interview with Mr. Adolf Seleky - a Luang community leader-, the shallow water area/*Aer Meti* is 15.3 miles, based on measurements taken by one of the captains of the Eliayana ship that landed on Luang Island, Johan Ponga from Manado. The second measurement was made by one of the "Papeda Laut" company's employees, Mr. Nus Waerissal, who took the same reading of 15.3 miles in length. When compared to the Google Earth map from 2020, it is true that nearly all of the sea water surrounding Luang Island is shallow, this is indicated by white shading on the Google Earth map of Luang Island. It will, however, be examined again with the Indonesian Geospatial Agency in Cibinong to ensure that it is scientifically justifiable.). This circumstance distinguishes Luang Island from the other Maluku islands (BPS Kabupaten Maluku Barat Daya, 2014, 2021).

Several factors contributed to the choice of Luang Island as a research location. Eastern Indonesia is the world's coral reef capital and most diverse region (Veron, 1993). Southwest Maluku Regency is included in the world's coral reef triangle, and because Luang Island is close to Timor Leste, it is automatically included in the Coral Triangle. As a result, it's unsurprising that Luang Island has the second largest coral reef area in Indonesia (Pannell, 1997) and a large seagrass area with a coral health level of 0% when compared to other regions in the country (Dinas Kelautan Dan Perikanan Provinsi Maluku, 2021; Estradivari, B, et al., 2016; Estradivari et al., 2015; Soleman & Noer, 2017; Wagey & Z, 2008). Luang Island is one of Maluku's remote small islands, bordering the Indonesian Archipelago's Sea Lane (ALKI IIIB) (Tamami & Siswanto, 2021).

Indonesia, after China and the Philippines, is the third largest fish exporter in the world (Badan Pusat Statistik Maluku, 2021). As a result, Indonesia has established a national fish barn to meet global market demand and one of them is Maluku. Luang Island is one of the fish barns in Maluku Province to support government programs. Therefore, Luang Island is included in the Marine Conservation Area Government (KKP) program, which aims to protect and preserve the marine environment while maximizing the sustainable use of natural resources for the welfare of the community (Dinas Kelautan Dan Perikanan Provinsi Maluku, 2021; Estradivari et al., 2015, 2017).

Luang Island played a significant influence in the cultural dispersion of the majority in Southwest Maluku's region to the Kei Islands. Luang Island is regarded as the epicenter of the Southwest Maluku

region's language, culture, and history (Andrews et al., 1996). This is consistent with Perry and Smith's assertion that elements of the culture of one society can spread to other societies, culture seems to have a center which is the source of the spread of its elements. It is in this center that there is the highest cultural dynamic (Barnard, 2004). Luang Island has local cultural diversity in managing its environment, such as *Hygera Lai*, *pAmali/taboo*, sacred (Believe in the head of the islands, animals, rocks and others) who have spirits.

The geographical location, the global economy, the global climate, and the actions of the Indonesian government all have an effect on the future viability of the environment, natural resources, and culture of community on Luang Island. Anticipating overexploitation of natural resources, the facts of global climate change (Yao, Cui-Luan & Somero, George, 2014) the practice of illicit fishing from foreign vessels and from within Indonesia, as well as fishing with explosives such as bombs. Additionally, the use of potash and borax endangers the ecosystem and the lives of the Luang Island inhabitants. According to the description above, the writer wishes to learn how the people of Luang Island manage their natural environment in accordance with their culture, traditions, and indigenous knowledge.

Research Results and Interpretation

Overview of the History, Culture and Social of Luang Island

The Luang people are a group of people that dwell on or around the island of Pulau Luang in western Maluku. Luang Island (East Luang and West Luang together) has a total population of 1,592. The village is homogeneous; residents are primarily fisherman (comment: fishermen in this area are considered to be traditional fishermen. Until now, traditional tools have been used. They fish exclusively within the island's boundaries, rarely venturing into the deep sea) and seaweed fishermen on a full-time basis (Badan Pusat Statistik Maluku, 2021; Estradivari, B, et al., 2016). Luang was one of Maluku's forgotten islands according to historical archives (Jonge & Dijk, 1995). The people of Luang Island have a lengthy history, beginning with how the island was constructed, how to communicate with the outside world through trade/barter (Riedel, 1886) to the origin of the population and the presence of minor islands nearby. The *Uparui* (comment*:* outside of Luang Island, it is referred to as *Upasrui* by the Uiwily and Masela Islands and *Uparua* by the of *Kampung Tela* on Babar Island) legend is well-known on Luang Island. Uparui has many versions and (Lewier, 2013; Pannell, 2007) is considered a mythology related to the history of their ancestors (Lewier, 2013; Pannell, 2007). Each story is corroborated by a grandmother singing a song in the indigenous tongue, followed by the slaughter of a sailfish and it is transformation into a rock or an island (Lewier, 2013). Luang Island is in the collective memory of the Southwest Maluku people even outside the Southwest Maluku region (such as Key Island) as Mother Island which is called in the Luang language *Noha Inni Rayami* (interview with Mr. Adolof Saleky in Tiakur on October 15, 2020).

Luang language categorized is as an Austronesian language. The Luang language is widely spoken and spread throughout most of Southwest Maluku. The spread and use of the Luang language in several additional islands, including Leti Island, Moa, Lakor, Wetan, and Sermatan, as well as two Luang language villages, Isu and Layeni, which were previously located on Teun Island but have now been moved to the TNS residential area in south-central Ceram (Taber, 1993; van Engelenhoven, 1998). The inhabitants of Luang Island are all Protestant Christians. The inhabitants of Luang Island adhere to a patrilineal marriage system. However, the Luang people are familiar with the

matrihat system in terms of inheritance. Women are highly valued and respected on Luang Island. Siri and areca nut are two foods that Luang women continue to consume. Sopi is a tool or media used on Luang Island to carry out traditional ceremonies and welcoming ceremonies. In Luang society there is a caste division system, *Marna* (High Caste), *Whura* (Middle Caste), and *Ata* (Slave).

Hygera Lai on Luang Island

This is an analytical descriptive qualitative study that takes an ecological anthropological perspective. Interviews and a review of the literature were used to collect data. The gathered data were evaluated using a content analysis technique (Kumar, 2014; Milles & Huberman, 1994). To be honest, scholarly data on Luang Island were still quite few. Nevertheless, I was able to obtain some articles from prior scholars, anthropologists from Australia, and numerous linguistics researchers from the Netherlands. Even then, they did not focus exclusively on Luang Island, but rather on Luang Island's role as a hub of language and historical dispersal. Wisesa, a prior ecological researcher in Southwest Maluku, encountered the same issue. The researchers collected ecological data from the Indonesian Ecological Institute, the Indonesian Institute of Sciences, the Indonesian Ministry of Maritime Affairs and Fisheries, and the Indonesian Geospatial Agency. As indicated previously, the inhabitants of Luang Island possess a wealth of indigenous knowledge for controlling and interacting with their physical environment; however, not all of them are described in this article. The author concentrates only on *Hygera Lai*, examining whether there is a connection between *Hygera Lai* and the environment in which the inhabitants of Luang Island live. The author approaches *Hygera Lai* differently than other researches have. The article discusses ecological, linguistic, cognitive, social, and historical dimensions.

Each location has its unique name conventions based on the regional language. It has a linguistic component and is more than a language, it reflects how individuals think and perceive the world around them, naturally according to their culture (Mushawana & Chauke, 2015; Wappa & Wada, 2019). The author adopts the term *Hygera Lai* in this article since *sasi* (comment: in Maluku each village uses the term "sasi" in their own language. In Central Maluku, most of them call it sasi. In the Southwest District, sasi is known by several terms. People on Kisar Island call it Lu Ira (Woirata) and Hewere (Meher), Nyertuyarna on Romang Island, Hgera Lai on Luang and Sermatan Island, Ner'ti, on Babar and Wetang Island, Weira on Masela Island, Hgere on Moa, Swere on Leti, and Sweri in Tanimbar. On Buru Island call it sihit and on the Key Islands it is called yut*)* is indeed *Hygera Lai* in the Luang "Old" language. *Hygera Lai* is a piece of indigenous knowledge passed down through generations among the people of Luang Island. I am not sure when *Hygera Lai* became law on Luang Island, but the inhabitants of Luang Island continue to observe it to this day. One may argue that the Luang have always possessed ecological intelligence, which they inherited from their forefathers. Until date, they have used technology or rudimentary production equipment in their daily production operations, utilizing, managing, and protecting marine resources in simple ways that they believe have ecological significance. This is referred to as the core of culture in Steward and Geertz's Anthropology ecology, where technology serves as the core of culture (Geertz, 1963; Pinkosky, 2008).

The precursors of *Hygera Lai* have been expressed in a variety of ways in the literature, depending on their scientific background, their point of view, and the aspects of *Hygera Lai* they wished to emphasize. Among them are those who

describe *Hygera Lai* as a traditional institution, a method of environmental protection based on local communities; others define *Hygera Lai* as the use of natural resources; and still others define *Hygera Lai* as just and equitable (Adhuri, 2004; Kissya, 1995; Kusapy et al., 2005; Lokollo, n.d.; Novaczek et al., 2001; Pannell, 1997; Persada et al., 2018; Rahail, 1993; Ratumanan et al., 2019; Ruddle, 1996). *Hygera Lai* is a technique for the Luang people to have a connection with nature and to protect natural resources. They believed that the sea provided them with everything. Their reliance on marine items compels them to exercise extreme caution when it comes to environmental stewardship. For them, *Hygera Lai* is about regulating the time and restriction of harvesting natural resources for a specified length of time in the interest of the common good. Additionally, it ensures that natural resource populations remain healthy. *Hygera Lai* is divided into two zones/regions/*petuanan*, land and sea.

Institutions that Manage of Hygera Lai

Luang Island's two communities are both traditional. In PP 43 of 2014, article 1 number 1, customary villages or what are referred to by other names are legal community units with territorial boundaries that are authorized to regulate and manage government affairs, the interests of local communities based on community initiatives, origin rights, and/or traditional rights that are recognized and respected under the Unitary State of the Republic of Indonesia's system of government. Luang Island's government structure is slightly different from that of other villages in Maluku Province's customary governance framework. In the two communities on Luang Island with a traditional governance structure, the village head is in charge. Two villages lack the traditional status of *kewang* in the traditional governance framework. The King or the Village Head manages *Hygera Lai* directly on Luang Island. The author was unable to provide a chart of the state and village government structures as a point of comparison in this section.

In practice, each community in Maluku has a unique version of the *Hygera Lai* rite, both in terms of the material utilized in the ritual and the commodities involved. At the island's opening and closing ceremonies, the *Hygera Lai* ceremony is conducted. Each 2-3 years, the *Hygera lai* period is observed on Luang Island. *Sopi* (comment: *Sopi* is a traditional drink made from water from the *mayang* tree (Enau) for the Central Maluku region, while for the Southeast Maluku region it is made from water from the koli tree (a type of tree that is almost similar to the coconut tree). Palm trees do not grow in this area probably because the area is very dry and rocky. Because many koli trees grow in this area, the community makes *sopi* drinks from the water of this koli tree. Here also grow some fig trees), areca nut, and red ginger are three of the primary components used in the *Hygera Lai* land ceremony. The ceremony utilizes sopi; prior to commencing, the leader lifts a glass of *sopi* and explains the objective of the ritual, before drinking it. Following that, communicate to all participants in the ritual that they are bound together by a link of brotherhood and mutual commitment. He then recited the traditional invocation. The procession concluded with the planting of red ginger in one corner and betel nuts in the center of the plantation area. Additionally, "coconut leaves" are planted to indicate the progress of the *Hygera Lai* land (It is forbidden to take until the agreed time). While *Hygera Lai* is used are sopi and black stone, it is located in Petuanan Laut. When the procession is complete, black stones with "palm leaves" are set in the Meti area as an indication that *Hygera Lai Meti* and the surrounding land area are closed or in the *Hygera Lai* period (Ratumanan et al., 2019). For approximately 1-2 weeks, *Hygera Lai* is open. Following that, *Hygera Lai* will be closed, which will

result in a temporary suspension of marine product harvesting activities.

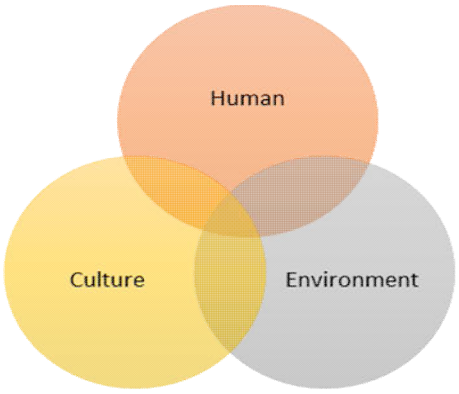
Currently, the *Hygera Lai* rite is being implemented differently, in *collaboration with the church. Today, the church also takes part in the Hygera* Lai ceremony, particularly at the opening and closing ceremonies. The church here approves the *Hygera Lai* ceremony with prayer. The village government and religious institutions collaborate in this area.

Interpretation of Results

Ecology, geography, anthropology, and sociology all examine the environment. Anthropology, being a scientific subject devoted to the study of humans in all their manifestations, is likewise concerned with the environment in which humans exist. Ecological anthropology is a subfield of anthropology that stresses the relationship between humans and their environment, which includes plants and animals. Stewart pioneered this ecological anthropology, arguing that environment and culture cannot be understood in isolation, but rather the product of a two-way communication interaction between the environment and humans and their civilization. In other words, ecological processes are governed by a reciprocity principle. Both culture and the environment have distinct and distinct features, none is a static finished product; both play a significant role and influence one another, demonstrating that the environment does have an effect on culture and human behavior. Moran underlined that each community has a philosophical or mythical explanation for nature and its relationship to humans (Moran, 2017).

Anthropologists such as Rapapport have conducted research on the interaction between humans and the environment by investigating the ceremonies done by the Tsembaga people in New Guinea. Evan Pritchard travels to South Sudan to study the Nuer people and their animals. Harold Conklin with his Hanunuo studies. Geertz is most known for his research on agricultural evolution in Indonesia.

Figure 2. Human-Culture-Environment Relationship. Resource: Made by author, February, 2022



Before the Sustainable Development Goals agenda, abbreviated as SDGs or Global Goals, and the Indonesian government's environmental conservation program captured the world's attention, the people of Luang Island possessed ecological knowledge, although in a traditional form. The indigenous people of the Luang Island community appreciate ecological wisdom in order to conserve the environment, which is reflected in the *Hygera Lai* rite and the community's daily lifestyle, which treats nature with respect and a focus on sustainable development. From a human ecology perspective, these behaviors are seen as a reciprocal relationship between local communities and their environment (interaction and interrelation). According to the report, the natural environment (physical environment), social environment, and cultural environment all play a role in the interaction and interrelationships. Natural environment refers to an area's natural state, which in this case comprises the climatic

conditions, sea, soil, physiography, and rocks that surround the indigenous people of Luang Island.

Hygera Lai is a set of traditional environmental management norms, guidelines and tactics. He took command of the efforts of the residents of Luang Island. Individuals and communities have different perspectives on water, which of course will affect their treatment of water. For those who rely on land for their survival, water can be a threat and has a frightening aspect. Meanwhile, those who live on the coast view the sea as a yard, a place to store food ingredients in the form of a "refrigerator", a way to find work, a place to play, and perhaps as a source of friendship. Here, Luang people assert their authority over the environment, which is reflected in their actual attitudes and behavior towards nature. "Not only the universe is a source of sustenance, but also a place to live together that must always be maintained, cared for, and arranged so that it is not damaged." Preserving the coast and the sea is protecting the "belly" of their children and grandchildren. With the arrival of Christianity in the Southwest Maluku region, there was a shift in the *Hygera Lai* rite. As a result, this has an effect on the Luang Island people's customs. That is not to say, however, that the people of Luang Island have forgotten their ancestral legacy in terms of how to behave, values, and standards while interacting with other humans, nature, and ancestor spirits. It is still evident in the lives of the inhabitants of Luang Island, who have converted to Christianity yet continue to believe in what are referred to as supernatural forces.

On Luang Island's *Hygera Lai* sea, resources are shared property, and all elements are administered cooperatively, resulting in sociocultural bonds and rather strict norms. With socio-cultural linkages and norms or laws regulating, supported by mutually accepted consequences, it is not permissible for anybody or at any time to take or harvest natural resources in the sea. This has a significant impact since it has the potential to conserve natural resources and the environment. These regulations are meant to avert difficulties that may arise during harvesting and to ensure that the life cycle of these resources is not disrupted (Kennedy et al., 2019). Additionally, when the *Hygera Lai* Ritual is opened, the harvesting implements remain traditional.

All harvests made by *Hygera Lai* for marine resources are sold to purchasers. The buyers here are "buyers" from outside Luang Island who have negotiated the price of *Meti* with the village government. The price of *Meti* is one of the idioms used by the people of Luang Island in their communication, and it literally means "the price for the low tide/shallow/*meti area*." The metaphor or comparison is that the "*Meti* Price" is the difference between the price disclosed to the government and the money prepared to purchase *Hygera Lai's* crops from the Luang Community. "*Bali Meti,"* This idiom, "*bali Meti*," is indeed purchasing the tide. While the metaphor or comparison is "Purchasing marine products produced by the Luang people in shallow or low water when *Hygera Lai* is exposed." (See table 1.).

It also has an effect on the behavior of the community in which it resides in the environmental domain. The Luang Island people's expressions demonstrate their environmental consciousness. Because the environment is codified in language, it is necessary to study the vernacular, indigenous words, taxonomy, and classification of the people examined in order to comprehend it. This is because local views about their environment are contained in diverse taxonomies, categorizations, and classifications of indigenous people (Conklin, 2007). D'Andrade defines them as the ways in which humans comprehend and think about the events and objects that occur in the world in which they exist. It establishes a connection between human mental processes, physical properties, and cultural concepts (D'Andrade, 2003; Stepp et al., 2002; Strauss & Quinn, 1997).

Table1. Word/Expressions Luang Dialect/Languages. Source: Analyses by author according to research result, Februari 2022.

Language/Dialect and meaning	Word/Expression 1	Word/Expression 2	Word/Expression 3
Luang	*Meti*	Harga *Meti*	*Bali Meti*
Melayu Ambon	*Aer turung*	Harga *aer turung*	*Bali aer turung*
Indonesia	Air Surut	Harga Air surut	Membeli Air surut
English	Low tide	The price of low tide	Buying low tide
Really Meaning	The condition of the sea surface changes periodically according to the gravity of the sun and moon	The amount of the price of the meti area	Buying meti water area
Metafora/Compare	The entire sea area that is the location for fishing for Luang people	The price for the area of low or shallow water with all the marine life in it when the Hygera Lai period opens	Purchase an area or location of low or shallow water with all the marine life in it when the Hygera Lai period opens

Conclusion

According to the explanation above, there is a connection between (Hygera Lai) and the Luang Island community's ecosystem. In the instance of Hygera Lai, ritual plays a significant role in regulating the dynamics of sociocultural contact with the environment inhabited by the Luang Island people. Even while the Hygera Lai ceremony has evolved and been largely absorbed by the church, it has not been in a transformation in the local community's fundamental ecological ideals. Additionally, the sea cucumber (Trochtus niloticus), Lola (Trochtus niloticus), becomes critical, not only as a complement to the system, but also as a component that contributes to the establishment of order. Additionally, Hygera Lai manages the timing and prohibition of natural resource extraction, as well as the manner in which natural resources reproduce.

Hygera Lai is a potent traditional method that is still employed today to safeguard Luang Island's habitat and natural resources. According to Benda Becmann, it is a body composed of significant ties between humans, the natural world, and gods, ancestors, and spirits (von Benda et al., 1992). Additionally, Carl Folke et al, refer to it as socio-ecological resilience, in which humans in a local community and the surrounding ecosystem are interdependent as a system through an adaptive and transformative process (Folke et al., 2010; Steffen et al., 2007). This is where you may observe how the inhabitants of Luang Island adapt and demonstrate resilience, as well transformative.

One clear indication that Hygera Lai is a strategic and effective local wisdom for managing the natural environment for the people of Luang Island comes from the World Wide Fund for Nature Indonesia's survey results, which indicate that Luang Island's marine ecology is still in good health when compared to other locations. Others are found in Maluku. This article has a number of flaws. Incapable of demonstrating the history of

Hygera Lai, the traditional rituals of Hygera Lai before to the influence of Christianity, and the shift from traditional institutions to churches following the arrival of Christianity. From the perspective of the differences in the structure of customary government prior to and following the colonial period, it has been unable to display more detailed taxonomies that are codified through language and generate metapora or comparisons that allow for the reading of indigenous people's knowledge about the environment. This is a reminder to the author to perform more in-depth holistic study.

References

Abdurachman, P. (2008). *Bunga Angin Portugis di Nusantara: Jejak-Jejak* Kebudayaan Portugis di Indonesia. Jakarta: LIPI Press.

Adhuri, D. S. (2004). How Can Traditional Marine Resource Management Support a Responsible Fisheri? *Lessons Learned from Maluku*. 1–13.

Aldrian, E. (2014). *Pemahaman Dinamika Iklim Negara Kepulauan Indonesia SEbagai Modalitas Ketahanan Bangsa*. Jakarta: Puslitbang-BMKG.

Andaya, L. Y. (1993). *The World of Maluku Eastern Indonesia in The Early Modern Period*. Honolulu: University of Hawai Press.

Andrews, B. A., Andrews, P., Loski, G., Tjia, J., & Wimbish, J. S. (1996). *Atlas Bahasa Tanah. Ambon: Summer Institute of Linguistic & Pusat Pengkajian dan Pengembangan Maluku* Universitas Pattimura.

Astuti, R. Y., Budisusanto, Y., Pratomo, D. G., & Sidqi, M. (2018). *Kajian Pemanfaatan Kadaster Laut Dan Visualisasi 3 Dimensi* (Studi Kasus: Pulau Maratua, Berau, Kalimantan Timur). 13(2), 158–161.

Badan Pusat Statistik Maluku. (2021). *Provinsi Maluku Dalam Angka* (Maluku Province in Figure). Ambon: Badan Pusat Statistik Maluku.

BPS Kabupaten Maluku Barat Daya. (2014). *Badan Pusat Statistik Maluku Barat Daya*. BPS Maluku Barat Daya.

BPS Kabupaten Maluku Barat Daya. (2021). *Badan Pusat Statistik Maluku Barat Daya*. Badan Pusat Statistik Maluku Barat Daya.

Conklin, Harold. C. (2007). *Fine Description Ethnographic and Linguistic Essays*. Yale University Southeast Asia Studies.

D'Andrade, R. (2003). *The Development of Cognitive Anhtropology*. The Press Syndicate Of The University Of Cambridge.

Dinas Kelautan Dan Perikanan Provinsi Maluku. (2021). *Membangun Perikanan Sebagai Penggerak* Ekonomi dan Kesejahteraan.

Estradivari, A., B, S., Wibowo, B., Handayani, C., Seetiawan, D. D., F, M., Nanlohy, H., Dyhapsary, H., Hargiyatno, I. T., Ptratiwi, I., Wrdhana, I., Kt, Y. W., Louhenapessy, N., Achmadia, G. H. L., Provosot, Mohebalian, Kiklily, & Setiawan, F. (2016). *Kajian Ekologi Sosial dan Pemanfaatan Sumber Daya Laut Kabupaten Maluku Barat Daya: Edisi Ringkasan*. WWF Indonesia.

Estradivari, A., Damora, A., Kiklily, A. C., Amkieltiela, Sumiono, B., Subhan, B., Wibowo, B., Handayani, Ch. N. N., Daniel, D., & Setiawan, F. (2016). *Status Ekologi, Sosial Pemanfaatan dan Tata Kelola Sumber Daya Laut Kabupaten Maluku Barat Daya*.

Estradivari, A., Novia, Christian. N., Handayani, Daniel, D., & Mustofa, A. (2017*). Membangun Desain Jejaring Kawasan Konservasi Perairan: Studi Kasus Provinsi Maluku*. Volume 1(Issue 2), 135–146.

Estradivari, A., Wisesa, N., Damora, A., Handayani, C., Amkieltiela, Wibowo, B., Hargiyatno, I. T., & Huda, H. M. (2015). *Menguak Potensi Ekologi, Sosial, Dan Peranan Maluku Barat Daya: Sebuah Temuan Awal* (pp. 1–7). Marine Conservation Science.

Folke, C., Carpenter, S. R., Walker, B., Scheffer, M., Chapin, T., & Rockström, J. (2010). Resilience Thinking: Integrating Resilience, Adaptability and Transformability. *Ecology and Society.15(4)*. 20. Doi 10.5751/ES-03610-150420

Fraassen, Chr. F. van. (1981). Ambon onder de Republiek. Confrontatie van Droom en Werkelijkheid. *In Intermediar*: Vol. 17 (9).

Geertz, C. (1963). Agrucultural Involution. *The Process Ecological Change in Indonesia*. Berkeley, Los Engeles & London: University of California Press Berkeley and Los Angeles, California University of California Press, Ltd.

Karuna, K., & Serpara, H. (2021). Local Wisdoms on Luang Island, Southwest Moluccas, Indonesia and Its Implementation in Learning. *Journal of Development Research, 5(1)*. 25–29. Doi 10.28926/jdr.v5i1.126

Kennedy, P. S. J., Nomleni, A. P. W., & Lina, S. (2019). Peranan Budaya Adat Sasi dalam Pengelolaan Sumber Daya Laut Berkelanjutan di Wilayah Perbatasan Maluku Barat Daya: Suatu Tinjauan Kualitatif. 103–114. Doi 10.33510/slki.2019.103-114

Kissya, E. (1995). *Sasi Aman Haru-ukui: Traditional Management of Sustainable Natural Resources in Haruku*. Jakarta: Sejati Foundation.

Kumar, R. (2014). *Research Methodology*. London: Sage.

Kusapy, D. L., Lay, C., & Kaho, J. R. (2005). *Manajemen Konflik Dalam Pemanfaatan Sumberdaya Alam Dan Pelestarian Lingkungan Hhidup Lewat Pelaksanaan Hukum adat Adat Sasi*. 130–139.

Kutoyo, S. (1977). *Sejarah Daerah Maluku. Jakarta: Proyek Pengembangan Media Kebudayaan*. Departemen Pendidikan dan Kebudayaan.

Lasabuda, R. (2013). Pembangunan Wilayah Pesisir Dan Lautan Dalam Perspektif Nagara Kepulauan Republik Indonesia. *Jurnal Ilmiah Platax,* 2(2), 92–101.

Leirissa, R. Z. (1982). *Maluku Tengah di Masa Lampau, Gambaran Sekilas Lewat Arsip Abad Sembilan Belas. Jakarta: Arsip Nasional* Republik Indonesia.

Lewier, M. (2013). *Cerita "Ikan Layar" (Upa Rui) Dari Kepulauan Babar Wuwlul Louli Ihryar Wakmyer*. Prociding The5 International Conference On Indonesian Studies:"Ethnicity Dan Globalization", 2, 1–14.

Lokollo, J. E. (n.d.). *Hukum Sasi Di Maluku Suatu Potret Binamulia Lingkungun Pedesaan Yang Dicari Pemerintah*. Ambon: Dies Natalis XXV Universitas Pattimura Ambon.

Milles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded Sourcebook*. (2nd ed). (2nd ed). Thousand Oaks, CA: Sage.

Moran, E. F. (2017). *People and Nature: An Introduction to Human Ecological Relations*, (Second Edition). Chichester, West Sussex, UK : John Wiley & Sons, Inc.

Mulya, L. (2013). Postur Maritim Indonesia: Pengukuran Melalui Teori Mahan. Yogyakarta: Universitas Gajah Mada. *Jurnal Lembaran Sejarah,* 10(2), 127–134.

Mushawana, A. & Chauke T. (2015). Naming Practices among Vatsonga: The Case of Naming of 'Characters' in Some of Thomas Hasani Chauke's Songs. *Journal of Sociology and Social Anthropology*, 6(3), 441—448. Doi 10.31901/24566764.2015/06.03.16

Novaczek, I., Harkes, I., Sopacua, J., & Tatuhey, Marcus. D. D. (2001). *An Institutional Analysis of Sasi Laut in Maluku, Indonesia*. Malaysia, Penang: ICLARM-The World Fish Center.

Pannell, S. (1997). Managing the discourse of resource management: *The case of sasi from 'Southeast'Maluku, Indonesia*. University of Sidney, 67(4), 289–307. Doi 10.1002/j.1834-4461.1997.tb02622.x

Pannell, S. (2007). Of Gods and Monsters Indigenous Sea Cosmologies, Promiscuous Geographies and the Depths of Local Sovereignty. In *A World of Water. Rain, Rivers and Seas in Southeast Asian Histories*. (pp. 71–102).

Published by: KITLV Press Koninklijk Instituut voor Taal-, Land- en Volkenkunde (Royal Netherlands Institute of Southeast Asian and Caribbean Studies) Leiden The Netherlands. Doi 10.1163/9789004254015_004

Persada, N. P. R., Mangunwijaya, F. M., & Tobing, I. S. L. (2018). *Sasi Sebagai Budaya Konservasi Sumber Daya Alam Di Kepulauan Maluku*. 41(59), 1–32.

Pinkosky, M. (2008). Julian Steward, American *Anthropology, and Colonialism*. *4*. 172–204. Doi 10.1353/haa.0.0043

Rahail, J. P. (1993). *Larwul Ngabal: Hukum Adat Kei Bertahan Menghadapi Arus Perubahan*. Jakarta: Yayasan Sejati.

Ratumanan, T. G., Marantika, J. E. R., & Kissiya, E. (2019). The Culture of Sasi In Babar Islands: Traditional and Church Wisdom. *Science Nature Journal,* 2(3), 167–176. Doi 10.30598/SNVol2Iss3pp167-176year2019

Ricklefs, M. C. (2007). Sejarah Indonesia Modern. Yogyakarta: Gadjah Mada Universitas Press.

Riedel, J. G. F. (1886). *The Sluik en Kroesharige Rassen Tusshen Selebes en Papua, Uitgave door Tussenkomst van het Koninklij Nederlansch Aardrijkskundig Genootschap, 's Gravenhage*. Martinus Nijhoff.

Robertson, A., Moron, V., Qian, J.-H., Chang, C.-P., Tangang, F., Aldrian, E., Tieh, K. Y., & Juneng, L. (2011). *The Maritime Continent Monsoon. In The Global Monsoon System: Research and Forecast,* 2nd Ed. World Scientific Publication Company.

Ruddle, K. (1996). *Formulating Policies for Existing Community-Based Fisheries Management System*.

Soleman, M., & Noer, M. (2017). Nawacita Sebagai Strategi Khusus Jokowi Periode. *Jurnal Kajian Politik dan Masalah Pembangunan*. Oktober 2014-20 Oktober 2015, 13(1), 1–15.

Steffen, W., Crutzen, P. J., & McNeill, J. R. (2007). The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature? *Ambio,* 36(8), 614–621.

Stepp, J. R., Wyndham, F., & Zarger, R. K. (2002). The Transmission of Traditional Plant Knowledge in Community Contexts A Human Ecosystem Perspective. *Ethnobiology and Biocultural Diversity*. University of Georgia Press.

Strauss, C., & Quinn, N. (1997). *A Cognitive Theory of Cultural Meaning*. The Pitt Building, Trumpington Street, Cambridge, United Kingdom:Cambridge University Press.

Sunaryo, T. (2019). Indonesia Sebagai Negara Kepulauan. *Jurnal Kajian Stratejik Ketahanan Nasional*, 2(2), 97–105.

Taber, M. (1993). *Toward A Better Understanding Of The Indigenous Languages Of Southwestern Maluku*. Hawaii-Honolulu: University of Hawaii Press., 32(2).

Tamami, K., & Siswanto, A. D. (2021). Perspektif ALKI Sebagai Implementasi UNCLUS Untuk Optimalisasi Potensi Kelautan Indonesia. In *Indonesia Emas Berkelanjutan 2045*. Jakarta: Lembaga Ilmu Pengetahuan Indonesia (LIPI) & Perhimpunan Pelajar Dunia (PPI).

van Engelenhoven, A. (1998). Epithets And Epitomes: Management And Loss Of Narrative Knowledge In Southwest Maluku (East-Iindonesia). *Paideusis - Journal for Interdisciplinary and Cross-Cultural Studies*, 1, A29–A41.

Veron, J. E. N. (1993). A Biogeographic Database of Hermatypic Coral Species of The Central Indo-Pacific, *Genera of The World*: Vol. Monograph series No.10. Australian Institute of Marine Science. DOI 10.5962/bhl.title.60554

von Benda, Beckmann. F., von Benda, Beckmann. K., & Brouwer, A. (1992). *Changing "Indigenous Environmental Law" in the Central Moluccas: Communal Regulation and Privatization of Sasi*. Paper Read at Congress of the Commission on Folk Law and Legal Pluralism, August, at Victoria University, Wellington.

Wagey, T., & Z, A. (2008). *Marine Biodiversity Review of Arafura an Timor Seas*. Jakarta: Minis Try of Marine Affairs and Fiseries.

Wappa, J. P., & Wada, R. S. (2019). Kamuə Female Personal Names and Identity in Cultural Contexts. *Journal of Modern Linguistics*, 9(2). 104–114. Doi 10.4236/ojml.2019.92011

Yao, Cui-Luan & Somero, George. (2014). The Impact of Ocean Warming on Marine Organisms. *Chinese Science Bulletin*, 59. 468–479. Doi 10.1007/s11434-014-0113-0