

The Legacy of Ecological Insights in Minangkabau *Kieh*

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Received: 16-10-2022; Revised: 1-11-2022; Accepted: 19-11-2022

DOI: 10.31291/hn.v1i1.665

Abstract

This article examines the form of Minangkabau people's wisdom and concern for nature and the environment through *kieh* 'allusion' or figurative language found in the form of *mamangan* (one of the traditional Minangkabau expressions) which contains ecological wisdom. Data of this study consist of *kieh* expressions in the form of suggestions and prohibitions. *Kieh* has several kinds of proverbs called *petitih*, *pituah*, *pameo* and *mamangan*. The object of the study is the *kieh* which is related to ecological problems and solutions. By employing descriptive-analytic method, the study focused on the concept of environmental ethics and the view of Minangkabau natural philosophy as summarized by A.A. Navis. It is found that the Minangkabau people through *mamangan kieh* express wisdom and concern for the environment, including nature conservation and preservation of natural resources. This form of wisdom guides Minangkabau community in interacting with the environment. The Minangkabau natural philosophy is attentive to the sustainability of natural resources and the sustainability of the Minangkabau customary system and communal tradition, such as inheritance in the form of agricultural land, fields, forests, and else. The ecological *kieh* expressed the environmental ethics for the Minangkabau community.

Keywords: *Kieh, Minangkabau, ecology, pelestarian lingkungan*

Heritage of Nusantara: International Journal of Religious Literature and Heritage, 11(2), 2022, 206-237

<https://heritage.kemendag.go.id/index.php/heritage>, p-ISSN: 2303-243X, e-ISSN: 2442-9031

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Abstrak

Artikel ini menelisik bentuk kearifan dan kepedulian masyarakat Minangkabau terhadap alam dan lingkungannya melalui kieh 'kias' dalam mamangan (salah satu ungkapan tradisional Minangkabau) yang mengandung kearifan ekologis. Artikel ini menyajikan data hasil penelitian tentang ungkapan kieh, seperti anjuran dan larangan dalam topik ekologis. Kieh memiliki beberapa bentuk, yakni pepatah, petitih, mamangan, pameo, dan pituah. Dalam konteks ini data kieh yang menjadi objek kajian ialah mamangan yang terkait dengan masalah ekologis. Kajian ini menggunakan konsep etika lingkungan dan pandangan falsafah alam Minangkabau dengan metode deskriptif analisis. Penelitian ini menghasilkan temuan bahwa masyarakat Minangkabau memiliki kearifan dan kepedulian terhadap lingkungan yang salah satunya dituangkan dalam kieh. Kieh ekologis yang lahir dalam bentuk mamangan itu mengandung nilai ekologis, yaitu kepedulian terhadap alam; pelestarian alam; dan penghematan sumber daya alam. Implikasi dari kajian ini diharapkan dapat berkontribusi dalam menjaga penerusan pusaka berupa tanah pertanian, ladang, dan hutan. Bentuk dan struktur kieh ekologis ini menggambarkan estetika dan sekaligus etika berlingkungan bagi masyarakat Minangkabau.

Kata kunci: *Kieh, Minangkabau, ekologi, pelestarian lingkungan*

Introduction

In speech acts, *kieh* is common for the Minangkabau community as a way of conveying intentions subtly and indirectly so that the speech partner is not offended. *Kieh* is more in the form of *mamangan* (handles of life, orders and prohibitions expressions). *Mamangan* contains suggestions for learning from motion and nature in social life. In addition, special *mamangan* about nature and humans contain warnings so that humans do not deviate from nature, do not damage nature, therefor humans adapt to nature so that humans do not perish (Lindawati (2012). *Kieh* is present in traditional *speeches, proverbs, petitih, and mamangan* (Navis, 2015:256; Gani, 2012; Yusriwal, 2005). *Mamangan, pituah, and pameo* have the function of carrying the meaning of the expression, while *petitih* has the function of carrying the function of expression. Therefore, due to its different

functions, *kieh* can be used as an aesthetic object (Yusriwal, 2005: 91–92).

In general, the study of *kieh* is mostly analyzed as an allusion from nature to the value of philosophical wisdom in Minangkabau social life. If it is related to ecology, in general, studies about the concept of "*alam takambang jadi guru*" or "Nature unfolds being a teacher" reveal the relation of diction to flora, fauna, places, landscapes, the universe as an allusion to social life. Many allegories related to nature were studied from *pantun*. Meanwhile, little study has been conducted to reveal the *kieh* contained in the form of *mamangan*, which focuses more on the ecological environment.

The research that quite intersects with this theme is research conducted by Nauri (2016) highlighting the people of the Harau sub-district in preserving tropical wet forests by utilizing the values of local wisdom contained in Minangkabau proverbs and quotes. Nauri's study proved that they do not fully apply the concepts that have been set forth in the Minangkabau proverb. For example, in the proverb it was recommended to plant slopes with sugar cane, while in reality Harau people plant *gambier* (*Uncaria gambir roxb*). This is one of the causes of damage to wet tropical forests in Harau District. Apart from that, the data on *petitih* proverbs related to ecology used by Nauri is still insufficient.

This is different from Gusrani and Rusdi (2020) whose study focuses on the lexicon of *pantun*, proverbs and *petitih* in Minangkabau traditional marriage ceremonies in Lintau Buo District. The research only found a lexicon of flora and fauna in poems, proverbs, and excerpts. This research does not lead to the empowerment of flora or fauna in life or how to preserve them. Still based on Minangkabau

proverbs and quotes, (Sya et al ,2021) instead look at the other side, namely the concept of the Minangkabau people's way of life found in these customary expressions.

In Minangkabau culture, nature is a very important element. Their geo-cultural area is called 'the Minangkabau realm'. Nature is very important and everything, not only the place of the cycle of birth to death, nature is a source of philosophical meaning for the value of life (Navis, 2015: 59).

Azrial (2021) also suggested that "Minangkabau realm" does not only "indicate the geographical location and place where the Minangkabau people live, but also includes the horizons of thinking and the understandings held by the community regarding various issues, including perspectives on various dimensions of life". Azrial viewed that the moral message of the word 'Minangkabau realm' implicitly inspires the wisdom of every individual (human being) on this earth, that human beings on this earth are one, that is, they are in one unified system of the universe created by God who includes the old microcosm and macrocosm. Likewise, what was argued by Nasir (2019) that apart from meaning geographic and territorial area, 'Minangkabau realm' also means ideas, thoughts, and ideas. "Alam takambang jadi guru" is very closely related to ecology because it originates from the nature and motion of nature to maintain the relationship between humans and nature. Therefore, the natural environment is the real 'teacher' because through nature wisdom and learning (*iktibar*) are obtained. Through natural phenomena and regularities, Minangkabau culture understands natural signs (Astuti, 2017: 225). Natural signs can be read by people who have sensitivity so that they become guidelines for themselves and can be implemented in life. As Hastuti (2020) said, "Nature unfolds

being a teacher" implies that nature is the source of all knowledge. In its meaning, it is the teacher for people who can 'read' it deeply with their heart.

In Minangkabau nature, humans are one of the elements whose position is equal to other elements, namely land, houses, and their social systems, such as sub-group of clan (*suku*) and *nagari* (traditional local government units) (Navis, 2015: 60). In addition, according to Navis, Minangkabau people have illustrated nature to human life as if they likened nature to the Minangkabau homeland. The elements of nature are placed equally with humans so that nature and humans are interpreted in personification as institutions as well as individuals in Minangkabau society. Therefore, each element has the right to maintain their existence and vice versa has the obligation to maintain their respective existence. In other words, socially humans must take care of nature so that the social system runs well, as stated by Greg that understanding ecological knowledge is not limited to environmental harmonization and stability, but also knowing human attitudes and behavior towards their own environment (Hestiyana, 2021:189).

For a long time, the Minangkabau people have actually taken *sunnatullah*, namely natural law as the basis for Minangkabau customary philosophy which was compiled by consensus and deliberation, and inherited in a sustainable manner (Abbas, 2007). The *sunnatullah* has close link to Islam way of life of Minangkabau people. Their customary philosophy based on religious law, religious law based on the book of Allah is a form of Minangkabau society applying Islamic law in everyday life. Supriatna argues that this ethnic has a rich and very Islamic cultural heritage, customs, and traditions that still have a big influence in everyday life. The order that is closely held as

the basis for the relationship between custom (*adat*) and religion is the expression "adat basandi sarak sarak basandi kitabullah", which means that all community regulations must be based on Islamic religious law and the Qur'an. This provides a valuable opportunity to embark on a faith-based approach to conservation (Supriatna, 2018: 103-104). The crystallization of 'Nature unfolds being a teacher' is found in various *kieh* (figure of speech) expressions.

This study aims to bring back the figurative philosophy of ecological conservation of nature stored in Minangkabau *kieh* by determining the form and structure of Minangkabau ecological *kieh* and revealing the philosophical meaning of *kieh* with ecological elements and its implications. It is expected that the disclosure of ecological wisdom can be a contribution and enrichment of the treasures of local wisdom and traditional knowledge in the preservation and utilization of natural resources. Therefore, the approach concept in this research is literary ecology. This study also employed the concept of environmental ethics. Environmental ethics is a combination of philosophy and biology, especially the environment. Philosophy in this context concerns aspects of human life in nature, while environmental science is to know and understand the earth system and the complex relationship between the layers of life (biotic) and non-living (non-biotic) layers (Hudha, Husamah, & Rahar, 2019: 63). Further explained Hudha, et al. at this level, humans are a component of the environment. In their interactions, processing and utilizing natural resources, humans must pay attention to environmental ethics. In explaining the form and structure of ecological *kieh*, the classification of *kieh* by Yusriwal (2005) will be used.

Literature Review

Studies of Minangkabau figurative language (*kiah*) are generally associated with figurative speech traditions in *adat* ('custom'). Yendra introduced types of figures of speech in Minangkabau *tambo* (traditional Minangkabau chronic) in the form of similes, metaphors, personifications, allegory, parables, and so on, but metaphor is the most common type of figure of speech (Yendra, 2016). Yuniseffendri (2014) in the context of natural reflection in "Nature unfolds being a teacher" counted figures of 218 *petitih petatah* (proverbs), ranging from landscapes, such as seas, mountains, rivers. Later, Cahyadi (2021) examined Musra Dahrizal's poems, especially in the section "Cinto Ampek Karek". With the concept of literary ecology, Cahyadi expressed the use of natural diction in the rhymes. According to Cahyadi, the poems by Musra Dahrizal (Mak Katik) depicted the harmony of nature with humans. Bahadur and Suryo (2017:24-30) also saw the use of natural elements (ecology) in the treatment of toothache in Kuranji village in Padang.

In Malay rhymes, the relationship between rhymes and nature elements must exist, namely in the *sampiran* (rhymes making) section which quotes a lot from the lexicon of flora, leaves, and flowers. However, *sampiran* is not necessarily related to the content (Jabar, Bukhari, & Warisan, 2018); (Andriani, 2012); (Yusari, 2021).. The content section is generally about the nature, feelings, thoughts, and ethical actions of humans. In Minangkabau rhymes, the characteristics of rhymes are physically and mentally sourced from objects, events, places, and others from the Minangkabau nature. The figure of speech is very familiar, the meaning and purpose of the rhyme can be understood

easily, and the *sampiran* and the content can be metaphorical at the same time (Gani, 2012).

A comprehensive research on *kieh* by Oktavinus (2005) in his dissertation examined the form, function, meaning, and value contained in *kieh*. He explained that the *kieh* lexicon took various sources of inspiration, namely plants, animals, poultry, insects, food and drink, activities, natural events, clothing and jewelry, professions, kitchen utensils, ethnicity and ethnicity, technological objects, fishing equipment, agricultural equipment and land, hunting equipment, office equipment, dung, reptiles, taste, limb movements, religious concepts, and the concept of wandering (Oktavianus, 2005: xiv). His research did not look at the ecological lexicon in the context of conservation, protection, and human responsibility for nature. Research by Almos et al. (2014) on the flora and fauna lexicon in Minangkabau rhymes and proverbs discussed the meaning of *kieh* as a guide to social ethics, but not about ethics towards nature. Barlian's study (2010) measured the actual value of the *petitih* ecological proverb in the Harau Valley nature reserve, Lima Puluh Kota Regency, that the ecological value of the *petitih* was no longer applied there due to changes in people's attitudes, economic needs and residential land. These studies did examined ecological views, but there was no direct point of view on ecological ethics.

The issue of the environmental crisis has also become a topic of discussion among scholars in this part of the world, such as research conducted by Irawan (2016). According to Irawan, the challenges posed by the current environmental crisis have spawned a response from religions in the form of efforts to build an environmental ethic based on religious and spiritual values (Irawan, 2016: 231). In his

study, Irawan explored the perspectives of three environmental thinkers, namely Fachruddin Mangunjaya from Indonesia, Hossein Nasr from Iran, and Fazlun Khalid from England. According to Irawan, from these three thinkers, strategies for elaborating productive Islamic values for environmental care and promoting cooperation among them in scheduling practical conservation projects can be learned.

A similar study was conducted by Taufiqurrahman and Mawaddatul, (2021) by highlighting mining conflicts in Indonesia which led to massive exploitation of nature. Using an ecological perspective in Islamic studies, the researchers found three basic concepts in resolving the mining conflict crisis in Indonesia, namely *eco-theology* (supporting constructive theology of Muslims in responding to environmental problems), *eco-sufi* (human moral base in relation to nature), and *eco-ushul al fiqh* (legal legitimacy in resolving ecological conflicts, especially conflicts in Indonesia) (Taufiqurrahman and Mawaddatul, 2021: 47). In line with this, an article entitled “To what extent does religion play a role in the environmental crisis?” Deta (2020) presents at least three responses that religion can take in responding to the ecological crisis: one, an attempt to return to tradition or recovery; two, efforts to reinterpret tradition or reform; three, not looking for a new religion or a replacement.

From the three articles above, it shows that the responsibility to care for, preserve, and protect nature is a fundamental obligation that religious teachings have instilled in their followers. Likewise, the Minangkabau people implement the traditional philosophy of “*Adat basandi sarak, sarak basandi kitabullah*” (“Customs are based on

religious law, religious law comes from the holy book’) in caring for the ecology in their environment.

A study by Colding and Carl Folke (2001) was focusing on social taboos prevailing in the community as a system of local resource management and biological conservation. Indeed, social taboos exist in some cultures both eastern and western countries. For developing countries, designs for biodiversity conservation and sustainable use are expected to focus more on informal institutions, such as social taboos because they offer more advantages than conventional actions. In this taboo system, people are only required to have voluntary compliance and it is not expensive (Colding and Carl Folke, 2001). Other Similar research stated that understanding knowledge of plants related to religious rituals can contribute to natural resource conservation planning, especially for plants that are already rare (Quiroz and van Andel, 2015). Both studies focus on the traditions of a society in maintaining, protecting and conserving biological and non-biological natural resources. This of course can be a reference for the Minangkabau community. If they still live and practice their traditions--such as *kieh* which is one of the heritages--of course, nature and its ecosystem are well preserved.

Method

This study employed a qualitative research method by exploring data in the form of written words and oral figurative expressions in the form of Minangkabau *kieh* containing ecological views. Ecological approach was taken regarding the concept of environmental ethics. Data was collected by documentations (*mamangan kieh*s) and interviews with culturalists. The interview also validated the *kieh* data related to the theme of ecology. Interviews were conducted with a traditional expert

(*guru*) named Katik (Musra Dahrizal) and some speakers of the Minangkabau language. In addition, data was also obtained from the understanding and knowledge of research members as speakers of the Minangkabau language. Data in written form were obtained from references that examined expressions in the Minangkabau language. Then, all collected data are grouped as *kieh* expressions that contain ecological elements.

All the data collected are grouped based on *kieh* expressions containing ecological elements. After the data was sorted by the criteria for comprehending nature conservation, then it was analyzed to capture the meaning at the word and phrase levels with descriptive analysis method. According to Ratna (2008:39) this method is carried out by describing and simultaneously analyzing. In other words, this method is carried out by describing existing facts, then followed by analysis (Ratna, 2008:53). Descriptive in this context does not mean just describing, but also providing sufficient understanding and explanation.

Lastly, the discussion of the findings was confirmed with relevant approaches and references to develop interpretations of the meaning of ecological *kieh*. The ecological approach under study was focusing on the attention of human reactions to nature, for example: natural management, nature conservation, and saving natural resources. This reaction is part of environmental ethics. Therefore, this study also utilized the concept of environmental ethics.

Result and Discussion

The main philosophy of *Alam takambang jadi guru* [Nature unfolds to be a teacher] in Minangkabau society is the teaching of social ethics

through the nature, particularly ecological ethics for humans to use and protect nature. This has been actualized for a long time in the highest form of figure of speech for the Minang people, namely *kieh*. Findings in this study about *kieh* in *mamangan* about natural use presented a broad meaning which relate to social order and need fulfilment.

This study found three classifications regarding the value of ecological *kieh*. *Kieh* expressions contain orders and prohibitions in the form of *mamangan*. The types of orders and prohibitions are generally summarized in three types of *kieh* messages, namely (1) concern for nature; (2) nature conservation; and (3) saving natural resources as shown in Table 1. This study also found that *kieh* is predominantly found in the form of *mamangan* with structure of 7 to 10 syllables.

Table 1 below shows some of the *kieh* wisdom regarding the natural environment.

Table 1. *Kieh* and its ecological values

No.	<i>Kieh</i>	Ecological values
1	<i>Kok mamancuang usah mamutuih</i> <i>Kok marabahan usah maabihan</i> (Katik, 2022) 'If you cut, don't cut them all If you put it down, don't destroy it'	Caring for nature (principle of compassion and care for nature)
2	<i>Nan bantjah ditanami banieh</i> (Nasroen, 1979: 194) 'The marshland planted with seeds'	Nature Conservation (Attitude of responsibility towards nature)
3	<i>Nan kareh dibuek ladang</i> (Nasroen, 1971, hlm: 194) 'The hard (land) is turned into a field'	Nature Conservation (Attitude of responsibility towards nature)
4	<i>Nan lereng ditanam tabu</i> 'The slopes land are planted with sugar cane'	Nature Conservation (Attitude of responsibility towards nature)
5	<i>Nan tabiang ditanam aua</i> 'The cliffs are planted with aur (bamboo)'	Nature Conservation (Attitude of responsibility towards nature)
6	<i>Nan munggu ka pandam pakuburan</i> 'Dried land that stands out is made into a	Nature Conservation (Attitude of responsibility

No.	Kieh	Ecological values
	graveyard'	towards nature)
7	<i>Mananam nan babuah Mamaliharo nan banyao</i> (Katik, 2022) 'Plant something that gives fruit Preserve the living things'	Nature Conservation (Attitude of responsibility towards nature)
8	<i>Mananam nan babuah kateh Mananam nan babuah ka bawah</i> 'Plant the fruit that grows above Plant the fruit that grows under	Nature Conservation (Attitude of responsibility towards nature)
9	<i>Aia buliah diminum Buahnyo buliah dimakan Tanahnyo tatap tingga Dijua indak dimakan bali Digadai indak dimakan sando</i> 'The water can be drunk The fruit can be eaten The land remains it is not to be sold it is not to be pawned (LBH Padang, 2005:51)	Nature Conservation (Attitude of responsibility towards nature)
10.	<i>Baimaik sabalun habis</i> 'Keep it before it is gone'	Natural Resource Saving (The principle of living is simple and in harmony with nature)

Ecological Kieh Form and Structure

Table above presents ecological *kieh* in some forms and structures. The forms of the *kieh* were in *mamangan* that contain the meaning of orders and prohibitions (Yusriwal, 2005). In terms of structure, the *kieh* consisted of 7-10 syllables, for example: *baimaik sabalun habis* 'keep before it's gone' consists of *ba-imaik sa-balun ha-bis* (7 syllables); *digadai indak dimakan sando* consists of *di-ga-dai in-dak di-ma-kan san-do* (10 syllables).

Kieh in the form of *mamangan* can appear in speech acts such as custom traditional speeches. However, *kieh* can also appear separately, such as the classification of *kieh* made by researchers. *Kieh* in the form of *mamangan* that contains suggestion is usually short and

straightforward, but it can be subtle. In nature, *kieh* is not owned and created individually. With the *mamangan* formula, people can create a new *mamangan*, but not based on the common and recognized *mamangan* that usually appears in traditional *mamangan* or *petitih* proverbs. For example, people can make a similar expression of generic *mamangan*, such as, “*kok nio cadiak, rajin mambaco; kok nio pandai rajin batanyo*”, 'if you want to be smart, read diligently, if you want to be smart, be diligent in asking questions'. In this form of *mamangan*, the expressions contain an order.

Kieh in the form of *mamangan* that contains order can also be seen in Table 2 below.

Table 2. *Kieh* containing the meaning of order

No.	<i>Kieh</i>	Kieh Containing the Meaning of Order
1.	<i>nan bantjah ditanami banieh</i>	'Plant the marshland with seeds!'
2.	<i>nan kareh dibuek ladang</i>	'Turn the hard (land) into a field!'
3.	<i>nan lereng ditanam tabu</i>	'Plant the slopes with sugar cane!'
4.	<i>nan tabiang ditanam aua</i>	'Plant the cliffs with aur (bamboo)!'
5.	<i>nan munggu ka pandam pakuburan</i>	'Make dried land that stands out into a graveyard!'
6.	<i>mananam nan babuah</i>	'Plant plants that bear fruit!'
7.	<i>mamaliharo nan banyao</i>	'Preserve the living!'
8.	<i>mananam nan babuah kateh</i>	'Plant fruits that grows up!'
9.	<i>mananam nan babuah ka bawah</i>	'Plant fruits that grows under
10.	<i>Baimaik sabalun habis</i>	'Save before it's gone!'

Kieh in the form of *mamangan* which contains the meaning of prohibition can be seen in Table 3 below.

Tabel 3. *Kieh* which contains the meaning of prohibition

No.	<i>Kieh</i>	Meaning of prohibition
1.	<i>Kok mamancuang usah mamutuih</i> <i>Kok marabahan usah maabihan</i> (Katik, 2022)	'If you cut, don't cut them all' 'If you lay down (plants), don't spend out'

No.	<i>Kieh</i>	Meaning of prohibition
2.	<i>Kok marabahan usah maabiah</i>	'If you lay down (plants), don't spend out'
3.	<i>Aia buliah diminum</i>	The water can be drunk
	<i>Buahnyo buliah dimakan</i>	The fruit can be eaten
	<i>Tanahnyo tatap tingga</i>	The land remains
	<i>Dijua indak dimakan bali</i>	It is not to be sold
	<i>Digadai indak dimakan sando</i>	It is not to be pawned

Ecological Philosophy Meaning of *Kieh*

Concern for Nature

All living things have the right to be protected, not hurt, and well cared for. On this basis born an attitude of compassion and concern for nature and mutual protection. In the ecological view of nature, "*Alam takambang manjadi guru* [Nature unfolds being a teacher]", humans and other elements in the environment are considered as institutions and at the same time individuals who have an equal position. This is also a metaphor that land and humans as individuals, are also part of institutions that determine the course of the cycle in the social ecological environment. In that institution, humans occupy the social environment, peruse the natural resources such as land, rice fields, and houses that determine the status and identity of the Minangkabau people in the *nagari* (*traditional government unit*) as their social unit. In it, each institution has the right to maintain their existence, while each individual has the obligation to maintain the existence of their respective institutions (Navis, 2015: 60).

This connection between the nature and the social environment forms a pattern of human culture. For example, in Minangkabau culture, property in the form of natural wealth such as rice fields will maintain the identity of the community unit, i.e. the people in the community. Human culture is related to the physical world so that it forms and

influences each other that the existence of the natural environment and natural resources is one of the conditions for the formation of identity and *nagari* in Minangkabau. The need for land and nature that is organized, productive, and maintained is a form of concern for nature, because nature that is maintained will return to goodness for humans. Humans depend on nature, but nature does not need humans. Relationships are conditional – nature will give back when humans are kind to it. For example, the maintenance of rice fields for food needs, which requires the selfless willingness of the perpetrators. If this principle has been embedded in every human being, it means that the human has shown a civilized human culture, and nature will in turn take care of humans. This can be seen in the following *kieh*.

Kok mamancuang usah mamutuih
Kok marabahan usah maabihan (Katik, 2022)
'If you cut off, don't cut off completely'
If you lay down (plants), don't vanish it/destroy it'

Another variation of the above expression can be done by exchanging the word *usah* ('don't') with *jan* ('don't').

Kok mamancuang jan mamutuih
Kok marabahan jan maabihan (Katik, 2022)

In the *kieh* above, humans are 'institutions' and individuals who need resources from another element of institutions, e.g., natural elements such as land and the resources in it. Therefore, humans can take advantage of other institutions, but not by pruning, chopping, or destroying their resources. Therefore, the required institution member has an imperative in protecting and preserving every individual in it. Literally, the above *kieh* means 'to cut down'. From the denotative meaning of *kieh*, it seems that the word choice of *mamancuang* (to

behead) did not make sense. The irrationality is seen in the words *mamancuang* 'behead' and *mamutuih* 'to cut off'.

Literally, *mamutuih* is bound to break something up. However, the presence of a conjunction of need or *jan* 'don't' causes the beheading to not be cut off. The style of language especially seen in the *kieh* is a common thing for the Minangkabau people. Language style with reversed logic, such as *kieh*: “*takruang nak di lua, taimpiak nak ateh*, 'to be confined outside, squeezed to be on top'. This style of language shows the aesthetics of the Minangkabau's language.

There is a very deep meaning contained in the *kieh mamancuang jan mamutuih*, “you cut off, don't cut off completely' and *marabahan jan maabihan* ‘if you flinch, don't spend’. Humans as part of the ecosystem are allowed to cut down trees in their environment. However, in that case, humans should not cut off trees excessively. Some trees can be cut down and some are left to grow so that trees and plants continue to regenerate. In the context of the *kieh*, there are two meanings that are emphasized to humans as natural users, such as: leaving trees that are still worthy of living and growing, then replanting the lands that have been cut down so as not to have a bad impact on human life. In ecological ethical view, *kieh* described that nature can be used fairly with calculations, considering its sustainability for the next generation.

Nature Conservation

One form of nature conservation that can be done is to plant or utilize the available land. Land use not only saves the earth, but also supports and provides benefits to creatures on earth. To achieve these benefits, there must be ethics, for example in opening a new land. People must pay attention to the sustainability of the biological life and soil cycle, so that nature and humans can take care of each other. Indeed, there is

a reciprocal relationship between nature and humankind as part of the ecosystem.

For the Minangkabau community, the wisdom of the environment can be seen in two focuses, namely: the land and the plants. Every land has its own designation, hence not all land can be planted with any type of plants. This shows that the Minangkabau people have traditional knowledge in classifying land for their needs.

Kieh related to land use classification can be seen in the following explanation.

Nan bantjah ditanami banieh (Nasroen, 1971, p. 194)
'The wetland is planted with seeds (rice)'

The above *kieh* literally means that *bencah* land (wetland) is more suitable for growing rice. Rice is a basic need for the Minangkabau people. The need for rice does not only meet the basic food needs of the land owner, but also as a fulfillment for social needs, as rice is also needed in ceremonies related to death, traditional rituals, marriage, and healing. Another *kieh* stated:

Nan kareh dibuek ladang (Nasroen, 1971: 194)
'The hard (land) is turned into a field'

This *kieh* means that hard land is best for gardening or farming, on which can be planted some consumable plants that have economic value. These plants include bananas, mangoes, cassava, oranges, tubers, and perennials (cloves, nutmeg, cocoa).

Fields have their own philosophical meanings for the Minangkabau people, namely as symbols of prosperity (Nasroen, 1971:194). Fields for the Minangkabau people are very important for their survival. From the results of their fields, they make *taratak* (agricultural land and

The Legacy of Ecological Insights ...

small settlements), hamlets, *koto* (the center of customary government activities), *nagari* (customary government territory units), villages, yards, halls, arenas, roads, *tapians* (places for public baths by the river), *surau*, and mosques (Nasroen, 1971:195).

From the produce of the fields, places that have social functions such as *lapau* (traditional coffee shop), *surau* (small mosque), arena (playground), and *tapian* (bathing in the river) can be enlivened. From the crops of the two lands, customs were filled in, institutions were poured in, the pillars of Islam were perfected, children and their neighbors were sent to school. In essence, with the results of fields "dunia urang dapek dilawan" [the world of other people can be fought (able to compete with others)] (Nasroen, 1971:195).

The next *kieh* said:

Nan lereng ditanam tabu
'The slopes are planted with sugar cane'

The meaning of above *kieh* implies that lands with a slope or sloping surface can be used to plant sugarcane, because sugarcane has roots that are suitable for such soil contours. Similar expressions can also be seen below.

Nan tabiang ditanam aua
'The cliffs are planted with aur (bamboo)'

The utilization of slopes and cliffs has the same function to prevent erosion and landslides. Planting sugar cane and bamboo trees is part of natural disaster mitigation. In addition, the plants can also be used for human needs. This is suitable with what was stated by the bamboo expert Widjaja (2016), that bamboo planting in rivers is able to withstand soil erosion, even better than concrete. In this case, according to Widjaja, bamboo is planted purposely, i.e. adapting the

type of bamboo to the type of lands. For instance, in cliff areas it is recommended to plant bamboo flute (*Schizostachyum iraten*, *S. silicatum*, and *S. lima*) and for areas commensurate with rivers, it is recommended to plant bamboo or yellow bamboo. Besides functioning as land protection, the bamboo trees can also be used for human needs (Widjaja, 2001).

Nan munggu ka pandam pakuburan
'Dried land that emerges is made into a graveyard'

What is meant by *munggu* is a small land in the middle of a rice field or a small hill that is higher than the surrounding surface with rocky characteristics. Such land is usually not considered to be a productive land because it is more barren. Therefore, the land is more suitable for burial because it is drier and more prominent than the surrounding land. By being used as a burial place, the land is still well managed.

Mananam nan babuah
Mamaliharo nan banyao (Katik, 2022)
plant the plants of fruit
preserve the living creatures

In simple terms, this *kieh* implies to plant plants of fruit and raise animals that can be used for their daily needs. In addition, this *kieh* also recommends that humans take advantage of nature that has been provided by God. By planting crops, unproductive land could be turned into productive land, so that it can produce cleaner air for the surrounding environment. Forests are best to produce air (oxygen). Land that is left for a long time becomes like a forest. The forest itself has economic value too, as it produces little, honey, fruit, and birds.

Then, what is meant by maintaining the living is raising chickens, ducks, cows, buffalo, and fishes. Humans need these livestock to meet their food and nutritional needs. In addition to the basic need for

nutrition, livestock can produce organic fertilizers from their manure. At present, chemical fertilizers are considered more practical and often used. However, if people look at the nature of organic fertilizers, it can be preferred over artificial fertilizers because they are more environmentally friendly and do not damage soil nutrients. Thus, the cultivated plants grow with good natural elements free of harmful substances, and the land is not contaminated with chemicals. From that land, the plants that will be planted in Minangkabau customs are determined, as stated in the *kieh* below.

Mananam nan babuah kateh
Mananam nan babuah ka bawah
'Plant the fruit that grows above
Plant the fruit that grows below

This *kieh* means that there are plants whose fruits are in the ground, such as tubers (potatoes, beans, carrots, etc.), and plants whose fruits are above such as: mango trees, durian, mangosteen, pineapple, oranges, and others. The verses indicate an awareness of the provision of food that is in accordance with human needs. In reality, the provision of food is also adjusted to the weather and land in each region. For example, the areas of Padang Lua, Parabek (in Agam Regency), Alahan Panjang (in Solok Regency) are located in the highlands, their position is close to the foot of the mountain, the availability of water is sufficient, and the temperature is relatively cold, so plants that are suitable for planting are seasonal plants, such as cabbage, lettuce, chickpeas, carrots, onions, peppers, potatoes, and beans. Meanwhile, the Tilatang Kamang area in Agam, which is also located in the highlands, has cool air, the land is more suitable for planting citrus, coconut, durian, cocoa, and cassava. Likewise, Solok area is more suitable to plant rice products. Natural management indirectly influences the community to carry out environmental

conservation. With natural products in their environment, they can produce and provide food for other regions. Thus, the needs of each ecosystem community (nature and creatures) are met.

Aia buliah diminum
Buahnyo buliah dimakan
Tanahnyo tatap tinggal
Dijua indak dimakan bali
Digadai indak dimakan sando
The water can be drunk
The fruit can be eaten
The land remains
It is not to be sold
It is not to be pawned
(Yayasan TIFA, 2005: 51).

Literally, this expression can be interpreted that water, fruit or whatever contained in the soil can be used by people. However, the land is not for sale and should be pawned. This expression is estimated to be based on the principle that the high inheritance belongs to the people. All people in the group have the same rights, namely the right to use. In other words, all members of the clan have the rights to use the property, but not to sell or pawn it.

Based on the results of research by the Padang Legal Aid Institute, this philosophy is related to the management and utilization of customary land in Minangkabau. What is meant by *ulayat* land (customary land) is a land that is jointly owned by indigenous peoples that is passed down from generation to generation. In addition, *ulayat* land can also be defined as a plot of land with wealth, both above and contained therein (Yayasan TIFA, 2005: 46).

According to the TIFA Foundation's research, apart from being an economic source, *ulayat* land is also a determinant of kinship. As an economic source, customary land is used for the benefit, welfare, and

prosperity of the *nagari* children. Therefore, its management must pay attention to the preservation of nature and reserved for future generations (Yayasan TIFA, 2005, hal. 46). Furthermore, a determinant of kinship shows that the person or people who own the *ulayat* land are native people, or the Minang people call it *urang asa* (descendants who originally formed the *nagari*).

Misappropriation committed by a person in the use of customary land in Minangkabau will get physical and spiritual misery in his life. This is expressed in the following customary philosophy.

Ka ateh indak bapucuaik
Ka bawah indak baurek
Di tengah digiriak kumbang
Iduik sagan mati ndak namuah
Bak karakok tumbuh di batu

'To the top without buds
To the down unrooted
In the middle being gnawed by a beetle
Life is not even afraid to die
Like a ringworm growing on a rock'

The customary *fatwa* (statement) above describes the consequences that a person will bear if he is not responsible for the utilization of the *ulayat* land. The consequences that are borne are likened to a tree without shoots, without roots, the trunk is also hollowed out by beetles, and it is said that it is neither alive nor dead. Such is the severity of the consequences for those who abuse the rights and obligations of using *ulayat* land in Minangkabau.

Natural Resource Preservation

Saving natural resources means using natural resources sparingly and not excessively. It is necessary to save natural resources because natural resources are the produce that can run out at one time. The

Minangkabau people's wisdom regarding this savings is contained in the following expression:

Baimaik sabalun habis
'Save before it's gone'

This *kieh* becomes a guideline for the Minangkabau people in using natural resources. Natural wealth in the form of water, land, mining products (coal, gold, tin, oil), and other natural products can be exhausted. Therefore, the above *kieh* recommends making savings on natural resources before the shortage period comes.

Learning from Nature for the Sustainability of Human and Nature

"Alam Takambang Manjadi Guru" philosophy or 'learning from nature' is a concept that is uniquely expressed from Minangkabau culture and customs which also view change as an eternal movement. This change does not eliminate the essence of Minangkabau culture because it is in accordance with the proverb, "*tak lapuk dek hujan, tak lekang dek paneh*", 'does not rot due to the rain, does not fade due to the heat'. What is expected from the people is their ability to adapt to change. Nature continues to operate, and continues to provide its elements, water, air, plants. In addition, water and fire still exist in nature, depending on how humans can take care of them and control themselves to be friendly with the elements of nature. According to Navis (2015: 78), human adaptation to nature is also a form of optimism in life that with harmony, both in nature and in society, nature will continue to operate according to its cycle.

In addition to this principle, there is a concept of sustainable social adaptation, as expressed as 'aia gadang, ctapian barubah'. Its basic meaning is: adjustment so as to maintain harmony. Changes in nature

cannot be avoided due to natural factors. Change is like a river flowing with water, which will continue to flow even though there has been a flood or big water coming from the upstream of the river. In rivers that are hit by large water, changes occur in the cliffs and riverbanks. However, after the river cycle continues, the water will still flow with a different path.

The above view can be seen ecologically and is very compatible and in favor of nature from an eco-critical perspective. This optimistic attitude emphasizes an ecological ethical attitude in maintaining and adapting to nature and the environment. The allegory in *mamangan* about being 'clever' with nature is also interpreted by the suggestion of humans (Minang people) more broadly in human adaptation outside their original social environment. This suggestion is reflected in the *mamangan* '*di mana bumi dipijak, di situ langit dijunjung*' 'where the earth is stepped on, there the sky is upheld' which can maintain harmony and sustainability Navis (2015, pp. 78-79).

The allegory in *mamangan* is more social in nature, but also has equality with an ecological view, namely in the form of recommendations and prohibitions for sustainability, as in the previous quote about *ulayat* land. Customary land that cannot be sold is a guardian of optimism and sustainability of a *nagari* so as to maintain the identity of a region in Minangkabau. This is an endeavor of maintaining the identity, economic resources of the people, and high inheritance. The *mamangan* regulates that a land belonging to the clan cannot be sold, but handed down to the successors of the clan, namely the matrilineal family or inheritance to women or according to the mother's clan line. The view of sustainability as quoted above is: *Aia buliah diminum, Buahnyo buliah dimakan, Tanahnyo tatap tingga,*

Dijua indak dimakan bali, Digadai indak dimakan sando ('water can be drunk, fruit can be eaten, land remains, it is not to be sold, it is not to be pawned) (Yayasan TIFA, 2005: 51) and the phrase: "*Kok mamancuang usah mamutuih Kok marabahan usah maabihan*" 'If you cut it, don't cut it completely, if you cut it down, don't use it up' (Katik, 2022). The expression above confirms the sustainability of nature by not cutting down to its roots, but still leaving the plant roots that can continue life, as in the phrase "broken growth and loss of change" which corresponds to: "*Mananam nan babuah, Mamaliharo nan banyao*" (Katik, 2022), 'Plant what bear fruits', 'Nurture the living' and also corresponds to the phrase: "*Baimaik sabalun habis*" 'Save before it's gone' is a warning not to arbitrarily cut down nature in uncontrolled quantities.

From this discussion, it can be seen that one of the main points of the ecological view in Minangkabau mamangan is the sustainability of nature for the sustainability of the Minang community. Nature and its resources, such as fields, *ulayat* land, and so on are properties that are closely related to social unity, identity, and community sustainability according to customs and traditions.

Conclusion

This article shows that the Minangkabau people have a great concern and wisdom towards nature as described in the expression of the essence of ecological philosophy, "Alam takambang manjadi guru" or 'learn from nature'. Concerns and wisdoms for the environment and ecosystem are recorded in the aesthetic expression of traditional expressions, namely *kieh* found in *mamangan*, which is an idiom containing orders, suggestions and prohibitions in utilizing natural resources. This *kieh* category becomes a guideline to protect, preserve,

protect, and care for nature and the environment. *Mamangan* is a form of *kieh* that contains a message of environmental ethics and the ethics of the Minangkabau community. In the Minangkabau community there are two types of conservation: The traditional philosophy of *adat basandi sarak sarak basandi kitabullah* is a form of religion-based conservation carried out by the Minangkabau community. *Kieh* is an effort to warn the use of natural resources wisely, including through daily speech acts. *Kieh* is mostly in the form of *mamangan*. The more sustainable the biodiversity in Minangkabau, the more sustainable *kieh* will be. The more sustainable *kieh* is, the more sustainable Minangkabau nature will be.

In *mamangan kieh*s, there are ethical values of caring for nature, nature conservation, and saving natural resources. Ecological ethics in food management aims to grow and maintain, as a concept of sustainable natural resources. *Kieh* about the natural resources that exist in the summarized *mamangan* is not only a quote about nature, but description of recommendation and prohibition. In understanding the environment and its relationship with humans in society, the suggestions and prohibitions in treating nature are integrated into the *mamangan*. It can be concluded that, *kieh* of *mamangan* tends to contain suggestions and prohibitions on the management of natural resources, especially the soil element as a place for agricultural land, forests, fields, where plants grow, water sources, settlements, and customary land, and land with special purposes (grave). *Kieh* in the form of *mamangan* cites a lexicon of the elements of soil, plants, and living things (humans and animals). There are also orders and prohibitions aimed at preserving natural resources, such as the figure of speech that reads, 'frugal before it runs out' and the story about the consequences that will be inflicted on people who do not heed the

preservation of nature and the communal rights found in natural resources that do not mention the lexicon directly.

In Minangkabau's view, three elements of ecosystem (soil, plants/flora, living things/fauna) have a relationship with one another, as well as with humans, therefore humans have an obligation to take care of them. This is very important considering that natural resources are one of the conditions for social coherence (sustainability of indigenous peoples) for the Minangkabau community, especially fields, burial grounds, and *ulayat* land as hereditary ownership, status and identity. The shape and structure of the *kieh* are ecological in nature, which is a characteristic of the Minangkabau people in interacting with their environment, social and nature. *Kieh mamangan* is an aesthetic idiom in which the ethics of interacting with the natural environment in the spirit of community sustainability are implied. It presents a real example of linguistic culture that unites Minangkabau people with their natural environment.

This study has not looked at whether this ecological concept is still being applied in Minangkabau society in general. The urgency of housing and various other necessities of life also changes human behavior towards nature. However, this research has not been able to provide studies that far.

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