



## Articles

# Marine Ecolexicon of Noun-Verb of the Coast Community in Pesisir Barus, Central Tapanuli

Rosliana Lubis<sup>1</sup>, Dwi Widayati<sup>2</sup>

<sup>1,2</sup>Faculty of Cultural Science, Universitas Sumatera Utara, Medan, Indonesia

## SUBMISSION TRACK

Received: March 8, 2021  
Final Revision: April 15, 2021  
Available Online: April 25, 2021

## KEYWORD

Coast community, ecolinguistics, linguistic form, marine ecolexicon,

## CORRESPONDENCE

E-mail: [dwiwidayati@usu.ac.id](mailto:dwiwidayati@usu.ac.id)

## A B S T R A C T

This study aims to describe the lingual form, which is a manifestation of the understanding of the speech community of the environment towards its environmental dimension. The theory used in this research is ecolinguistic. Data in the form of basic lexicons and affixed lexicons related to the marine environment were collected through interviews with informants. Furthermore, the data were analyzed by grouping them based on the word class, environmental category, and the affixation process contained in the affixed words. The results of the study show that many marine environmental lexicons which are divided into noun lexicon and verb lexicon. The noun lexicon is divided into four lexicon categories, namely: (1) Marine Environmental Fauna Lexicon (88 lexicons); (2) Flora of the Marine Environment Flora (9 lexicons); (3) Lexicon of Facilities / Infrastructure for Marine Environmental Activities (16 lexicons); and (4) Nominal Environmental Lexicon (7 lexicons). The number of vocabulary that is still recorded in the cognition of the Barus coastal Malay language community indicates that the community is very familiar with its environment and therefore the vocabularies are preserved.

## I. INTRODUCTION

Barus is one of the sub-districts in Central Tapanuli Regency, which used to have a long history in Indonesia known as “Kota Tua”. Historically, Barus is an international port for the camphor (*barus*) and spices commodity. The term *Barus* was then used for the camphor commodity (Suprpti, Subagyo, & Tanjung, 1995). By its long history, Barus has been an object of various researches, including Islamic civilization, literature, and culture. Additionally, various issues about Barus had been discussed in the seminars conducted by the Balai Bahasa Sumatera Utara in 2020. It was discussed that Barus was the center of Islamic civilization in the archipelago and the roots of the Indonesian language. Of course, as an area that has had a maritime culture since the 6th century, Barus certainly has a rich maritime environment lexicon. This wealth needs to be explored to reveal its archaeological footprint.

The emergence of the ecolinguistic approach indicates that the language that lives and is used

by the community can describe, represent, depict, and symbolically represent the reality in the environment, both the physical environment and the artificial environment (Suweta, 2013) Hence, ecolinguistics sees the relationship between a community’s diversity and its environment in one unit (Haugen, 1972). The physical environment with different social conditions affects language speakers psychologically in their language use (Al-Gayoni, 2010). From that perspective, language and environment have a decisive relationship due to the interrelation, interaction, and interference of humans, language, and the environment. The parameters of ecolinguistics include (1) the environment, (2) diversity, and (3) interrelationships; interaction; and interdependency (Fill and Muhlhausler, 2001). Theses parameters are adopted from the ecology parameter (Odum, 1996). From an ecolinguistic perspective, speech maintains interaction, interrelation, and interdependence with the environment.

As an area located on the coast, marine resources are the main income for the local community. The center for marine product transactions is Pasar Terendam or Kualo (the term refers to a local community) and Kade Gadang Village. Barus community has close ties with coastal cultural products, such as *pukat payang*, *pukat pantai/dogal*, *pukat kantong*, *perangkap bubu*, *rawai*, *pancing*, *jaring insang tetap*, *jaring lingkar* and *jaring insang hayut*. Apart from going to sea, fishermen also have other activities such as making baskets, repairing nets and drying fish.

Communities who live in coastal environments have a marine lexicon treasure. Sapir (as cited in Mbete, 2013) suggests that a language's vocabulary mostly reflects the speaker's physical and social environment. A language's vocabulary may be represented as a complex inventory of all the people's ideas, interests, and activities. It is like a complete thesaurus of a particular tribal-given language that reflects society's physical environment and cultural characteristics. The interactions, interrelationships, and interdependence of people and the sea were encoded in the marine lexicon (Mbete, 2013). These lexicons can refer to marine biota (both flora and fauna) and activities relating to the marine environment in a specific language. For example, people in Barus use the terms *mangayi* "catching fish with a hook", *mamukek* "catching fish with a trawl", and *manjalo* "catching fish using nets". However, when the relationship becomes twisted or not balanced, then the biota and marine activities will be affected. As a result, the lexicons of society begin to be eroded by changes in the environment. Thus, environmental factors also determine lexical sustainability. Marine ecollexicon in Barus community shows how people understand their environment (Widayati and Lubis, 2019; Widayati, 2019). Words can reflect the characteristics of the way of life and way of thinking of the speaker and provide valuable clues to understand their culture (Wierzbicka, 1997; Cassirer, 1987; Lauder, 2004; Mbete, 2015).

On the other hand, the history and long process of culture have made Barus people speak several languages, including Minangkabau, Malay, Indonesian and Batak. Yet, for daily communication, Barus community who live on the coast use Malay language. The Malay language used in Pesisir Barus (known also under the acronym of BMPB) reflects the environment and the people's condition.

BMPB plays an important role as a communication device, a unifying device, and expresses the speech community's identity. As a communication device, BMPB builds a network of interactions between the speech community and the natural environment, the interaction between the speech community and the socio-cultural environment. As a unifying device, BMPB builds harmony in the sociological and ideological functions of the community. BMPB can reflect the identity, which reveals and record everything in the community. In other words, the ecollexicon reflects the cognitive intelligence of the speaker (Renjaan, 2015).

The basic assumption of this research is that speakers and interlocutors of any language must know and use a set of words or discourse related to their environment, both the social environment and the natural environment. From this assumption, it is important for the author to reveal the various ecollexical treasures of the marine environment stored in Barus District, Central Tapanuli Regency.

This is also based on the fact that language contact and interaction between people of different origins and languages raises concerns about the shift and extinction of a language in line with the progress and development of the times (Lindo, 2000). Responding to the development of information and population mobility in the area of Central Tapanuli Regency which is very high at present which results in heterogeneity of the community, the guidance, development and inventory of the Barus Coastal Malay language is felt to be done immediately to preserve the language, especially those related to the marine environment.

## II. RESEARCH METHOD

The data were collected using observational and conversational methods (Mahsun, 2005: 90). The data obtained were written data and spoken data, which were collected using recording techniques.

The data then analyzed using the identity method relies on the external aspect of language (Sudaryanto, 2015). Some marine lexicons were analyzed using immediate constituent analysis, which relies on the researcher's mental competence (Sudaryanto, 2015). Furthermore, the data are grouped based on lexicon groups and divided into certain linguistic forms.

### III. RESULT

BMPB-speaking communities used to be plural and heterogeneous societies since Barus was a trading route for a long time, especially at its ports. Many traders from local and overseas (Arabs, Indians, Chinese, Netherlands among others) interacted in this area. Camphor, leather, resin, and rattan were among the important export commodities at that time. As Barus became an important trading port city in the XVI century, there was also the interaction between different ethnicities and foreigners. The acculturation proses making of the people a coastal population that has been using the Malay language, which was influenced by Batak and Minangkabau culture. Today, although dominated by the Batak people, some other workers also come to Barus. These marine ecolexicons are analyzed based on ecolinguistic parameters, namely the interaction, interrelation, interconnection, and interactivity of the community with its environment. The following describes the marine environment known to the people of Barus, Central Tapanuli.

#### 3.1 Noun

Nouns are a category or class of words. Syntactically, the noun has no potential to join the particle “tidak”, but has the potential to be preceded by the word “dari” (Kridalaksana, 2007). In this study, the noun category is a lexical category, or part of speech that belongs to the marine environment’s lexicons in the Barus District.

#### Lexicons of Marine Fauna

The lexicon of marine fauna is a lexicon group that refers to animals with a close relationship to the marine environment. These lexicons belong to the category of the living environment. the results of the study related to lexicons of marine fauna revealed that there are are 81 lexicons of marine fauna that collectively understood by the community (see appendix 1 for illustration).

From the lexicon of marine fauna in appendix 1 above, these lexicons are group into several types, including the fish, shrimp, crab, shellfish, bird, insect, and reptile. In ecolinguistics, people’s understanding of interaction and interrelation is influenced by three dimensions: biological, sociological, and ideological. The firts dimension is related to biological diversity with the level of species vitality. As for the sociological dimension it deals with social praxis aspects and how to regulate

human beings’ interrelationships. Finally, the ideological dimension relates to collective mental, cognition, ideology, and other psychological aspects (Mbeti, 2013). Understanding these three dimensions creates certain lingual forms and meanings. For example, the lexicon *bada* in Indonesian means ‘anchovy’ (Stolephorus). Conceptually, *bada* is a dry fish with small size and has little meat. From the biological dimension, *bada* is associated with the *Jan bak condo bada* ‘don’t be an anchovies’. The meaning of this expression was used since *bada* is a cheaper commodity (ideological dimension). The lexicon *bada* derives different linguistic forms, such *bada mentol*, *bada putih*, and *bada nasi* which can be examined from its biological dimension. *Bada mentol* has a pale color and larger than the other *bada*. However, *bada putih* has a white color and about the same size with *bada nasi*.

Besides *bada*, the community recognizes several types of *garapu* based on the variety or species. This biological understanding is coded into other lingual forms: *jonang*, *noneh*, *sopan*, *gerotang*, *minyak*, and *pano*. For instance, *jonang* refers to grouper which has a reddish color merahan or keorangean. Meanwhile, *noneh*, *gerotang*, and *pano* refer to groupers with brownish black bodies



Figure 1. Garapu (resource: own documentation)

(general public understanding of the biological dimension). *Jonang* or *sunuk* grouper and oil cultivar are grouper fish that have the highest economic value compared to other species. other groupers. This makes *jonang* or cultivated oil a fairly good commodity in society with the most delicious taste (ideological dimension). By some people, *jonang* is usually served in a curry dish, such as in the lingual form of manggule *jonang* ‘gulai *jonang*’ or gule *jonang* ‘gulai *jonang*’ or gule garapu (sociological dimension).

*Kapiting* is grouped based on the place of life. According to the variation of its biological form, the crab is classified as *kapiting bako*, *kapiting sungai*, *kapiting lauk*, dan *rajungan/bukong* (biological dimension). *Rajungan* is a crab that lives in marine waters but is rarely found in coastal areas. There is another lexicon namely *ambe-ambe* and *anggo*. *Ambe-ambe* is a small sand crabs and white like sands and *Anggo* is a crab that looks like a nut. Besides daily consumption, *kapiting* is also commonly served in certain events, such as family gatherings (sociological dimension). Like crab, shellfish also have several types with manifestations of linguistics forms based on simple biological and ideological

understanding of the community, such as *pato-pato*, *lokan*, *simarhuruan*, *biduan*, *rimis*, and *beliung*. The people understand that *biduan*, *rimis* is white, and *beliung* is black.

### Lexicons of Marine Flora

Flora in the KBBI (2008: 318) is defined as the entire life of a plant species in a particular habitat, area, or geological strata; natural flora. Flora is defined as the entire life of a plant species in a particular region, area, or geological level (KBBI, 2008: 318). Marine environment flora lexicons refer to plants (Plantae) that have a close relationship to the marine environment because they live in areas around the sea/coast of Barus. These lexicons belong to the biological environment (living things). As far as the lexicon of Marine Flora, the result located nine lexicons of marine environment (see Appendix 2).

Ecolinguistically, the lexicon of the flora of the Malay Pesisir Barus marine environment (MBP) is a manifestation of understanding of interaction and interrelation, which is also influenced by the biological, the sociological, and the ideological dimensions. The lexicon of *tapak kudo* ‘horseshoe’, for example, is an upright plant creeping and forming shrubs. *Tapak kudo* plants can be found in the Barus beach. At first glance, the shape of this plant’s leaves looks like horseshoe (biological dimension), so people called it *tapak kudo*. Besides, the same plant is called by the local population as *andor palas*. As a shrub, the *tapak kudo* plant is often destroyed from residents’ yards near the shoreline and was only used as a jumping rope game by children in the 1980s. However, by some fishing communities, this plant is used as a material for cleaning boats from dirt or moss and is also used as traditional medicine (ideological dimension).



Figure 2. *Kapiting mata tigo* (left) and *Ambe-ambe* (right) (resource: own documentation)

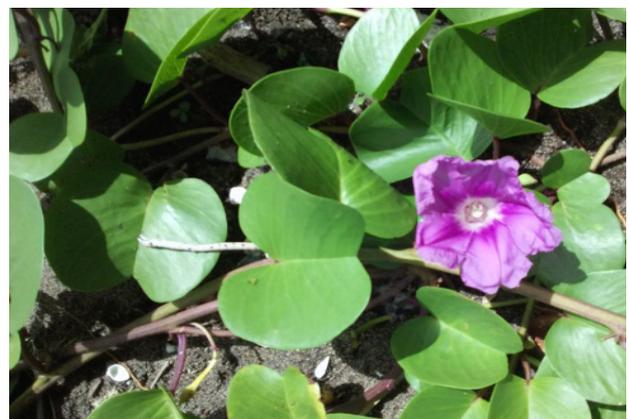


Figure 3. *Tapak kudo*

Karambi, or coconut tree, is a plant that is highly valueable. Almost all its parts are used for domestic purposes. From a biological dimension, some expressions refer to parts of the plant such as *buah karambi* <coconut>, *daun karambi* <coconut leaves>, *aikarambi* 'air kelapa', *sabuik karambi* <coconut husks>, *batang karambie* 'coconut stems', and *batokkarambi* 'coconut shell'. From the sociological dimension, *daun karambi* are commonly used to make coconut leaves (*janur*) at weddings. The coconut leaves that is strung like a crown are tangled on a banana stem. It is used as a point of the location of an event or celebration for guests. In addition, it has also become a common thing, *daun karambi* are also used to make *lontong ketupat*, especially on holiday celebrations, such as Eid al-Fitr and Eid al-Adha.

### Lexicon of Utilities and Tools

The lexicon of utilities for marine environmental activities refer to tools to support marine activities. These lexicons belongs to abiotic environment that are not living things. Then, the lexicons are marked as the function or description of the object. The research shows there are sixteen lexicons of utilities for marine activities (see Appendix 3).

From the lexicon data above, the lexicon of facilities and infrastructure for marine environmental activities can be in the form of fishing gear for marine resources commonly used by the community, means of transportation, places or buildings, as well as materials/tools for drying fish

The utilities for marine activities function as fishing tools, transportation devices, places or buildings, as well as materials / tools for drying fish. Fishing gear includes *pukek*, *tungguok*, *jalo*, *kanyie*, *jariang*, and *payang*; transportation devices includes *bagan* and *sapan*; buildings includes *bagan* and *sapan*; as well as production support tools and materials, such as *lantai*, *langgayan*, *saringan*, *garom*, dan *keramba*. For fishing gear, *pukat* can be grouped based on the quantity of the fishing gear, such as *pukat payang*, *pukat pantai/dogal*, *pukat kantong*. Meanwhile, there are also other fishing gears such as *perangkap bubu*, *rawai*, *pancing*, *jaring insang tetap*, *jaring lingkar* and *jaring insang hayut*.

In general, Barus fishermen are traditional fishermen. The coastal environment has been a source of wisdoms that are embedded in their habits. This understanding is also part of the ideological dimension of the language that the

community speaks. To make a simple boat, for example Barus fishermen know the term *calik langkah*. This activity term refers to the calculation system of good days for carrying out activities. The activity should be postponed if the counts comes to a bad day. If the fisherman still be carried out, then it will bring disaster. Shipbuilding can take between one and two months. For *pincalang boat*, the wood used are *kayu meranti*, *kayu kapur*, or *kayu aloban*. Moreover, the community will held a ceremony for lowering the boat / ship to sea and usually followed by eat together.

### Noun of Coastal Environment

Coastal nouns are lexicons which closely related to the coastal environment. These lexicons refers to conditions in the coastal area or entities that are close to the Barus coast area. In this respect, the study shows that there are eighth coastal nouns as depicted in the following table.

Table 1. Noun of Coastal Environment

No.	Lexicon	Description
1	<i>Bade</i>	Storm
2	<i>Bui</i>	Sea foam
3	<i>Surut</i>	Down (waves)
4	<i>Karang</i>	Reef
5	<i>Luluk</i>	Mud
6	<i>Ombak</i>	Wave
7	<i>Pasang</i>	Tide (waves)
8	<i>Pasi</i>	Sand

*Pasang*, *surut*, *bade*, *ombak* are manifestations of people understanding of natural phenomena. By these lexicons, the community understands that nature can change. Therefore, as a community living by the sea, MPB shows its respect for nature. This is an articulations of gratitude to God for the gifts and protection for society. Every year, in the month of Syafar, the people hold *tolak bala*. This event is a form of gratitude and prayer to avoid all natural disasters caused by human activity. As a symbol of purity and peace, white flags (*panji-panji*) are used during the event. Besides prayers, the people will bring food to eat together as a form of togetherness and cooperation. In the past, the *kenduri laut* was also followed by several rituals such as cutting off buffalo heads they washed into the sea (Wahyudi, 2011). However, over time people became more educated and knew Islamic rules such rituals no longer exist. The activity shifts to Islamic rituals, such as prayers, and recitation of the holy Koran.

**3.2 Verb about Marine activities**

Syntactically, verbs can be accompanied by particles *tidak* and cannot be accompanied by particles *sangat*, *lebih* and *agak* (Kridalaksana, 2007). The verb lexicon is obtained from the derivation process of the lexeme which has undergone a morphological process. The following lexicons describe marine verbs (see appendix 4) that reflect the marine activities by the Barus community, Central Tapanuli Regency

*Mambagan* is a fishing activity. Usually, fishers use lamps they hang around their ship to attract fish. When the fish gets close, the net will be lowered

The economic activities of fisheries carried out by fishers are generally performed in groups, but some also do it individually. *Bagan* operates in the dark season (moonlight is not too bright), while it does not operate in the bright season (full moon). At this time, fishers usually take the time to repair their fishing gear. Based on local people’s knowledge, the bright season occurs in the middle of the month.

*Mamayang* is a way used by fishers to catch fish using *payang*. *Payang* is a type of fishing gear like *pukat* (trawl), similar to a bag. This wide pocket uses to collect trapped fish, which are then pulled up from the sea.

*Mamukek* is an activity of fishing using trawl nets that fishermen use to spread along with the the movement of the boat. Then when the nets are about to be lifted, the anchors are thrown into the sea. There are several types of trawling- *godang pukek*- used by the machines to catch fish on a large scale. For example *pukek karang* and *pukek tarik*. *Pukek karang* is trawlers that are held or installed between the reefs in the sea and *Pukek tarik* is trawlers that are pulled into the sea by a trawl boat (*sampan*).

The following is a form of the derivation of MPB marine eolexicon verbs.

**Derivation {*bagan*} + Prefiks {*maN-*} and {*bar-*}**

**Table 2. Derivation {*bagan*} + Prefix {*maN-*} and {*bar-*}**

No.	Root	Lexicon	Morphological Process	Description
1.	<i>Bagan</i> (n)	<i>Mambagan</i> (v)	<i>maN</i> + <i>bagan</i> (prefix + root)	Fishing using <i>bagan</i>
		<i>Babagan</i> (v)	<i>Bar</i> + <i>bagan</i> (prefix + root)	Own a <i>bagan</i>

Table 2 shows *mambagan* and *babagan* are lexicons that have undergone a morphological process (affix), including the prefix *maN-* and the prefix *bar-*. This is a derivation that changes its lexical category (part of speech). This can be understood because the lexicon *mambagan* and *babagan* come from the basic form, a noun After the affixation, this lexicon is changed to verbs. The lexicons refer to an activity carried out by MPB for fishing using *bagan*. The following is the context for the sentence from the verb lexicon above.

- a. *Urang mambagan malam hai.*  
 People ACT-*bagan* at the evening  
 “People fishing using *bagan* at the evening”.
- b. *Babarapo urang palaut di sikko, babagan tigo.*  
 DEF fisher PRE-here POS-*bagan* NUM  
 “Some fishers here own three *bagan*.”

**Derivation {*pukek*} + Prefix {*maN-*}, {*bar-*}, and {*di-*}**

**Table 3 Derivation {*pukek*} + Prefix {*maN-*}, {*bar-*}, and {*di-*}**

No.	Root	Lexicon	Morphological Process	Description
1	<i>Pukek</i> (n)	<i>Mamukek</i> (v)	<i>maN</i> + <i>pukek</i> (prefix + root)	Menangkap ikan/hasil laut dengan menggunakan <i>pukat</i>
		<i>Bapukek</i> (v)	<i>bar</i> + <i>pukek</i> (prefix + root)	Memiliki <i>pukat</i>
		<i>Dipukek</i> (v)	<i>di</i> + <i>pukek</i> (prefix + root)	Dipukat

From table 3 above it can be explained that the lexicon *mamukek*, *bapukek* and *pukek* derive from the lexicon of nouns *pukek*. The morphological process is the affixation, the prefix *maN-*, *bar-*, and *di-*. The meaning refers to in the original form is a fishing tool in the form of a trawl. The derivation process refers to catching fish using the *pukek* ‘*pukat*’ and having the *pukek* ‘*pukat*’ on the *bapukek* lexicon. The following is the context for the sentence from the verb lexicon above.

- a. *Pabilo Ayah ang pai mamukek ko laut?*  
 When father-2TG go AKT-*pukek* PRE sea  
 “When did your father go to the sea for fishing using *pukek*?”
- b. *Bagan nan gadang ko bapukek gadang pulo.*  
*Bagan* DEM big itu POS-*pukat* big too  
 “The big *Bagan* has a big *pukat*.”

**Derivation {jalo} + Prefix {Man-}, {bar-}, and {di-}**

**Table 4. Derivation {jalo} + Prefix {Man-}, {bar-}, and {di-}**

No.	Root	Lexicon	Morphological Process	Description
1.	Jalo (n)	Manjalo (v)	maN + jalo (prefix + root)	Fishing using jalo
		Dijalo (v)	di + jalo (prefix + root)	Passive form

From table 4 it can be explained that the lexicons *manjalo*, *bajalo*, and *dijalo* are lexicons that have undergone a morphological process, prefixing *maN-*, *bar-*, and *di-*. The lexicons derive from the root noun *jalo*. The meaning refers to marine activity capturing marine animals using nets. The following is the context for the sentence from the verb lexicon above.

a. *Kini ko inyo sedang manjalo lauk ka tapi.*  
 Now 3TG AKT-jala fish PRE edge  
 "Now, He is getting *jalo* to the edge."

b. *Dijalonyo jonang nan gadang tu.*  
 PAS-jalan-PRO fish REL big DEF  
 "He catch the big fish."

**Derivation {jaring} + Prefix {maN-}, {bar-}, {di-}, {-i}, {tar-}**

**Table 5. Derivation {jaring} + Prefiks {maN-}, {bar-}, {di-}, {-i}, {tar-}**

No	Root	Lexicon	Morphological Process	Description
1	Jaring (n)	Manjaring (v)	maN + jaring (prefix + root)	Manjaring
		Bajaring (v)	bar + jaring (prefix + root)	Bajaring
		Dijaring (v)	di + jaring (prefix + root)	Dijaring
		Dijaringi (v)	di+jaring+i (prefix + root) + suffix	Dijaringi
		Tajaring (v)	tar + jaring (prefix + root)	Terjaring

From the table 5 above it can be explained that the lexicons *manjaring*, *bajaring*, *dijaring*, and *dijaringi* have undergone a morphological process by prefix *maN-*, *bar-*, and suffix *-i*. The lexicon derives form the root noun *jariang*. The meaning of the lexicon refers to activity of fishing using a fishing gear with a *jariang* (net) in the lexicon *bajariang*. The following is the context for the sentence from the verb lexicon above.

a. *Manjaring lauk apo Mamak kinin?*  
 AKT-jaring OL/fish whct Uncle now  
 "What fish are you fishing (*Manjaring*)?"

b. *Bajaring limo bagan urang ko.*  
 POS-jaring NUM bagan the man DEF  
 "He owns five *bagan*".

c. *Lauk apo nan dijaring kinin, cek?*  
 Fish what REL PAS-jaring now kak?  
 "What fish did you catch (*jaring*)?"

d. *Timpik nan gadang ko, tajaring jaring anak bagan.*  
 Tongkol REL big DEF PAS-jaring jaring anak bagan  
 "The fish are trapped in the net".

e. *Jaringi keramba ko, Dik!*  
 Jaring-i keramba DEF dik  
 "Throw the net to the pool!"

**Derivation {tangguok} + Prefix {maN-} and {di-}**

**Table 6. Derivation {tangguok} + Prefix {maN-} and {di-}**

No	Root	Lexicon	Morphological Process	Description
1.	Tangguok (n)	Manangguok (v)	maN + tangguok (prefix + root)	Menangguok
		Ditangguok (v)	di + tangguok (prefix + root)	Ditangguok

From table 6 above shows that the lexicon *manangguok*, and *ditangguok* are complex forms which are affixed by the prefix *maN-* and *di-*. The result of this morphological process derive from the root *Tangguok*. The meaning refers to fishing activity using a tool *tangguok*. The following is the context for the sentence from the verb lexicon above.

a. *Lamo bona waang manangguok lauok nan kociek tu.*  
 Lama ADV 2TG AKT-tangguk OL/ ikan REL kecil DEF  
 "Lama sekali kau menangguk ikan yang kecil itu."

**Derivation {payang} + Prefix {maN-} and {di-}**

**Table 7. Derivasi {mayang} + Prefiks {maN-} dan {di-}**

No	Root	Lexicon	Morphological Process	Description
1.	Payang (n)	Mamayang (v)	maN + mayang (prefix + root)	Fising using <i>payang</i>
2.		Dipayang (v)	di + payang (prefix + root)	Dipayang (passive)

Table 7 shows that, the lexicons *mamayang*, and *dipayang* have been affixed by the prefix *maN-* and *di-*. This process derives from the root *payang*. The meaning refers to activity of fishing tools using *payang*. The following is the context for the sentence from the verb lexicon.

a. *Mamayanglah kito kiniko, beko patang pulo hari.*  
 AKT-mayanglah 1JM sekarang nanti petang pula hari.  
 “Pergi menangkap ikanlah (dengan payang) kita sekarang, sebentar lagi sore.”

**Derivasi {kai} + Prefiks {maN-, bar-, di-, di- + i-, maN- +-ken, and tar-}**

**Table 8. Derivasi {kai} + Prefiks {maN-, bar-, di-, di- + i-, maN- +-ken, and tar-}**

No	Root	Lexicon	Morphological Process	Pro-	Description
1.	kai	Mangai	<i>maN+panciang</i> (prefix + root)		<i>Memancing</i>
			<i>bar + panciang</i> (prefix + root)		<i>Berpancing</i>
			<i>di + panciang</i> (prefix + root)		<i>Dipancing</i>
			<i>(di + pancing) + i</i> (prefix + root)+ suffix i		<i>Dipancingi</i>
			<i>maN + panciang + ken</i> (prefix + root) + suffix		<i>Memancingken</i>
			<i>tar + panciang</i> (prefix + root)		<i>Terpancing</i>

Table 8 shows that the lexicons *mamancing*, *bapancing*, *dipancing*, *dipancingi*, *mamancingken* and *tapancing* have prefix *maN-*, *bar-*, *di-*, *tar-*, and simulfix (*di- + -i*) , (*maN- + -ken*). These lexicons derive from the word *panciang* (fishing rod) because they refer to the activity using a fishing rod to catch the fish. The following sentence shows the use of these verbs.

- a. *ala pai ayah mangsi, Umak?*  
 ASP go father AKT-pancing mother  
 “Daddy has gone fishing, Mom?”
- b. *dikailah lauk tu!*  
 PAS-pancinglah fish DEF  
 “Catch the fish”.
- c. *Lauk nan di karamba tu dikainyo.*  
 Fish REL PRE keramba DEF PAS-pancing-i 3GT  
 “Catch the fish in the pool”.
- d. *Alah lamo ambo di siko, takai juo gaguk ko.*  
 ASP long 1GT PRE-sini PAS-pancing juga mayung DEF  
 “After a long time, finally I get the fish”.

**IV. DISCUSSION**

An overview of the lingual form of the Barus Malay marine ecolexicon consisting of noun and verb categories. Noun lexicon can be divided into four lexicon groups, namely (1) Lexicons of Marine Fauna (81 lexicon); (2) Lexicons of Marine Flora (9 lexicons); (3) Lexicon of Utilities and Tools (16 lexicons); (4) Noun of Coastal Environment (8 lexicons). The verb lexicon, which is a form of

marine environmental activity, is formed from basic verbs (12 lexicons) and affix verbs (29 lexicons).

The lingual forms of the MPB ecolexicon consist of monomorphemic forms, polymorphemic forms, and compound words. Noun ecolexicons include morphophonemic forms, for example *bajan*, *gaguk*, *gambolo*, *karambi*, *kateng*, *karamba*, *payang*, *bagan*, *jalo*, and others. Ecolexicon consisting of polymorphemic forms, for example, *palabuhan*, *saringan*, *mamayang*, *bapukek*, and others. Ecolexicon consisting of compound words, for example, *bajan murai*, *gajah menong*, *kaling-kaling gadang*, *lauk sabalah* (see appendices 1-4). Polymorphemic forms are constructed by adding affixes, such as {*maN-*}, {*ber-*}, {*di-*}, {*-i*}, {*tar-*}, {*di- + -i*}, and (*maN- + ken*). These Marine lexicons are a manifestation of the BMPB understanding of the process of interaction, interrelation, and interdependence of society with its environment which is influenced by biological, sociological, and ideological dimensions. The understanding of these three dimensions lowers certain forms and lingual meanings, even leads to expressions passed down from generation to generation by the speech community there, becomes advice, and the delivery of teachings and guidelines in social life.

**V. CONCLUSION**

The analysis of marine ecolexicon BMPB shows two part of speech, nouns and verbs, that can be divided into four groups, (1) lexicon of marine fauna; (2) lexicon of marine flora; (3) lexicon of marine utilities and facilities; (4) noun of marine environment, and verb of marine activity. These lexicons manifest MAB’s understanding of the process of interaction, interrelation, and interdependence of society with its environment, which is influenced by biological, sociological, and ideological dimensions. The linguistic forms of the BMPB ecolexicon consist of monomorphemic and polymorphemic forms. Polymorphemic forms are constructed by adding affixes, such as {*maN-*}, {*ber-*}, {*di-*}, {*-i*}, {*tar-*}, {*di- + -i*}, and (*maN- + ken*).The number of vocabulary that is still recorded in the cognition of the Barus coastal Malay language community shows that the community is very familiar with their environment so that these vocabularies are maintained. This condition must be maintained in an effort to preserve vocabulary as well as cultural preservation.

## REFERENCES

- Al-Gayoni, Yusradi Usman. (2010). *Penyusutan Tutur dalam Masyarakat Gayo: Pendekatan Ekolinguistik (Thesis)*. Medan: Universitas Sumatera Utara.
- Cassirer, Ernest. (1987). *Manusia dan Kebudayaan: Sebuah Esai tentang manusia*. Translate by Alois A . Nugroho. Jakarta: Gramedia.
- Fill, Alwin dan Peter Muhlhausler (eds). (2001). *The Ecolinguistic Reader Language Ecology and Environment*. London and New York: Continuum.
- Haugen, (1972). *The Ecology of Language*. in Fill, Alwin, and Peter Muhlhausler (Eds), (2001). *The Ecolinguistics Reader: Language, Ecology, and Environment*. London, and New York: Continuum.
- Kridalaksana, Harimurti. (2007). *Pembentukan Kata dalam Bahasa Indonesia*. Jakarta: Gramedia Pustaka Utama.
- Kridalaksana, Harimurti. (2007). *Kelas Kata dalam Bahasa Indonesia*. Jakarta: Gramedia Pustaka Utama.
- Lauder, M.R.T.M. (2004) *Simposium Internasional Kajian Bahasa, Sastra dan Budaya*. Austronesia III, Denpasar.
- Lindo, Anna Vibeke and Jeppe Bundsgaard (eds.). (2000). *Dialectal Ecolinguistics Three Essays.. Symposium 30 Years of Language and Ecology, Graz 2000*. University of Odense research Group for Ecology, Language and Ecology. Austria.
- Mbete, Aron Meko. (2013). *Penuntun Singkat Penulisan Proposal Penelitian Ekolinguistik*. Denpasar: Vidia.
- Mbete, Aron Meko. (2015). *Pembelajaran Bahasa Berbasis Lingkungan: Perspektif Ekolinguistik*. *RETORIKA Jurnal Ilmu Bahasa*. 1 (2), 352-364.
- Odum, Eugene P. (1996). *Dasar-Dasar Ekologi*. 3rd Edition. Translate by Tjahyono Samingan. Yogyakarta: Gadjahmada University Press.
- Rahyono, F X. (2015). *Kearifan Budaya dalam Kata*. Jakarta: Wedayatama Widya Sastra.
- Renjaan, Meiksyana Raynold. (2015) *Leksikon Bahasa Kei dalam Lingkungan Kelautan: Kajian Ekolinguistik*. *Linguistika*: 21 (1).
- Sudaryanto. (2015). *Metode dan Aneka Teknik Analisis Bahasa*. Yogyakarta: Sanata Dharma University Press.
- Suprpti, Mc., Suhardi, Subagyo, W., Tanjung, Z. et al. (1995). *Studi Pertumbuhan dan Pemudaran Kota Pelabuhan Kasus Barus dan Sibolga*. Jakarta: Departemen Pendidikan dan Kebudayaan.
- Suweta, I Made. (2013). *Ecolinguistics Approach In Preservation Rare Plants Growing In Bali*. *International Journal of Linguistics*. 5 (1), 283.
- Wahyudi, Sarjana Sigit. (2011). "Sedekah Laut" Tradition for in the Fishermen Community in Pekalongan, Central Jawa. *Journal of Coastal Development*. 14 (3), 262-270.
- Widayati, Dwi dan Rosliana Lubis. (2019). *Cultural Values in The Culinary Ecolingicon of the Asahan Malay Society*. *Proceeding of The 4<sup>th</sup> International Seminar on Linguistics (ISOL-4)-Language in Disruptive Technology*. 57- 65 <https://content.sciendo.com/view/2>, 147-161.
- Widayati, Dwi. (2019). *Diversity of Cullinary Ecolingicon of Main Cuisine in Malay Communities on the East Coast of North Sumatra*. *Arbitrer*. 6 ( 2), 113 – 121. <https://doi.org/10.25077/ar.6.2.113-121.2019>
- Wierzbicka, Anna. (1997). *Understanding Cultures through Their Key Words: English, Russian, Polish, German, and Japanese*. New York: Oxford University Press.

## Appendix 1. Lexicons of Marine Fauna

No.	Lexicon	Description
1	<i>Aso-aso</i>	Looks like Yellowstripe scad
2	<i>Bada</i>	Dried anchovies
3	<i>Bajan</i>	undulated moray ( <i>Gymnothorax undulatus</i> )
4	<i>Bajan murai</i>	Muraenasox talabon
5	<i>Bango</i>	Crane
6	<i>Balatolang</i>	The yellowstripe scad
7	<i>Baledang</i>	Largehead hairtail
8	<i>Baledang karing</i>	Dried beltfish
9	<i>Bawa</i>	Pomfrets
10	<i>Bona</i>	Brackish fish
11	<i>Bonta</i>	Pufferfish
12	<i>Buayo</i>	Crocodile
13	<i>Bubu</i>	Jelly fish
14	<i>Bukong</i>	Crabs
15	<i>Bulan-bulan</i>	Tarpon
16	<i>Bulu babi</i>	Sea urchins
17	<i>Cabe-cabe</i>	Rabbitfish
18	<i>Camar</i>	Seagull
19	<i>Cubahak/gerapu</i>	Epinephelus
20	<i>Dencis</i>	Sardinella
21	<i>Ebi</i>	Dried Shrimp
22	<i>Gabu</i>	Giant Trevally
23	<i>Gagak</i>	Ariid Catfish
24	<i>Gajah menong</i>	Seahorse
25	<i>Gambolo</i>	Chub mackerels
26	<i>Gelimin</i>	Soldier croaker
27	<i>Geromieh</i>	Live sharksucker
28	<i>Gulamo</i>	Johnius coitor
29	<i>Girgak</i>	Siganus
30	<i>Iu</i>	Shark
31	<i>Itik laut</i>	Merginae
32	<i>Karatang</i>	Reef fish
33	<i>Kakap</i>	Snapper
34	<i>Kampua</i>	Bluespot mullet
35	<i>Kanbayam</i>	Salted fish
36	<i>Kape-kape</i>	silver biddy fish
37	<i>Katung</i>	Turtle
38	<i>Kalilawar</i>	Bat
39	<i>Kaling-kaling gadang</i>	Cane fish
40	<i>Kapah</i>	Clams
41	<i>Kapiting</i>	Crabs
42	<i>Karang</i>	Clams

43	<i>Kira-kira</i>	Shark
44	<i>Lauk sabalah</i>	Sole
45	<i>Lauk bakko</i>	Mudskippers
46	<i>Lauk talang</i>	Doublespotted queenfish
47	<i>Lapu</i>	Lionfish
48	<i>Lidah-lidah</i>	Tonguefish
49	<i>Lokkan</i>	Clams
50	<i>Londu</i>	Ariid Catfish
51	<i>Lulu poang</i>	Hermit crabs
52	<i>Macco</i>	Flat dried fish
53	<i>Malong</i>	Muraenasox talabon
54	<i>Mangsi-mangsi</i>	Squid
55	<i>Maning</i>	Sardinella
56	<i>Marang</i>	maze rabbitfish (Vermiculated spinefoot)
57	<i>Mayung</i>	Ariid Catfish
58	<i>Olang</i>	Hawk
59	<i>Pari</i>	Stingray
60	<i>Paus</i>	Whale
61	<i>Ramo-ramo</i>	Silver biddy fish
62	<i>Ramung</i>	Looks like Snapper
63	<i>Ranjungan</i>	Portunidae
64	<i>Sinangi</i>	Lihat kuro
65	<i>Situhuk</i>	Sailfish
66	<i>Sotong</i>	Squid
67	<i>Sumbilang</i>	Ariid Catfish
68	<i>Subang-subang</i>	Eeltail catfish
69	<i>Sumpit-sumpit</i>	Archerfish
70	<i>Sure</i>	Mackerel tuna
71	<i>Suseh</i>	Fourfinger threadfin
72	<i>Taba bibi</i>	Epinephelus
73	<i>Tanggiri</i>	Spanish mackerels
74	<i>Timbo kolong</i>	Sandfish
75	<i>Timpik</i>	Mackerel tuna
76	<i>Todak</i>	Houndfish
77	<i>Tundeman</i>	Chub mackerels
78	<i>Udang</i>	Shrimp
79	<i>Udang baring</i>	Small shrimp
80	<i>Ula laut</i>	Coral reef snakes
81	<i>Umang-umang</i>	Murex pecten

## Appendix 2. Lexicons of Marine Flora

No.	Lexicon	Description
1.	<i>Bakko</i>	Mangrove
2.	<i>Batang baru</i>	Hibiscus Tiliaceus
3.	<i>Cemara</i>	Sheoaks
4.	<i>Kapiting</i>	Terminalia catappa
5.	<i>Karambi</i>	Coconut
6.	<i>Kateng</i>	bayhops ( <i>Ipomoea pes-caprae</i> )
7.	<i>Pandan</i>	Pandanus amaryllifolius
8.	<i>Rumput laut</i>	Seaweed
9.	<i>Tapak kudo</i>	bayhops ( <i>Ipomoea pes-caprae</i> )

## Appendix 3. Lexicon of Utilities and Tools

No.	Lexicon	Function
1	<i>Bagan</i>	Transportasi
2	<i>Garam</i>	Ingredient for drying fish
3	<i>Jalo</i>	Fishing tools
4	<i>Jaring</i>	Fishing tools
5	<i>Jaring Banam</i>	Fishing tools
6	<i>Kai</i>	Hook (Fishing tools)
7	<i>Karamba</i>	Fish farming
8	<i>Lantaran</i>	Tools for drying the fish
9	<i>Palabuhan</i>	Harbour (Site)
10	<i>Payang</i>	Fishing tools
11	<i>Pukkekek</i>	Fishing tools
12	<i>Rinti</i>	Tools for drying the fish
13	<i>Sampan</i>	Transportation
14	<i>Saringan</i>	Tools for drying the fish
15	<i>Steker</i>	Port (Site)
16	<i>Tangguk</i>	Fishing tools

## Appendix 4. Verb about Marine Activities

No.	Lexicon	Derivation	Description
1	<i>BAGAN</i>	<input type="checkbox"/> <i>Mambagan/mancolok</i> <input type="checkbox"/> <i>Babagan</i>	<input type="checkbox"/> Fishing using <i>bagan</i> <input type="checkbox"/> Own the <i>bagan</i>
2	<i>BUI</i>	<input type="checkbox"/> <i>Mambui</i> <input type="checkbox"/> <i>Babui</i>	<input type="checkbox"/> Becoming foam <input type="checkbox"/> Get foam
3	<i>JALO</i>	<input type="checkbox"/> <i>Manjalo</i> <input type="checkbox"/> <i>Bajalo</i> <input type="checkbox"/> <i>Dijalo</i>	<input type="checkbox"/> Fishing using <i>Jalo</i> <input type="checkbox"/> Own the <i>jalo</i> <input type="checkbox"/> Using <i>Jalo</i> (passive)
4	<i>JAMUO</i>	<input type="checkbox"/> <i>Manjomuo (lauok)</i>	<input type="checkbox"/> Drying the fish
5	<i>JARING</i>	<input type="checkbox"/> <i>Manjaring</i> <input type="checkbox"/> <i>Bajaring</i> <input type="checkbox"/> <i>Dijaring</i> <input type="checkbox"/> <i>Dijaringi</i>	<input type="checkbox"/> Menjaring (using <i>Jaring/Net</i> ) <input type="checkbox"/> Berjaring (own the <i>jaring/Net</i> ) <input type="checkbox"/> Dijaring (Passive) <input type="checkbox"/> Dijaringi (Passive)
6	<i>KAI</i>	<input type="checkbox"/> <i>Mangai</i> <input type="checkbox"/> <i>Bakai</i> <input type="checkbox"/> <i>Dikai</i> <input type="checkbox"/> <i>Mangaikan</i> <input type="checkbox"/> <i>Takai</i>	<input type="checkbox"/> Fishing <input type="checkbox"/> Own the <i>kai</i> (hook) <input type="checkbox"/> Passive <input type="checkbox"/> Active (Valency 2) <input type="checkbox"/> Ergative
7	<i>KARANG</i>	<input type="checkbox"/> <i>Bakarang</i>	<input type="checkbox"/> Become a coral
8	<i>LULUK</i>	<input type="checkbox"/> <i>Baluluk</i> <input type="checkbox"/> <i>Maluluk</i> <input type="checkbox"/> <i>Diluluki</i>	<input type="checkbox"/> Mudy <input type="checkbox"/> Get into the mud <input type="checkbox"/> Cover with the mud
9	<i>PASI/KASIK</i>	<input type="checkbox"/> <i>Bapasi</i> <input type="checkbox"/> <i>Bakasik</i>	<input type="checkbox"/> Sandy (adjective) <input type="checkbox"/> Sandy (adjective)
10	<i>PAYANG</i>	<input type="checkbox"/> <i>Mamayang</i>	<input type="checkbox"/> Using <i>payang</i> for fishing
11	<i>PUKEK</i>	<input type="checkbox"/> <i>Mamukek</i> <input type="checkbox"/> <i>Bapukek</i> <input type="checkbox"/> <i>Dipukek</i>	<input type="checkbox"/> Fishing with <i>pukat</i> <input type="checkbox"/> Own the <i>pukat</i> <input type="checkbox"/> Verb for using <i>pukat</i> (passive)
12	<i>TANGGUK</i>	<input type="checkbox"/> <i>Manangguk</i> <input type="checkbox"/> <i>Ditangguk</i>	<input type="checkbox"/> Menangguk (using <i>tangguk</i> ) <input type="checkbox"/> Ditangguk (Passive)