

# A Preliminary Description of the Phonology of Ri-Bhoi Amri Karbi

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**ABSTRACT:** A Phonological Description of Ri-Bhoi Amri Karbi, 'examines the phonological characteristics of a particular variety of the Karbi language spoken in the Ri-Bhoi district of Meghalaya. Amri Karbi, which is a variation of Karbi spoken in the plains of Assam, specifically the Kamrup district and Meghalaya, is the primary focus of this study. The study was conducted in Umrang village, located at Umrang, Rongkru Branch Nongpoh, Ri-Bhoi district, Meghalaya. Two interviews were conducted at the village head's residence, each lasting approximately three to four hours. The interviews took place on March 3rd and 12th, 2023. Three native speakers of Amri Karbi from Umrang, Ri-Bhoi district, participated in the study and a total of 835 words were collected from the basic vocabulary list. The data was analysed using the Phonology Assistant software, while Praat software was utilised for phonetic analysis. The phonological inventory of the language was determined using the minimal pair test. Analysis of Ri-Bhoi Amri Karbi phonology reveals the presence of segmental and suprasegmental phonemes. The language consists of 21 consonant phonemes, including eleven stops or plosives (/p p<sup>h</sup> b t d t<sup>h</sup> k k<sup>h</sup> c ʔ/), five fricatives (/β φ s f h/), three nasals (/m n ŋ/), and two approximants, namely flap (/r/) and lateral (/l/). In terms of place of articulation, there are six bilabial phonemes (/p p<sup>h</sup> b β φ β m/), one labiodental (/v/ - although it occurs as a free variation), seven alveolar phonemes (/t t<sup>h</sup> d s n l r/), one post-alveolar phoneme (/ʃ/), three palatal phonemes (/c ʃ j/), three velar phonemes (/k k<sup>h</sup> ŋ/), and two glottal sounds (/ʔ h/). Additionally, there are seven vowel phonemes in Ri-Bhoi Amri Karbi, namely /i/, /a/, /e/, /e/, /u/, /o/, and /ɔ/. The language features only one diphthong (/ai/), which occurs exclusively as open syllables, primarily in word-final positions. When comparing the Hills Karbi (spoken in Karbi Anglong) and the Plains Karbi (Amri Karbi), differences can be observed in terms of phonology, morphology, and syntactic structure. While several studies have been conducted on the socio-cultural and linguistic aspects of Amri Karbi as a whole, there is a lack of linguistic research available on the Ri-Bhoi variety. This study aims to fill that gap and serve as a valuable resource for future investigations of the language. The Ri-Bhoi Karbi variety shows differences in its sound system as and when compared with that of the Kamrup Amri Karbi. This variety, therefore, requires a special study. In addition, the status of the Amri Karbi variety is threatened. The Ri-Bhoi Karbis have also started losing speakers; while some have chosen to speak in the state language, Khasi, some have learnt the standard Karbi and have intermixed the two unique dialects. In this way, it is on the verge of language death. Therefore, it is hoped that this study will more so be of some use in the promoting the language use amongst the speakers.

**KEYWORDS:** Amri Karbi, Ri-Bhoi Karbi, Amri Karbi phonology, consonant inventory, minimal pairs

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## I. INTRODUCTION

Karbi is a tribal community residing in the state of Assam, also historically known by the name *mikir*, a name considered to be given by the Assamese. Still, the term is no longer preferred by the Karbi people. Instead, they choose the term *Arleng*, which carries the meaning of 'the Karbi man', or most commonly only Karbi. The Karbis speak the Karbi language in the regions of Assam, especially in the largest district of the State i.e., Karbi Anglong, with Diphu being the headquarters. The Karbis were originally known to have migrated from the Tibetan regions, sharing home with the other Tibeto-Burman-speaking communities. They entered India and resided in Assam. It is believed that these communities, including the Karbis, had inhabited western China near the Yang-Tee-Kiang and the Howang-ho rivers and moved from there following the courses of the Brahmaputra, the Chindwin and the Irrawaddy finally reaching India. Unfortunately, it is impossible to trace the people's origin and history due to a lack of written documents or evidence. Only through their folktales, folksongs, and folklores can one gain some knowledge about their origin.

According to the Census of India 2011, Karbi has more than 5,28,503 speakers. The language is mainly spoken in two states, Assam and Meghalaya. Within Assam, Karbi Anglong has the highest number of speakers, followed by the Kamrup district. It is also spoken in the north Cachar Hills, Nagaon, and Morigaon. A good number of speakers reside in the Ri-Bhoi and Jaintia Hills districts of Meghalaya.

## II. METHODOLOGY

The study was conducted at Umrang village which is located at Rongkru Branch Nongpoh, Ri-Bhoi district, Meghalaya. Interviews were held at the village's head's residence where each interview took about three to four hours. The dates of the interviews are March 3<sup>rd</sup> and 12<sup>th</sup>, 2023. This study used a descriptive approach and employed elicitation, interview and questionnaire methods, where the informants were questioned on the spot and the data were collected and copied into the notebook. The transcriptions as well as tone markings were done during the interviews. The voices were recorded on the phone and the recordings were later used to verify and confirm whether the sounds were accurately transcribed. Before taking the interviews, the SPPEL-CIIL questionnaire and list of words were prepared in a notebook and A4 size papers. Later, while the data were being collected, modifications and changes of the list were made as and when required. The hand-written data were then copied into Microsoft Excel Worksheet for analysis. A total of 835 words were collected from the basic vocabulary list comprising of the following semantic domains: Body parts, animal body parts, kinship terms, birds and animals, insects and aquatic animal terms, fruits and vegetables, household and religious items, colour terms, numbers, music and performance, adornments and clothing, earth, nature and universe, food and diseases, directions, time, days and week, categories such as verbs, adjectives, conjunctions, interrogatives, pronouns, and also simple and complex sentences etc. Vocabulary under the domains of professions, transportation, sports and games, and expressive. The informants of this study were three native speakers, one young woman, a man, and an older man, of the Amri Karbi in Umrang, Ri-Bhoi district. The ages of the informants range from the mid-20s to the 50s. The voices of two of the informants were recorded after getting their oral consent. They have resided in the native village since birth and are well-versed in their native language. They are also fluent in other languages such as Khasi and English. For the analysis of the data, the software *Phonology Assistant* was used and for phonetic analysis, *Praat* software was also utilized.

## III. FINDINGS

### 1. Phonemic Inventory

In this section, the phonological features of the Ri-Bhoi Amri variety of the Karbi language are briefly described. The features consist of the segmental and the suprasegmental phonemes. The segmental phonemes are inclusive of the consonants and vowels, whereas the suprasegmental phonemes include the tone system. These features provide insight into the sound systems and also help in explaining the patterns and categorical organization of speech sounds of the language. The phonological features studied in this overview are the phonemic inventory of the consonants and vowels, and description and distribution of the both sounds.

#### 1.1. Consonants

This section gives an overview of the phonemic inventory of consonants, description and distribution, minimal pairs and triplets, and marginal consonants.

**Table 1** Consonantal Phonemes

	Bilabial	Labio-dental	Alveolar	Post-alveolar	Palatal	Velar	Glottal
Stop	p    b		t    d		c    ʃ <ch> <j>	k	ʔ
Fricative	ɸ    β	(v)	s	ʃ		k <sup>h</sup>	h
Nasal	m		n			ŋ	
Liquid (lateral)			l				
Liquid (rhotic)			r				
Glide					(j)		

The Amri Karbi spoken in the Umrang village of Ri-Bhoi district, Meghalaya has in total 21 consonants. The labio-dental fricative /v/ and the palatal glide /j/ are in brackets since they occur as free variations to the phonemes /β/ and /ɟ/ respectively (see Table 3.1). There are 11 consonants /p p<sup>h</sup> b t d t<sup>h</sup> k k<sup>h</sup> c ʃ ʔ/, 5 fricatives /β ɸ s ʃ h/, 3 nasals /m n ŋ/, and 2 approximants, flap /ɾ/ and lateral /l/. The following minimal pairs and triplets are shown in order to show how these sounds contrast/ with one another. Not all the consonants can occur at the final position or coda. Those which can occur are /p b t d k m n ŋ r l/. The voiceless aspirated alveolar stop /t<sup>h</sup>/ occurs word-finally only in one word, *kat<sup>h</sup>ma* which means 'war'. The velar nasal /ŋ/ is the only consonant that cannot occur word-initially.

### 2.1.1. Description and Distribution of Consonants

#### Stops

##### Bilabial stops:

The voiceless bilabial stop /p/ is produced when the vocal cords are far away from each other and no vibration is caused. The soft palate is raised and it touches the back wall of the pharynx allowing no air to pass through the nose and the lower lip touches the upper lip. It has no allophones and is realized only as /p/. It occurs syllable-initially and syllable-finally.

*pun* 'measure'  
*rap* 'help'

The voiced bilabial stop /b/ is produced with the vocal cords kept loosely together causing a vibration. It is realized as /b/ and occurs both at the initial as well as the final. However, the occurrence of /b/ in the syllable-final is rare.

*bi* 'goat'  
*adɔb* 'ground'

##### Alveolar stops:

The voiceless alveolar stop /t/ is produced with no vibration; the tip of the tongue touches the teeth-ridge. It is realized as /t/ and occurs both at the initial and final positions of the syllable.

*kat* 'run'  
*tuk* 'dig'

The voiced dental stop /d/ causes vibration while production; the tip of the tongue is the active articulator while the teeth-ridge the passive. It is realized as /d/ and commonly occurs in the initial position of the syllable, and very rarely at the final.

*do* 'exist/have'  
*bid* 'chin'

##### Aspirated stops:

The aspirated voiceless bilabial stop /p<sup>h</sup>/ is produced when /p/ is released with a strong puff of breath. It occurs only in the initial position.

*p<sup>h</sup>u* 'head'  
*p<sup>h</sup>ili* 'four'

The aspirated voiceless alveolar plosive /t<sup>h</sup>/ is produced when a strong force of air is accompanied with the sound /t/. It occurs only in the initial position, except in the case of *ka<sup>h</sup>ma* which means 'war'.

*t<sup>h</sup>i* 'short'  
*t<sup>h</sup>e* 'big'

##### Palatal stops

The voiceless palatal stop /c/ is produced by restricting the airflow in the vocal tract; the blade or back part of the tongue is raised towards the hard palate. It only occurs word-finally.

*cɔn* 'jump'  
*cu* 'hair'

The voiced palatal stop /j/ is produced with vibration and the airflow is obstructed; the tongue is raised towards the hard palate. It occurs only the initial position. The phoneme is in free variation with the palatal glide /j/.

*p<sup>h</sup>ɥu* and *p<sup>h</sup>uju* 'mouse/rat'  
*ojaŋ* and *ojaŋ* 'young'

##### Velar stops:

The voiceless velar plosive /k/ is produced with the back of the tongue touching the soft-palate or velum. It occurs frequently at both the positions, i.e., the initial and final.

*keŋ* 'leg'  
*dɔk* 'sweet'

The aspirated voiceless velar plosive /k<sup>h</sup>/ sound produced with a breathy explosion is not common in the language. It only occurs only in the beginning of the syllable.

*k<sup>h</sup>ai* 'community'

##### Glottal stop:

The glottal stop /ʔ/ is produced by obstructing the air in the glottis. It usually occurs whenever there is any syllable beginning with a vowel.

For example, *p<sup>h</sup>uuʔ* 'banana'  
*kieʔ* 'to plant'

##### Fricatives

The voiceless alveolar fricative /s/ is produced without vibration; the front of the tongue is placed near the teeth-ridge and air is released between a small space at the centre of tip of the tongue and the front of the teeth ridge. It occurs only in the initial position.

*sok* 'rice'  
*sunij* 'heaven'

The voiceless bilabial fricative /ɸ/ is voiceless in that there is no vibration and air is constricted during its production. It is produced by using both the lips. It occurs very rarely in the language sound system. The phoneme is found only in the word *ɸɔɔ* which means ‘hundred’.

The post-alveolar fricative /ʃ/ is a voiceless sound produced when the sides of the blade of the tongue touches the sides of the teeth at the back and air is released between the space of the tongue and the teeth ridge. This sound occurs in very rare cases. For example, *ʃitum* for ‘tortoise’. And it is usually found to occur in borrowed words such as *ʃini* which means ‘sugar’.

The voiceless glottal fricative /h/ is produced when the air passes through the glottis with audible friction. It occurs in the initial position only and is always realized as /h/.

*hi* ‘dog’  
*hem* ‘house’

The voiced bilabial fricative /β/ is a phoneme that is produced when there is constriction of airflow through a narrow channel between the lips causing friction. It occurs only in the initial position of the syllable. It is in free variation with the voiced labio-dental fricative /v/ in some cases.

*βɔ* ‘bird’  
*kiβɔl* ‘return’

**Nasals**

The voiced bilabial nasal /m/ is produced when there is complete closure to the oral passage letting the air to pass through the nose; the sound is then articulated using both the lips. It occurs both syllable-initially and syllable-finally.

*mir* ‘flower’  
*lam* ‘word’

The voiced alveolar nasal /n/ is produced when the tip of the tongue touches the teeth ridge and air is released through the nose. It occurs in both the positions, i.e., the initial and final.

*naŋ* ‘you’  
*han* ‘curry’

The voiced velar nasal sound /ŋ/ is produced when the back of the tongue comes in contact with the soft-palate. It occurs only in the final position of the syllable.

*laŋ* ‘water’  
*diŋ* ‘long’

**Liquids**

The voiced lateral approximant /l/ is produced when the tip of the tongue touches the teeth-ridge and air is passed through the sides of the tongue without any turbulence. The sound occurs in both the initial and final positions.

*lek* ‘necklace’  
*kidɔl* ‘to push’

The voiced alveolar flap sound /ɾ/ is produced when the tip of the tongue is retracted behind the teeth-ridge and it touches the teeth-ridge when the air passes. It occurs in the syllable-initial position and in the syllable-final position.

*rupe* ‘bone’  
*hɔɾ* ‘alcohol’

**2.1.2. Minimal pairs and triplets- consonants**

**Table 2** Bilabial stops minimal pairs

<i>/p/</i>	<i>pi</i>	‘to give’
<i>/b/</i>	<i>bi</i>	‘goat’

**Table 3** Alveolar stops minimal pairs

<i>/t/</i>	<i>tuk</i>	‘to dig’
<i>/d/</i>	<i>duk</i>	‘poor’

**Table 4** Palatal stops minimal pairs

<i>/c/</i>	<i>cu</i>	‘hair’
<i>/ɟ/</i>	<i>ju</i>	‘soul’

**Table 5** Velar stops minimal pairs

<i>/k/</i>	<i>kai-kai</i>	‘joke’
<i>/kʰ/</i>	<i>kʰai</i>	‘community’

**Table 6** Bilabial aspirated with unaspirated stops pairs

/p/	<i>pun</i>	‘to measure’
/p <sup>h</sup> /	<i>p<sup>h</sup>un</i>	‘neck’

**Table 7** Alveolar aspirated with unaspirated stops pairs

/t/	<i>tur</i>	‘lip’
/t <sup>h</sup> /	<i>t<sup>h</sup>ur</i>	‘to get up’

**Table 8** Fricatives minimal pairs

/h/	<i>hɔ</i>	‘bitter’
/s/	<i>sɔ</i>	‘small’
/β/	<i>βɔ</i>	‘bird’

**Table 9** Bilabial and alveolar nasals minimal pairs

/m/	<i>mɛl</i>	‘body hair’
/n/	<i>nɛl</i>	‘smooth’

**Table 10** Alveolar and velar nasals minimal pairs

/n/	<i>kan</i>	‘dance’
/ŋ/	<i>lanŋ</i>	‘water’

**Table 11** Liquids minimal pairs

/l/	<i>lɔŋ</i>	‘to receive’
/ɾ/	<i>ɾɔŋ</i>	‘village’

### 2.1.3. Marginal consonants

Minimal pairs for the bilabial fricative /ɸ/ and the post-alveolar fricative /ʃ/ were not found since their occurrence in the sound system is very rare. It is assumed that these sounds are a result of the influence or borrowing from neighbouring languages such as Assamese. The voiced stops /b/ and /d/ are also marginal at the coda position. They frequently take the onset position in a word but rarely at the coda. The voiced bilabial stop /b/ seems to occur at the coda position when it has the voiced alveolar stop /d/ at the onset or vice versa.

**Table 12** Marginal consonants

Structure	Word	Gloss
d _ b	<i>dab</i>	‘morning’
d _ b	<i>dɔb</i>	‘ground’
b _ d	<i>bɛd</i>	‘leprosy’
b _ d	<i>bid</i>	‘chin’

## 2.2. Vowels

This section gives an overview of the vowel inventory, minimal pairs and triplets, the description and distribution and marginal vowels.

### 2.2.1. Vowel inventory

In the Ri-Bhoi variety, the vowels consist of four front vowels /i/, /a/, /e/, /ɛ/, and three back vowels /u/, /o/ and /ɔ/. /ɛ/ and /ɔ/ are marginal vowels.

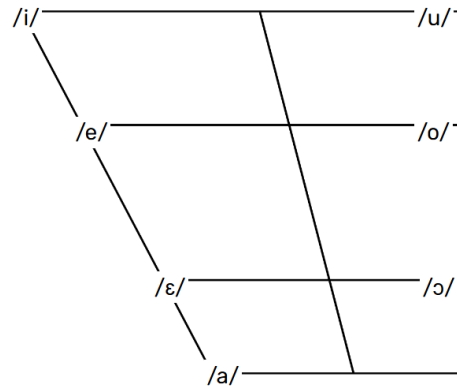


Figure 1 Vowel chart

### 2.2.2. Description and Distribution of Vowels

Front vowels:

The phoneme /i/ is a close front unrounded vowel which is produced when the front of the tongue is raised close towards the hard-palate with spread lips. It occurs frequently at the word-initial, word-medial and word-final positions.

- i* ‘black’
- dij* ‘long’
- ri* ‘hand’

The mid front unrounded vowel phoneme /e/ which is produced when the front of the tongue is raised half-close towards the hard-palate. It does not occur in the word-initial position but only in the medial and final.

- mek* ‘eye’
- arp<sup>h</sup>ek* ‘broom’
- kibe* ‘small’

The open-mid front unrounded vowel /ɛ/ is produced when the front of the tongue is raised half-open towards the hard-palate. It occurs in the word-initial, word-medial and word-final positions. It is in contrast with the vowel phoneme /e/.

- ɛt* ‘yellow’
- hem* ‘house’
- kime* ‘good’

The open front unrounded vowel phoneme /a/ is produced when the tongue is positioned open or low towards the hard-palate. It occurs word-initially, word-medially, and word-finally.

- an* ‘cooked rice’
- nay* ‘you’
- la* ‘it’

Back vowels:

The open-mid back rounded vowel /ɔ/ is a phoneme which is produced when the front of the tongue is raised half-open towards the mouth. It occurs in the word-initial, word-medial and word-final positions. For example,

- ɔm* ‘cheek’
- lɔk* ‘friend’
- p<sup>h</sup>ɔ* ‘five’

The mid-back rounded vowel /o/ is a phoneme occurring in the initial, medial and the final positions. It is produced when the tongue is positioned back towards the soft palate in the middle between high and low and it is in contrast with the vowel phoneme /ɔ/. The phoneme frequently occurs in the syllable-final.

- ok* ‘meat’
- pok* ‘stomach’
- aso* ‘child’

The close back rounded vowel /u/ is produced when the back of the tongue moves towards the soft-palate to a close position. It occurs in the initial, medial and final positions of the word.

- ureŋʔ* ‘lizard’
- kimuŋ* ‘to smoke’
- ip<sup>h</sup>u* ‘head’

**2.2.3. Vowel minimal pairs and triplets**

**Table 13** Close front and back vowels

/i/	Gloss	/u/	Gloss
<i>diŋ</i>	‘long’	<i>duŋ</i>	‘pour’
<i>ni</i>	‘sister’	<i>nu</i>	‘horn’
<i>t<sup>h</sup>i</i>	‘die’	<i>t<sup>h</sup>u</i>	‘rot’

**Table 14** Front close-mid, open-mid and open vowels

/e/	Gloss	/ɛ/	Gloss	/a/	Gloss
<i>keŋ</i>	‘leg’	<i>keŋ</i>	‘straight’	<i>kaŋ</i>	‘swell’
<i>pe</i>	‘female’			<i>pa</i>	‘CAUS’
<i>me</i>	‘sister’s husband’	<i>mɛ</i>	‘fire’		

**Table 15** Back close-mid and open-mid vowels

/o/	Gloss	/ɔ/	Gloss
<i>lok</i>	‘white’	<i>lɔk</i>	‘friend’
<i>p<sup>h</sup>o</i>	‘peel’	<i>p<sup>h</sup>ɔ</i>	‘five’
<i>so</i>	‘child’	<i>sɔ</i>	‘pain’

**2.2.4 Diphthongs**

In the analysis of the vowels, /ai/ is the only diphthong that was found. Philipova had found two of them, /ai/ and /ei/ with /ei/ frequently occurring in borrowed words from Assamese. However, /ei/ is totally absent in the variety spoken in Ri-Bhoi. /ai/ occurs only as open syllables and mostly in the word final position.

**Table 16** Diphthong /ai/

Word	Gloss
<i>ai</i>	‘mother’
<i>hohai</i>	‘rabbit’
<i>at<sup>h</sup>ai</i>	‘place’
<i>ak<sup>h</sup>ai</i>	‘community’
<i>kaduβai</i>	‘to pray’

**2.2.5 Marginal vowels**

The vowels /ɛ/ and /o/ are marginals since they occur in very few words and also restrictive environments. A handful of minimal pairs for these vowels could not be found. In some cases, they appear as allophones. /ɛ/ as the allophone of /e/ and /o/ as the allophone of /ɔ/.

For example, *pɔ/po* ‘MALE’  
*me/me* ‘son’s father-in-law’

However, the vowels occur as phonemes giving contrast in the meaning as shown in the minimal sets.

**IV. CONCLUSION**

In this study, the various phonological features of the Ri-Bhoi Amri Karbi were explored and examined. Certain methods and techniques were carried out to reach the goals laid out. It is important to note that the study only covers the Umrang village, based in the Ri-Bhoi district, as a source of data collection and the overall research. It is probable that other villages within the same district may have differences and this study does not generalize the findings for those villages. Due to unavoidable hurdles, the research is limited in many ways. It only investigates on the phonology of the language, and not any other linguistic levels. It also fails to perform a thorough examination of many important features such as the prosodic or suprasegmental features due to time constraint. Despite of these limitations, the study bears significance in that it sets a foundation for further research in the Ri-Bhoi Amri Karbi and also promotes the dialect since the language has a threatened status. In the analysis of the phonology of the Ri-Bhoi Amri Karbi, it is found that the Ri-Bhoi Amri Karbi has the segmental and suprasegmental phonemes. In the segmental phonology, analysis is done on the consonants and vowels that are present in the language. It is observed that the language has in total 21 consonants. In terms of the place of

articulation of the consonants, they are of seven ways. It includes bilabial, labio-dental, alveolar, post-alveolar, palatal, velar and glottal. And in terms of their manner of articulation, the consonants contrast in six ways: stop, fricative, nasal, liquid (lateral), liquid (rhotic), and glide. There are eleven stops or plosives /p p<sup>h</sup> b t d t<sup>h</sup> k k<sup>h</sup> c ɟ ʔ/, five fricatives /β φ s f h/, three nasals /m n ŋ/, and two approximants, flap /ɾ/ and lateral /l/. The labio-dental fricative /v/ and the palatal glide /j/ are in free variations with the phonemes /β/ and /j/. In terms of the place of articulation, there are six bilabial phonemes /p p<sup>h</sup> b φ β m/, one labio-dental /v/ (even though it is a free variation), seven alveolar phonemes /t t<sup>h</sup> d s n l r/, one post-alveolar phoneme /ʃ/, three palatals /c ɟ j/, three velars /k k<sup>h</sup> ŋ/ and finally, two glottal sounds /ʔ h/. Among these consonants, the voiced stops /b/ and /d/, the bilabial fricative /φ/ and the post-alveolar fricative /ʃ/ are found to be marginal consonants since their occurrences are very restrictive and limited. There are seven vowels in the Ri-Bhoi Amri Karbi, namely /i/, /a/, /ɛ/, /e/, /u/, /o/ and /ɔ/. These seven vowels show a two-way contrast of front and back. There are no central vowels. They are differentiated according to the three levels of the height of the tongue, i.e., high, mid and low levels. In this thesis, the tongue height is presented in four ways, close, close-mid, open-mid, and open. The vowels are also distinguished based on the lip's position: rounded or unrounded.

#### REFERENCES

- [1]. Abraham, B. & Daimary, P. (2021). A Sociolinguistic Study of Amri Karbi [ajz] in Northeast India. SIL International®. *Journal of Language Survey Report 2021-050*, 2766-9327.
- [2]. Barua, P. & Kikhi, K. (2016). Culinary Traditions, Aesthetics and Practices: Constructing the Cultural Identity of Amri Karbis of Northeast India. *The Journal of North East Indian Cultures (JNEIC)*, 3, 1.
- [3]. Benedict, P. (1972). *Sino-Tibetan A Conspectus*. Cambridge University Press.
- [4]. Gogoi, R., & Senapati, J. (2020). Karbis- the Unsung Tribe of Assam. *International Journal of Creative Research Thought (IJCRT)*, 8 (9 September 2020), 2320–2882.
- [5]. Gope & Sarmah, (2012). *Preliminary Description of Amri Karbi Phonology*. Research Gate.
- [6]. Grierson, G. (1903). *Linguistic Survey of India: Specimens of the Bodo, Nāgā and Kachin groups. Tibeto-Burman Family*. III, II.
- [7]. Jeyapaul, V.Y. (1987). *Karbi Grammar*. Central Institute of Indian Languages.
- [8]. Konnerth, L. (2020). *A Grammar of Karbi*. De Gruyter Mouton.
- [9]. Philippova, N. (2021). *A grammar of Amri Karbi*. University of Helsinki. Ri-Bhoi district map. Maps of India. [Picture]. <https://www.mapsofindia.com/maps/meghalaya/districts/ri-bhoi.jpg> accessed on 20 May, 2023.
- [10]. Sarma, H. (2021). Karbis: Changes in the socio-cultural life. *Journal of Emerging Technologies and Innovative Research (JETIR)*, 8, 12 (December 2021), 2349-5162.
- [11]. Stack, E. & Lyall, C. (1908). *The Mikirs*. Guwahati: United Publishers.
- [12]. Tribes and Culture. *Karbi Anglong District, Govt. of Assam*. National Informatics Centre (NIC). <https://karbianglong.gov.in/information-services/tribes-and-culture> accessed on 21 May, 2023