

SIGNIFICANCE OF NATURAL RESOURCES IN MATERIAL CULTURE: A STUDY ON THE KARBIS OF KARBI ANGLONG, ASSAM

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Abstract: *The livelihood of human beings is deeply correlated with nature and natural resources. In our country, the tribal people dwell in the high hills in isolated forest covered region. Their entire livelihood is very much dependent on the forest based natural products. In this context, the present study has been focused on the Karbi tribal group who are the early settlers of Karbi Anglong district in Assam. They are completely dependent on nature for their sustenance. It has been observed that they utilized a number of natural resources related to their traditional economic organization, settlement and material culture. They apply their traditional knowledge related with the collection and utilization of different natural resources and those are an integral part of their material cultural tradition. In the present study such issues are analyzed in detail.*

ENVIRONMENT AND CULTURE

Cultural ecology points about an intimate relationship between culture and its surrounding environment. Man is influenced by his environment and in turn influences the environment. It is believed that environment determines a culture and environment limits a culture. By ethno-ecology we mean the conception of ecological relationships held by a group of people and their culture from the participant's point of view which is known as ethno-science or cognitive ethnography or cognized environment. Rappaport 1968, in his Ecosystem-based Model focused on the relationship of specific human population to specific ecosystem. Geertz 1963, in his System Model stated about the interaction between ecosystem and social system, where the latter includes social organization, nutrition, health, economy, religious values etc (Sarkar, 2000).

In our country, a large section of people are dwelling in the high hills isolated forest covered region, and they are far away from the conveniences of regular communications and urban attractions. Their entire livelihood is dependent on the forest based natural products. The role of environment upon

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the livelihood of the human being has a multidimensional aspect. The people of simple societies have a deep sense of oneness with nature. Such feelings are not confined only to relationships between one individual and the other but also extends to that between the individual and nature. The requirements or needs of human life are multifarious in nature and they have close inter-relationship with the environment. The fundamental requirements of human life are totally dependent on the natural resources.

In this regard the present study has been done on the Karbi tribal group who were the early settlers of Karbi Anglong district in Assam. They had their own concept of ethno-ecology and different forest based natural resources were intimately associated with their livelihood and cultural practices. The present study is mainly focused to know about the significance of different natural resources in their livelihood, and material culture from their early stages of hunting-gathering up to the present settlement from synchronic and diachronic perspective.

A BRIEF NOTE ON THE PRESENT STUDY

The Karbi Anglong District is situated in the central part of Assam. It consists mostly of undulating and hilly terrain with numerous rivers and streams and is situated between 25°33' N to 26°35' N Latitude and 92°10'E to 93°50'E Longitude. The district has dense tropical forest covered hills and flat plains. The population of the district consists predominantly of tribal people. Karbis are the indigenous community of the said region. It has a total geographical area of 10,434 sq. km. that mostly consists of undulating and hilly terrain with numerous rivers and streams. The district can be broadly divided into two physiographic units viz. hills and plains. About 85 percent of the district is covered by hills. As per the State of Forest report 1999 of Forest Survey of India, Dehradun, 6044 sq. km. of the district are under dense forest cover while 2776 sq. km are under open forest cover. The important forest types found in Karbi Anglong District are:-

1. Moist semi-evergreen forests.
2. Moist Mixed Deciduous forests.
3. Riverrain Type.
4. Miscellaneous type with scattered pure or mixed patches of bamboo.

The livelihood of the Karbis has a deep co-relation with surrounding forest and environment from multidimensional perspective. However due to continuous growth of habitation and several other factors, 6844 hectares of land has become degraded. It has reduced their scope of accessibility of natural

resources. However, for the sustenance of their livelihood, prevention of environmental degradation is earnestly required. In this regard, the folk culture of the concerned community can be applied for environmental sustainability and security of livelihood.

To conduct the present study, field work was conducted in the Hamren sub division of West Karbi Anglong. The study was done in the selected villages of Chinthong and Amri block of Hamren. It can be represented through the following table-

Table 1
The studied villages and the studied population

<i>Sub Division</i>	<i>Block</i>	<i>Village Name</i>	<i>Village code**</i>	<i>Total Karbi Family studied++</i>	<i>Male++</i>	<i>Female++</i>	<i>Total++</i>
Hamren	Amri	Pumakunchi	02042300	101	406	397	803
Hamren	Amri	Phutsari	02044100	125	503	498	1001
Hamren	Chinthong	Umat	02091700	192	704	699	1403
Hamren	Chinthong	Langsomepi	02090200	206	783	759	1542
Total				624	2396	2353	4749

*Source: (**Record as per the office of Karbi Anglong Autonomous Council) and (++) Field study, 2012-2014)*

The studied villages were some of the earliest settlements of Karbi people. In the studied villages, all of the Karbi families were selected. The study was done on total 624 Karbi families, with a total population of 4749. Among them there were a total 2396 male and total 2353 female, with a sex ratio of 982. It was noticed that the studied people carried out their livelihood by utilizing different natural resources. Significantly, most of their material cultural implements are prepared with different natural products. Meanwhile, the forest covered region of the Karbi Anglong district can be represented through the following table 2.

Objective of the study: The prime objective of the present study is to analyze the significance of different natural resources in the livelihood and material culture of the Karbi people. Further, it is focused to find out the successive stages of their socio-economic perspective of livelihood from the stage of hunting gathering to the stage of cultivation, construction of their traditional hut, household material culture and traditional weaving.

Methodology applied: The study was conducted during the period of 2012-2014. There were four divisions of the total field work. Two to three times of field work was done under each division as per the requirement.

Table 2
Forest area in the District of Karbi Anglong, Assam

<i>Year</i>	<i>East Karbi Anglong (In Hectare)</i>	<i>West Karbi Anglong (In Hectare)</i>	<i>Total Forest Area (In Hectare)</i>
1994	1,11,855	10,264	1,22,119
1997	43,737	10,057	53,794
1999	72,720	89,372	1,62,092
2002	48,042	85,654	1,33,696
2003	48,048	82,087	1,30,135
2004	43,737	79,654	1,23,391
2005	43,534	76,532	1,20,066
2006	42,924	75,324	1,18,248
2011	41,912	72,865	1,14,777
2013	41,612	70,765	1,02,377

Source: Official record of Karbi Anglong Autonomous Council, 2014.

Division-1: First, a pilot survey was conducted to select the villages. Literature survey was done to know about their earlier phases of livelihood, although it was very limited. Further, Preliminary Census Schedule (PCS) was applied on the studied families to know the demographic composition of the people.

Division-2: Case studies were taken on the aged persons of the studied people. It was focused on the issues of their historical background, livelihood, traditional occupational pursuit, present economic pursuit, indigenous knowledge and material culture.

Division-3: Detailed open structured interviews were conducted on the key informant, eldest person of the settlement, leader of the traditional political organization of the concerned society, and the village priest about their different successive stages of livelihood and indigenous knowledge to utilize the natural resources in material culture.

Division-4: Data was collected in detail about their different material cultural implements and their proper utilization.

FINDINGS AND DISCUSSIONS

Hunting-Gathering stage

A number of Karbi folksongs reflect their features of livelihood during the early stage of development. It reflects how they had invented fire by rubbing very thin bamboo strips or how they had carried out hunting in spite of lacking adequate implements. Their folksongs revealed the lack of knowledge to identify paddy in the ancient period; however it reflected that they used to

dig up the soil, and collected a few wild variety of vegetables or roots and tubers to satisfy their hunger. Hunting was their prime occupational pursuit and the methods employed for the said purpose reflected their earlier glimpses of skill development (Lyall, 1997). A few of them are discussed below-

Hilik: It was their oldest method of hunting. They kept a careful vigil on the way of movements of wild animals and assumed that they always used to follow a particular pathway. At certain places they used to dig deep ditches and close the opening with the braches, twigs and leaves of trees. It camouflaged the trap as plain land and animals that ventured there used to get trapped in the ditches. Through this method they used to catch wild boar, deer, rabbits etc.

Akor: It was mainly applied to trap the animals with antlers and horns. In the dense forest, a square shaped cage-like trap made of bamboo and branches of trees was prepared. Its one end was kept open for the entrance of wild animals. Within the cage, gourd and acacia were kept as food. Such vegetables were slightly pierced with thin bamboo strips and these strips were touched with the opening of the door through a channel. When the animal grabbed the vegetable to eat, the movement of the bamboo strips caused the door to fall, trapping the animal inside.

Arkap: In this method, a portion of bamboo strip was bent like a bow and another strip was prepared like a sharp arrow. A fruit or vegetable is placed before the arrow like a trap. The food is tied to the end of the arrow with a thread. When the animal attempts to eat that food, it creates a tension on the thread which results in the arrow being released at a very high speed and piercing as well as killing the animal directly.

Langde: The Karbi people used to collect the latex of cotton and jackfruit. It was mixed and burnt in fire to form a lump. They used to paste the lump with thin bamboo strips on the branches of trees. Whenever any bird or animals like squirrel sat on that lump, they got stuck to it and could be easily caught. During the field study it was evident that this method is still used in Taseng Bey, Rongnihang areas of Hamren sub division.

Rukrak: It was one of the oldest fishing implements. A bamboo was prepared in a cylindrical form, while its frontal portion was split into strips and tied up. Fishes could enter it and would get trapped (Das, 2010).

Arsan: The root of the wild poisonous plant *Hiru* was squashed and the extract was mixed with water. It resulted in the fishes losing their vision, causing them to float above the water level, and they could be easily collected.

Stage of Primitive Agriculture

Rice was the staple diet of the Karbis. They cultivated rice themselves, and consumed it either steamed in bamboo tubes, pounded and powdered to make rice cakes, as roasted and flattened rice (sangpher), as fried powdered rice without using oil (sang-aduk) and as a rice powder which was soaked for an hour and pounded, which is known as Him. They have an oral narrative about the origin of rice (sok keplang).

One day, two Karbi chiefs namely Teron Rongsopo and Dandivar Sarpo, along with the kuki chin chief named kuki Chindaipo went together for fishing in a river called Kuleng. Upstream, they saw a paddy with glowing seed. They had not seen such a beautiful thing before. So they brought some of the seed with them. The seeds were carried by Rongsopo but it slipped off from his hand and fell into the river and the seed was swallowed by a fish. Again, one day Chindaipo went fishing, he caught the fish and from this fish he got the glowing seeds and sowed it in his garden from which grew beautiful golden bunches of seeds. One day the Karbi chief with his grandson on his back was taking a walk in the village and entered the house of Chindaipo. The baby's attention was suddenly drawn to the glowing bunches in the garden and he started to cry then Chindaipo plucked a bunch and handed it over to Rongsopo to give the baby. Later on, the Karbi chief also sowed the glowing seed in his own garden, harvested and cooked it. First, he gave it to a dog to eat; the dog survived. Then it was given to a very old lady. Instead of dying, the dog and the old lady became stronger. After experimenting and consumption of the new crop, it was determined to be safe, and the entire village started to cultivate it. Having found it good to be eaten, everyone wanted to eat more and more of it and every one began to say 'Ne An Choji'. In Karbi language, 'An' means 'so much', and 'La An' means 'this much'. Later on, rice came to be called "AN". There were varieties of rice cultivated by the Karbis, but there were certain rice varieties such as Kathi, Dimro and Rrengkum (rongaon) which are considered the earliest ones.

The discovery of rice was narrated in a song called Porom Alun. The song is sung in the night on completion of the paddy harvest, and after the paddy has been threshed and brought home. This song is sung accompanied by dance. Bringing the paddy was called Sok keroi; Sok means paddy and Keroi means bringing in. This singing of Porom Alun accompanied by dance was called Hacha Kakan.

Among the Karbi people, rice was considered sacred and the gift of god. In a traditional Karbi society there are different rituals related to worship of rice. For a good yield of rice, a ritual known as Menu Karkli is performed. It is

performed either in the house or paddy field when the paddy starts to produce flowers. After harvesting, a ritual known as Hacha Kekan is celebrated. This ritual involves the ritual singing about the origin of rice. In every new harvest season, every Karbi household compulsorily performed a ritual called 'Sang Kimi Arnam Kepi', which means, new rice sanctification ceremony. Another worship related to rice was An-kimi kecho, which means new rice eating. On this occasion, all friends and relatives are invited. Their traditional country liquor Hor-Lang or Hor is also prepared from rice.

Origin of Ginger: According to a Karbi folk tale, in the heaven, a son was born in the palace of the King. However, the fingers of his hands were twisted and joined. It made him humiliated and the King advised him to go down to the earth, where he would get honour. Accordingly, the son came to earth and stood like a grass on the bank of a river. While crossing the river, a man watched him and came to know the story. The plant told the man to take him to his village, because he had some extraordinary capability and was possessed with the power to ward off evil spirits. Thus, ginger cultivation started among the Karbi people.

Jhum Cultivation

The Karbis traditionally practiced Jhum cultivation (slash and burn) in the hill areas and grew varieties of crops. The people who were dwelling in the interior areas which were covered with natural forest and hills practiced Jhum cultivation for their survival with the application of simple technology. The whole operation starts at the onset of winter. The herbs, shrubs and trees are cut down in the month of February and left to dry for more than a month, and then set on fire. It is observed from the opposite (bottom of the hill) hill. The burning is done mostly in the late afternoon.

The next phase of Jhum is waiting for rain. During this time, the entire half-burned rubbish is collected and burnt again, and the place is cleaned for Jhuming purpose. Shovels and hoes are used to dress up the field. The seeds of maize are planted first as maize grows quickly at the start of rain. Paddy seeds are broadcast along with cotton or sesame. Three kinds of seeds are broadcast in a place at a time: maize, paddy and sesame, or cotton. At that time, sesame and jute were broadcast in a separate plot and it was not mixed with other crops. The harvesting of crops is done in the month of September and October. The sesame which was broadcast as the last item, thus comes last in the month of December.

The stages of the Jhum cultivation are-

1. Hawar kelang: Selection of land

2. Rit kepan: Cutting of trees, herbs and shrubs for Jhum field.
3. Meh kekai: Burning the rubbish.
4. Re karhi: Clearance of half burnt logs or rubbish.
5. Rit kenong: Broadcast of different seeds with preparing the field by digging with spade or hoe.
6. Sok karlu: Picking of unwanted herbs and shrubs from the crops field.
7. Sokthe kehon: Guarding the crops from wild animals at night by preparing hemtap (house on the tree top).
8. Sok kerot: Harvesting the crop.

Table 3
Traditional Jhum Calendar of the Karbi People

<i>Sl. No.</i>	<i>Traditional Month</i>	<i>English Month</i>	<i>Climatic Condition and Natural Indicator</i>	<i>Activities Related to Jhum</i>
1.	THANG-THANG	FEBRUARY	Dry	Suitable land is selected. Bushes are cleared.
2.	THERE	MARCH	Dry and windy.	Bushes are left to dry. After drying, it is burnt.
3.	JANGMI	APRIL	Moderate climate with very little rainfall.	Left over bushes are cleared and seeds are sown. E.g. Maize, tubers, brinjal, etc.
4.	ARU	MAY	Monsoon starts.	Rice is cultivated.
5.	VOSIK	JUNE	Heavy rainfall with lot of humidity.	Weeds are removed from the cultivated area.
6.	JAKHONG	JULY	Heavy rainfall with lot of humidity.	Sesame (til) can be sown. Maize is harvested.
7.	PAI-PAI	AUGUST	Heavy rainfall with lot of humidity.	Rice is harvested
8.	CHITI	SEPTEMBER	Amount of rainfall decreases	Rice is harvested
9.	PHRE	OCTOBER	Monsoon retreats. Clear sky.	Sesame (til) is collected.

Source: Field study 2012-2014

TECHNOLOGY APPLIED

The Karbis use simple and limited tools in their agricultural work. They use nopak (big knife) for cutting herbs, shrubs, and trees. They collect the half burnt logs with their hands and cut it with knives to clear and prepare the

field for sowing. The seeds of the crops are carried with the hoton or hakso (a kind of basket) to broadcast the seeds, and the field is dug with a hoe (ku). Chumleng is used to dig the soil and place the seeds in the dugout soil to grow plants from the seeds. They use the chingjor (crowbar), and nokek rangso (sickle) to harvest the crops, and some other tools are used for different purposes in Jhum cultivation, like clasp knife, knife etc.

Some tools and technologies used in the Jhum cultivation are-

1. Nopak: A big knife for cutting trees, herbs and shrubs.
2. Cho: An axe to cut the big trees in Jhum field.
3. Ku: A spade used for digging the soil.
4. Chumleng: A digging stick used for seeding the seeds of crops.
5. Chingjor: A crowbar for digging the soil to pick the potatoes.
6. Tari, nokek: A knife, or clasp knife used to harvest the crops.
7. Nokek rangso: A sickle, to harvest the crops.
8. Ingtong: A kind of basket to carry the crops and other material.
9. Khangra: A kind of basket to carry the harvest crops and other materials.
10. Hoton: A basket used as a container at the time of broadcast of the seeds.
11. Hak: A kind of basket with legs to keep or carry seeds, or used as a container at the time of harvesting of sesame.
12. Phanki (baria): A bamboo stick to carry harvest crops on the shoulder.
13. Jintaak: A bamboo rope to tie up the harvest crops and other material.

Traditional House Type

A Karbi house influenced by Khasi/Jaintia type is constructed on a wooden platform at a height of approximately one and a half feet from the ground. The area beneath the platform is utilized for storing firewood and other miscellaneous articles. The walls, roof, and floor are mainly made of wood, bamboo, and soil.

The traditional hut of the Karbi people is known as Tsang-ghar. It was prepared on the Tsang or tower and accordingly the name originated. Prior to construction, a bamboo pole is erected and allowed to remain there for three days and three nights. If there are some evil effects, it will get noticed, otherwise it will be treated as auspicious. Generally, a Tsang-ghar is fifty feet in length, fifteen feet in width and six feet in height. It consists of three main parts-(i) outer zone, (ii) inner zone, (iii) rear zone. It is discussed below-

(i) Outer zone: It consists of the following parts-

Fak-boy: It is the place to keep the vessel of food for the domesticated pig.

Longso: It is the stone laid on the courtyard to sharpen the iron implements.

Marh: It is an open space for seating the guests and on that earthen courtyard, the female folk grind paddy.

Dondon: It is the staircase from the ground to the main hut.

Hongpharla: It is the place for the reception, meeting, feast, jurisdiction of the guests, clan members and other village people. It is associated with a hearth or fire place and is of prime importance for social and cultural life.

Raph: It is adjacent to the ceiling of the hut. It had two parts liker Raphpi to keep ritualistic implements and Raphso to keep dry fishes, meat etc.

Hongjai: It is the open place above the seating space of the guests. Earlier Hacha Kekan used to be performed here.

Hongkup: It is the place adjacent to Hongjai.

Theng Rorai: It is the place to keep firewood.

Okrap or L'rap: The place adjacent to Hongkup, where the dried fishes, plantain leaves are kept for rituals is known as Okrap or L'rap.

(ii) Inner zone: It is divided into two parts by fencing and consists of the following segments-

Ingdeng: It is the place for a newly married couple, which is constructed at the right side of the partition.

Dambuk: The place in front of the Ingdeng is known as dambuk.

Furung: Adjacent to Ingdeng a fire hearth is kept. Beside that hearth the domesticated cats, dogs used to get warmth and it is known as furung. It reflects their affection towards domesticated animals.

Kut: It is the place of dwelling for the familial head and his wife. In it, the paddy is stored.

Tongfli-Atibung: It is the place for seating of the women guests. During any ritual, the female guests sit together for gossiping.

Tibhung: It is the place of sleeping for the adolescent or adult unmarried girls or daughters.

Pang honthu a tibung: It is the sleeping place for widows or grandmothers.

Kham: It is a place of storage.

Nokchek: It is the place to keep the iron implements used for animal sacrifice. All sorts of household rituals are performed here for the familial well-being.

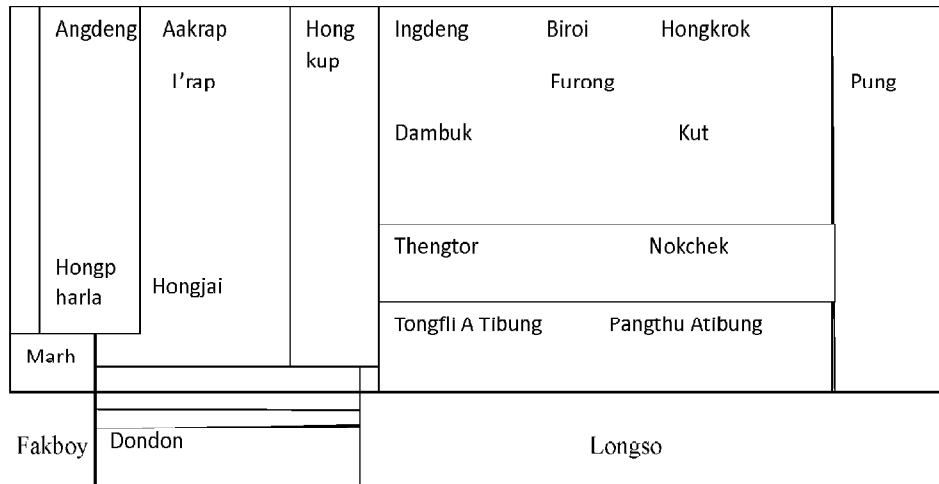


Figure 1: Traditional house type

Their traditional house type signifies the maintenance of privacy for the female folk, adolescents and aged parents. Meanwhile, outsiders are never allowed to enter the inner part of the hut.

Importance of Bamboo in the Construction of Household: The traditional houses of the Karbis are either constructed on grounds or raised platforms. In this regard, bamboo is used mainly for- (i) Arbung: A long piece of bamboo for supporting the roof of a house. (ii) Arphe: A bamboo to support the lower part of a roof. (iii) Nujok: A bamboo or wooden post of a house. (iv) Pongdei: A bamboo support for the wall of a house. (v) Jintak: A strip or split of bamboo. (vi) Jarbob: A bamboo rafter. (vii) Paisong: The bamboo wall or fence. (viii) Inghap: A door of a house generally made with bamboo. (ix) Rap: A hanging platform over the fire of hearth. (x) Arpong: A bamboo wall.

The Karbi Houses and its rules: Domestic spaces are always of great anthropological interest. Among the Karbis as elsewhere, spaces within the houses are encoded with social and cultural meanings which are manifested in the many conventions regulating their use, and the way spaces are separated and linked is determined by social and cultural norms. Hence, the observation of the use of domestic spaces is a relevant clue for understanding the true nature of social relationships. The present paper is not a complete anthropological description but only an attempt to identify some basic features of this peculiar domestic organization. For that purpose it will focus on the traditional house only, despite the fact that this model has long ceased to be the unique type of residential building found in Karbi inhabited areas.

Location and Orientation: Contrary to other tribal communities of Northeast India, slopes or hilltops are not favored by Karbis for establishing their villages, nor the vicinity of rivers. Mountains and streams are believed to be the abode of the most jealous kinds of terrestrial spirits and the people fear that the foundation of a human settlement nearby would bring disease and destruction (a-hi-i keso) in the village. For that reason, flat areas are always preferred. The spatial orientation of the house does not seem to follow any specific rule; however, one usually finds dwelling oriented towards the village road or lane, and more often than not, having an east facing entrance. When houses are to be built on hilly ground, they are oriented in such a way that the front side faces the valley and the rear side is oriented towards the upslope of the mountain. In communities settled on river banks, dwellings usually lie with the main entrance facing the river.

The Dwelling space: Traditionally, Karbi houses are made up entirely of wood, bamboo and thatch. The whole construction is raised several feet above the ground on a bamboo platform (klong) supported by wooden posts (nujoks) and stilts, under which domestic animals run about freely and cattle is kept at night. The floor rests on a layer of support consisting of splintered and whole bamboo grids to ensure appropriate rigidity. The platform is totally enclosed by a fence of bamboo lattice, except one passage allowing access to the front via a ladder (dondon). This protected area contains two constructions. The main building (hempi), where household members work on various domestic chores, have their meals and sleep, is located to the rear. It has a unique front door entrance, but also a back door giving access to an open verandah (pang;back side), primarily used for throwing wastewater and food waste, and for storing items which are not of daily use. The front verandah (hongkup) is prorogated by an open platform (hong;front) where all kinds of social and everyday activities take place, including rice pounding. Towards the front part of the platform, most often located perpendicular to the main building, lies a smaller house, hong pharla (hong;front, pharla; dormitory), whose first purpose is to serve as a reception hall for guests. Occasionally it is also used as sleeping room for unmarried boys when the main house is too crowded, as well as temporary residence for married children before they established their own separate house.

The external aspect of the two buildings is very much similar. Both are single rectangular structures made of wood (all pillars, ridge pole, horizontal support beams, roof support beams) and bamboo (bamboo poles for cross beams and all the small roofing structure, interlaced bamboo strips for walls and doors). Remarkable is the absence of nails, wires or metal clippings, as well as windows. Bamboo splits as well as thongs extracted from the bark of

trees are used to tie structural and non structural elements. The curve in the front and rear sides (more rarely the overhanging of the perpendicularly) form two small porches. The curves do not extend much further down than the fencing level. Roofs are thatched with stalks of *Imperata cylindrical* (phelang), a grass species particularly abundant in wet grassland habitats of Assam.

Their interiors, however, differ. The main dwelling-house is divided by a transverse lattice-work partition into two sections, *kam and kut*, both containing a fire place and various areas for keeping utensils and valuables, whereas *hong pharla* is not compartmented, nor does it contain any area for storage; all household goods (grain, firewood, clothes, kitchen appliances, jewelry and other valuables of the family) are kept in the main building only. Baskets of bamboo serve as wardrobes for paddy, clothes and other domestic goods. Sections of large bamboo stems closed by the joint at one end are used as containers for water, ornaments and other valuables. *Hongpharla* does include a fireplace, but fire is not kept burning permanently as is the case for the two hearths located inside the main building.

On entering a Karbi dwelling, one first gets into the *kam* section. On the left side lies a raised platform of split bamboo. The front (*hormu hortar arung*, lit: place for kitchen utensils) is used for storing kitchen artifacts, whereas the rear part (*tibung, dambung*) delimited by a bamboo lattice partition, functions as a sleeping area for unmarried girls. A fireplace (*me-hip*) lies more or less in the center of this room, with a hearth made of clay and wooden planks to hold clay in place. A suspended rack system (*raap*) overhangs it, on which meat and various objects can be left to dry. It is also used to store gourds holding rice beer (*horlang*), wine (*arak*) or lustral water to be sprinkled on altars during religious ceremonies. The rear side is used as a store room for wood (*pang a thengkroi*)

From *kam*, one can access the *kut* section through a door, which actually constitutes the innermost area of the house and contains all the sacred and important household possessions. This room can be entered only from the outer section (*kam*), and as for the outer room, it also includes a central fireplace. The rear side is occupied by an elevated platform used both as granary (*sok ingkro*) and store room (*tikut*). The sacred household paraphernalia (a storage basket, *marjong*, and the ritual artifacts that it contains) are located in the most valued part of the house, i.e. attached to the central pillar (*angbong anujok*) which stands in the middle of the partition separating *kam* from *kut*. As a rule, the household head always sleeps close to this pillar with his head oriented towards it, so that *marjong* is located just above his head. An interstitial space (*vo-bi aroi*) between the inner room and the main building's outer wall serves as poultry house and goat-shed.

Spatial positions in the household: As a rule, house members and guests are not made to sleep outdoors on the raised platform (*hong*), but always inside. As far as sleeping is concerned, a permanent access to *kut* is restricted to the household head (*hem aripo*) and his wife only. Children below the age of 5-6 years generally sleep besides their mother, but beyond that age they have to move to *kam* area. In *kam*, unmarried boys and girls sleep separately: girls in the rear portion of the raised platform called *tibung* or *dambung*, and boys around the fireplace, sometimes along with one newly married couple. They may even sleep in *hong pharla* when the main building becomes too crowded, whereas as a rule, girls sleep in the main building (*hempi*) only. Although the household head and his wife occupy the same sleeping place, their spatial and hence social positions are not strictly equivalent, since the husband must have his head located closer to the symbolic center of the house represented by *marjong*. Member of the household usually eat together in *kut*, unless guests are invited in *hongpharla* (in which case they will be joined by the household head). People normally have their meals around the fireplace, and sit on stools or small benches (*inghoi*). Although no strict rule requires him to do so, during meals the household head generally sits with his back facing the rear side of *kut*, next to his wife. He should always be the first to eat the food prepared for the family (implying that it is not tasted by anyone before) and the first to be served.

As a rule, members of the house owner's clan (*nok-hum-isi*, lit: one clan) are allowed to sit in the *kut*. In practice, however, access to the inner rooms seems to be restricted to clan elders of the same regional sub-divisions (*chingthong*, *amri*, *rongkhang*) As a rule, also only people older than the house hold head are to be invited, although other members may be occasionally allowed to enter *kut* if needed. No one else is admitted in the *kut*. Village headmen, officials and all important people, if not belonging to the same regional section of the owner's *nok-hum*, will be entertained in *hongpharla*. Apart from household members, only those people whom the owner knows personally (*chini-chethek*, lit: known very well to each other) are invited to sit in *kam* instead of *hongpharla*. Among them are kin related people in general, being either close relatives (*hem isi*, lit: of one house, applying mostly to the paternal kin, and *apok*, lit: of same stomach) or far relatives (*chepho-chiri*, *chepho*: to touch and *chiri*: to lead). Important visitors received in *kam* are served rice beer or liquor as a sign of respect. This is also the case for representatives of the mother's lineage (*don-rap*) such as the mother's brother or mother's brother's son in Karbi society where men by tradition were encouraged to marry their mother's brother's daughter (*tipi/korpi*). This lineage represents the wife-givers. On the contrary, the wife takers who are

represented for each male individual by members of his father's sister's husband's clan (i.e., those who are encouraged to marry his own cousins) are supposed to bring rice beer along with them and serve it to the owner of the house, as would any visiting employee of the house have to do, or a person wishing to solicit him. This reflects status inequalities between wife giver and wife taker in Karbi society, the former being superior to the latter.

The house as a ritual unit: The Karbi house is a residential, economic, but also ritual unit. The responsibility to propitiate deities protecting the house and its inhabitants as well as to perform all kinds of domestic rituals usually lies in the hands of the living father, who assumes the title of *arnam ke-ot abang*. After him, the title normally passes down to the eldest son who is taught all the ritualistic procedures. In case the eldest son refuses or is unable to take the responsibility, the next immediate son by birth rank will get it. Whoever is to take charge of domestic cults is regarded as *hem aripo* (household head) and as such, should inherit the parental house. Daughter can become female household head (*hem aripi*) the same way they inherits lands, properties and money if the situation arises, particularly when there is no male heir in the household. But they cannot inherit the religious artifacts constituting *marjong*, including the basket (*arnam a burup*) containing them. As a rule, in the absence of male heir, a close paternal male relative will get them. In all cases, the person selected to inherit *marjong* is required to become the religious leader (*arnam ke-ot abang*) of the domestic unit. A son does not immediately set up a new ritual unit by establishing his own house after marriage, for he will have a new *marjong* only if his father passes it on to him. Usually, after the father has died it is handed to him by the person assuming the function of *hem aripo/pi*. Otherwise he has to remain attached to his father's house and join religious ceremonies.

Bipan Bijon: Since time immemorial, *Bipan-Bijon* has played a very important role in the material cultural aspects of the Karbis. *Bipan-bijon* is nothing but the two designed pattern of the bamboo-made material cultural implements of the Karbis. By combining these two designs, a number of other designs could be developed and a number of material cultural implements could be prepared from it. It is a belief among the Karbis that *Bipan-Bijon* was introduced by a mythical person named "*Thireng-Vangreng*" in the Karbi society. Some of the *bipan-bijon* taught by *Thireng-Vangreng* to the Karbis are:

- (i) *Bu pla-pla*: It was the simplest design and used to make *vo-um* (bird cage), *phak-um* (pig cage) *hor-hi* (rice beer distiller) etc. (ii) *Bi chekup*: A design which met with each other, (iii) *Bi chekak*: A design which moved away from each other, (iv) *Thoithe suri angphar*: This design was mainly used in *hijap* (hand fan). This design was placed at the

corner and was also used in weaving. (v) Kethoi Abot: This design was placed at the centre. Almost all the material cultural implements of the Karbis were made by combining the design and pattern of bipan-bijon.

Traditional Kitchen

It is believed that the traditional Karbi's kitchen comes into formation with the origin of rice, peng (household deity) and different cultural implements. It is believed that origin of rice is associated with the origin of traditional Karbi kitchen, because rice is a gift of God. So there should be a particular sacred room where rice can be prepared. Further, with the origin of different cultural implements, a kitchen was built to store different implements. A traditional Karbi kitchen is built several feet above the ground, and it is entirely made up of wood, bamboo and thatch which is available in the forest.

A traditional Karbi kitchen is known as *Kut*. It is the most sacred space of the house. The main purpose of the kitchen among the Karbi's is to store different cultural implements and to cook food. In a traditional kitchen, there are some restrictions related to food, table manners, sleeping, etc. In a traditional Karbi kitchen, only the kin member can enter, to maintain the auspiciousness. There are some food items that are tabooed to cook in the presence of other clan members. After child birth, mothers are not allowed to either cook or even serve food because it is regarded as pollution period.

Concept of Hearth: A hearth is the floor or surrounding of a fire place. The people sat on the hearth for warmth and discussion in front of the fire. In a traditional Karbi house, there are two hearths, one inside the Kut and the other in the center of Kam. A hearth in a kam is mainly used for warmth and discussion. Further, the hearth inside the kitchen is to prepare food. In a traditional Karbi house, a hearth is prepared with the forest resource like leaves, wood and bamboo. Here, first a wooden plank or leaves of different plants are spread and then plastered with mud. After that, three pieces of stones are placed in a triangular position, which is collectively known as *Korte-Bang-kethom*, which means three brothers, and is plastered with mud. In a Karbi house, a fire place is always kept burning to ward off the effects of evil spirits.

The raw materials required to form a traditional Karbi kitchen are wood, bamboo and straw. Here, wood or tree trunks are used for the pillar; for the wall, the bamboo is made into strips and a platform is also made of bamboo which is known as Klong. Bamboo is also used for the roof, including the ridge pole. The roof is thatched by using phelang.

Different parts of the kitchen and their function: A traditional kitchen of the Karbi is known as *Kut*. From *Kam*, one can access the *kut* through a door. It is the most sacred space of the house. In a Karbi kitchen, there are different sections for different purposes, like *Me-hip* (fire place) is set up towards the eastern direction. A Karbi *Me-hip* (fire place) is prepared by placing three pieces of stones in a triangular position which are collectively known as *Korte-bang-kethom* which means three brothers.

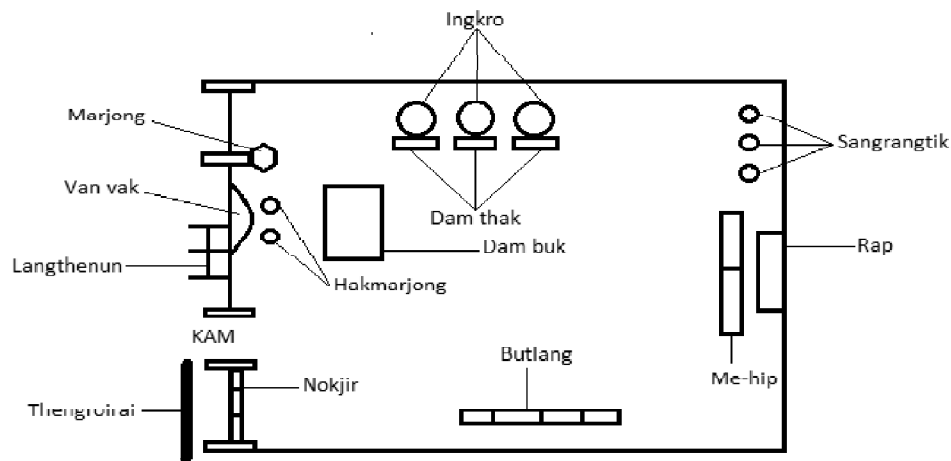


Figure 2: Traditional Karbi kitchen

Over the *Me-hip* there is a suspended rack (*Rap*) where meat and other objects are left to dry. It is also used to store gourds holding rice beer (*Horlang*), or holy water to be sprinkled on the altar (*dovan*) during religious ceremonies. There is *Dam-buk* to the west of *Me-hip* (fire place), used as a bed for sleeping. Only the household head (*hemaripo*) and his wife (*hemaripi*) are allowed to sleep in the *kut*. The *Marjong* (a storage basket containing the ritual artifacts) is placed in the most valued part of the kitchen, attached to the central pillar (*Angbong a nujok*) which stands in the middle of the partition separating *kam* from *kut*. As a rule, the household head always sleeps close to this pillar with his head oriented towards it, so that *Marjong* is located just above his head. Opposite to *Dum-buk* there is *Dam-thak*, used as a platform to store the paddy. The paddy is stored in *Sok ingkro* (a basket to store paddy). There *Lang-the-nun* on the left at the entrance of *kut* where water is stored in long bamboo tubes (*Lang-the*). *Nok sek* is on the right of the entry to *kut* where a *Nok-jir*, a long handled sword used in rituals is kept. In a Karbi kitchen, one of the important parts is *Van-vak* where the members of the house hang their clothes; below the *van-vak* is *Hak marjong*. It is used to keep their clothes and jewelry.

It is always close to *Dum-buk*. The *Theng roi-rai* (fire wood stored) is on the right side on the entrance to the kut where dried firewood is stored for ready used. Lang is used as a rack to keep utensils; it is in the southern side of the kitchen.

In a traditional Karbi kitchen, there are different parts, which are used for different purposes and where different implements are kept. In a Karbi kitchen, the most important part is where a *Marjong* is kept, because some of the important rituals are performed in kut, and especially close to the place where *Marjong* is kept.

Traditionally Karbi dishes are divided into

- (i) Kang-moi
- (ii) Kalang dang
- (iii) Hanthor (sour)
- (iv) Kemung (cooked in bamboo tubes)
- (v) Kangthu (wrapped in leaves) and
- (vi) Kephi and Ke-ur (roasting and smoking)

The discovery of rice is narrated in a song called *Porom Alun*. The song is sung on the night of completion of paddy harvest and after the paddy has been threshed and brought home. This performance of *Porom Alun* accompanied by dance is called Hacha Kakan.

HOUSEHOLD IMPLEMENTS

The Karbis use furniture of different and typical designs made of both bamboo and timber. They basically use the traditional handicraft in their household equipment. The traditional household implements used by the Karbi people are:

1. Ingkrung: A sieve or vessel with holes at the bottom for separating the main food parts from any discarding element.
2. Beleng: A winnowing tray used to clean rice.
3. Chathang: A big sieve used for separating fine particles from the coarse, and to catch fish.
4. Bulingkang: A kind of basket used to keep small things.
5. An choho: A basket used as a cover of a container of rice.
6. Hoton: A kind of basket used for storage.

7. Hak: A basket with legs for carrying implements or crop seeds.
8. Ingtong: A basket used as storage and carrying the necessary implements.
9. Khangra: A basket used to carry wood for fuel.
10. Mih cham: Used as a storage implement.
11. Horhi: A distiller of rice beer, mainly to offer to the deity.
12. Sie: A distiller of rice beer.
13. Phelo bisir: Bamboo-made handicraft as a distiller of alkali.
14. Hijap: A bamboo-made hand fan.
15. Beivuk: A bamboo-made handicraft used for sweeping.
16. Lankponog: A bamboo-made glass.
17. Okrap: A platform where fishes or meat are kept for drying, which is prepared with bamboo.
18. Voum: A bird cage.
19. Long: A wooden apparatus.
20. Lengpum: A pestle to grind ingredients.
21. Lumphlak/lumhor: A wooden spoon.
22. An-Chobak: A big wooden spoon to distribute rice on ceremonial occasions.
23. Hor-chobak: A wooden handicraft used in preparation of alcohol.
24. Tar: A mat used for sitting and sleeping.
25. Inghoi: A wooden structure used for sitting.

RITUALISTIC MATERIALS

The Karbis observe some ceremonial rituals during the year. The ritualistic performances vary for different ceremonial occasions. The people celebrate a number of festivals and ceremonies for which they use different implements during the rituals, without which the ritualistic performances are incomplete. Each material cultural implement has a specific role in the ritualistic performance. These material implements are as follows-

1. Jambili athon: The traditional emblem of the Karbi people made from timber, which is used at the time of chomangkan (death ritual)

2. Arnam ahoton: A basket used to keep the ritualistic material at the time of ritualistic performances.
3. Horhak: A basket used to carry country liquor. In Karbi society, there is a provision to carry some commodity including *bongkrok* (bottle gourd) and wine to some festivals or ceremonies invited by relatives. These items are kept in the basket and young girls have to carry it to the place of ceremonial performances.
4. Horhi: A distiller of rice beer, used mainly for offering to God.
5. Siro: A wooden handicraft used for distribution of rice beer or alcohol.
6. Sih: A basket made from bamboo used for separating rice beer.
7. Mih cham: A bamboo handicraft used to store and distribute ok-bor.
8. Vo-um: A bird cage used to keep birds at the time of ritual.
9. Bhak-um: A pig cage used to keep pig at the time of ritual.
10. Beleng: A winnowing tray used in sang kelang to worship the deity.
11. Ingkrung: A sieve used in sang kelang to worship the deity.
12. Anthong: A handicraft used to store cooked rice during the ritualistic performances.
13. An-chobak: A wooden handicraft used for distribution of rice at the time of rituals.
14. Chuhu: A bamboo handicraft on which pots are kept.

FISHING IMPLEMENTS

Fishing is the most primitive means of livelihood. Fish is called Lank aok in Karbi. The people catch different fishes from ponds, rivers and streams. The Karbi people catch fish by ru (trap), chathang, chakei, lan and with poison. There is a community fishing festival called 'okpru' which is performed annually before the arrival of summer. The roots of certain plants called hiru or rumet are crushed and mixed in the river to poison the fish, making it easy to catch them. The implements used to catch fish are:

1. Ruh krak: A simple fishing trap used to catch fish.
2. Ruh parlip: A fishing trap.
3. Bulingkang: A basket of narrow neck used for storage of fish.
4. Ingkrung: A sieve used to catch fish.

5. Chathang: A big sieve used to catch fish.
6. Chake: A fishing implement usually used by the women to catch fish.
7. Arhi: A fishing hook.
8. Soklet: A bamboo handicraft used to catch fish.
9. Kongsin-Used for draining the water from the pond to catch fish easily.

Traditional Weaving and Dress Pattern

Arloso, or the female folk are mainly associated with weaving in the Karbi society. Most of the Karbi women, basically those who dwell in the villages are associated with the preparation of the traditional dresses. The Karbi women prepare the traditional dresses with very artistic designs. Primarily, they prepare their traditional dresses for themselves and for their familial members. They prepare traditional dresses like- pini, pehkok, vamkok, seleng (dhoti), choi, poho, pelu, khonjari (scarf) and other dresses for their family.

The traditional dresses of the Karbi people

The Karbis traditional dresses, which are artistically designed, are woven at their familial looms. There are distinct dresses for men and women. The shirt for males is called *choi-hongthor*. The young men (unmarried boys) wear *choi-ik* (black colour shirt), and the aged married men wear *choi-angpo* or the *choi-miri* (shirt in a mix of red and white colour), while everyone uses the *seleng* (dhoti). The male wear *choi* with a *poho* on his shoulder and the turban he wears on the head is called *poho*. The young unmarried male uses white, and aged married male uses the red coloured *poho*.

The Karbi women and girls generally used *pini*, the lower garment (a piece of cloth tied around the waist to cover the lower part). Both women and girls used the *pinikamphlak* and the *pinilangpong* is worn by the women. A highly artistic waist band used by every women and girl is called *vamkok*. A piece of intrinsically woven cloth used by them to cover the upper part of the body is called *peh-kok*. The Karbi women and girls use an artistic cloth which is wrapped around their chest, called *jiso*. The Karbi use the Edi scarf called *khonjari* during winter.

Weaving machine: The Karbis prepare different traditional dresses. All the dresses created by them are hand-made. For weaving, they use different material instruments made of bamboo and fiber. The *kachivour aterang*

(traditional weaving machine) is mainly used by the Karbi women to weave the traditional dresses. The instruments and material used in *kachivour atherang* are as follows-

1. Harpi: It is made of wood called dok-kichu in Karbi, which is used to keteng (weave).
2. Thihu: A belt worn around the waist while weaving.
3. Thening: Two barrels which are used to tighten and for folding.
4. Adang: It is made of bamboo, and used to keep the cloth uniform and maintain its parallel breadth.
5. Hi-i akaibong: It is made of small bamboo sticks generally used for changing the layer of the thread woven.
6. Thelangpong: Two parallel sticks used to make design layer.
7. Uvek: A device used to hold and tighten the layer of the cloth.
8. Honthari: A bamboo stick used to roll up the thread.
9. Honthari langpong: A hollow barrel used as a cover of the honthari.

The studied people use spinning machines like takiri or mihchongkret and honlan to roll up the thread. Jotor and siriki are also used by the people. Most of the weaving parts are made of bamboo, except Harpi and Thening. It is made from the wood of a big tree called "Dokichu" and "Kove arong" (betel nut tree).

Thread and Method of Dyeing: Earlier the Karbi people prepared thread from *eddi silk*, and cotton. A *takiri* was prepared with bamboo. The eddi silk or cotton is rolled up by hanging the takiri and the thread comes-up. They tempered the thread by boiling with rice and then they hung it on the honjar to dry. Generally, they boil the thread with the leaves, roots and fruits of trees to get the colour. They select leaves, roots and fruits of different trees to get different colours.

Karbi Weavers knew the art of making natural dyes out of various species of shrubs, herbs, barks, roots, flowers, plants and some out of animal origin. Besides the three primary or 'basic chromatic trio' of white, black and red, the Karbi weavers had yellow and blue in their inventory of colours. The term *A-lir/A-cham* is used to mean colour or dye. The expression *Acham Kedam*, or colour having faded or discolored, means the 'end' or 'termination of life'.

Assuming that green and blue, commonly called *A-ke-lir* and *A-ke-lu*, are the basic terms, then there are six terms in Karbi colour vocabulary, which are *A-ke-lok* (white), *A-ke-er* (red), *A-ke-lir* (green), *A-ke-lu* (Blue) and *A-ke-et* (yellow). Dark blue or black dye is produced from the leaves of a plant called Sibul (*Strobi-lanthus hoeditolius*) while 'red' is produced from the resinous

secretions of lac (*Laccifer lacca/laccifer chinesis*) insects retrieved from host plants / trees such as Therer (*Cajanus Cajan*), Chiri Jangphong (Banyan/*ficus*), and Inghor (*Pongamia pinnata*). The insects are collected and boiled in a container and the Yarn is soaked in water to produce the red dye. The 'white' colour comes naturally from cotton (Teron 2011).

It is a tradition to cultivate Sebu in every household and it continues to have a very special significance in Karbi tradition. There is a legend of the 'Origin of Sibú' (Sibu keplang kangthum alun), which narrates the process of making the 'blue' dye from the 'Sibu' and its cultivation and harvesting. Black, red, and yellow dyes are traditionally obtained in the following manner:

Black: Siluka (*Terminalia Chebula Retz*) is boiled with Ingchin Ahi (Iron filings) to get black dye. Ingchin ahi probably served as a kind of mordant obtained by soaking ingchin ahi in fresh water in an earthen pot. The solution is allowed to remain in this condition for at least three nights or till black dye emerges. The yarn is then soaked in the black dye. Barks of Loring (*Careya arborea Roxb*), Langdung (Banana flower) and Siluka are also boiled together for making black dye in some regions.

Red: To obtain a red dye, three ingredients are normally used. Crushed lac (*Laccifer lacca*), leaves of Tampijuk (*Baccaurea ramiflora* Lour) or Tamsir (*Aporosa diocia benta a porosa octandra*) are boiled together. Lac is washed properly and placed in a clean long (wooden mortar) which serves as a dye bath; boiling water is poured over the crushed lac. The lac is then taken out of the dye bath and the yarn to be dyed is soaked in the red dye, boiled together with the leaves of Tampijuk or Tamsir till the desired red shade is obtained. The yarn is again boiled with the leaves of Tamsir. The red dye used in early days was actually more maroon than red.

Yellow: Tharmit (*Turmeric/ Curcuma longa* Linn) and Jang tarlong (*pavetta indica* Linn/ Indian pellet shrub) creeper's roots are ground together. The yarn is then boiled together with the mixture. The yarn is dried in the sun, and until the desired yellow dye is obtained, boiling with the said mixture and drying process is repeated. Finally, the yarn is washed. The seeds of Tamsir are also boiled to produce yellow dye.

Blue: The most popularly used natural dye is Sibú, which is also one of the oldest known natural dye. Karbi women's Pini, Piba etc. are dyed in sibu; in fact Sibú is used for female clothes alone, not for male clothes.

Sibú has four varieties. One uses the leaves of a creeper *Bu-Jir*. *Bu-rot* is also a creeper whose *Angjok and Akrok* (young leaves and stems) are used together. The leaves of *Bu-Kengkung*, a shrub, and *Duli*, another variety of

shrub are used. The leaves of *Duli* are taken before flowering. *Duli* and *Bu-jir* are the most commonly used plants.

The pattern of design is as follows-

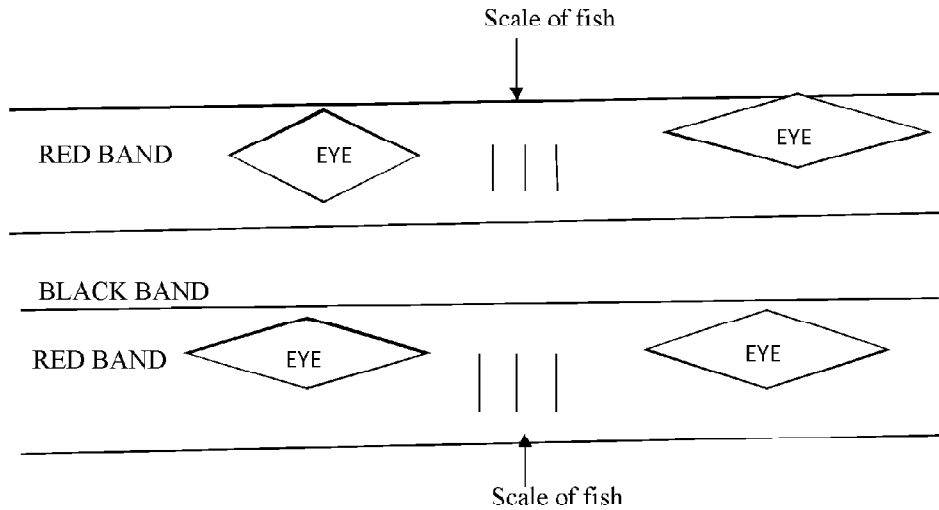


Figure 3: A weaving design

Here the black band and red band symbolize malevolence and benevolence respectively. It may be noted that the evil or malevolent sources are prohibited by benevolence and the red colour is symbolical of the blood of scarified animals used for rituals. Meanwhile, fish is considered very auspicious among them, as they believe that the eyes and scales of the fish ward off the effect of any evil spirit on them. Such designs are always to be woven on the red band.



Plate 1: Preparation of Household Material cultural implements with Natural resources



Plate 2: A Karbi Woman Weaving the Traditional Dress

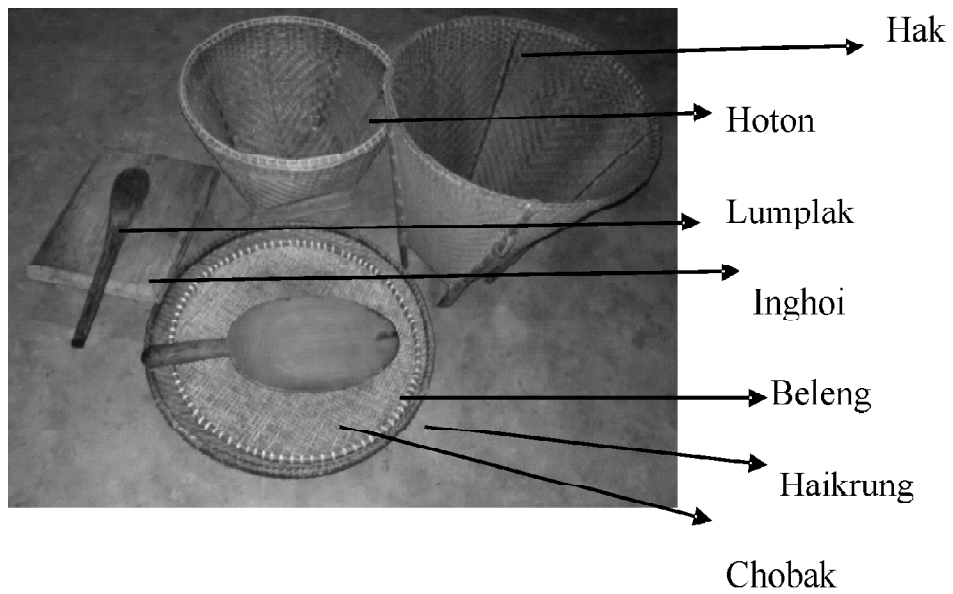


Plate 3: Bamboo made Traditional Household Implements



Plate 4: A Traditional Karbi Hut

CONCLUDING REMARKS

The livelihood of the Karbi people has passed through different successive stages with the passage of time. Significantly, in every circumstance, their livelihood and culture were nourished in the lap of nature. They mitigate their hunger by hunting wild animals and collecting natural resources. Over time, they started to utilize the natural fertility in their favour and gradually jhum cultivation and settled cultivation was developed. By utilizing a number of natural products like bamboo and cane, they constructed their traditional hut which is still noticed. Weaving became an integral part of their cultural tradition and significantly, a number of natural resources played a vital role in it. Natural products like bamboo, plantain leaves, and gourd shell were inseparable objects in their rituals. Meanwhile, the traditional Karbi cultural emblem named as *Jambili Athon* reflected their social organization and clan distribution. It was prepared with the stem of *Bengvoii* tree and on the top of the branches, the totemic object of the major clan *Vojaru* (a racket tailed *Draco*) sits. It symbolizes that the natural living beings in the form of plants and animals are an inseparable part of their livelihood sustainability and only these can ensure the continuity of their social structure. Thus it can be summarized that the livelihood, economy and material culture of the Karbi people are the gift of nature and different natural resources.

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