CHAPTER-IV

ECONOMC LIFE

The economic life of the people of the Bodos, in general, was conditioned by geographical, physical and climatic factors of the place on the one hand, and by social organizations, age-old customs and religious faiths on the other. Through the ages the basic ways of living of the Bodos were stabilized into fixed economic systems which, more or less, maintained continuity from ancient to present times.

Assam is a peasant's land Par Excellence; not only her economy but also her social and cultural patterns are determined by this avocation.[1] Agriculture is the main stay of the people of the Assam. Of the two mainsprings of the village economy of the State, agriculture and small industry, agriculture is the more vital and employed a greater number of people. It is the basis of the rural people as almost the entire rural population is connected with the land in some way or another. Hence, from time immemorial, the agriculturist, or the cultivator, or the peasant, is the backbone of economic life of the State. Still, "eighty percent of the state's population is dependent on agriculture. Out of the total working population 66 percent are engaged in agriculture".[2] The state of the economy of Assam is, on the whole prosperous. About the village economy of self sufficiency obtaining here Moffat Mills says in his Report of 1853, thus: "They are their own weavers, their own-rope-makers, their own tailors, their own carpenters, and, if a man is cunning worker in ivory or precious metals, or in iron or pottery, he and his family perform between them all the arts besides".[3]

"The soil of the Brahmaputra valley is fertile" and "the people enjoy great material prosperity".[4] The varied but rich soil of Assam was well adapted, from its diversified elevation, to the cultivation of every kind of crop. The natural conditions of land and climatic influences have rendered Assam predominantly an agricultural state. Apart from paddy and mustard seeds, sugar-cane and cotton are widely cultivated.[5]

The land of Assam may be divided into four classes, viz.

i) Home stead land or *Bari* or *Bitha ha*,

ii) Low rice land or Rupit. It is called *Dubli ha*,

iii) High land or Faringati. It is known as *Bwri ha*

iv) Waste land.

The *Bitha* land is used for the purpose of constructing house and gardening. On the Rupit land or *dubli ha* Sali rice or *Maisali* is grown. The Faringati land or *bwri ha* is used for growing crops such as mustard, jute and Asu paddy. The waste land is generally classified into three categories, viz., the forest and high waste land; the extensive reed and grass lands and the grass lands amidst cultivated land.[6]

The Bodos of Assam primarily live in the rural areas and are basically farmers. Their pattern of livelihood is characterized by preponderance of agricultural occupation. In fact, it is a way of life. Though agriculture is the prime occupation, but the indigenous cottage and village industries also form another important economic source of living of the Bodos. Besides these, their economy is supplemented by animal husbandry, fishing, forest products, and by raising certain cash crops.

Part-A

1. AGRICULTURE:

The Bodos "are a purely agricultural people, with but few exceptions, live by the produce of their fields."[7] The Bodo economy is a household economy in which the household is a unit of production and consumption. The members of the domestic group provide work-team and labour power for agriculture and other economic activities which are geared mainly towards production of food and other basic consumption needs of the domestic group. As regards to the nature of Bodo cultivation, Major Jenkins gives them the highest character, observing that they are a remarkably fine peasantry, and have very superior cultivation of the permanent kind. This is abundant proof of docility of the Bodo.[8]

To understand the condition of agriculture three factors need examination, namely, the possession of land, the manner of cultivation and the various crops produced.

Land Holding:

Land is the basic asset in the productive resources of the Bodos. The initial practice in the society was that each household would clear as much as virgin land as was essential to meet its domestic needs. They never deem it fit to posses more land than was necessary in spite of its availability, because their economy was basically household economy.

It may be recalled that the Bodos "in olden times practiced shifting cultivation when land was available in plenty. This practice is no longer seen among them.[8] They were not sedentary cultivators. The Bodos "are of very migratory habits, and seldom stay at one place or cultivate the same soil for more than two or three years; but this can hardly be wondered at, when they have so much virgin soil at their disposal".[9] Due to the practice of shifting cultivation, they move to a fresh area as soon as the cultivated land lost its fertility. Thus, the practice of shifting to new areas and easy availability of land made them rather indifferent towards owning land permanently. Land was therefore, not considered a part of the household property in those days. Since it was available in abundance, land was not considered a part of the heritable asset either.

However, with the passes of time, the conditions also changed. With the increase of their population as well as of other communities, land ceased to be abundantly available in the hitherto uninhabited areas. Under such circumstances, the Bodos were forced to change their mode of cultivation. Thus, they became settled agriculturists from shifting cultivators. During the British rule, the reservation of vast areas of forest land of Assam by their Government, made it more difficult to clear the forest for agricultural purpose.

The Bodos are settled on land owned by the government. They cultivate the land that has been leased to them on periodic tenancy which is renewed without exception. Thus for all intents and purposes, the land possessed by a household is like permanent property, provided the tenant pays the land revenue regularly. The possession of land is in the name of the head of the domestic group who holds lease of land on behalf of the households. The entire agricultural products on the land, belongs to the household consumption. Each son of the lease holder is given a share in the land when they separate from one another. The share of this segment of the domestic group is determined on basis of its size. Sometimes, each segment can also increase its possession of land by clearing virgin land, if available.

Manner of Cultivation:

The techniques and the methods on which the agriculture activities rested are varied in nature, depending on the nature of the soil and the crop. But though varied, they are primitively very simple, retaining almost a static pattern since ancient time. The man has pair of animals, and a few simple village-made crude tools are all that the soil

required. The man is called the *halua*, the animal is generally the bullock, or buffalo at some places. The main implement for cultivation is the plough and for harvesting, the sickle. Cultivation itself is also a simple operation, but it requires hard physical work. It can be safely carried out by a single individual under the very scorching Indian sun and the torrential monsoon rain. The patterns of cultivation of the peasant differ from crop to crop. The different phases of any particular crop depended on seasonal climatic conditions and topographical variation. The actual success of agriculture, however, largely depends on the monsoon rain, the greatest single climatic factor that dominated the cultivation of rice. Other important need of agriculture is the proper irrigation system for the supply of water.

One plough of land is called *halise*. To cultivate what is technically known as one plough of land for a farmer, equal to about twelve bighas, the following cattle and implements is necessary :-- one pair of oxen or buffaloes, a plough, harrow, rake , beda, cold-breaker, two long knives or billhooks, two spades, an axe, adze and chisel, two sickles, rope for various purposes, two weeders, one goad, two poles for carrying burdens called *baoka*, a large and small baskets-measure for rice, six baskets (*duli)* of different kinds for stowing rice, a rice pedal, a pestle and mortar, and a large vessel for husking rice.

Traditional Practice of Land Classification:

The Bodos of Assam are considered to be the first ever agriculturist tribe of early Assam (present North-East India). Some historians opined that the Bodos are premier agricultural tribe of India. They are regarded as the first cultivators of wet system of rice (*Sali kheti*) cultivation in India.[9]

Paddy cultivation being the chief economic pursuit of the Bodo people, land forms the main source of the livelihood for the people of the villagers. The Bodo peasants have traditional practices on the selection of the type of the soil. In the process of land selection, they first survey the surrounding site of the land to examine the feasibility of good cultivation. Their chief consideration is the quality of the soil and availability of water for irrigating crops. Their most preferred land is clayey land, because it is suitable for *Maisali* or *Sali* crop cultivation. *Maisali* or *Sali* crop demands a clayey land so that the roots of the plants may be always in water. The clayey land is called *'hama-ha'*, i.e., the mother of the soil. Besides this, a high land grazing field for

the cattle, abundant water facility, ponds or lakes for fishing, jungles and forest for collecting raw materials for the house construction and hunting for animal flesh as well as for easy procurement of firewood, etc. are the basic consideration for their settlement. In the scarcity of anything of these, they may sometimes abandon their early settlement for search of suitable fertile land.[10]

Thus, the Bodos first select a land suitable for good cultivation, and then only they settle near the land. They determine the quality of land by the following systems of land identification:

(i) The Bodos traditionally identified a variety of herb as the indicator of quaility of land. This herb is widely known as *ding dinga* in Bodo and *moorphula* in Assamese. The land where this plant grows abundantly is not suitable for cultivation. Usually, this herb grows in permanently wet and marshy land. Such a land is not good for rice cultivation. They call such a land *khandina ha* or temporary land.

(ii) A piece of sandy land *(hasrao ha)* which is nearer to a big river with stiff bank is not considered as good land for cultivation. The explanation is that such land is enormously porous, so nutrients and water drain out through the pores into the river making it unsuitable for cultivation. The Bodos call such a land as *zwmgara* or Devil Pith. They believed that one who cultivates such a land dies out of starvation.

(iii) The Bodos consider a land as good for cultivation if it has proper irrigation facilities. And so, a piece of land which depends on rain water for cultivation is naturally not considered as good land. Such plot of land is called *swrwb daria ha*. On the other hand, a piece of land at the bank of a canal or a big drain called *zamphwi* is considered good for cultivation. Such a land is easy for wet cultivation by carrying the water to their fields, and is called *zamphwi daria*. There is popular folk song regarding the quality of a good cultivable land:

Ha ladwngmwn agini khona –
Mwsou ladwngmwn gong mena mena
Zamphwi daria daria mai gainaya
Dao zalangbai oma zalangbai
Makhou zabaonw along lwi –

Makhou zabaonw along lwi[11]

(English Rendering – I had selected a land at the *Agni* direction, I had selected a pair of bull with curved horn, the crops at the bank of a big drain have been eaten by cattle and pigs. Now, O' my dear wife what shall eat? Now, O' my dear wife what shall do?)

(iv) The Bodos always select a land, suited at a down level near the homestead for cultivation. They knew that the land at the down level near the homestead always receive the domestic sewage and cattle sewage, which adds to the fertility to the land. There is a traditional system of constructing dwelling houses, at the north side of the agriculture land, by the Bodos of northern bank of Brahmaputra river. This system is scientific because the northern side of the Brahmaputra river is gradually at higher level. The system of having agricultural lands on the southern side and dwelling houses on the north enables an easy flow of domestic waste and sewage to the fields which enhances the fertility of the soil.[12]

Irrigation System:

The Bodos have a long tradition of rain water harvesting by different methods for paddy cultivation. They arrange irrigation facilities according to their own traditional ideas. They were the first to start wet agriculture in this region. The Bodos irrigate their fields from water of hills-streams drained to the agricultural fields. Irrigation came to be regarded as an important aspect of agriculture from that period.[13] The people are especially skillful in the construction of irrigation canals and earth work embankments for diverting water from river beds into their rice fields; and their efforts in this direction are very largely aided by their closely clannish organization. Whenever the rainfall threatens to be below the average, the village headman with his associated elders fixes on the spot whence water is to be brought from the nearest river to the rice fields.[14] The cultivators of Assam, particularly in the areas of Bodo inhabitants usually never face a drought condition in their rice fields, as there are as old man made canal systems, which canalized rain and spring water from the distant hill springs or lakes. This man-made canal system is called dongo or *zamphwi*, i.e., *dong* in Assamese. The *dongs* are though not very wide but very long, distributing its branches and sub-

branches throughout an extensive paddy field. It is estimated that a single *dong* may be capable of irrigating one thousand to five thousand hectares of land in the dry season.[15]

It is worthy to be mentioned that such a large and scientific irrigation canal system was the creation of the wisdom of the people. The villagers collectively made such a large irrigation sustem. Again it is interesting to note that, there was standing rules for management and distribution of water to all the villagers at the time of need.[16]

The Bodo farmers adopt different methods whenever necessary for supplying water to their rice field. At the time when water is necessary for drenching of a field, the farmers make a temporary mud *bandw* (embankment) over the canal. After the *bandw* is made properly, the water in the upper part flooded the whole of the canal above the *bandw*. At this stage , longitudinal embankment of canal is cut in places so that the water can enter the field. After complete inundation of the field to the desired level, the *bandw* is demolished. The process of this is called *dwi - dukrang hwnai or hangra hwnai*. Sometimes, if the water canal is beyond to the position of making a mud *bandw*, then the farmers used to put up primitive shelter of jungle grass and branches of the trees at the spot from where water is to be diverted. This system is called *jagra hwtenai*. One most importnt method of diverting water from main canal to sub-canal is *harla hwnai* system. Generally water level of sub-canal remain higher than the main canal which become difficult to divert water through it. As such the farmers has to make an indigenous device of water drop-out process on the main current of canal. For the purpose they put earth over main canal upto a appreciable hieght on which they spread cushion of thatch grass first and again on it inter-woven bamboo split layer of one or two is covered so that current of main canal can not wash away the earth.This help in rising the water level of the upper part of the canal which begins to flow through the sub-canal and remaining surplus water drop out to the main canal over the cushion. This device last for a season and every year at the beginning of rainy season require for replacement. The same method also applied to drain out excess flow of water in sub-canal to the other canal when it threaten to inundate rice field. Another highly efficient indigenous equipment of carrying out of water to rice field is the application of *naodra*. It is a hollowed out trunk of wooden large pipe which may extent up to thirty feet long. The farmer use this device to carry the water from his one plot of land to another plot of land that lies to the other side of the canal by placing the *naodra* over canal through

which water passes out. Sometimes it is also used as a bridge to cross the canal in the rainy season.

It is worthy to be mentioned that such a large and scientific irrigation system had helped them good harvest even in years of drught. About this W. W. Hunter said in these words, "The streams and water courses are used for irrigation purposes in the tract along the foot of the hills and in mahals Buriguma, Chatgari, Khaling and Kariapara, where the population consists almost entirely of Cacharis (Bodos). In these Dwars the crops are always good, and even in years of drought, the Deputy Commissioner states that the harvest is never less than 75 percent of the usual abundant one. However, scanty the rainfall, the cultivators can secure a good harvest by means of artificial irrigation, which in such a case they make use of to the utmost. In the remaining mahals, forming the southern portion of the District, viz., Des Darrang, Chutia, Chardwar, Naodwar, and Chaidwar, there is no lack of streams and water courses which are equally available for the same purpose; but here the population consists almost entirely of Hindus, who will not take the trouble to utilize the means at their disposal, but would rather see their crops fail by drought. They depend entirely upon the local rainfall".[17]

Manure and Rotation of Crops:

Manure is used in certain crops only. For *Maisali or Sali* crop manure is not necessary, as the land used for this crop is situated at low level of fertilizing inundations. In the case of vegetable crops that are grown at high land in the garden, cow dung is used as manure. In the case of sugarcane lands sufficient cow dung is spread over the fields. The same way is necessary for the *Asu* crop, if the fields lie high, but most *Asu or Ahu* land being low and reliable to inundation, there is little or no necessity for manure. The dung of the cattle is thrown on the fields and spread over the land when it is ploughed. Before use the dung of the cattle is deposited in the pith prepared for the purpose besides the cattle shed, and at the time of need it is dug out.

Land is generally allowed to remain to fallow for a period of the year, as it allows to rest between the period of reaping and the next ploughing; That is to say, only one crop in the year is usually taken off the same field. For instance, *Maisali or Sali* lands are allowed to remain fallow from January to about June. In certain cases, however, two crops are taken off the same land in one year, viz., both *Asu* and *Sali* crops. The land is ploughed for the *Asu* seed in February and March, and then sown. In

June the crop is reaped; the land is again ploughed almost immediately, and *Sali* rice is grown, this crop being reaped in December. In the same way, high lands are ploughed for *Asu* rice in February and March, and the crop reaped in June and July. The land is then again ploughed and mustard seed sown in October and November, the crop being reaped in January and February. Pulses are also grown frequently as a second crop on dry lands.[18] Sometimes, high land is allowed to remain fallow for about two to three years in order to increase the fertility of the soil. It is called *Son Thanghwnai.*

Agricultural Implements and Terms Used in Cultivation:

Bodos are well acquainted with the technique of agricultural works. All the agricultural implements are their hand products.[19] The implements of agriculture that is required for a farmer is described below:

(i) *Nangal*:- Body of the wooden Plough

(ii) *Zungal*:- Yoke

(iii) *Mwi*: - Ladder. It is equipment made of two bamboos about six feet in length, which are joined together by some bars like a ladder, dragged across thefield by bullocks or buffaloes, on which the driver stands to give it weight.It is used to cover the seed, and smooth the field.

(iv) *Beda* :- Harrow, a wooden or bamboo teeth, which is drawn by two oxen, and is passed through the rice plants to clear them from weeds, and to thin the plants

(v) *Hasini*: - A hand rake used to gather the refuse and sweepings.

(vi) *Dulabari*: - Hammer or Club. It is used to break the clods after ploughing.

(vii) *Roina*: - Scoop; Shovel. It is used to collect paddy on the threshing floor.

(viii) *Hukhen*: - Fork i.e., long handled one pronged bamboo tool for turning and lifting straw or hay

(ix) *Banko*: - Spud. It is used to dig or cut up the weeds.

(x) *Kodal*:- Spade; Hoe

(xi) *Kachi*: - A reaping sickle made of iron.

(xii) *Ruwa*: - An axe is used for cutting down of trees or chopping of firewood.

(xiii) *Khonta*: - A hand weeper used for weeping and loosening the earth around the plants.

(xiv) *Baiz*: - Adze. It is a carpenter tool for cutting or shaping the wooden plough.

(xv) *Baital*: - Chisel. It is used to make or repair the implements.

(xvi) *Khada*: - Bamboo Baskets. It is used for stowing rice or other grains.

(xvii) *Muthi* :- Handle of the plough

(xviii) *Phal* :- plough share

(xix) *Dhila*:-The wooden rod fixed to the plough at an angle

(xx) *Khila* :-The wooden rod driven between the plough and the *dhila* for fixing it in position

(xxi) *Hangt*a: - The notch at the far end of the dhila to fix the rope that ties the zungal with the *dhila*

(xxii) *Lengra*: - A rounded rope that ties the *zungal* with the *dhila*

(xxiii) *Sulabari*: - Two small bamboo rods driven into two ends of the *zungal* to fix the animals

(xxiv) *Suljuri*:--The rope loop that passes between the neck of the animals and the sulabari

(xxv) *Mwi-dangur*: - A bamboo split on one having hooked of the same to which rope harrow is attached, and the other end of bar is fixed to the z*ungal*,i.e., yoke

(xxvi) *Laoti*: - A goat driving the oxen

(xxvii) *Phaga*: - A rope for binding the cattle

(xxviii) *Durung*: - General ropes used for various purposes

(xxix) *Sinkai*: - A kind of knotted strings that ties the load for carrying with baokha

(xxx) *Baokha*: - A bamboo or wooden pole used for carrying loads on the shoulder

(xxxi) *Kachi*: - A reaping sickle made of iron

(xxxii) *Tokon*: - A stick used by the agriculturist in watching their fields at night

(xxxiii) *Chikha*: A chopper

(xxxiv) *Chikha* konkai: A long bent knife for cutting wood plants

(xxxv) *Naodra*: - A hollowed out trunk of wooden large pipe for carrying water fromone plot of land to another over the canal

The important use of agricultural terms is given below:

i. *Halise*: A plough

ii. *Hal:* -Plough
iii. *Eonai or haleonai*: - Ploughing
iv. *Khahrainai*: - First and thin ploughing
v. *Samar hwnai*: - Second round of light ploughing
vi. *Boro hwnai*: - Deep ploughing
vii. *Pwmwnnai*: - Final round of ploughing
viii. *Khap*; - Refuse of grass sticking on the polugh that raised while ploughing.
ix. *Hathor chapra*: - Clod of earth raised as a result of deep ploughing
x. *Anthwr*: - Furrow
xi. *Gwran abad* (Rabi crops) :- Winter cultivation
xii. *Gisi abad*: - Wet cultivation
xiii. *Nwjwr dan-gra*: - Scare crow
xiv. *Abadthili*: - Land for agriculture cultivation
xv. *Dubli*: - Land areas for paddy cultivation
xvi. *Doblai*: - A plot of land surrounded by ridges for paddy cultivation
xvii. *Bari, mwigong thili:* -Vegetable garden
xviii. *Thiasum gainai:* -Amon paddy transplanted
xix. *Asu phwnai*: - Amon paddy broadcast
xx. *Khwthia phwnai*: -Broadcasting of paddy seeds for nursey
xxi. *Khasia gainai*: - Transplanting of paddy seedlings for nursery
xxii. *Gainai*: - Transplanting paddy seedlings
xxiii. *Son mwnse ha:* - Single crop land
xxiv. *Son mwnnwi ha*: - Two crop land

MAIN AGRICULTURAL PRODUCTS:

Assam soil has produced rice, millets, pulses and oilseedsas the chief food crops. Among these, rice is the foremost. Assam is known as the land of rice. Natives of Assam cultivated rice since time immemorial. It is said that Assam is the land where wet rice was first cultivated.[20] The Bodos are regarded as the first cultivators of wet system of rice (Sali Kheti) cultivation in India.[21] T.C. Sharma opines that they brought into N.E. India, the technique of food production by plant cultivation and domestication of animals. They are in all likelihood the first cultivators of rice in India.[22] Thus, rice cultivation becomes chief food crops of the Bodo people.

Paddy Cultivation:

The staple crop of the Bodos is rice, of which three principal varieties are cultivated, namely-

(i) *Asu or Ahu (Aus)*

(ii) *Baoya or Bao*

(iii)*Maisali (Sali or Amon)*

(a) Mode of *Asu* or *Aus* Cultivation:

The *Asu* or *Aus* rice crop is of three kinds.

The first one is sown broadcast in February and March, corresponding with Hindu months of *Magh, Phalgun, and Chaitra,* and reaped in June or July, or the Hindu month of *Ashar.* It is sown on moist and does not require much rain and is called *gwran phwnai*. It is generally cultivated in land which is just above the flood level in June and July, the object being to reap the crop before the field becomes submerged. It is sown broadcast; and then when the plants are six inches high, they are thinned by a large wooden rake called *beda* dragged across the field by a pair of bullocks. This rake also removes the greater parts of the weeds. When the plant is about a foot high it is needed by hand, but after that it requires no further attention until ready for reaping.[23] The grain of *Asu* or *Ahu* rice is inferior to *maisali* or *Sali* and is generally retained by the cultivators for their own consumption. The husked rice is red in color. The second description of *Asu* or *Aus* rice is called *bhadai*. It is known as *thaisum* in Bodo. It is grown in nurseries and is transplanted in March (*Phalgun* and *Chaitra*) and cut in August or September or in the month of *Bhadra,* the crop being called the name of the Hindu month in which it is reaped. It requires more water than early *Asu* or *Aus* crop and is also more precious, owing to its liability to be submerged during the heavy rains.[24]

The third variety of *Asu* or *Aus* is *karma*. It is sown in nurseries in May and June, transplanted in June and July, and reaped in September and October. It requires a moist soil for its successful cultivation.[25]

(b) Mode of *Baoya (Bao)* Paddy Cultivation:

The *Baoya,* is a species of long stemmed rice, which is cultivated chiefly where the land is low and swampy, but, however, its cultivation is very little. It is sown in the month of March and April, when the marshes are dry and its growth keep pace with the

rice of the water level during the rains. It flourishes in length from six to twelve feet of deep water. The straw of the *baoya* is very coarse and the grain inferior. *Baoya* grains appear to be the paddy having sting and prickles. It is reaped in the month of December and January as the *baoya* takes a much longer time in coming to maturity. Sometimes *baoya* also cultivated in the field of *maisali or Sali* crop. In this case stem grows like the *Sali* rice.

There are various considerations for the cultivations of *Baoya* paddy by the Bodo farmer. First it is easy to cultivate in low field which is almost flooded in the rainy season, because the stem of it rises with the rise of the water level without affecting the plant. It also takes a much longer time in coming to maturity. As such the crop can be reaped when water dries out in the winter. The second consideration is to avoid the failure of crop production because of some unseen reasons. The farmers are wisely speculated that in the forth coming rainy season either members of the family or the plough cattle may be affected badly by the seasonal diseases which are common features in the region. As such farmers may not be able to cultivate their field. To avoid starvation and famine in the consequent failure of crops, they in advance can sow in broadcast *Baoya* paddy in the month of *Phalgun* and *Chaitra*.

The third reason is that, there are some peasants who are having large agricultural fields. For such farmers cultivation of all fields in time is not possible. Therefore, they adopted easy method of *Baoya* cultivation in advance. It is said that *baoya* paddy is friend of distress family. There is a common saying in Bodo folk – *Baoya mai gaibla wngkham ukhwinanga*, i.e., a cultivator of *Baoya* paddy never suffer from hunger.

(c) Mode of *Maisali* or *Sali* Cultivation:

The principal rice crop cultivated by the farmer is *maisali* or *sali*, which demand a sandy, moist or clayey land, so that the roots of the plants may be always in water. The crop of *maisali* or *sali* rice is roughly classified as the larger grains called *'maima'* and the smaller grais called *maisa*. Again *maisa* or smaller grains has early varieties. Among the early variety of *maisa* or smaller grain is *kartik Sali* which is reaped in the month of *kartik,* so the name of the Hindu month. The other one is *Aghan Sali* which is reaped in the month of *Aghan.*[26] These early variety of '*maisa'* is cultivated as a

supplementary crop till the harvest of the principal rice *maima*. It is called *jagrwnai mai* as it provides relief to the farmers in the shortfall of rice.

Maisali or *Sali,* rice is sown broadcast in seedling in May and June, and afterwards transplanted in July, August and September, especially in July and August, and reaped in November, December and January.

Before transplantation the field have been thoroughly ploughed and watered, the soil being worked up into a soft pulpy mud which effectually rots the entire weed. And for the purpose the fields has to go several rounds of ploughing. The first round of plough which makes furrows in the field is very thin. It is called *kahrainai*. The second round of plough is crosswise of the first round, and is called *Samar-hwnai.* The third round of plough is called *boro hwnai.* The fourth and final round is called *Fwmwnnai*. In the case when the soil not worked up into a softpulpy mud, after the fourth round, then extra round of ploughing is necessary, and it is called *eogarnai*.

Transplantation of rice is done into two processes. If the matured seedling is directly transplanted into the field, it is called *leosia gainai*. It is generally done for the *maisa* (smaller grains). In the case of *maima* (larger grains), the seedlings is transferred to another seed bed for nursery, and after one month it is again uprooted and transplanted finally to the fields. The plantation of this process is called *khasia gainai*. The plantation of this method has two advantages. Firstly, in this process the nurseries become matured enough to resist the affect of the flood, and from attack of pests and blight. Secondly, paddy plantation of this method yields greater ear corn.

The entire paddy fields are divided into smaller plots, called *doblai*. Each *doblai* of field is surrounded by a small ridge or embankment called *ali* to keep the plant in the water with a provision of slightly raised small passes about a foot wide particularly to the side of higher parts of the plot or *doblai* in order to allow the excess water to pass out. This small pass is called *dwiba*. In transplantation about five to six seedlings together in a clump called *gosa* are put into the ground by hand, from nine inches to a foot apart in a triangular shape. This space is essential in order to enable the crop to arrive at a full maturity, that there should be water always lodged about its roots. If the ordinary rainfall is insufficient for cultivation, the farmers generally dam up a neighbouring stream, and divert the portion of cutting small channels for the purpose of irrigation.

Different Stages of Rice Cultivation:

Rice is known by the following terms in the various stages of its growth. Seeds are called *jwlwi*: the young plants or germs, *gaja*: small growing plants, *kwthia*: plants in the nursery, *kwthia akha*: when newly transplantated of seedling *leoya gainai* and newly transplanted of nursery, *khasia gainai*: when the plant begins to grow after transplantation, *maiswmkhangnai:* whenthe plants begins to give new shoots in clump, *bisong khanai:* when the plant begins to get ears, *bithorai khanai*: when it arrives at the full growth, *mai wngkharnai:* when the top of the plant bends, *mai gonglainai:* and the grains begins to ripe, *mwnglangnai:* when ripe and ready for harvesting, *mai mwnnai*: when the plants are being reaped they are called '*mai hanai:* when they are arranged and put into bundles of a hand grips, called *mwthi:* when the *mwthi* is arranged in a larger bundles is called *boja:* the strings of rice straw used to put into bundles, *panja:* a single rice straw with grains, *dangsa:* rice straw after thrershing, *jigab:* paddy grain, *mai guthi:* when the grain is husked, it is called *mai sounai:* husked rice is called *mairong* the husk, *maigab:* remains of paddy grains after husked, *mai khoro:* further cleaning of husked rice by pounding, *mairong khunai:* the broken rice in husking is called *engkur:* cooked rice is called *wngkham.*

The various solid and liquid preparations made from rice are as follows:

A variety of food item is prepared from rice by the peasant. *Pitha laodum (thinkli pitha),* is a preparation made from scented small grainrice called *jwsa*. The rice is steeped in water, and pounded in a mortar to make powder, and afterwards powder is steamed in vapour of an earthen jar, *thinkli.* In the preparation molasses and parched sesame are also mixed with the powder. *Enthao or enthab* is prepared with the flour of sticky rice, *maibra* where molasses and sesamum also added. *Laru,* a kind of sweet meatball of rice cakes, made from rice flour. Powder rice is sometimes mixed with water, and afterwards parched in a pan. This preparation is called *dwini sitao* or *mwsou thapli. Maibra* sticky rice is sometimes steeped in water and then parched over a slow fire. It is called *sourai*.

Sometimes rice flour is prepared with boiled water, where a little amount of *khardwi* i.e., potash is added. It is used as curry, and is called *ondla*. In the preparation different condiments also added to enhance the flavour of the curry. The liquid preparation made from rice is called *jumai* or *jou*. In this preparation a kind of

condiment called *emou* is mixed for fermentation. *jou gwran* or *pithika* is a common distilled indigenous spirit, prepared and consumed by the Bodos. Both the preparation is not sold.

Labour Management for Agriculture:

The process of cultivation is mainly guided by two social customs which recognizes the systems

1. **Ownership Cultivation:**

Under ownership cultivation system the following systems is practiced:

a) Self Cultivation: Every individual owner of land almost invariably cultivates his own land by himself with the help of his family members.

b) Hiring agricultural labourers: There is a custom in the society of hiring agricultural labourers in contract system. For the purpose several processes is adopted as attributed below:

(i) *Dahwna*: - An agricultural labour is hired for the period of commencing from *Baisak* (April-May) to *Bhadra* (August-September) for preparing the ground, sowing and transplanting; and for reaping and storing as well as cultivation of other crops like mustard, vegetables of winter season from the period of *Ashin* (September-October) to *Magh* (December-January); again for *Asu,* jute cultivation in the month of *Falgun* and *Chaitra*. According to this contract system for different terms a male person's remuneration is paid in kind particularly in the form of paddy along with food and clothes. This description of labour is designated as *dahwna* or *dhana*. He lives in the house of his employer and performs household services as well as field work.

(ii) *Ruwati*: - Similarly, a female agricultural labourers also employed for a period of 6 (six) months intervals in a year for paddy plantation as well as other ancillary works like weaving of clothes, catching fish and attending to other day to day domestic works under a contract system who is called *ruwati*. During the period of employment, she has to live in the house of employer and she receives paddy as remuneration for summer season and in the case of winter season she is paid one pair of *dokhona* (female garment), *Sadri* (Scarf) and blouse and sometimes *Sima* (bed sheet) also. It is, however, to be noted that the *dahwnas* and *ruwatis* never serve under any non-Bodo cultivators. This is because of the fact that the Bodo society recognizes them as helpless rather than ordinary domestic servants. Therefore, the Bodo *dahwnas* always

prefer employment in their own community and refuse employment with other non-Bodos simply of their services as above domestic servants.[27]

(iii) *Bokhali*: One of the important hiring labour systems prevalent in Bodo society is keeping a young girl as baby sitter. Of all activities it is agriculture in which the maximum amount of time and labour of the members of household is invested. As such every women of the family could not give time to look after their children and the household. Therefore, the land owner arranges a young girl to take care of their children as well as household on contract basis. The girls who serve as baby sitter is called *bokhali*. Though she is not involved directly in the agricultural operation, she provides ample scope to the members of land owner to engage in the agricultural activities without trouble.

(iv) *Laokhar*: Since the Bodos are agriculturist, a cattle rearing forms an important part in their economy. Every household rears cow and buffalo which are the basic requirements in ploughing the soil for agricultural operation. As such for tending the cattle land owner hire a male person on contract basis for a period of six months or of a year. The person is known as *laokhar*, i.e., cowherd. If individual family's cattle is less in number they use to employ a boy servant called *laokhar gotho*. Sometimes entire village community used to keep adult person as their common cowherd, called *raijwni laokar* where they contribute individual shares for the remuneration of their cowherd. This system is basically meant for facilitating agricultural operation for the agriculturist.

2. Cultivation of Landless Labouring Classes:

There is no indication among the people of the Bodos towards the growth of distinct class of a day labourers neither possessing nor renting land of their own. Those who have no land or sufficient land they cultivate the land of landlords on various conditions.

(i) *Adi* System: There are a few landless peasants who cultivates lands belonging to a *mahajan* on condition that half of the products from the land is to be given to the land owner– that is the share of produced crops between the land owners and the cultivators at the rate of 50:50. Of course, in some cases seeds are supplied by the owner of land.

(ii) *Adiari banda:* There are some poor peasants who cultivate the lands of others by taking in advance of money and cultivate rice and other crops receiving half

the crops as remuneration. In this case, the money is a sort of loan, and the borrower engages to till the land in lieu of interest. The lender of the money provides oxen, seeds etc. However, in this case if the original debt is not paid up, then no interest is charged and on payment of principal the agreement may be cancelled at any time. The cultivators of this system are called *adiari banda.*

(iii) *Jirati* System: - This is a contract entered into between the land owner and the cultivator for giving to the owner a fixed quantity of paddy for each *bigha* of land given to the cultivator.

(iv) *Banda Bwinai* (bondsmen) System: - Sometimes the poor persons on the ground of economic crisis have to borrow in advance a certain sum of money from the village rich man. In this case, the money is a sort of loan and the borrower engages his sons to till the lender's land in lieu of interest staying in the house of lenders. For his support he gets nothing except clothing and meals. They get no share of produce and are only released from their service when they have repaid the amount in full. These men who are to serve under this agreement are called *banda* or bondsmen. Similarly, female also serve to the lenders under the same condition and terms as stated above. These women are termed as *bandi.*

(v) *Fwrja* System: - There are poorpersons who have no land, oxen and also the seed of their own, but cultivate the fields of others, staying temporarily with his family by constructing hut on the land of owners. In this case the persons borrow in advance a certain sum of money or paddy grains for maintaining his family. They get no share of the produce and are only repaid the amount borrowed in full, but they do not pay anything towards the rent of the land. These men are termed as *fwrja*. The contract system is sometimes called *fwrjali*. It is, however, to be noted that under this contract system non-Bodos are also employed *fwrjali* by the land owners.

(vi) *Samdang Jagarnai:* - There is also another kind of contract for cultivating land. According to the customs, persons occasionally cultivate the land of another and live in the owner's family for about three to five years, on the condition that the latter will give him his daughter in marriage. And during the period of his servitude the owners will provide him remuneration besides cloth and food. This remuneration received by the person is known as *"junia bari".* In case of breach of contract on the part of the owner of the land, he has to pay a certain sum of money as damages. In case

the person who contracted to cultivate land should leave the service he has to pay the owner damages. This kind of description of contract is termed as *Samdang Jagarnai*.[28]

vii) Agricultural Day Labourers: - Agricultural day labourers are also appointed under *up-khoraki* system according to which cash payments are made at the rate of Rs. 2.50 per day including free mid-day meal and tiffin. They are generally employed in weeding jute and also *asu* crops.[29]

(viii) Another system of labour common in the society is that by which a man gives a certain number of day's labour in ploughing the fields of another, in consideration of getting the use of his employer's bullocks for an equal number of days to assist him in ploughing his own land. It is called *mwsou swlao lainai.*

(ix) Women Agricultural Day Labourers: - Those who have no lands of their own, the women of these family hired themselves and are largely employed in transplanting the paddy seedlings from the nurseries to the fields; they also gather in the mustard and pulse as well as assist in reaping in the rice field but do not plough. For these services they received wages in kind from the employers. They called it *hajira maonai*. Children are not employed in field works.

Besides the above-mentioned process, the Bodo farmers perform his paddy cultivation by taking help of community service. These may be described as given below:

(a) *Saori Lingnai:* - One of the most important ideal systems prevalent in the Bodo society is *Saori Lingnai*. It is an institution of mutual co-operation among the community. Through which an owner being in capable to work out his paddy plantation in the time may invite the village community for help and who give labour service by arranging a nominal feast only.

(b) *Gatha Janai:* - Still there is another institution of mutual co-operation which is known as *Gatha Janai*. Through this institution only five or six family members are invited to work in rotation basis of each intending family member instead of the village community. In this system of course no feast is necessary.[30]

Harvesting of Paddy:

Harvesting of paddy start in November, December and January, this operation is known as *mai hanai*. When the paddy is in full ripe both men and women cultivators are busy in harvesting the great winter rice crop, *Maisali*. It is a custom to start the

operation on an auspicious day. The grains with the stalks are cut with sickle (*Khasi*) leaving about one foot of the stamp (*nara)* with the earth. In the case of finer kinds, the stamp is cut close by the ground. The operation of harvesting on the morning has dew in the paddy stalk. For this the villagers who cut the paddy stalks made bunches of the handful grip called *mwthi* which are left in the fields for one or three days for drying. Later the men folk make it small bundles for carrying. But the operation of harvesting in the afternoon is different. The paddy stalks that are cut tied in a big bundlewith the rope of rice straw itself. For the purpose rice straw is cut close by the ground and is folded near the rice ears and is called *panja*. The big bundle of rice stalk is called *boja*.

On the same occasion, prior to the operation, if the rice straw is tall and standing straight, it is a common practice of the farmers to lay it quite flat on the ground, which is done by a man at each end pushing a bamboo bar over the field, and the process is called *mai lemnai*. Various reasons are assigned for this. It is said, that it prevents shaking, that it gives good time for harvest as by this operation the reaping is facilitated, for the reaper at work always bend his back to the front.

The small bundles of stalks are carried from the field by the man folk with the help of a shoulder carrier, called *baokha,* which is slope and pointed towards the both ends. Some well to do family of the villagers use bullock carts for carrying the reaped stalks. It is then piled in small rude stacks in the yard specially set apart for the purpose called *Kol Sithla* until it can be trodden out. It may be somewhere in the field or in the outer yard of the cultivator or in the outer yard of the land lord if the cultivators are a share-cropper. *Kol Sithla* or yard is built specially for the purpose of stowing rice stacks and for threshing it. It is also used for drying the grains in the sun.

Bodo families who possess more than 20 bighas or about 7 acres of agriicultural land seek the help of the entire village community, a system known as *Saori*. The farmers summons his neighbour to come and help him in this work – a summons which usually meets with a ready and cheerful response. It is quite common to see in December and January organized bodies of labourers, varying in number from ten to fifty or more, all in line and busy with the sickle in one man's field at the same time.[31] For this community service no money payments are made to the workers but the proprietor of the rice field offer cooked food, to be eaten on the spot, and rice-beer. The

community service always associated with ‘much marry talk and laughter, and many jests and jokes.[32]

Threshing of Paddy:

Threshing of paddy grains is generally done by trampling with a number of bullocks or buffaloes tied in a row and allowing them to trample in a circular manner. This is called *mara hwnai.* For the purpose after harvesting the paddy a little of the cuttings are thinly spread over the earth keeping the ears and corns upward and bullocks are allowed to trample several round on it in circular manner till the grains are separated from the stalk. After the paddy is well threshed the straws are separated by shaking with the help of bamboo hook, called ‘*huken’* and thereby gather the grains with the help of scoop called *roina*. Paddy grains are then removed from the chaff with the larger bamboo sieve, *Sandanga.*

Mai Bao Hwnai:

Paddy grains which are just separated from the stalks abounds with chaffs (*guda)* is thinly spread on the ground and then fanned with the *Songrai* whereby the dust are blown away by the wind created by the movement of fan and the paddy is cleaned. Generally this work is done by man.

The paddy grain thus cleaned is broadcast in the sun for drying and is stored in the *bakri,* i.e., granary.

Maihung:

The rice straw in any considerable quantity is preserved in staking for the cattle as fodder making heap mounted on a bamboo platform with a long pole of bamboo or wood passing right through. The stack is called *maihung*. The straw heap is cone shaped. Its base rest on a platform of bamboo and the top ends in a point. This saves the straw from being soaked and putrefied in the rains. In the rainy season when there is incessant rain and the pasture lands are flooded, then the cattle are not taken out for grazing. They are all allowed to eat the rice straw preserved in the stacks. Rice stacks, i.e., *maihung* are very common found in every household of the village.

Preservation of Paddy seeds:

Bodos are well-known in the art of preserving paddy seeds.[33] For preserving paddy seeds for the next season, soon after harvesting they select the good quality

grains before separation from the stalk. They remove all undesirable mixed rice stalks in advance and then separated the grains.

The grain that is intended for seed must be well dried in the sun, and is preserved in a kind of straw bags which encloses it on all sides over the spread of dry thatch stalk as outer cover to tie straw bags, which contains about four or five mounds, and which is preserved on a bamboo stage at some distance from the earth. This enclosure with seeds is called *maijli thumnai* and the seed is called *maijli.*

Out–Turn of Crops:

In the same land out-turn of *Asu* or *Ahu* rice differ with *Sali* or *Maisali* rice. A fair out turn from *Asu* or *Aus* land is 6 to 8 *mounds* of unhusked paddy per *bigha*. Besides the rice, a second crop of mustard seed is got off *Asu* or *Aus* land, the out-turn varying from 1 to 3 *mounds* per *bigha.* The average out-turns of *Sali* or *Maisali* rice is from 8 to 13 *mounds* of unhusked rice per *bigha*.[34]

Paddy-Pounding:

Pounding of paddy with the help of mortar and pestle is very common in villages. It seems tohave been supplementary craft practiced by the farmers and agricultural labourars. The entire exercise of husking paddy is carried out by women folk only. It is done in the first watch of cock crow in dawn. Two modes of husking paddy are followed. One is merely drying the grain in the sun, and husking in a large wooden mortar called *ual*. The pounding handle is called *gaihen.* The second method is to boil the paddy in order to loosen the husks, then to dry it in the sun, and afterwards to husk it. This mode of husking is *'runai' (ushna* in Assamese). The husking implements used along with wooden mortar and pestle are winnowing fan *songrai* and bamboo sieve *sandri*.

Plants Cultivated as Vegetables:

Each family has a garden, which contains from about one-third to one-sixth of an English acre. Nearly, every requisite of living is raised by the cultivator himself in his kitchen garden. Pulses, oilseeds and vegetables are essential commodities next only in importance to rice.

Pulse Crops:

The Bodo farmer is familiar with the production of certain types of pulse as well. The principal pulse crops produced by the farmers are -

(i) *Musur* or *lentil* (Cicer lens), sown in October and cut in January.

(ii) *Sabai* or *mati kali* (Phaseolus radiatus) sown in August and reaped in January.

(iii) *Mug* (Phaseolus mungo), sown in September, and cut in December or January.

(iv) *Khesari (*Lathirus sativas), sown in October and cut in January.

(v) *Kokling* or *arhar* (Cyttisus cajan), sown in April and cut in February.

(vi) *Sabai Bima* or *Lesera Maha* (Indian Pea), sown March and April and cut in June or July month.

(vii) *Gorsi* or *uruhi maha* (native pea), sown in September and reaped in December.

(viii) *Motor or peas* (Pisum Sativum,) sown in September-October and reaped in December to February.

Other Crops:

(i) *Jukam* (Maize), sown in February and March, and reaped in May-June.

(ii) *Job* (Berly). It is cultivated to a limited extent, in one or two places.

(iii) *Kangkri kola* or *kānkilor,* the young shoots are planted in winter season before rain and begin to produce the fruit in about 14 months.

(iv) *Gom (*wheat), sown in October-November and harvested in February-March. It is cultivated in scanty.

(v) *Kaon* (Panicum Ialicum), planted in November-December and reaped in March, April and May. It is cultivated in scanty by clearing forest.

(vi) *Sibing* (Sesamum Orientale). It is of two kinds: one is sown in April and gathered in October; other one is sown in August gathered in December-January.

Spices:

Various kinds of spices are also grown by the farmers. Among the spices – ginger (*haizeng*), chili (*Fanlu* or *banlu*), garlic, onion, coriander (*dunjia*), *gonger dunjia, bura-bud, bose,* long pepper, black pepper (*Gorom mosola*), turmeric (*haldai*), tezpat etc.

Vegetables

A good deal of vegetables is also produced in every village. Among the vegetables of green leaf varieties of food crops are *palong, chuka, lafa, lai, lai- hagar,*

china lai, mula, are sown in September, October and November, and reaped in December, January, and February. On the other hand, *mwitha gwja (tenga sak), mwitha bangal, jwglaory* are grown in March, April. They require land of the same description as that suited to *Asu* rice. A variety of pumpkin, called *kumra,* is sown in April and May and ripens in August and September. Besides, these, *thaibeng* (cucumber) *jwgwnath* (pumpkin), *Jinkha, (Fwrla (bhol), phantao* and *lao*or gourd also produced.

Different types of *aurum* plants, such as *tarun (kochu), tarun suji, manakochu (*Arum mucronatum), *basor (sola Kachu), olodor (*found in wild) are also grown in garden. Besides, varieties of Yam called *tha,* sweet potato are cultivated by the villagers.

Miscellaneous Crops:

Among these are –

(i) *Kuser* or sugarcane, it is planted in April and cut in January and February.

(ii) *Pathwi* or *pan (*betel nut leave), a creeper is planted in June, July, but they grow all year round and live for a considerable time. It is planted at the foot of the betel nut (Areca Catechu) tree and kept well manured. It clings to the long taper stems of the tree.[35]

(iii) *Goi* or Betel nuts are extensively cultivated by the almost householders of the village.

(iv) *Besor* or *Sarisha* (mustard), is extensively grown in the village. It is generally sown broadcast on lands from which the *Asu* or *Ahu* has been reaped. It requires verylittle cultivation. A plough is parsed over the land a few times, the weeds are collected and either burnt or thrown away and the clods broken. The seed is put into the ground in October and November, and the crop is reaped in February. The young leaves are used extensively as a vegetable**.**

(v) *Pathw* (jute):- It is sown in March and April and cut in August and September.

(vi) *Thanku* (tobaco), a very small quantity is grown in garden lands in November- December and gathered in February-March.

(vii) Tapioca cultivation: Tapioca cultivation is becoming popular and every household cultivates tapioca in at least half a *bigha* of land on an average. In

> fact tapioca cultivation is resorted to as a supplementary source of living during the lean periods.[36] The basic reason for the cultivation of tapioca is done by the land owners on the ground that tapioca leaves is used as a substitution of the leave of castor oil plant for feeding *endi* silk worms. Almost households of every village usually practice rearing of *endi* silk worm'

Along with the British colonialisation of Assam, some new varieties of western crops are also introduced in native agricultural practices. The cultivation of potato, cabbages, cauliflower etc. is now becoming common crops in kitchen garden of the Bodos.

Fruits:

Plantation of different kinds of fruit trees of various varieties are found almost in the garden of every village. They cultivate the fruit trees, such as *kantal (*Jacks), *thaijou* (Mangoes), *thailit* (Plaintains), *Sonsra* (Oranges), *raimali* or *Anaras* (Pine apples), *balam* or *bolam*, *kusumai* or *leteku, sumphram* (Guava), *mwdwmful* (Papaya), *naspoti* (Pears), *goi* (Arecanut), *narengkol* (coconut), etc. Among the citrous fruits are *nareng kagoji* (Lemon), *tintlang* (*teteli*), *jolphai or jalphai* (Olive), *thaika* (thekera), *thaigir* (*Au-tenga), kamrenga* (*kardai* orstar fruit), *daowa, taisuri, amlai or amloki* etc. Besides the fruit trees, the plantain and betel nut together with betel leave are universally cultivated.

Live-Stock:

Since the Bodos are agriculturist, animal husbandry plays an important role in their socio-economic life. In their agricultural operation cows and buffaloes are indispensable, so they rear them. Besides these, they also rear pigs, ducks and fowls which they mostly need for meat; offering sacrifices and for trade too. The cows and buffaloes are tended in herds in large scales in the nearby forest, where they erect a temporary colony for tending them. This place is termed as *bathwn*. For the purpose of rearing pig they construct pig-sty and hen-coop for poultry. Every Bodo women has their own mini piggery and poultry farm. Keeping such a farm is their traditional occupation. They also rear goat but is not common to all the family. The poultry, piggery and goats are entirely managed by women folk and most of these products are sold at home by themselves. Sometimes these products are also sold in the market by

the men folk on behalf of the actual rearers. These earnings are her own money and she buys her necessary articles and save the rest for future purposes.

PART- B

2. VILLAGE CRAFFTS AND INDUSTRIES:

Agriculture is the prime occupation of the people, but by no means have they lived only on this occupation. A considerably large portion of the people depended on indigenous cottage and village industries. Some of the important industries are described below.

Sericulture

The art of sericulture and the rearing of cocoons for the manufacture of various silk cloths are part of Bodo social life since the time immemorial. P. C. Choudhury holds the view that "Whether in the art of weaving or in the rearing of silk worms and the manufacture of dyed cloths, the Bodos in general had a great deal to contribute towards their development. Even today they produce them in plenty and supply the needs of their neighbours".[37]

The silk-worms which the Bodo cultivate the most is *endi* worm and the other silk is called *Muga Latha* (*Muga* in Assamese), and is cultivated very less in comparison to the first. The worm of *Endi* is a favourite diet of the Bodos. So they prefer more to *endi* cultivation.

(i) The Endi Culture (*Attacus Ricina*):- About the *endi* culture of the Bodos, S. Endle comments: "One of the chief industries, a very profitable one among the Kacharis, is that of the culture of the silk-worm known as *eri*, and the manufacture of the *eri* cloth".[38]

The *endi* worms are reared indoors and great care to be taken for cleanliness. For the purpose temporarily a separate house *nosa* is constructed and a great care may be taken from the attack of rats and other insects. A number of the caterpillars are also destroyed in the more advanced stages by the sting of *swima sikari* i.e., wasp.

For the purpose of breading the Bodo women with thin cord is passed through the base of the cocoons which are about 2½ or 3 inches in length, and then suspended on the roof. In this condition the cocoons remains for some fifteen days at the end of which period the insects make their appearance in the butterfly stage, called *sikhri*. Before able to fly away, they are collected with care placed ina piece of cloth hung on

the roof for the purpose of hatch, and at the end of 5 or 7 days eggs resembling sago-grains make their appearance in the great numbers. The processes of hatching eggs continue for 4 or 5 days. One insect on an average can produce eighty to one hundred such eggs or even more.

The eggs are then collected and it is wrapped loosely in a piece of cloth and keep it hung on the roof till a few begin to hatch.

In a further period of 8 or 10 days the eggs are duly hatched and the new born insects begin to come out. The colour of the new born insects is almost black. The insect of this stage is called *akhai-miji.* At this stage it is difficult to remove it with hand. Therefore, tender leaves of the castor i.e, *endi bilai gwrlwi* are placed besides the insects for feeding when they come over on the leave for food they are removed and placed on a *songrai* i.e., winnowing fan. In this stage frequent change of the winnowing fan is required for cleanliness purpose.

After a few days the minor insects take the size of cooked rice and it is called *wngkham-fram*, i.e, size of rice.

In the next stage the insects grew in the size of about one or two inches. In this stage the insect is called *akhai-bima*. In each stage the colour of insects from black it passes to brown, and finally to white, at intervals of three or four days; and at each change of colour the worm cast its skin in snake-like fashion. It is known as *rungonai*. During this stage the insects are placed in the three hanging bamboo bar which is about six inches distances at each other and covered with matured leave of castor for feeding. In this period the bundles of castor leave are to be placed for every 4 or 5 hours later for continue feeding.[39] The last stage is reached about fifteen days after being hatched, and the insect may be expected to set about the formation of its cocoon. This stage is called *empou gwmwn*, i.e., ripen. The actual formation of cocoon is preceded by certain signs, i.e., the insect itself refuses food for a short time beforehand and becomes of a light, brilliant colour; and on handling it gently, a soft, rustling sound, proceeding from the insect itself, can be distinctly heard.[40] To assist it in this stage of cocoon formation, small bundles of *lwkhna bilai* (a native plant) or other suitable leaves of branch such as *kusumai*, plantain, mango leaves are loosely tied together and placed within broad basket or on bamboo platforms, and the insects are then carefully placed within these

bundles; and under favourable conditions the cocoon will be formed fully in about twenty-four hours.

During the fifteen days preceding the formation of the cocoon, the insect quarters must be kept scrupulously clean, and the food carefully and regularly provided.

The most favourable food of this insect is castor leave. In the absence of this, sometimes *thasumbli bilai* (tapioca leaves) or *gambari bilai* (leaves of *gamari*) are fed.

When the formation of cocoon becomes complete, selection has been made for the next breed, and the remainders are made empty by removing the insects with hand. These insects are now ready for diet.

Process of Reeling of *Endi* Cocoons:

After being carefully cleaned in water and dried in the sun, the cocoons are placed in an earthen vessel and put over a slow fire in the solution of *khardwi* (potush), until a fitting time, where by drawing of the silk is rendered easy; they are then removed and the water gently squeezed out. After this the cocoons are taken one by one and the silk placed within the thumb of the left hand or inserted it into the stick handle to both end, whilst the right hand is employed in drawing out the silk by rounding it over the distaff. Any inequalities that may exist are reduced by rubbing them down between the thumb and finger. This mode is also adopted for joining on new cocoons. The thread is allowed to accumulate in small quality on the stick of distaff. These are afterwards exposed to the sun or near a fire till dry, when they are wound up into skin, and the silk is then ready for the weaver.

Generally in the dry and cold season the process of reeling work of cocoons are carried out by women and girls. According to S. Endle, "a kachari, working steadily at his occupation, can on an average reel off some 250 or 200 cocoons in a day".[41]

***Muga-Latha* (*Muga* Silk):**

Muga silk cloth which are produced by the Bodo people are basically for the use of family members only and seldom manufacture for sale. The cultivation of mulberry silk worms was a good subsidiary to those who cultivate it.[42] As the Bodos were expert in the cultivation of silkworm, the Ahom king Shuteupha (A.D- 1268-1281), in order to increase the production of silks, such as mulberry silk, *Mejankari* and *Muga*, appointed one thousand *paiks* from the Chutia and Kachari community to rear silk moths.[43]

The common names of the mulberry silkworm (bombyx textore) and muga silk worm (antherea assama) called *muga-latha*. The kind of silk worms which are fed with the mulberry trees are cultivated more by the Bodos than the muga silk worm (antherea assama). The silk threads produced from the cocoons of mulberry silk worms are the finest of all "with a mixture of white yellowish tinge". The cultivation of worm is a long-drawn process and need a great deal of care and attention. They are reared within doors. A separate hut is constructed with special care for the ventilation of air and for the protection from animals and insects. Such a hut is filled with bamboo stages, with a passage left all round, between them and outer wall.

The treatment of this description of silkworm is as follows: - The moths are tied on sticks, which are hung from the beams of the house; the eggs, when laid, are tied up in a cloth, and when hatched, the young worms are placed on round trays and fed upon mulberry leaves. This variety of silk worm is never put out on trees to feed, and the silk produced is of a much finer texture than that of the other kinds.[44] The time for the worms arriving at maturity varies according to the season of the year.

When they arrive at maturity the worms are removed to branches of dry leaves suspended from the roof of the house, on which cocoons are formed. The Chrysalis is killed either by continuous exposure to the sun or by smoking over a grass fire. The cocoons are then boiled for about an hour in a solution of *khardwi* (potush), after then they are taken out and the floss is removed with the hand, and the cocoons are thrown into hot water.

Process of Reeling the Silk Cocoons:

For the purpose of winding off the silk, a thick bamboo about 3 feet long is split into two and the pieces driven equally into the ground about 2 feet apart; over the interior projection of one of the knots is laid a stick, to which is fixed, a little on one side, a round piece of plank about a foot in diameter. The rotary motion is given by jerking this axle, on which the thread rolls itself; in front of the vessel holding the cocoons, a stick is placed horizontally for the thread to travel upon. Two persons are employed for this purpose, one attends to the cocoons and the other jerks the axle with the right hand, and with the same hand directs the thread up the left forearm, so that it is twisted in coming down again towards the hand; the left hand directs the thread over the axle.[45]

Spinning and Weaving:

Weaving is a traditional age-old industry exclusively practiced by the Bodos. Next to agriculture, weaving is most prominent cottage industry comprising mainly cotton cloth, *endi (eri* in Assamese); and *muga* has been playing a vital role in the Bodo economy.

Handloom weaving of Bodos is characterized by its distinctiveness and although most of the products are of purely utility purposes, some of them which are used for certain occasions are of exquisite beauty, durable quality, delicate weave, dainty designs and delightful colours. The beautiful handloom fabrics show the creative genius of individual weavers. Handloom is in fact the symbol of the largest oldest cottage industry of the Bodos and there is hardly any family in the village with no looms. It is a folk art of the Bodos. In the opinion of M. C. Saikia, "In fact spinning industry and weaving is household industry and every Bodo Kachari women is expected to excel in the finer art of handloom craftsman".[46]

Regarding the weaving culture of Bodo women, Montgomery Martin also comments: "Every women weaves".[47] In fact, Bodo women are expert weavers and they have a great heritage of traditional skills of weaving. They are the symbol of weaving and art of spinning too. Every Bodo women has their own traditional loom. Women weave not only for themselves but for the members of the family. In the early times they weave to meet their household requirements only.

Weaving and spinning art is considered the most important part of girls' education and "the maiden who is ignorant of these not only occurs the social odium, but also finds it difficult to get married".[48] It is usual practice in the society that Bodo mother which searching bride for her marriageable son, she first enquire about the girl of her knowledge of spinning and weaving art by a question, "*danai lunai rwng-gou na rwnga?*,i.e., whether she is expert in the art of weaving (*danai*) and spinning (*lunai*) or not". It may be mentioned that "a girl not having sufficient command in the art of weaving and spinning is nick named as *auluri* which means lack of substantial worth in contracting marriage negotiations".[49]

From an early age, girls begin to weave and by the time they attain puberty they become master of weaving. They are well versed in weaving their dreams through their looms.[50] The weaver can express their artistic tendencies in their textile designs. Both

floral and geometrical designs are popular among them. About the Bodo women design, P. Goswami remarks: "Kachari weaver are eager to learn how to make the design of butterfly on a flower".[51] The term of design of cloth in Bodo is *agor*. In the design (*agor)* of Bodo cloth nature played an important role.It is true that the sBodos are fond of living amidst nature adorned by trees, forest and hills which are abodes of various kinds of birds and beasts. So the Bodo belli are charmed with the scenic beauty of nature and they express their pleasure and bliss by setting designs of leaves, flowers on their cloths. The print of paws of wild animals like bears, tigers and elephant are also initiated on their cloths. Even the twinkling eyes of pea-cock and the colourful beauty of the neck of doves cannot escape the crafty hands of Bodo weavers".[52]

In the former days, there were some important *agors* such as *Thaigir Bibar* (flower of acid fruit having five shells), *Fulmwbla* and *Derhasar Agor* which had significant place in Bodo cloths. *Thaigir Bibar* was one of the most popular designs woven on cloths and bamboo fans. *Fulmwbla* and *Derhasar agor* also were equally popular in those days. Once the Bodo youths felt proud to use the scarf of *Fulmwbla* design on their necks. A saying was there in those days that - *Gwdwnao Fulmwbla, Bodo sengraphra wjwng bla hojwng bla* - i.e., the Bodo youths roamed proudly here and there with scarf of *Fulmwbla* on their necks".[53]

The *Derhasar Agor* was believed to be the sign of victory in a war. In this connection a legend is still prevalent among the Bodos that the wife of valiant Bashiram Jwhwlao dressed him with the tie of a long *Aronai* (scarf) bearing the *Derhasar* design across his chest and waist wishing his victory in war. That was done on the eve of proceeding towards the battle field.[54]

Different types of Designs:

There are different types of designs called *agor* on clothes which may be classified on the pattern of nature on which the shape of design is created. This may be classified as follows:-

1. Design on Plants

(a) *Ful-mwbla* – A variety of bloomed flowers.

(b) *Dinkhia mohor* – A design of fern.

(c) *Singri bibar* – A design of flower of *singri*.

(d) *Bwigri bibar* – A design of flower of palm.

(e) *Gongar thaisib* – A design of fruit of Mulberry.

(f) *Thaigir bibar* – The flower of acid fruit.

(g) *Singri bilai* – The leave of *singri*.

(h) *Khwdwm bibar* – The flower of *kwdwm.*

(i) *Lao Begor agor* **–** Seed of bottle gourd.

(j) *Khangkhrikola agor* **–** Design of *Khangkhrikola* fruit, *Bhat Kerela* in Assamese.

(k) *Halw dwilw agor*

2. Design of animals and Insects

(a) *Maoji afa* – Foot print of a cat.

(b) *Mufur afa* – Foot print of a bear.

(c) *Gangu godo* – Design of a mantis.

(d) *Jwrema agor* – Design of a poisonous insect.

(e) *Mwsou hathai agor* – Design of cow teeth.

(f) *Gandoula agor* – Design of dragonfly.

(g) *Thamphwi agor* – Design of Mosquito.

(h) *Khaseo bikha agor* – Design of heart of tortoise.

(i) *Khankhrai agor* – Design of crab.

3. Design of Birds

(a) *Farou megon* – Eye of pigeon.

(b) *Daosa mwkhreb* – Winkle of chicken.

(c) *Daorai mwkhreb* – Winkle of peacock.

(d) *Daokhi agor* – A design like the stool of canker hen.

(e) *Daorai agor* – A design of peacock.

(f) *Daobo agor* – A design of crane.

4. Design of Nature

(a) *Hajw agor* – Design of the hill.

(b) *Hathorkhi agor* – Design of the star.

(c) *Okhafwr agor* – Design of moon.

(d) *Okhrang agor* – Design of sky.

5. Design of Ornaments

(a) *Chandi agor* – Design of bangle.

(b) *Medal agor* – Design of medal.

(c) *Jinjiri agor* – Design of chain.

(d) *Khera agor* – Design of ear ring.

6. Design of Special Pattern

(a) *Mokhordoma Agor* (design of *mokhordoma)*: - It is a unique pattern of design, generally a bit tough to weave for common girl. It may be mentioned that for weaving this particular design are given sufficient weightage and she is considered excel in weaving. It is believed that a man who use this cloth bearing the *mokhordoma* design at the time of law-suit become victory in the case and hence the name *mokhordoma*, i.e., law-suit.

7. Design of General Pattern

(a) *Gudam agor* – Design of button.

(b) *Dola agor* – Design of *Dola*, i.e., a design of palanquin.

(c) *Anarkoli agor* – Design of *anarkoli.*

(d) *Manipuri agor* – Design of Manipuri.

(e) *Gari chakha agor* – Design of car wheel.

(f) *Khasi hathai agor* – Design of sickle teeth.

(g) *Bwiragi agor* – Design of *boiragi* (Saint)

The Bodo women weave different kinds of cloths for the use of household family members. These are female garments – *dokhona, Sadri* or *jwmgra; gamsa (gansa)* for male garment, *phali* (towel), *aronai, sima jwmgra (*a large size cloth), and for common use sush as *sima bogra* (bed sheet), *endi si (eri* cloth), *muga si* (silk cloth), *dril si, gandu si* (pillow cover) etc.

The loom employed for weaving the *eri* silk is of simple construction, and most, if not all, the material need for the purpose can be provided by the villagers themselves from local resources.

There is a separate place for setting up looms for weaving purpose. It is useally set up on a shady side of the dwelling house, or where this is impracticable, a rude structure of thatch and bamboo work is provided to shield the weaver from the sun.[55] The structure is called *ishan-sali* or *si-shan sali.* The actual work is always carried out either by the lady of the house, or by one of her grown up daughters; and it is in every way suitable to women workers, as it requires very little exertion of physical strength,

but only a certain quickness and readiness of eye and hand. The conditions under which the industry is carried on are in all respects pleasing and satisfactory.[56]

Weaving industry of *eri* clothe is a profitable one among the Bodos. It is said that a kachari (Bodo) women, if not greatly or frequently interrupted in her work, can weave about half a yard each day; and, as this *eri* cloth, woven in long strips about two yards wide, can always command a ready sale at about Rs. 2/- per yard. It will be at once evident that a good worker can in this way, without neglecting other urgent domestic duties, easily make a substantial addition to the family income".[57]

Thaokhri (Distaff):

Spinning of fibre is done with the help of *Thaokhri*. It is made of a split bamboo stick carefully cleaned and made smooth. The upper end of the stick has a knots and a lump of earthen ball or skeleton of chest of the tortoise is fixed to the other end. A cotton or *eri* cocoon fibre is attached to the knots and the spindle quickly rotated by rubbing on the thigh and allowed to spin in the air and the cotton or *eri* cocoon fibre is spun into a fine thread. This thread is used for weaving cloths.

Use of Dye:

Among the Bodos, the art of dyeing yearn and cloths were community secret.[58] As regards the coloured garments red, yellow and green were more favourite. The art of dyeing was anancient practice in Assam; the thread were either dyed before their use in the loom to manufacture varying coloured cloths or the finished garments were dyed red, black, yellow, blue and the like. The materials were not only lac or indigo, called *rumdye* in Assam, but were also prepared from various roots, leaves and barks of trees, like *khoir* (acacia catechu), acanthaceae and other ingredients, which made fast and dazzling colours. The manufacture of coloured garments has a speciality with the tribes, and it is likely that the Assamese Hindus initiated their use from them.[59] P. C. Choudhury opines that, "In the manufacture of dyed cloths, The Bodos in general, had a great deal to contribute towards their development".[60] Important references to coloured cloths is made by Bana, who states that Bhaskara sent to Harsa variously coloured and painted cloths, and smooth as birch with the pattern of jasmine flowers.[61] Bharkara Varman was one of the most remarkable Bodo rulers of Kamarupa in the 7th century AD.[62] Historian Tavernier, referring to the manufacture of lac in Assam, writes that the people produced sufficient shellac, of a red colour; with it they dyed their calicoes and

other staffs and when they extracted the red colour, they used the lac to lacquer cabinets and other objects of the kind, and prepared wax from it.[63]

Spinning, Weaving implements and Terms:

(i) *Salkhuntha* – Post of wooden or Bamboo or Betel nut tree.

(ii) *Thad* – Loom

(iii) *Gandwi* – Beam

(iv) *Makhu* – Shuttle

(v) *Seoari (Baleb)* – Lease rod

(vi) *Gonsa* or *Gonsi* – Cross bar of split bamboo.

(vii) *Ban-gwja* or *Banjabari* – the pole, on which a loom is hung; the horizontal pole at the top of a loom.

(viii) *Rasw* – Reed

(ix) *Gorkha* – Treadle

(x) *Gorai* – Pulley

(xi) *Khilabari* – Pointed stick of bamboo split for fixing the loom from rotating.

(xii) *Putul* – Temple used for stretching the cloth of both end.

(xiii) *Khaita* – Drawing hook

(xiv) *Khadini* – It is used for drawing yarn while warping.

(xv) *Boudangi* – A long cross bar.

(xvi) *Nw Hasung* – Heald pipe

(xvii) *Nw* – A large thread used in heald.

(xviii) *Nw Khonnai* – Heald

(xix) *Mushra* – Pirn, generally made of reed.

(xx) *Khainai* – Drafting

(xxi) *Danga-natha* – Reel (a reel for winding yarn)

(xxii) *Swrkhi* – Swift

(xxiii) *Jenther* – *S*pinning wheel

(xxiv) *Fogai* – A kind of pirn of large size.

(xxv) *Khuntha* – Warping stick or post

(xxvi) *Si Swngnai* – Wraping the warping in the beam

(xxvii) *Si thwrnai* – Weft.

(xxviii) *Khundung* – Yarn

(xxix) *Khundung mutha (lesa)* – Hank

(xxx) *Mushra Sanai* – Twist

(xxxi) *Sujubnai* – Lacing, i.e., to draw edges together.

(xxxii) *Maidi hwnai* – Sizing.

(xxxiii) *Thaokhri* – Distaff.

(xxxiv) *Thaokhri Akhai* – Handle of distaff.

(xxxv) *Phaneo* – A kind of reel for winding *endi* or *eri yarn*.

(xxxvi) *Kho* – Creel, (pirn keeping bamboo basket).

Other Crafts:

Different industries dealing with metals like gold, iron, copper, brass, etc. are known to the Bodos. About the village technological knowledge of the Bodos, Montgomery Martin states that "they have made some more progress in the arts. They have also merchants, goldsmiths, blacksmiths, coppersmiths and carpenter".[64]

(a) Working on Gold:

Gold is used by the Bodos from time immemorial. History tells us that a great section of Bodo people used to collect gold dust from Sonasri (Subansiri) river in upper Assam. They did not only collect gold dust but they were surely familiar with the process of refining the crude gold dust as well as with the art of jewellery works. The descendents of this tribal group are at present identified as Sonowal-Kacharis.The Sonasri river no longer products gold dust and the Sonowal-Kacharis are also not in the practice of making jewellery now.[65]

"Craftsmanship in gold also", as Mohini Mohan Brahma observes, "is not totally absent among the tribals. One Atul Boro of Tipkai in Dhubri district and another one Arjun Narzary of Kokrajhar were once known as skillful goldsmiths. They made gold ornaments of select designs which are popular among the women".[66] The basic reason for declining the gold industry of goldsmith is due to flow of gold jewellery from outside states.

(b) Working on Iron:

In the days of yore, in order to manufacture weapons, farming implements, and household items, bkacksmiths with their iron workshops were present among the Bodos. During the Ahom rule many iron smelting furnaces and workshops existed in Assam, and this place was known as Tiru loha khat.[67] The workers employed in the Tiru loha

khat as iron-smelters were known as Tiruwal. Some historians opine that the tiruwals or the iron smelters belonged to the Bodo tribes of Assam. There were three big villages of iron manufacturer or tiruwals, namely Lohakhat, Pachikhat and perakhat.[68] The Bodos traditionally smelted iron ores and manufactured various iron implements such as *thungri* (swords), Canons, *silai* (guns), *sikha* (choppers), *jong* (spears), *ruwa* (axes), *daba* (knife), *kodal* (spade), *banko* (hoe), *pal* (plough), *kontha* (weeper), *chiprang* (pick axe), *khasi* (sickle), *gaihen sama* (pestle head), *bwrla thir* (arrow head), *kepjang* (multiple fishing head), *suli* (fishing rod), *baital* (chisel), *baiz* (adz), *hatura* (hammer), *korat* (saw), etc.

Among the Bodo people "late Anaram Boro and late Bircharan Brahma of Tipkai were popularly known as blacksmiths. Both of them produced daos, axe, knifes, arrows, spears etc. But they could not develop their craft due to want of raw materials. Moreover, they did not take the craft as their profession". [69]

(c) Manufacture of Salt-petre and Gun powder:

The Bodos also developed the art of making gun powder from the salt-petre. A source claimed that the Kacharis (Bodos) developed the art of gun powder and fire-arms manufacturing indigenously. It is also said: When Rudra Singha invaded Maibong, they came across 700 hilois, 200 mounds sulphur, armours etc, in the Kachari kingdom.[70] It is believed that development of gun powder and fire arms manufacturing technique was brought to this land from China when they had migrated from there.

(c) Working on Copper:

The working of copper by the Bodos is proved by the existing remains of the copper temple known as Tamreswari Mandir, near Sadia.[71] The old copper plate inscriptions also a testimony of the use of copper by the Bodos.[72]

From the historical records it is known that the Bodo (Kachari) king Tamradhwaja had brought with him copper and other metals to the Ahom king Rudra Singha.[73] It is a custom in Bodo that during the *kherai* worship *doudini* has to sit on copper ladden low stool made of *gambari*, called *gamari pitlaini kamplai*. In any religious worship holy water also taken in copper made utensils. Copper is used mainly in making utensils and ornaments.

(d) Working on Brass:

The existence of the working on brass by the Bodos is supported by the fact. The Bodo (Kacharis) offered brass among other metals as tribute to the Ahom kings.[74] Almost Bodo family belonging the middle class and rich family have been using the different utensils made of brass. The utensils such as *dw* (cooking pot of small size), *tamjang* (large vessels used in community feast), *gahra* or *dwihu* (water vessels), *kherka* (sieve), *tursi* (dish), *lota* (water glass), *gamla* (washing bowl), *kurwi* (bowl), *garba* (a laddle) are made of brass. Brass metal works are seen among the Bodos in Dudnoi area. But for want of raw materials and money the craftsmen cannot stand promising.[75]

(e) Bamboo Works:

Various articles, prepared from bamboo, are required for day to day use in village life. In the house construction bamboo is the chief material for making posts, sub-posts, rafter, post plates, ceiling and walls of the house. Different kinds of fishing instruments like *khoka*, *sen*, *jekhai fisa, jekhai gidir* (large size), *dangi*, *jan honai* and musical insruments such as *siphung* (flute), *gongona*, *tarka* are made from bamboos. The handloom appliances namely sley, bamboo reed, swift, creel, cross bar, temple, heald pipes etc. are made from bamboo.[76] The instruments used in their day to day life such as mats, baskets, plates, sieves, winnowing fan, don, rake, combs, bows are all product of bamboo. Bamboo is also used in making head gear called *Kopri* for protection of the sunlight and rain in summer season. It is of two folds – one is wide brimmed head gear known as *San Kopri* i.e., for protection of sunlight and other one is long flowing down to the knee at the backside whose top is conical in shape. It is called *Gangjema Kopri*. According to Dr. G.C. Sharma Thakur, "The Assmese traditional headgear i.e, *Japi* formed a prestigious Bodo item of presentation as early as seventh century and till this day the item maintains its glorious tradition. Kumar Bhaskar Barman, The celebrated king of Kamrupa presented a flower bedecked *Japi* known as *Halali* to Huen t-sang".[77] They manufacture all these by their own hands with tools like *Sikha* (*dao)* i.e., knife. Thus, traditional Bodo culture is also known as bamboo culture in the sense that bamboo is inevitable item in their material culture which is widely grown and used by every Bodo household in the villages of Assam.

(f) Cane Works:

Cane is the essential raw material used in basketry. Cane abundantly grows in the forest of North-Eastern Region. Baskets and mates are used in the day to day life of the Bodo people of Assam. They are expert in the art of basket and mate making with cane which is generally done by menfolk. Professional weavers among the Bodos are few as they produce according to their household needs. Cane is widely used as a string for fastening the frames in the construction of house. It is also used in fastening woven border of winnowing fan, sieve, head gear, mate of bamboo etc. The most common tool used for manufacture of baskets and various objects is a long knife locally known as *sikha.* In the weaving of baskets and mats various stages are involved. They may be summarized as – collection of raw materials from the forest, making of splits, weaving of the baskets and mates, and finally giving the finishing touches.

(g) Wood Works:

Bodos are well acquainted with techniques of agriculture works that are made from wood. All the agriculture implements such as plough, yoke, harrow, rake and other wooden materials are their hand products. Wooden hand-barrows were also seen made by them till the recent past. Wood craft of making weaving such as shuttle, beam, pulley, charkas etc. may be termed as their rustic technology. They manufacture by their own hands with their simple tools like *daos,* knife and axe.[78] There are also individual carpenter in the villages who made different kinds of wooden works such as stool, chair, bench, wooden cot for sleeping for the use of the village people. Beautiful wood carving is also seen to have been practicing among the Bodos. The sculptor curved a good number of aesthetically pleasing images of various animals, birds, objects and human beings in varied shapes and designs. All the idols are wooden and carved only with the help of *dao,* knife and axe. These sculptures appear to be of high imagination and reveal their skillful art. It may be mentioned that late Dhanu Ram Brahma of Kajigaon village in Tipkai area under the district of Kokrajhar invented a new type of wooden reeling machine, which is operated by hand. According to an official of Sericulture Department, 5 kg cocoons can be reeling a day by this machine, and the Sericulture Department of Assam named it "Dhanu Type Pat Reeling Machine".[79] The Bodos of erstwhile eastern *Dwars* engaged themselves in the manufacture of boats. Boats are made from the

hollowed-out trunks of trees cut in the forest. These boats or canoes are called *dinga* or *dunga*. They made these boats for trade with their chief occupation of agriculture.[80]

(h) Cotton and Fibres:

Cotton and fibres form essential raw materials for weaving for the use of different purposes. The villagers are expert in spinning or extracting threads from the cotton and the fibre trees such as *odal* and *kukursita*. They "grow a good deal of cotton" along with their agricultural activities in the villages.[81] The trees like *odal* and *kukursita* grow wild in the forest. For the purpose of extracting fibres, especially jutes are cultivated in abundant. From the fibres of jute and *odal* ropes are made for the use of different purpose. Before the coming of machine-made threads, the villagers used to spin cotton in spindle called *thaokri* for preparing threads which is the usual work for every womenfolk. In earlier time *Rhea* fibres also used for making cloths and bags.

Cotton is also useful for the purpose of making pillows, mattresses and different purposes. Cotton is collected from the trees called *kun*. It is also collected from the tree called *Sumli* (Bombax Malabaricum) which grows in large numbers with surprising vigour and rapidity.[82]

(i) Lime Production:

The Bodos have a long tradition of preparing *Sunwi* or lime. They prepare it from shells of *Samo Junaikhong* or snails (Helices). There are several species of shells, chiefly snails of *Samo Junaikhong* that are burnt into lime sufficient to supply the usual demand of the villagers. It is specially confined to the chewing with betel-nuts but to a small quantity is used in manufactures. The chewing of betel-nut and betel-leaf mixed with little amount of lime is a regular feature in the village. The first thing to entertain the guest by the host is the betel-nuts and lime. It is an important custom to distribute it to the guest in the marriage ceremony of Bodos. The people used to collect shells in the dry season, long before the lime is wanted. Most are procured from marshes and old courses of rivers, where the water is stagnant.

(j) Salt Making:

The Bodos possessed know-how of the traditional practice of salt manufacturing from brine springs. There were numerous brine springs in the hills of North-Eastern region. Kacharis and Koches from Assam and Bhutiyas from Bhutan traditionally manufactured salt and sold them to their neighbours through the barter system.[83] Nowa

days, the tradition of salt making is completely disappeared due to the available supply of salt from the coastal regions.

(k) Alkaline Preparation:

As salt was a rare commodity, people resorted to use alkaline as substitute item of it. The indigenous art of preparation of alkaline ingredients is well known to the Bodos. It is prepared by burning different dry stems. Out of these – dry stems of banana plant, mustard seed straw, sesame straw and the straw of phaseolus or *Sabai* is used. The best quality alkaline is produced from the Phaseolus, as it has medicinal value also. In the absence of these, stems of dry papaya are also used. The ashes of these burnt stems are mixed with required quantity of water in order to make ball, and the alkaline is called *kardwi*.

Part-C

Commerce and Trade:

With the British colonialisation, "Assam became the importer of foreign machines made goods and the exporter of raw materials".[84] Assam, with its rich natural resources, presented unlimited prospects of the development of a new related industry, viz. the growth of the timber trade in Assam. It was also generally agreed that "Assam is provided with much more timber and wood than is likely to be required for a long time to go".[85]

In the former Eastern *Dwars* as well as in Goalpara Proper, several large and important forests exist, which yield good profit and the *Sal* timber trade of the *Dwars*, and of Parbotjhora and other paragonas, has contributed considerably to the wealth and prosperity of the district. An important source of income to the land holders of Parbotjhora, and in a minor degree to several other land lords, is derived from taxes or cesses termed as *gor khāti* (felling timber) and *thailijat* (stacking timber). Their total income under these two headings is estimated at about £ 3000 per annum.[86]In the valuable *sal* forest of the eastern *Dwars*, in Goalpara district, the Bengal woodcutters were found exceedingly busy, cutting down whatever they want.[87] The principal part of the trade in timber and jungle produce is carried on by the Bodos, who go up to the hills in gangs every year in the dry season to cut timber, which they float down to the plains for sale in the ensuing rains. This however, is merely as auxiliary occupation, and altogether secondary to their regular employment of agriculture.[88] The people who go

up to the forest of the southern slopes of the Bhutan Mountains in gang to cut timber is generally used to stay by erecting camps in the jungle for certain days. These wood cutters are termed *badari*. And for the purpose of wood cutting, the richman paid money in advance to hire the poor peasant. The persons who take them are called *dafadar* or *jafadar*.[89] The timber-cutters sometimes deploy male buffaloes to draw out the logs to the rivers. They floated down to the rivers into the Brahmaputra. "About six hundred boats come up every year from Sirajgams, Dacca, and other palces in Bengal, for the purpose of purchasing timber. It is estimated they carry down with them timber to the average value of £20 for each boat. The total value of the timber traffic would thus amount to about £ 12,000 per annum.[90]According to the timber-cutter's own statement, as per the British records, that each man brought down fifty logs and supposing two logs to be cut out of one three, which is a very high estimate. All this time, logs realised on the Brahmaputra Rs. 10 to 15 per pair.[91]

In the former days in the Eastern *Dwars,* their exchange of articles is not carried on at any particular mart, but at the several villages along the banks of the rivers.[92] When the crops of dry and wet cultivations were harvested fully in the month of February, the growers used to invite traders from outside for diposal of their yearly produces. This was done in the form of a ceremony with the beats of drums and *khams* (a musical drum) and the playing of Bodo flute *siphung.* On the occasion they sing the following song:

Oi Soumar, oi Soumar
Naua labwdw
Jwng ni mai, doi, patw, besor,
Gasibw lankfwidw.
Oi soumar, oi soumar
Naoua labwdw,
Drang fwidra, brung fwidra, brung-fwidra,
Thing -thing thing tha,
Thoro-rori-ri-rit
Thoro-rori-ri-rit.[93]

(i.e., Oh merchants, Oh merchants, bring up your boats now, here are our paddy, jute, and mustard seeds. Take them all a way, Oh merchants bring up your boats now. Drang

fwidra, brung fwidra, brung-fwidra (the drums roar), thing-thing, thing tha (the symbols tinkle). And ring the flutes too - thoro-rori-ri-rit, thoro-rori-ri-rit.)

It is worthy to note that boats from Goalpara and Kamrup districts come up the rivers during the rainy season with the articles of import and exchange them for rice, mustard seed etc. either by barter or by first selling their goods and then purchasing for cash what they require.[94] The Bodos also gain subsistence by collecting and trading in jungle products, such as lac, beeswax, fibre, dyes, gum etc., which are found in abundance. Lac is exported in considerable quantities.[95]

In the former days, in the districts of Goalpara, Kamrup and Darrang, the local trade is chiefly carried on by means of permanent markets as well as periodical fairs. Small shops are scattered all over the country, and *hats* or markets are held on certain days of the week in most of the villages.[96] At these gatherings people collect from within a radius of ten to fifteen miles, returning to their homes the same evening.[97] The principal exports are mustard seed, jute, cotton, timber and lac. Small quantities of wax and ivory are also exported, because a very scanty use is made of them by the people in the way of manufactures. The imports obtained in exchange for the commodities are principally: - salt, pulses of different kinds, oil, sugar, tobacco, treacle, piece goods, spices, brass and bell meal, utensils, gold and silver articles, chinaware, etc., besides a variety of articles of European manufacture.[98] Besides the markets, a number of petty traders, called *basania* or *bepari*, literally floating or moving traders, visit almost every village, for the purpose of exchange or sale of certain articles, and the purchase of others.[99] The local trader is principally in the hands of Marwari merchants. They are known as *Kaya houya*. They drive bullock cart carrying saleable commodities from village to village with ding-dong bell hanging on the neck of their bullocks. This alarm of the bell is a signal about their presence in the village, where the exchange of articles took place between the trader and the villagers.

Trade with the Hill Tribes:

It is to be noted that the Bodos did engage in border trade activities during the ancient and medieval periods. Having migrated from the Sino-Tibetin border regions through the numerous mountains passes the Bodos, setting in the northern foot hill regions of Bengal and Assam, had for long maintained trade links with the bordering hill tribes on the north and through them the Tibetans and the Chinese trades. Several

trade routes through these passes existed throughout the ages between Tibet and the North-eastern parts of India. The places in the foot-hills through which these passes opened up to the Indian plains were and are still known 'Kachari-Dooar' meaning door or gate-way opening to the Kacharis. Several such *Dooars* exist on the northern foot hills of Jalpaiguri in North Bengal and Kokrajhar, Bongaigaon, Barpeta, Nalbari, Kamrup, Darrang and Sanitpur districts of Assam.[100] A market was opened of each *dooar* through which extensive trade was carried on. Besides the periodical markets, annual fairs hold in winter season at important *dooars* like Dewangiri, Udalgiri, Doimara and Kherkeria. The articles brought for sale by the Bhutia, were as follows: ponies, sheep, dogs, salt, gold blankets, yak tails, musk, wax, lac, dried fruits, dye, needles, spice, Bhutia bags, onions, garlic, chilies etc.[101] In exchange for the above articles, the Bhutias took away with them the following items – paddy, rice, *endi (eria)* silk cloth, cotton cloth, *dunko lepa* cloth, *kharu* cloth. It is to be mentioned that these two last named cloths are specially made by the Cachari (Bodo) villagers for sale to the Bhutias. Besides these, brass pots, kahar pots, bar iron, bundles of pan leaves, betel nuts, molasses, peacocks, parrots, bundles of cotton threads, dried fish and flesh, tobacco, jabrang and rope seed were also taken by them.[102] Barter trade in the commodities named above used to take place between the hill traders and the Assam plains traders mainly Bodos. Of all these border market Udalgaguri was by far the biggest market and used to be known as the Bhootia Mela.[103]

Means of procuring money from money lenders:

Land mortgage:

A farmer who needs money can procure it by mortgaging his land to the money lenders. There are two systems of mortgage:

(i) **Sukho nangnai (Gada Bandhak)**: A poverty striken villager approaches a village *Mahajan* to borrow money with a proposal of pledging his cultivable land in favour of the later. Then the *Mahajan* agrees to lend money in lieu of which the borower has to place his land under mortgage for a specified period.[104] The land goes under possession of *Mahajan* from the day the deed of mortgage is executed. The agreement generally involves a condition that the land concerned would be fortified to the *Mahajan* in the event of failure to repay the debt in the specified time. In this system of mortgage no interest is taken because the annual produce of the land is deemed to be the interest.

(ii) **Sukho nangwi (kai kalash)**:- In this system the principal is not required to be returned by the borrower and after a stipulated period land reverts to the land owner. In this system land is not mortgaged for long period in order to gain more benefit from the borrower.

Money and Paddy lending Policy:

Dharta: Among the village folk, there is a system of giving money or paddy in advance on certain condition in locally termed as *Dharta* or *Dan Pratha*. By this system money is given by a village *Mahajan* or a businessman on loan to the poor borrowers who ask for it when he falls in dire necesity for procuring food, cloth or for treatment of patient. There is no question of interest, but a verbal aggreement is made that the money would be returned in kind. The price of paddy is settled beforehand at the will of money lender at the rate far below the current price. Thus, the large portion of paddy of the borrower goes to money lender. Not only that at the event of non realization of paddy at the stipulated time the interest is calculated 50% in term of paddy. As for instance, suppose a borrower has to pay four mounds of paddy (1 mound = 40 Kgs.) to a *Mahajan* for one hundred rupees as settled previously, the interest accrues to *Mahajan* two mounds and thus the total quantity of paddy to be repaid amounts to six mounds inclusive of interest. In this way after some years the amount of paddy due to *Mahajan* inclusive of compound interest becomes too high to be repaid and ultimately the poor debtor has to lose his land to the creditor.[105]

Besides these, a person also can procure paddy in advance for standing crops, for which the borrower has to repay the entire produce of standing crops earmarked in advance for borrowing the paddy to the lender immediately after the harvest. However, it happens in a very rare case. It is called *mai dahar janai.*

Weight and Measures:

1. Measurement of Time:

In ancient Assam, time was calculated by observing natural phenomena. The Bodos generally record the beginning of night from the sunset and the end of night with cock's crow, which they call *'daola gesernai'*; it has also number of counting the round of cock's crow. In the villages the time of the period after day is known by the position of the sun or when going on a journey the time is generally recorded by the time taken for the eating a piece of betel-nut which generally takes fifteen minutes for each

place.[106] Another way of expressing time, in describing the time required to do a thing, mention it in 'smoking tobacco once'.[107] The time during the night was calculated by observing the position of the moon in the night sky.

The periods of the day and night are as follows:-

Dawn – S*wrangpha mapha* or *Andra-andri*

Early morning – *Bere phungjani*

Morning – *Phung*

Morning period – *Phungbili*

Day at (9:00 to 10:00 A.M.) – *Sansu*

Mid day – *Sansu thir*

Descending Sun (1:00 to 2:00 P.M.) – *San dedennai*

Afternoon (3:00 to 4:00 P.M.) – *Belasi*

Geting Dark – *Mwna*

Evening (5:00 to 6:00 P.M.) – *Mwnabili*

Dusk (6:00 to 10:00 P.M.) – *Bilifang*

Night – *Hor*

Midnight – *Hor gejer*

After midnight – *Okha naisi*

Before dawn – *Swrangsi Swrangsi*

Full day of 12 hours, from sunset to sunrise – *Sanse*

Full night of 12 hours, from sunrise to sunset – *Horse*

30 days (1 *mass* in Assamese) – *Danse*

12 Calander months (1 *batsar* or year) - *Bwswrse*

The increasing forth night of the month's age, or from new moon to full moon, is termed as *dan-swrang* and the decreasing forth night, or full moon to the next new moon, *dan-kwmshi*. The new moon is termed as *okhaphwr gwrlwi*; and the full moon is called *okhaphwr gaodang*. The Bengali era is used in all mercantile transactions.[108] The Bengali era commence on the first day of the month of *Baisakh*, and end on the last day of *Chaitra*.[109]

2. Measurement of Quantity and Weight:

In ancient Assam there was no unit sustem to measure weight. Till the middle part of medieval period, villagers used a kind of basket to exchange things in weight. In

the former days, weights are seldom used by any of the cultivators, who generally dispose of their produce in bulk or by measures.[110] The basket used to exchange things in weights is called *don.* It is a bamboo basket of definite size. Sometimes a bamboo basket called *kada,* larger than *don,* is also used for the purpose. Later, however units of measurement of weights were employed as per the Assamese or Bengali neighbours. Another counting measure of the villagers is *bisise,* which is equal to 20 *don,* or 100 *ser* or Kg., *bisinwi, 200* seror Kg. or 40 *don*.

The petty shopkeeper when selling their goods, use the ordinary *ser* of 80 *talas*. The component parts of *ser* being the same as in lower Bengal.[111]

5 *Sikki* = 1 *Kachha*; 4 *Kachha* = 1 *Chhatak*;

4 *Chhatak* = 1 *Paya*; 4 *Paya* = 1 *Ser*;

5 *Ser* = 1 *Pasuri* or *kada* (One *Parsuri* also called 1 *Parla*)

8 *Pasur*or *khda* or *Parla* = 1 *mound*.[112]

The measurement units *Paya*, 4 *Paya* = 1 *Ser* which is equivalent to 1 Kg, 5 *Ser* = 1 *Parla* (instead of Pasuri), 8 *Parla* = 1 *mound*, or 40 *Ser* or 40 Kg are still current in business transaction.

3. Liquid Measure:

5 *sikki* = 1 *chhatak*; 4 c*hhatak* = 1 *paya*; 4 *paya* = 1 *ser*; 40 *ser* = 1 *mound*.

4. Measure of Distance:

The people have very vague idea of distance. They are acquinted with the word *Kos*, i.e, *agan thabainai*, but they can never tell how many *Kos* or *agan* one place is distant from another. Some times they express the distance of their journey; for short distance, they say a place by arrow-shots off.[113] To express a short distance the standard measurement is made by the number of *pans* or *goi khandi* (betel-nut) a man chew in the course of journey. Some times distance is also indicated by distanc travelled by sound, for instance ‘distance of a cry’s reach’. The long distance is usually expressed by days such as ‘one days journey’, ‘four days journey’ etc. Another standard measure of length in Bodo is *mu,* a length from elbow to the end of middle finger.

5. Land Measures:

The following were the common standard measures of land used by the villagers – 3 *jab* = 1 *anguli*; 4 *anguli* = 1 *muti*; 3 *muti* = 1 *bigat*; 1 *bigat* = 1 *hath*; 5 *hath* = 1

Chhatak; 16 *Chhatak* = 1 *katha*; 20 *Katha* = 1 *Bigha*, equal to 14,400 square feet.[114] The above standard measures are also known as Bengali *bigha*.

Prior to 1852, land in Asam was measured by a *tar*, or measuring rod of 7 *haths* (cubits), 1 *bist (*span*)*, and 4 *angulis* (finger breadths) in length, equal to nearly 11½ English feet.[115] In 1852, by order of Government (British Government), the standard Bengal *bigha* of 14,400 square feet was introduced into Assam; and since that date, all land measurement papers have been prepared according to this standard.[116]

Currency:

Cowries was used as a kind of currency in ancient Assam, as a standard of exchange. The earliest reference to the use of cowries is found in the *Harshacharita* where, Bana states that Bhaskara sent to Harsha 'heaps of black and white cowries' as presenst. The use of cowries is further proved by the Tezpure rock inscription of Harjara.[117] Cowries remained in use among the villagers as a medium of exchange till the introduction of currency though in limited scale.

Religious Ceremony for Agriculture:

Being almost exclusively dependent on agriculture for livelihood the Bodos have many ceremonies and religious rituals connected with harvesting, sowing and other agricultiral operations. The most important of them ofcourse is the *kherai Puja* which is performed to invoke blessings of good harvest or as thanks giving after the harvesting.[118] There are two types of *kherai* worship which is performed for profuse yield of crops. One is *Dwrshwn Khera* which is performed during the first week of the Assamese month of *kati* (September - October month). This *Kherai Puja* is meant for *Mainao*, who is the Goddess of wealth. It is also known as the *Sali Kherai* as the ceremony is associated with the *Sali* or winter crop.[119] Another *Kherai* worship is *Umraokherai* which is held during the month of Ashar, at the end of the Amthi Sua (the unclean period) for wellfare of the villagers as well as of the crops. It is also known as the *Ashu Kherai*, being connected with the *Asu* or a summer season crop.[120]

Besides *kherai* worship, the Bodos observe some ceremonies relating to the agricultural operation. In the first day of the ploughing of the soil, they start either Monday or Wednesday for *maisali* or *Sali* crop, and for the crop of *Asu* they prefer Saturday or Teusday.[121] On the occasion of *khwtia Phwnai* i.e, sowing seeds of paddy, the owner of the house first offer a pair of areca nuts and betel leaves (*Goi jora-Pathwi*

jora) to the Goddess *Mainao* and salute facing east by kneeling and then start to sow or broadcast the seeds of paddy.

At the time of uprooting the seedlings for trnsplantation also, the elderly female member of the family offers a pair of areca nuts and betel leaves, and then starts uprooting the seedlings.[122] On the first day of *mai gainai* (paddy plantation) some rites are performed. On the day the elderly female members of the family offers areca nuts and betel leaves (*Goi jora-Pathwi jora*) in the name of *Mainao* or the goddess of wealth and anointing a little smustard oil on small quantity of seedlings she salutes towards the east and then starts plantation. Afterwards other members of the family start plantation all saluting to the east. Saturday and Tuesday is considered auspicious day for the *Asu* paddy plantation. In the case of *Maisali* or *Sali* paddy any day is regarded auspicious day.[123]

The Bodos perform pre-harvest ceremony known as *Mainao Lainai* i.e, bringing Goddess of wealth. It is done when paddy becomes ripe and time for reaping. For this purpose, the elderly women of the family become fresh after taking bath and cleaning her hair. When she proceeds to the field with a sickle for reaping in the early morning, she has to lose her hair and should refrain from talking to other on the whole process of operation. She brings a clump of corn ear (*mai bidang*) after sprinkling holy water on it, kept it inside the *Bakhri* or granary of the paddy.

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