CHAPTER–IV
SILK IN SOCIO-ECONOMIC LIFE OF
THE TAI-AHOMS OF DHAKUAKHANA

4.1 Silk Culture of Dhakuakhana

Silk has a wide variety of uses and importance in the Tai- Ahom society. Therefore, sericulture provides a gainful engagement to lots of people in the villages. Sericulture being an agro-based industry is highly suitable to the area having an agricultural base and problems of providing employment to the rural landless people both male and female. Hence, many activities are involved related to silk, like, collection of seeds, rearing of silkworm, stifling, degumming, reeling, weaving of silk cloth, fabrication in the garments etc. Therefore it has associated to different people having different age and sex. Silk is considered being an indispensable aspect of the socio-economic life of the Tai- Ahoms of Dhakuakhana. Many social and religious functions are incomplete without silk and varieties of norms and taboos are affiliated to silk are prevailed in the society. People involve with it, continuing from the time immemorial. Earlier, it was hold only for domestic purpose, but, now a day, it has commercialized in a vast manner. Monopoly in muga silk production increases the demand of it in the market. As like as muga, eri and mulberry has also highly valued because of its beauty. In china, silk fabric is not only used for making fine cloths and banners but also as blotting pads for documents more than 200 different characters in the Chinese alphabet have connection to sericulture mulberry or silk (Jethner, et al, 2012). In Dhakuakhana, rearing of muga in the somani of street side, a loom with silk thread in the portico or below the granary or in the courtyard is common scenery of each village. Various sounds of working looms have heard. In the villages, a woman is seen either busy with her loom or takuri or maintaining larvae in the somani. Although agriculture is, the principle livelihood of majority of the villages still sericulture plays a vital role as another source of income.

4.2 Significance of Silk in Social Sphere

The social life of people always depends on their physical environment. Conducive environment for silkworm rearing makes the silk as a cultural element of
Tai-Ahom culture and establishing some norms and values in it. Rearing of muga silkworm in outside in som trees, rearing of eri with castor and keseru leaf and mulberry silkworm with mulberry leaf in large bamboo tray inside the house are some common scene in the rural agrarian Tai –Ahom society. During the cultivating season, it is a common question to each others in the meeting that whether they reared it or not, how many seed has taken to cultivate and from where it has collected, how many cocoons has gained or lost so and so. The male folk engage in muga silkworm rearing only, but not with other process. Moreover, only females has affianced in eri and mulberry culture. In the field study, no one male has found as practitioner of both of these. In relation to such culture, some other habits are also formed, such as eating of pupa, wearing of silk as a tradition; use the host plant as medicine and fruit because of their availability in own garden and others. It is not only a product of those people, but also a representative of its culture, tradition, emotion, and sentiment. There, a brief description has made on the social consequences of silk.

4.2.1 Sericulture as a Part of Cultivating Life

The villagers spent lots of time in their daily routine or in year with sericulture activity. It is a primary as well as sideline activity for the rural people. During the lean period of agricultural cycle, income has assured by taking up sericulture. Return from sericulture has assured with a short period, in one to two months. Even, there are some people taking up sericulture, as mainline activity has secure regular income at periodical intervals spread throughout the year.

The villages relish both ahu and sali paddy cultivation. Besides these, they also produced mustard seeds, sweet potatoes, pulses, sesame and a few varieties of winter crops. The seeds of ahu cultivation has planted in the month of March -April and completed in June-July, which is the time of rearing and reeling of jethua breed of muga silkworm. The families of available work force can overlap both of these, but sometimes families of fewer work forces have to select one only. Some families having own somani or interest preferred to rear the mugaculture instead of ahu cultivation. There is a saying related to ahu cultivation and muga cultivation as

Aahukheti aahukal
Mugakheti kapal bhal.
This proverb denotes that *ahu* rice cultivation is difficult to do and cultivation of muga is depends on the luck of rearer. Sometimes, agriculture and sericulture cycle are alternately practice by them. After completing the plantation of *ahu* paddy rapidly, they start to rear the *jethua* breed of muga, then harvest the *ahu* paddy and later harvest the muga. After few days, they planted *sali* rice and then rear the *kotia* breed in the month of November-December. They harvest the *sali* crop and *kotia* breed contemporary. Then *Jarua* breed has practiced. Some additional breed like *aherua* and *bhodia* has reared between those. Moreover, during the same time, they also rear the eri and mulberry also. As these may be rear indoor, hence labour is not necessary largely for those as like as muga.

### 4.2.II Sericulture as Leisure Time Activity

From a tight schedule of the villagers, they take a leisure time for their sericulture activity. Womenfolk of any age in their leisure time are busy with reeling the *eri* thread by *takuri*. Moreover, the men folk are busy in manufacturing and repairing of different implements related to sericulture(photo plate-28). They prepare *chilingi, khong, kuki*, bamboo tray, bamboo mate, *takuri, jotor*, bow and arrow, *chak, khilang, khorika* and different parts of loom like *xiri, tulutha, xali mari, durpati, dalmari, xali, nachani, chereki, ugha, letai* etc.

![Photo Plate 28: An old man preparing implement in som garden.](image)

### 4.2.III Division of Labour

Miscellaneous nature of people, according to their age and sex is created a division of labour regarding sericulture. Women’s precision and patience make
silkworm handling easier. Traditions and customs of society in rural context do not encourage the majority of the rural women to work outdoor. There sericulture proves to be a boon wherein women can carry all the work within the house after attending to their regular household chores. Hence, silk rearing, reeling, weaving etc. are ideally suited for family women in this rural area. Among the women, the young lady rear muga silkworm in outdoor, weave and decorate the fabrics, the aged women look after the indoor rearing of eri and mulberry silkworm, make jali for cocoonage, degumming and reeling the yarn, check the stifled cocoons etc. Both aged women and young girls spun the thread into bobbin, performed with the help of spinning wheel jotor. A loom is a status symbol for the womenfolk to know the intricacies of weaving and has always been a way of life. The malefolk engaged in collection of seed, outdoor rearing specially in night, collect the feeding leaves, plantation and maintenance of host plants etc. The young boys are helping to expel the bats and birds, and the insects through the bow and arrow. During the survey, researcher has noticed that younger generation now have take interest in the craft also. Majority of young girls after school or college hours help their mother to spin the cocoons. Many young girls have taken craft on commercial basis to meet the increasing demand for the silk. Thus, this traditional activity has helped the young girls and homemakers to lend a helping hand to the males in winning bread for the family.

**Case 4.1**

**Date 16.05.08**

Bhadreswar Gogoi, aged 54, of Maloubari village is a silk cultivator rearing every type of silk, muga, eri and mulberry. He is the head of family with his wife and son and daughter. He is a cultivator and he cultivates rice and other seasonable crops along with sericulture. He has sufficient work force to run all of these at the same time. Generally, he is engaged in rice cultivation with the help of his son. However, during the time of rearing of muga silkworm he played an important role. He check the silkworm, transferred them from one tree to another, maintain the host plant, staying in the somani during night, collects the mature larvae from somani and brought them to home for cocoonage etc. His wife staying in the daytime in the somani, expels the birds and bats, helps her husband to collect the mature larvae etc. He said that during the time of maturing all the larvae, they have move downward to the tree trunk. Without sufficient menpower, the larvae may lose. So, all the family members are preparing for
that time to collect them and store in the kuki. Generally, his participation has completed with it. Reeling, spinning, weaving, designing etc. has done by his wife or daughter. In case of eri and mulberry silkworm, all activities have performed by the female members of the family.

**Case 4.2**

**Date 29.04.08**

Dulumoni Gogoi, aged 46, is a permanent resident of Bantau village. She also rears all three types of silk but not extensively, because of lack of menpower. She has generally deal with reeling and weaving of muga cloths. Her old mother-in-law is practicing the eri silk and during the leisure time, she spin the eri yarn and rolled the bobbin in jotor. Her husband generally practiced the rice and other seasonal agriculture and related to sericulture too. She said that her husband collects the seed of muga silkworm from here and there, and arranges money to bring those. He also engaged himself in collecting the keseru leaf for eri silkworm. According to the informant, her younger boy helps them in expelling the animals and birds entering to the somani, collect the leaves of castor host plant from the outside, gather mulberry leaf, and cleaned them to provide to mulberry silkworm. Her children attracted to those work because they are fond of pupae for its great delicacy.

**4.2.IV Silk in Socio-Cultural and Religious Functions**

Silk is a part and parcel in any cultural and religious function of the Tai Ahom society, either it is a marriage ceremony or a festival like bihu, puja or any get together. Silk is a prestigious garment with high valued. In village setting, it is a symbol of proud for the women, who make best attire among those. From earlier days also, silk occupies a high position in the society. Only the royal families of earlier days wear mejankari silk. In the marriage ceremony, the bride must be wearing the silk cloths. Moreover, during marriage the family of bridegroom must give a set of mekhela chardar of muga to the bride in joron (a ceremony before marriage). The mother of the bride has also presented a set of riha and mekhela of muga silk from the family of bridegroom. In such auspicious occasion, the guests are also wear silk attires. From the fieldwork, the researcher has observed that although the people wear both muga and mulberry silk in the marriage ceremony, still, they mostly prefer to wear muga silk cloth than others. Eri
silk cloth has not wear and use as *mekhela chadar* traditionally but in modern context, weavers interested to make a new one to attract customers and hence prepare it according to customer’s choice. Sometimes, they make the fabrics by mixing eri and muga, or eri and mulberry, or muga and mulberry. The family of bride has also offer silk dress to the bridegroom to attend the ceremony. It is considered as a sign of affection to their would be son-in-law. From the beginning of a marriage life or for the continuation of a happy married life, the girl has observed thoroughly from the bridegroom’s family. Hence, mother of girls has also observed. In such context, silk comes on spotlight where a saying regarding this has been sang,

*Makatkai jiek kaji*

*Dheki thorare bate paji*

*Maakeh nejane tatar diha*

*Jiekar gat phulam riha*

Daughter is more expert than mother is and spin with pedal tooth mother do not know the art of loom but daughter wears decorated *riha*

There are so many marriage songs also, where involvement of silk has seen.

This is a song to the bride,

*Jokari pindhile king khapar mekhala*

*Maake achile sai*

*Ainu mane garhe mor ai barane*

*Namani jilato nai*

Mother observed to wear the mekhela of king khap by the daughter and think that nobody is there like her daughter.

During the time of *joron* some jocular songs has sung towards the mother-in-law of the bride.

*Kinu rihakhoni anila xahuai*

*Koinar galoike nate*

What type of *riha* brough by mother in low not covered form the body of bride?

In the marriage day bath, this has locally called *nouwa*, there is also a song sang by the females as,

*Snan kari aidewe kope tharahari*

*Pelai dia patar bastra pindhak lahe kari*

The bride shivering after bath
Let give the silk cloth to wear

Another marriage song has been sang during the time of dressing of bride as,

_Gawa machi dibya patbastra dila aani_
_Prabandhe pindhile taake aapuni gohani_
_Ratnar mekhela tani bandhile kakali_
_Musthite lukai jen batahate hale_

The bride has been given silk cloth

And the _mekhela chadar_ to wear on their waist

The cloth can keep in the grip

A special kind of marriage song that is locally call _joranam_ has been sang as

_Harmaniom bajoa hatat dhari lagowa_
_Aaideor rihakhan Kalikatat magowa_
_O juti latar chemij disu patar_
_Sualkushir mekhela disu Benarachi chadar_

The bride in marriage has given a _riha_ ordered from Kolkata, _mekhela_ from Sualkuchi and _chadar_ from Benarash.

There is a mention of mulberry silk in the marriage songs

_Ga dhui aaiti makak hudhile_
_Ki xaj xalaba pai_
_Sate hukuwa muthite lukuwa_
_Xai xaj xalaba pai_

After bath the bride ask her mother

What dress has to wear?

Dried in shadow and keep in grip

That dress should be wear

After the first puberty of girl, the girl welcomed to the new life by giving _riha_ oh muga silk and _mekhela_ in her body. In bihu songs it mentioned as

_Jetiare para gate muga riha khani lala_
_Bayaxat aamatkoi xaru_
_Tetiare para Tumaloi aaxa kara_
_Atia kenekoi ero?_

You are younger than me, I loved you from

When you get your first puberty, how I forget you now?
There are many bihu songs related to silk, which reflect the significance of silk in their society. The gorgeousness of silk, weaving of silk fabric has expressed along with love and affection of young girls and boys to each other. In the spring, the heart of young ones in flutters a little and sings.

\begin{verbatim}
Atiko chenhahar mugare mohura
Tatokoi chenhahar mako
Tatokoi chenhahar aamare bihuti
Napati kekeko thako?
So dear is the bobbin of muga
so dear is the shuttle
dearer still is the bihu of Bohag
what also to do but observe it?
\end{verbatim}

In Huchari, the group dance of Bohag Bihu, the initiating part is call jojana, where a little depiction of silk stated in the songs as,

\begin{verbatim}
Swargadeo ulale batcharar mukhaloi oi
Duliai patile dola
Kanat jilikile narare jang-phaai
Gate gomechengar chola
The king entering to the gateway
Palanquian-bearer makes ready the palanquin
brightened jang-phaai is shown in ear
in body there is silk shirt.
\end{verbatim}

Rearing practice of silk has also cited in the various songs of bihu. The worms have to be protecting as they feed on trees. A scene of daily life had come to mouth of illiterate villagers of earlier days spontaneously. Some of those are

\begin{verbatim}
Kaorir xataru muga chungiya
Bohiba je nidie dalat
Mure xataru mure aai-bopai
Phuriba je nidia gaot
The crow’s enemy is muga rearer or watcher
He has not allowed the crow to sit in the tree
My enemy is my parent
They do not allow me to move around in the village
\end{verbatim}
Dhenur jor batota nai
Kasta kari kari tor ghar patilo
Mur ghar patota nai
At the foothill, I was rearing muga
there was none to twine my bow string with such efforts
I have made a home for you
there is no anybody to make a home for me.
Jethua katilu kotia katilu
Boboloi mugakoi chola
Aageye najanu atia bujisu
Tomaru antarkhan kola.
I have spin jethua and kotia thread
To weave the muga shirt
I did not known earlier, but now understand
Your heart is not fair.

In earlier days, the seed has collected from Garo hills by many rearers. That is reveals in those folk songs as,

Garo paharare mugakoi kotia
kotia puhiboloi lolu
ahabar bohagot biakhon patimei
atiai maghate kalu
I have reared kotia muga
and bring the seeds from Garo hills
I am telling you now, in the month of Magh
that, I will marry you in next Bohag.

Somare chirili pat oi lahari
Somare chirili pat
Tumake bhabote achetan hoisilu
Xagun parisile gat.
O’ dear, the leaf of som is there
I was sure senseless and
vulture has disturbed in my body.
The disease of silkworm is a common problem faced by the rearer. In the bihu songs of Dhakuakhana, it is also point out along with stating of renowned pilgrimage place Basudev sthan.

*Muga puhisilu phutuka ulale
Gharaloi aahilu gusi
Tomak paboloi Basudev thanot goi
Kali hoi aahisu xuchi*

I was reared muga silk worm but effected by disease
So I returned home
I got purification in the basudev sthan
To marry you

Weaving of different types of attire for male and female reflected in the songs. A healthy sentiment towards the lover along with muga silk has seen in the song below

*Baru tenehale moi jao bhotiai
Anugoi kopahar jola
Tumi boi loba mugakoi mekhela
Muku boi diba chola.*

Oh, let me go to collect the teased cotton
You will weave mekhela of muga for own and shirt for me.

The endemic golden muga silk of Assam is appreciated in the songs, sang during the time of bihu.

*Kotiar xutare rong xonowali
Dekhi bhal lage mon
Chahakir chowali aanim aanim lage
Hatot naikia dhan.*

The golden muga yarn is looking nice
Though I am not rich but
Have a desire to marry the daughter of rich.

Besides the fine and decorated fabric, the yarn of waste cocoon are weave as warm cloth. Such type of cloth is also takes a place in the songs of bihu.

*Kapahi akhoni khola huta dukhani
Tinikhoni kapahor jap
Rati nou puwate kukurai dak dile
Chenai eri gol muk.*
One piece of cotton and two pieces of waste cocoon yarn cloth
Consists three cloth,
My lover left me before the morning

In bihu, dancing is essential part and the female dancer must wear muga mekhela and riha. Bihu song in this regard is

*Dholto kandhot loi bihuloi ahilu*
*Nachani keniba gol*
*Ulai aaha naachani muga xaj pindhi*
*Bihu nachiboloi hol*

I am coming for *bihu* with the drum
Where the lady dancer has gone?
Let come the dancer by wearing muga dress
And let ready for dance

The haughtiness of young boy’s and girl’s are expressed with and bihu songs, when a spontaneous reaction regarding the outlook of the girlfriend coming to the mind of boyfriend, that his girlfriend would be wearing muga silk.

*Kehukali nikali muga  huta mukali*
*Theh pati nekhabi bhat*
*Apura hendurar jor phot marili*
*Loli muga riha gat.*

The girlfriend has not take food due to haughtiness,
Her lover make a joke that she
Use lots of vermillion with wearing red coloured muga *riha*.

Another song is sang by the boyfriend to his lover as a request to her haughtiness

*Kapurat basila isati bisati*
*Rihat basila kes*
*Akan tamol di xudhisu lahori*
*Lagise ki gune pes.*

O’ dear, you make *kes* design in *riha*
I have offer you a betel nut and leaf
Please tell me what is the reason of haughtiness
Relation of silk with bihu and its instrument is also observes in the folk songs.
Importance of bihu and silk are same in Assamese as well as Tai-Ahom society.

Gagana aarani gagana purani
O’ makon deha oi
Gagana kihere bao
Duphale dusati majate asati
O’ makan deha oi
Muga xuta lagaugoe jao.
The instrument gagana is old
O’ dear, how I play it
It consists of three parts, two strip in the side and one in middle
O’dear, let start to weave muga thread.

There are some folk songs, which are locally popular as, bongeet, where mentioning of silk has shown.

Erabarir erapat kone chingi nile
Kone bhangi gole dal
Kone bhangi gole chenaire manti
Pirite premare jal.
Who plucked the eri leaves of eri garden
Who broke the branch?
Who broke the heart of my lover
And the illusion of love.

In the studying society, there are a joking relationship between the sister-in-law and brother-in-law. In some jocular songs among them, there are a few reference of silk also as stated below.

Erapat pitikao baierok luteao
Tamol kati dia khao
Xarujani khulxali duar meli dia
Xoani kothaloi jao.
Let the castor leaf mix
O’ my dear sister-in-law
Please prepare ereca nut and
Open the door to go to bedroom

_Ereea kapurar jeria nabhange_  
_Paniye nebhänge mane_  
_Lokar lagaria nuxunibi maina_  
_Mur mukhe nuhuna mane_  
Entanglement of eri thread has not been broken  
Till when water have not used  
Don’t hear the others sayings  
Until then I am not saying

_Eri puhiboloi edali era nai_  
_Muga puhiboli som_  
No one eri tree to rear the eri silkworm  
And no one _som_ tree to rear the muga silkworm.

These songs represent the silk that it is so dearer to the Assamese people. They expressed the love and sentiment towards the silk through meaningful songs. In the dance of _bihu_ also, silk is most essential. The female dancer wears designable muga _mekhela_ with red coloured motif and _riha_ with _kes_ design. Although, the dancers preferred coloured blouse, still, muga blouse with red coloured lace in hand and backside also like better. In the earlier days, the male dancer was wear the _churia_ (a piece of cloth use as lower garment) of muga silk and the shirt from eri silk also (Gandhia, 1997). Moreover, some studies reveal that, once upon a time, the male dancer use _anga-chola_ or _halowa–chola_ (a special type of shirt) of eri or muga (Saikia, 2008). However, now a day, they wear a special type of muga shirt splited in front side. However, eri does not use by the dancers of today. Some related pictures of ancient days, reveal that, mothers of the kings wear the blouse only of silk (Saikia, 2008). Hence, silk is a part and parcel of the Assamese society from time immemorial. In Dhakuakhana, there is a tradition from earlier times that, in the famous _Phat Bihu_ of Dhakuakhana, the visitors including the guests from outside have to wear the traditional silk dress. It is a festival, where people of all classes, castes, religions celebrated and dance _bihu_ spontaneously in open field under big trees for days in the southern bank of river _Charikaria_, at _Mohghuli Chapari_ (Photo Plate- 29). Moreover, entering to the
stage without muga silk has forbidden in *Phat Bihu*. The females show off *riha*, *mekhela-chadar* and male have to dress in a shirt of Assamese design of muga with cotton *churia*. That is an honour showed to muga silk by the people of Dhakuakhana and an effort to carry on the Assamese culture and tradition. In *bhaona* (a kind of drama) the participants wear the silk cloth also. Moreover, in the Satriya Dance of Assam, the dancer also dressed in silk.

Photo Plate 29: Dancers wear traditional muga dress

**Case 4.3**

**Date 08.02.08**

*Bidyawati Gogoi, Aged 83 is a permanent inhabitant of Hiloidary village of Dhakuakhana. She has vast knowledge on the silk activities and various types of silk with divergent colour and designs. According to her silk is a very prestigious item for the people of Dhakuakhana. She used the silk from when she got puberty and started to wear mekhela chadar. In every social and religious function, whether it is a marriage ceremony, a bihu festival, or even a death ceremony, she used the silk because it is common attire for the rural people. She also said that during the time of marriage there is a tradition to present a set of muga cloth to the bride along with her mother from the groom’s family. She was followed all these during the time of her marriage and her children marriage times too. It is a symbol of honour to the mother of bride. That girl has preferred for marriage who is an expert weaver and designer. It is very shameful*
for those who do not know the art of weaving. The informant provides such related bihu songs, which reflect the art of silk among those people.

4.2.V Silk Related to Food Habit

Another cultural aspect of silk is associated to the food habits. Pupae of the silk moth has regarded as a great delicacy and dietary staple. Recipes for several dishes exist. The pupae has high rich nutritional value having proteins, carbohydrates, fats and vitamins such as vitamin B-12, vitamin D, folic acid, nicotinic acid etc. These have high caloric value of 460 kcal / 100 gram on dry basis and provide 133 kcal / 100 gram on fresh weight basis which is higher than energy obtained through cow milks, eggs, chicken and raw carrot. Deoiled pupa is valuable source of essential amino acids. The pupa proteins has high commercial value in industry. The pupae of eri of 100 gm can supplement daily requirement of 75% of a person’s protein and 100% of daily requirement of many vitamins such as pyridoxal, Thiamine, Riboflavin, Ascorbic acid and Minerals. In terms of nutritious value of proteins, fats and vitamins providing energy by the pupae may compare with the source of energy obtained from meat and fish. Apart from human consumption the pupae is also used as a source as feed for poultry, piggery and fishery in different states (Pandey, et al, 2009). The rearers of sericulture village earn thire income from the pupae also. In the local market, the price of the pupae is Rs.400.00 per kg. This may ensure an additional income for silk farmers and should not see only as a thread.

4.2.VI Traditions, Taboos, and Superstitions Related to Silk

Being a part of a society, many traditions and taboos are there regarding silk especially with muga silkworm. In case of eri and mulberry, there is no special ritual but, regarding muga culture, they believed that it is an object of god. A supernatural power controls it and one who is a successful rearer receives the blessing of that supernatural being. They think that its successful completion depends on fortune of rearer. There is a proverb regarding the belief.

Ahukheti ahukal

mugakheti kapal bhal
That means ahu rice cultivation is problematic and muga cultivation is luck depending.

There are some traditions from the beginning of muga cultivation until completion. Rearers of the muga silk moth take arduous treks in search of seed cocoons after the monsoon trails off. The cocoons are essential for starting the rearing operation in the autumn and again after winter for the spring brood. The transport of seed cocoons takes place mostly during nighttime and great effort is taken to avoid jerks, vibration, and other disturbances that may damage the cocoons. Healthy cocoons have believed to lead to successful harvest. A procurer of seed cocoons is expected to dress in white, whereas the rearer may be untidy, unshaven, and unkempt without any use of soap, oil, and other cosmetics.

Taboos demand that strangers and visitors has dissuaded from even having a look at the rearing. They have not entered to the somani without bath. A menstruating woman has forbidden visiting the rearing site for three days, as it has believed that her flow is so potent that the mere touch of a live object by her will render it sterile.

It is as some belief concerning menstruation, is prevalent in different parts of the world. “In the Great French Perfumeries, for example, women are not permitted to work during the time of their menstruation; nor are they allowed to pick mushrooms in those regions, in which their growth is a profitable industry. In the south of Franch, at such times, they are not allowed to tend silk worms and in various wine districts of Franch and also of the Rhine, women are debarred from approaching or handling the vessels in which fermentation takes place for the reason that should their course begins, fermentation would be accelerated and the wine spoilt (Montagu, 1957).

Many rituals are there associated with it. In the first day of rearing, the rearer offer worship to the supernatural being with betel nut, incent stick, one rupee coin by wrapping with a banana leaf in front of the main som tree. The below part of tree trunk is wrapped by a creeper. Then the offering materials have well wrapped by plantain leaf and kept it below the roof of the house in the somani. After the completion of rearing process the rearer perform a ritual here also, where, the rearer offer betel nut, rupee, rice beer and special type of chicken curry, cooked only with xandah (powder of fried rice) to the spirit. They believed that red coloured fowl is best suited for the purpose. By offering incent stick and chaki (a lamp), the rearer along with priest bowed to the
spirit and says that, ‘O god we have done so many activities by entering to your garden, please apologized us’. After cooking, they offer three plates of curry and three glasses of rice beer to the spirit and a special type of prayer has been sang. The priest must be of odd number whether it may be three, five, or more. The prayer is as follows

\[
\begin{align*}
\text{Jale jale khale oi patalar nagini oi} \\
\text{chaharat gathiale deo mur debota oi} \\
\text{jale jale khale ai matchyake sodhale oi} \\
\text{sonarik xudhale xune mur debota oi} \\
\text{emata ximate oi burha dangaria oi} \\
\text{chamanar xato bhai kakai mur} \\
\text{dalar xanumante oi bhangake kutile oi devota} \\
\text{bhaluke lagai oi dile mur devota oi} \\
\text{xanuwe patile oi halouwe thakile oi} \\
\text{thapile bhalare miri mur devota oi} \\
\text{chari muthi jiboi oi prartha karisu} \\
\text{ibaru tari jao buli mur deuta oi} \\
\text{banate ai dharma pale, oi mur devata oi} \\
\text{halouwe karile halouwe mathile} \\
\text{mathile dalare miri mur devota oi} \\
\text{naga naruttam oi burhadangaria oi} \\
\text{lage boikunthaloj jam, mur devata oi} \\
\text{nalia hatike O’ maut chaleoi} \\
\text{hatat langching loi mur devata oi} \\
\text{jalare kuruwai o; matchya dhari khale oi} \\
\text{bandare hudhale guwa mur devota oi} \\
\text{Ramdeo aahile Madhabdeo aahile} \\
\text{Gopaldeo aanile mati} \\
\text{Jadudeo aahiye bhande bhangi dile} \\
\text{diya purnamukhe baki} \\
\text{koise shyamadeve oi huna bandhusave oi} \\
\text{ai dharama banaana gai mur devota oi.}
\end{align*}
\]
The prayer is a request to god to accept their offerings and apologize them if they do something wrong. They also request to the supernatural power to help them in continuation of muga silk culture.

Those rituals are strictly followed by the rearers of muga. However, it is not necessary for eri and mulberry rearers. Even a belief is existing regarding the palaria muga (the larvae escape to the ground). The missing larvae formed a cocoon in any corner of furniture or wall. During the survey, villagers said that if any newborn baby affected by the ‘evil eye’, the guardian tied same cocoon in the body of the baby. They entered angling hook, white needle, thread of fishing net etc. inside the cocoon. They believed that the baby cannot affected by any evil power than.

Photo Plate 30 : There is taboo of keeping khorikas in the somani tangi until completion of rearing

Case 4.4

Date 02.03.08

Basuram Gogoi, aged 69, is a permanent resident of Katharbari village. He has a vast knowledge in the tradition and taboos, rituals and activities related to silk rearing. He has practiced the silk culture from his childhood. According to him, muga cultivation is an activity of good fortune, which is not suited for all. So many taboos and rituals have to maintain to gain a positive result. He said that there is no any special taboo related to eri and mulberry cultivation. But, according to him muga culture is controlled by a supernatural power, and his blessing helps the rearer to get a
success. The ritual starts from the time of collection of seeds upto when those have bought to home after maturation. He preferred to take the seed cocoons at night times and as the practitioner he dressed in white. As a rearer, he becomes untidy, unshaven and unkempt without any use of soap, oil, cosmetics etc. until the rearing has completed. He restricts anybody to enter somani without bath. Menstruating woman of his family has not entered to the rearing site for three days. Besides it, in the first and last day of rearing in the site, special offer has to make to the supernatural power, where the priests sang a special prayer to the spirit of muga. Completion of rearing in the site has occurred with it.

4.2.VII Necessity of a Thatch House

Moreover, the silk culture also influence in the infrastructure of the villagers. A thatch house is very common in the villages of Dhakuakhana, where everybody prefer it in their homestead land, along with a concrete or tin roof house. It has mentioned earlier that, the muga silk moth has tied with khorika for laying eggs. Those khorika has made from buruli that means already used thatch in the kitchen. Those are somehow gummy because of kitchen oil, where the eggs tightly attached there. Instead of it, the newly brought thatch is plain, smooth, and slippery where, it may found difficult to affix. Moreover, during lying, the moth requires a cool temperature and a thatch house is more convenient instead of a tin roofed. Hence, a thatch house is very necessary for the villagers for the same along with other requirement.

4.2.VIII Medicinal Use

The silk, the host plant, and other related object have a medicinal value also. Castor oil taken 1-2 teaspoon with hot milk at bedtime for 2-3 days, are suitable to cure constipation. It can also used as eye drops and in dermatosis and protective in occupational eczema and dermatitis. The bark powder and leaves of barkeseru (ailanthus excelsa) plant are use in dyspepsia and helps to cure in debility after childbirth. The bark is aromatic, febrifuge, and antithelmintic in nature and cures chronic bronchitis and asthma. Bark preparations are use to reduce external bleeding and discharges. Leaves of the plant of gamari (menila arborea) another host plant of eri silkworm are used to cure gonorrhea, cough and to remove foetid discharges and worms from ulcers. Flower is used in blood diseases and fruits decoction in fever and
bilious affections. Plant is also used in scorpion sting and snakebite cases. Roots of the plants are used to prepare *Dasmulararistha. Monihot utilitssima* where include *tapioca, cassava, simalu alu*, its tuber flour is given in liver and stomach disorders. Its juice is aperients; leaves are purgative as well as vermifuse and used to treat the sores, ascites, eczema, coriasis, scabies, and sycosis. Roots contain hydrochloric acid and are purgative in function. Bitter cassava variety is extremely poisonous. *Jatropha curcas* (Bhotera and Ratanjyoti) seed oil used to treat Dropsy and applied externally on sciatica rheumatism. Seed oil is antihelmienthic, hair stimulant to abortifacient and β laxative in nature. Fumigation of leaves has done to remove bed bugs. Latex has applied extremely on sores, skin boils, and rheumatic joint pain. *Bajramani, xanthoxylum rhesta* fruits are used to treat dyspepsia, rheumation, heart trouble, and bronchitis. Pericarp is astringent; Stimulant and digestive. Seed tincture has given in cholera. Oil of fruits has applied externally/locally on swelling of skin.

Moreover, silk fibroin consists of certain amino acids having 43% glycine, 31% alanine, and 5% tyrosine. Glycine reduces the level of blood cholesterol while alanine combats alcoholism. The membrane of the silk fibroin shows dissolved oxygen permeability compared to that of polyhydroxy-ethylmethacrylate material used in preparation of contact lens. Latest information reveals that silkworm is a helping tool in growing of intellectual curiosity and scientific research spirit among developing and budding children of kindergarten stage as well as promotes the memory of elderly peoples.

Besides, all of the above, silkworm can also be use for production of valuable eco-friendly pesticides, pharmaceutical and therapeutics. A high cost valuable human antigen protein Lymphokine Interlenkin can produced from silkworm larvae. Even, for production of vaccine to combat deadest disease like hepatitis and AIDS etc (Pandey, et al, 2009). Muga silk moth also contains a type of enzyme, regarded as medicine. Guts and sutures can also be prepared out of the silk glands of muga larvae like the mulberry silkworm guts. Mulberry silkworm guts are use for surgical sutures. The steam of eri leaf used by woman after delivery for curing pain. The fruits of mulberry are useful for diabetic patient. These medicinal values increase the importance of silk.

**4.2.IX Women in Sericulture**

Participation of women is more than the men folk in sericulture activities. They take part in silk cultivation in addition to their multifarious responsibilities at home.
Silkworm rearing, reeling, weaving etc. are peculiar activities, which may be done more efficiently by women for their patience and precision. Almost the entire lot of women engaged in this craft had their lesson in art of weaving from their mothers. Mothers generally engaged her grown up daughter in weaving in their leisure time. Therefore, the girl gradually inculcates the habit of weaving and becomes expert weaver as she attains womanhood.

4.2.X Silk as a Social Bonding

It is a common belief among the rearers that collecting seeds from long distance is better than nearer. Therefore, in earlier period, they went to Garo Hills and south bank of river Brahmaputra and resided in the houses of the inhabitants to gather and search the best one. During their visit, they brought different types of luncheon, dried fish or any dress item to them as a symbol of love and honour and vice-versa. Thus, an emotional bond was formed with them without blood relation. Sometimes, affinal relations are also created in reference of silk. Some have come with such motive of searching marriageable girls and boys with looking for seed or thread or dress.

4.3 Silk Plays a Role of Economic Upliftment

Silk industry generates employment for a large number of people partially or fully in its various stages of activities. The scope has increased further, when the industries has undertaken on commercial lines. Thousands of families in Assam have been engaged directly or indirectly in various sericulture activities like sowing of seeds, plantation of host plants, maintenance of plants, plucking of leaves from the planted and wildly grown trees, feeding and rearing of worm up to cocoon stage, spinning of yarn, weaving of fabrics, marketing of cocoons and cloth etc. In Assam, in the year 2001, only 95.38 lakh population of the total population of 2.66 crores belonged to working class (2001 census). Out of these thousands of people were engaged in sericulture. The contribution of sericulture to the total workforce in Assam has estimated and presented in the table 4.1 for the last two census years.
Table: 4.1
Contribution of sericulture to total workforce of Assam

<table>
<thead>
<tr>
<th>Year</th>
<th>Workforce (number)</th>
<th>Families engaged in sericulture</th>
<th>Number of sericulturists</th>
<th>% of Sericulturists</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>8088935</td>
<td>186836</td>
<td>560508</td>
<td>6.92</td>
</tr>
<tr>
<td>2001</td>
<td>9538591</td>
<td>172918</td>
<td>518754</td>
<td>5.43</td>
</tr>
</tbody>
</table>


From table 4.1, it has shown that among the total workforce of 8088935, 560508 numbers are sericulture cultivators in the year 1991, where the percentage is 6.92%. On the other hand in 2001, 518754 numbers of people are engaged in sericulture among total workforce of 9538591 which percentage is 5.43% . There are 186836 and 172918 families in Assam, who practice sericulture in the year 1991 and 2001 respectively.

Figure: 4.1 Contribution of sericulture to total workforce of Assam

However, sericulture is a labour intensive industry. In does not require great skill but only delicacy in the handling of the worms and it is ideally suitable for the unskilled family labour, particularly womenfolk, aged women, handicapped and
children. Many educated youth of today is increasingly taking up sericulture under the self-employment schemes of the government. Because, sericulture is highly profitable and have quick return as it compare too many other crops. Hence, number of families associated with mugaculture increased from about 26087 in 1990-91 to 29409 in 1994-95. It has gone to downward in the next two years, after which it grew continuously and reached a figure 32814 in 2005-06. The decrease of number of families reared muga during 1995-96 and 1996-97 was because of the devastating flood for which, numbers of muga rearers had to abandon their practice during 1995-96 as mentioned earlier and also for the conversion of some somani into more remunerative tea gardens in some areas of upper Assam. However, in the subsequent years, as more and more wasteland have brought under cultivation of host plants, the situation improved, and the number of families practicing muga culture also increased. With the increase in number of families, connected with nugaculture, its contribution to total sericulture families also improved slowly from 14.37 percent in 1990-91 to 16.82 percent in 2005-06.

Regarding ericulture, number of families associated with ericulture increased from about 1.18 lakh in 1990 to 1.35 lakh in 2005-06 with a little bit up and downs in the middle years. In terms of percentage to total sericulture families also, its contribution has increased from 65.22 percent in 1990-91 to 69.29 percent in 2005-06. The main reason for its attractiveness among the sericulture practitioners is low required investment, easy to operate, less risk and finally it is by product pupae that also fetches some revenue along with food full of protein food to the poor eri practicing families. In the following table 4.2, the whole scenery has been show (Das,2009).
Table 4.2
Families engaged in sericulture in Assam during 1990-91 to 2005-06

<table>
<thead>
<tr>
<th>Year</th>
<th>Muga</th>
<th>Eri</th>
<th>Mulberry</th>
<th>Sericulture Total</th>
<th>Percentage to sericulture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Muga</td>
</tr>
<tr>
<td>1990-91</td>
<td>26087</td>
<td>118410</td>
<td>37052</td>
<td>181549</td>
<td>14.37</td>
</tr>
<tr>
<td>1991-92</td>
<td>26757</td>
<td>122672</td>
<td>37407</td>
<td>186836</td>
<td>14.32</td>
</tr>
<tr>
<td>1992-93</td>
<td>26974</td>
<td>123327</td>
<td>37506</td>
<td>187807</td>
<td>14.36</td>
</tr>
<tr>
<td>1993-94</td>
<td>27209</td>
<td>124024</td>
<td>37635</td>
<td>188868</td>
<td>14.41</td>
</tr>
<tr>
<td>1994-95</td>
<td>29327</td>
<td>128021</td>
<td>38763</td>
<td>196111</td>
<td>14.95</td>
</tr>
<tr>
<td>1995-96</td>
<td>29409</td>
<td>128186</td>
<td>38822</td>
<td>196477</td>
<td>14.97</td>
</tr>
<tr>
<td>1996-97</td>
<td>14363</td>
<td>113492</td>
<td>25375</td>
<td>153230</td>
<td>9.37</td>
</tr>
<tr>
<td>1997-98</td>
<td>14230</td>
<td>116580</td>
<td>22188</td>
<td>152998</td>
<td>9.30</td>
</tr>
<tr>
<td>1998-99</td>
<td>14910</td>
<td>121003</td>
<td>26201</td>
<td>162114</td>
<td>9.20</td>
</tr>
<tr>
<td>1999-00</td>
<td>17882</td>
<td>119534</td>
<td>31385</td>
<td>168801</td>
<td>10.59</td>
</tr>
<tr>
<td>2000-01</td>
<td>21569</td>
<td>119320</td>
<td>25965</td>
<td>166854</td>
<td>72.93</td>
</tr>
<tr>
<td>2001-02</td>
<td>21831</td>
<td>125420</td>
<td>25667</td>
<td>172918</td>
<td>12.63</td>
</tr>
<tr>
<td>2002-03</td>
<td>22687</td>
<td>128727</td>
<td>27691</td>
<td>179105</td>
<td>12.67</td>
</tr>
<tr>
<td>2003-04</td>
<td>23543</td>
<td>132033</td>
<td>29715</td>
<td>185291</td>
<td>12.71</td>
</tr>
<tr>
<td>2004-05</td>
<td>27070</td>
<td>135216</td>
<td>27070</td>
<td>190166</td>
<td>14.66</td>
</tr>
<tr>
<td>2005-06</td>
<td>32814</td>
<td>135237</td>
<td>27101</td>
<td>195152</td>
<td>16.81</td>
</tr>
</tbody>
</table>

Source: Directorate of Sericulture, Government of Assam, Guwahati.

Table 4.2 shows that although muga and eri cultivation has shown a successful increasing trend, yet mulberry is not satisfactory at all. In the above table, mulberry-
rearing family was 37052 in 1990-91 to 38822 in 1995-96; it had a radical fall in the year 1996-97. It is because of same flood condition. Moreover, more sensitiveness of mulberry silkworm and low price of mulberry fabric than muga and eri silkworm, people do not interest to do this extensively.

**Figure: 4.2 Families engaged in sericulture in Assam during 1990-91 to 2005-06**

4.3.1 Sericulture as an Occupation

The picture of the field site is also similar like that of whole Assam, because, Dhakuakhana is one of the viable zones of the state of Assam for cultivating the silk. A few number of the villages considered sericulture as their primary occupation. Land is the most important of the economic resources available in these villages and hence, majority has agriculture as their main economic activity of the villages. Almost all of the villagers have an additional source of income. However, the economic condition of artisans of these villages is far from satisfactory.

It has seen from the field survey that, a few numbers of villagers takes sericulture as a primary source of income for their livelihood in Dhakuakhana. Most of the silkworm rearers of the area adopt it as secondary sources of income, having either one economic activity as primary source of income. Table 4.4 shows the picture of occupation as sericulture.
From the above table 4.3, it reveals that although sericulture may consider as self-employed village industry yet very few families fully dependable on it. On the other hand, 355 families measured it sometimes as secondary or seldom as tertiary occupation according to production.

Maximum families regarded agriculture as primary occupation. Sericulture may be a tertiary occupation in case of service holder, because they practiced agriculture too. Here, environment plays a role, that it is not convenient every year for the sericulture or agriculture. Hence, which has produced more, this may recognized as secondary and other is tertiary. Although, all of them involved with it, but activities are not same. It is shown in the below table, 4.4.
Table: 4.4
Sericulture activities regarding primary occupation

<table>
<thead>
<tr>
<th>Type of occupation</th>
<th>Rearer &amp; Reeler &amp; Weaver</th>
<th>%</th>
<th>Rearer &amp; Reeler &amp; Weaver &amp; Cocoon Collector</th>
<th>%</th>
<th>Rearer &amp; Reeler &amp; Weaver &amp; Cocoon Collector &amp; Marketer</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Families have primary occupation</td>
<td>9</td>
<td>50.0</td>
<td>7</td>
<td>38.8</td>
<td>2</td>
<td>11.1</td>
<td>18</td>
<td>99.9</td>
</tr>
</tbody>
</table>

Table: 4.4 show that, among those 18 families of primary occupation holder of sericulture, 9 families, i.e 50% practiced it as rearer, reeler and weaver. 7 numbers and 38.8 % are rearer, reeler, and weaver and cocoon collector. 2 numbers, 11.1% are rearer and reeler, weaver and cocoon collector and marketer. Cocoon collectors are collected those from their own village and nearby villages too.

Figure: 4.4
Sericulture activities regarding primary occupation

Case 4.6
Date 03.05.08

Nomal Phukan, aged 66, is a permanent resident of the village Bantau. He is one of the sericulture practitioners, who practiced it as a primary occupation. He has extensively practiced the muga silk from very early period as well as traditionally. He
has a land of two acre as rearing site for muga cultivation. In the last year, he produces 1.50 lacs cocoons. He said that according to the price of cocoon in present market, he can earn Rs.90, 000/- and through the yarn can gain Rs. 1, 18,400.00 annually including the cost of cocoons etc. An average earning from the muga activity is approximately 1.5 lacs. Because they generally weave the fabric and sold it except sold in the form of cocoon or yarn. In addition, the price of the fabric is depending on the design and weaving quality. He said that his concrete house, well build granary, huge amount for medical treatment all is from the income from muga culture. Besides the muga cultivation, his wife and daughter-in-laws reared and maintained the eri and mulberry cultivation for domestic use. He also earn money from selling seed cocoons.

Case 4.7

Date 03.03.08

Rupam Gogoi, aged 32, is the only male weaver as well as designer of Dighalagaon. He weaves all types of dresses with all types of yarn. According to him, he along with his mother and sister-in-law practiced this activity. He and his family only related to cocoon collection and weaving of fabrics. They bought the healthy cocoons and spine, and reeled in their house and prepared to weave. He weaves different traditional attires according to the demand of the customers. In the year 2007, he bought 30,000 cocoon and spine, reel and weave. He earned approximately 90,000 from only weaving muga dresses excluding the wage. He also weaves eri and mulberry dresses from whom he earned handsome money. As he is an expert weave, divergent colourful designs have made by him and therefore there is a demand for his weaving.

However, there is some silk cultivator, who engaged with it having other primary sources of income. The occupational pattern of the villagers in the studying area are shown in the table 4.5
### Table: 4.5
Occupational pattern of the villagers

<table>
<thead>
<tr>
<th>Occupational pattern</th>
<th>Mode of occupation and no of families</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary occupation</td>
</tr>
<tr>
<td>Agriculture</td>
<td>159</td>
</tr>
<tr>
<td>Sericulture</td>
<td>18</td>
</tr>
<tr>
<td>Service</td>
<td>100</td>
</tr>
<tr>
<td>Business</td>
<td>41</td>
</tr>
<tr>
<td>Professional</td>
<td>3</td>
</tr>
<tr>
<td>Non- Agricultural labour</td>
<td>16</td>
</tr>
<tr>
<td>Retired</td>
<td>36</td>
</tr>
<tr>
<td>Total</td>
<td>373</td>
</tr>
</tbody>
</table>

The above table 4.6 shows the pattern of occupation among the villagers of 5 studying villages. There, mode of occupation has been seen, i.e., primary, secondary, and tertiary. Agriculture is the highest primary mode of occupation which number and percentage is 159 and 42.6 respectively. Moreover, service is another primary occupation, followed by the first one by 100, which percentage is 26.8%. 41 Families have the primary occupation by adopting business which percentage is 10.9%. Sericulture is adopting by 18 families of the villages as primary occupation where the percentage is 4.8% and as the secondary occupation by 289, 77.4%. Families having any service or business, practice sericulture, as tertiary mode of occupation, which number is 66 and percentage is 1.6%, 36 families with 9.6 % are retired person. 16 families mean 4.2% earn their livelihood through non-agricultural labour.
Hence, sericulture practiced by most of the families in the studying area although not as a primary occupation but a large number of families conduct it as secondary and tertiary occupation. It has been shown in the below table 4.6.

**Table 4.6**

Sericulture as secondary and tertiary occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Rearer</th>
<th>%</th>
<th>Rearer &amp; Reeler</th>
<th>%</th>
<th>Rearer &amp; Reeler &amp; Weaver</th>
<th>%</th>
<th>Rearer &amp; Reeler &amp; Weaver &amp; Cocoon collector</th>
<th>%</th>
<th>Reeler &amp; Weaver</th>
<th>%</th>
<th>Cocoon Collector &amp; Weaver</th>
<th>%</th>
<th>Marketer</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary</td>
<td>2</td>
<td>0.56</td>
<td>40</td>
<td>11.2</td>
<td>183</td>
<td>51.5</td>
<td>15</td>
<td>4.22</td>
<td>35</td>
<td>9.85</td>
<td>12</td>
<td>3.3</td>
<td>2</td>
<td>0.56</td>
<td>289</td>
<td>81.19</td>
</tr>
<tr>
<td>Tertiary</td>
<td>5</td>
<td>1.4</td>
<td>26</td>
<td>7.32</td>
<td>21</td>
<td>5.91</td>
<td>14</td>
<td>3.94</td>
<td>66</td>
<td></td>
<td>18.57</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>0.56</td>
<td>45</td>
<td>12.5</td>
<td>209</td>
<td>58.82</td>
<td>15</td>
<td>4.22</td>
<td>56</td>
<td>15.76</td>
<td>26</td>
<td>7.24</td>
<td>2</td>
<td>0.56</td>
<td>355</td>
<td>99.76</td>
</tr>
</tbody>
</table>
From the above table 4.6 it has been reveal that people related to sericulture involve in different type of activities. There are 2 numbers of people, i.e., 0.56% who are the only rearer. Due to lack of interest or work force, he or she is not associated with other activities. 45 sericulture practitioners 12.6% involved with both rearing and reeling. Highest of silk cultivator with 209 in number, and 58.82% are engaged with rearing, reeling and weaving activities. There are some people who own are related in rearing, reeling, and weaving, and collect others cocoon to reel the yarn. Here, 15 numbers of families done this where the percentage is 4.22 %. Again 56 numbers reel and weave the fabric, and the percentage is 15.76%. 26 numbers are related to cocoon collection and weaving, which have not own land or somani or host plant. The percentage is there is 7.24%. Through marketing 2 families are associated with silk cultivation where the percentage is 0.56%.

**Figure: 4.6 Sericulture as secondary and tertiary occupation**

**Case 4.8**

**Date 07.03.08**

Dimbeswar Baruah, aged 49, is a permanent resident of Katharbari village, reported that he has a land of 1.5 acre for som plantation. He is an agriculturist, but sericulture provides an additional source of earning for him. According to him, he never remains to rear kotia and jethua breed of muga. His family provides their helping hand to earn the same. Except rearing by him, reeling and weaving have done by his wife and daughter. According to his number of food plant, he can gain 60,000.00 row
cocoons from it and earn approximately Rs. 36,000.00 from one breed. Nevertheless, all breeds do not showing same result. It can happen only for jethua and kotia breed. Thus in a year, he can earn approximately earn Rs. 72,000.00 from row muga cocoon only. Income from well-finished fabric may have more than cocoons or yarn. His family does not engage in mulberry culture. However, eri cultivation is continuously practice by them, in a year, his wife or daughter may weave 6-7 eri gents wrapper from where they earn approximately Rs. 4,200.00 in annually. It is very beneficial as a sideline activity.

Thus, sericulture provides engagement to the families of Dhakuakhana. It shows differentiation in case of various types of silk in different villages. Differentiation is generally occurred in case of muga silk culture because it is an outdoor activity and various necessities are required for muga cultivation such as land for host plant, well planted host plant, economic capacity to hire the host plant, availability of manpower, sufficient knowledge to rear and maintenance the worms in critical period etc. As eri and mulberry cultivation is not as troublesome like muga so it have not specific activities. In the below table the village wise distribution in different process of muga silk practicing has been shown.

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Name of the villager</th>
<th>No.of Rearing family</th>
<th>%</th>
<th>No.of Rearing &amp; Realing &amp; weaving &amp; marketing family</th>
<th>%</th>
<th>No.of Realing &amp; weaving &amp; marketing family</th>
<th>%</th>
<th>No.of marketing family</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bantau</td>
<td>33</td>
<td>10.57</td>
<td>3</td>
<td>0.96</td>
<td>1</td>
<td>0.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Dighalagaon</td>
<td>82</td>
<td>26.28</td>
<td>3</td>
<td>0.96</td>
<td>1</td>
<td>0.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Hiloidari</td>
<td>1</td>
<td>0.32</td>
<td>39</td>
<td>12.5</td>
<td>2</td>
<td>0.64</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Katharbari</td>
<td>67</td>
<td>21.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Maloubari</td>
<td>1</td>
<td>0.32</td>
<td>69</td>
<td>22.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2</td>
<td>0.64</td>
<td>290</td>
<td>96.02</td>
<td>8</td>
<td>2.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table: 4.7
Village wise distribution in different process of muga silk practicing among the families
The above table 4.7 depicts about in all of the villages only 2 families engaged only in rearing activities, whose percentage where the percentage is 0.64% and 300 families, 96.15% are engaged in rearing, reeling, weaving and marketing. Due to problem of rearing, 8 families done reeling, weaving and marketing where the percentage is 2.5%. There is single family in each Bantou and Dighala village who related to only marketing of silk. The percentage here is 0.64%.

**Figure: 4.7**

Village wise distribution in different process of muga silk practicing among the families

All of the families associated with the silk culture recognized as primary, secondary, or tertiary occupation. The valuable cost of fabric of silk motivates the cultivator towards commercialization. Family projects itself as an economic unit as distinctive division of labour has noted among the family member (Ray, 2003). Silk cultivator is a family employed avocation. Only one or two person cannot complete all the activities especially in case of muga culture. Generally, the male or female head of the family takes the major role but other members of the family help him part timely. Thus, the whole family can be help for economic upliftment of those. Regarding eri and mulberry cultivation, the female head of the family look after the breed and completed until the end with the help of other female family members. Division of labour has distinctly seen in the silk culture. An age wise distribution regarding mugaculture has shown there.
Table 4.8 Agewise distributions in different process of muga cultivation

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Rearer</th>
<th>Rearer &amp; Reeler</th>
<th>Rearer &amp; Weaver</th>
<th>Reeler &amp; Weaver &amp; Marketer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>M%</td>
<td>F</td>
<td>F%</td>
</tr>
<tr>
<td>Below 20</td>
<td>8</td>
<td>1.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-25</td>
<td>1</td>
<td>0.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26-30</td>
<td>4</td>
<td>0.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31-35</td>
<td>16</td>
<td>2.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36-40</td>
<td>28</td>
<td>3.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41-45</td>
<td>42</td>
<td>5.76</td>
<td>1</td>
<td>0.13</td>
</tr>
<tr>
<td>46-50</td>
<td>25</td>
<td>3.42</td>
<td>1</td>
<td>0.13</td>
</tr>
<tr>
<td>51-55</td>
<td>40</td>
<td>5.48</td>
<td>4</td>
<td>0.54</td>
</tr>
<tr>
<td>56-60</td>
<td>24</td>
<td>3.29</td>
<td>5</td>
<td>0.68</td>
</tr>
<tr>
<td>61-65</td>
<td>35</td>
<td>4.80</td>
<td>2</td>
<td>0.27</td>
</tr>
<tr>
<td>66-70</td>
<td>17</td>
<td>2.33</td>
<td>7</td>
<td>0.96</td>
</tr>
<tr>
<td>71-75</td>
<td>12</td>
<td>1.64</td>
<td>1</td>
<td>0.13</td>
</tr>
<tr>
<td>76-80</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>80+</td>
<td>2</td>
<td>0.27</td>
<td>2</td>
<td>0.27</td>
</tr>
<tr>
<td>Total</td>
<td>246</td>
<td>33.6</td>
<td>42</td>
<td>5.73</td>
</tr>
</tbody>
</table>

Table 4.8 reveals that 255 males and 21 females engaged only in rearing and the percentage is 34.97% and 2.89% respectively. 11 male, 1.50% and 5 females, 68% are engaged in both rearing and reeling. Rearing, reeling and weaving have done by only two male and 405 female where the percentage is 0.27% and 55.55% respectively. Three activities like reeling, weaving and marketing are done only by female whose number is 27, i.e. 3.70%. 1 male and 2 female are found to be engaged in marketing and the percentage is 0.13 and 0.27 respectively. Highest number of male rearer has found in the age group of 41-45 i.e. 42 in number. Highest number of female rearer i.e. 2 in number has found in the age group of 26-30. Moreover, highest number 78, of females are engaged in reeling and weaving in the age group of 26-30. There it is seen that only 2 males are engaged in reeling and weaving. There, it is a joint activity, which has to perform by several number of the family.
4.3.I. (i) Income from host plant

For the process of silk cultivation, well-grown food plants are very much necessary. Among the rearers some have food plants of own, some of them have to depend on rented food plants to produce cocoon. Moreover, some have unmatured plant for which they have to shift the muga silkworm to another host plant. The host plant may be a source of income for the owner, because, somebody have to offer one third of going cocoon to the owner of host plant if he/she reared them from beginning. In case of eri and mulberry Rs. 20.00-30.00 have to give to the owner per full grown tree. Even, sometimes the mode of payment may be different. Some of them have to pay in form of cash money, someone in the form of produced cocoons or reeling yarn or weaving fabric. In the previous chapter, it has found that 64 families use other somani regarding muga silk rearing. In the below table it has seen as.

<table>
<thead>
<tr>
<th>Form of rent</th>
<th>No of Rearer</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash-money</td>
<td>8</td>
<td>12.5</td>
</tr>
<tr>
<td>Produced Cocoon</td>
<td>56</td>
<td>87.5</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>100</td>
</tr>
</tbody>
</table>

The above table 4.9 shows that total 64 numbers of food plant hirer of muga food plant, 8 numbers, 12.5% gives cash money to the owner and 56 numbers, i.e. 87.5
% give the produced cocoons. The share of cocoons depends on from which stage larvae have reared in the trees. Moreover, in case of eri silkworm rearer among total 329 families, a little number only 7 families completely hired trees from where and 49 families required others if there is scarcity of leaf of own.

**Figure: 4.9**

Form of rent of the hired food plants for muga silkworm

![Graph showing form of rent for muga silkworm](image)

However, eri silk is not so much costly as like as muga silk and people reared it less for commercially and those rears who have own plantation. Moreover, the castor host plant for eri silkworm is easily assessable in that area, but sometimes they face scarcity of the same. In the below table the forms of rent for eri silkworm is shown.

**Table: 4.10**

Forms of Rent of the hired host plant of eri silkworm

<table>
<thead>
<tr>
<th>Forms of rent</th>
<th>No of rearer</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash-money</td>
<td>37</td>
<td>66.07</td>
</tr>
<tr>
<td>Cocoons</td>
<td>19</td>
<td>33.92</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>99.99</td>
</tr>
</tbody>
</table>
From table 4.10 it has observed that 37 families, 66.06% offer cash money for *kesseru* host plant of eri silkworm. Because majority of people practices eri silk rearing so, there is no large requirement for eri cocoon locally. Therefore, it has found that only 19, families take the cocoon for the host plant, where the percentage is 33.9%. Thus, the host plant also can give source of income for the villagers of Dhakuakhana.

**4.3.I.(ii) Cocoon Production**

The cocoon of silkworm is a profitable business. Number of production of cocoon is not same in all breeds. Generally, the *Jethua* and *Katia* breed are main commercial crops, where 250 grams of yarn has found from 1000 cocoons. In present day market the price of 1000 cocoons are become Rs. 600.00-800.00. Except indoor rearing, in outdoor rearing, the earnings may be different in time to time due to rearing behaviours, natural calamities, and silkworm enemies etc. Nevertheless, it has found that in favourable situation, more than 80,000 cocoons can produced from 1000 healthy seed cocoons and in normal situation average 40,000-50,000 cocoons can be produced from 1000 healthy seed cocoons. Thus, they can earn handsome money from the cocoon. Sometimes the traders of Sualkuchi are the bulk purchasers of the cocoon. Muga waste cocoons are also valuable raw material and a good price declined for it by the villagers. Moreover, the eri and mulberry waste cocoons have collected by some petty businesspersons from the villagers. They brought these in Rs. 150.00 in per kg of waste cocoons.
4.3.I.(iii) Reeled yarn

Some villagers prefer to reel the yarn and sale it. The present price of muga silk yarn varies from Rs.3200.00-3500.00 per kilogram depending upon the quality. In earlier days, a part of muga yarn has sold outside the area or state by the traders, but now a day the villagers are not interested to sale as like. Because they may earn more money if make the fabric instead of selling yarn. Along with muga, the price of eri and mulberry silk yarn increased day by day. Now a day, the price of eri and mulberry silk in per kilogram is almost Rs. 2000.00 and 1500.00 respectively. The price of silk yarn may be increase if the rearer and reeler engage wage labour for reeling activity. It has given as per day wage income and paid it in the form of cash money.

4.3.I.(iv) Silk Fabric

The silk fabric is generally the traditional attire but in recent period, modern dresses and cloths are also prepared from it. The muga and mulberry fabric have usually worn by average women as loincloth or mekhela, which is usually a common garment of the women. The cost of muga mekhela is varies from Rs.800.00 to Rs. 1200.00 in the present day market depending upon the quality of yarn and type of designs made on it. The whole set, i.e. a chadar with mekhela in very costly now. One has to pay Rs.3200.00 to Rs. 3500.00 in the villages for the same. The eri silk in mainly used as warm cloth and common fabric of eri is erichador or Barkapor for which the price is almost Rs.1000.00. The mulberry silk is less costly then muga and eri but it is also too much in present day market. In the below table 4.12 an attempt is made to show the price picture of common silk garment.

\[\text{Table: 4.11}
\]

**Type of silk cloth with measurement and price**

<table>
<thead>
<tr>
<th>Name of the dresses</th>
<th>Length (mtr)</th>
<th>Breadth (mtr)</th>
<th>Price (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muga mekhela</td>
<td>2.5</td>
<td>1</td>
<td>800.00-1200.00</td>
</tr>
<tr>
<td>Muga Chadar</td>
<td>2.5-3</td>
<td>1.5</td>
<td>1400.00-1800.00</td>
</tr>
<tr>
<td>Muga Riha</td>
<td>3-3.5</td>
<td>0.60-0.70</td>
<td>1200.00-1500.00</td>
</tr>
<tr>
<td>Muga shirt</td>
<td>2</td>
<td></td>
<td>1800.00-2000.00</td>
</tr>
<tr>
<td>Muga Saree</td>
<td>5</td>
<td>1.5</td>
<td>3500.00-4500.00</td>
</tr>
<tr>
<td>Eri Chadar for male</td>
<td>5</td>
<td>1.5</td>
<td>1000.00-1200.00</td>
</tr>
<tr>
<td>Eri Scarf for female</td>
<td>2.5</td>
<td>1.5</td>
<td>800.00-1000.00</td>
</tr>
<tr>
<td>Eri mekhela &amp; chadar</td>
<td>2.5 &amp; 2.5</td>
<td>1 &amp; 1.5</td>
<td>1200.00-1500.00</td>
</tr>
<tr>
<td>Mulberry Mekhela &amp; chadar</td>
<td>2.5 &amp; 2.5</td>
<td>1 &amp; 1.5</td>
<td>1000.00-1500.00</td>
</tr>
<tr>
<td>Mulberry Chadar</td>
<td>2.5</td>
<td>1.5</td>
<td>500.00-700.00</td>
</tr>
</tbody>
</table>

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Besides these traditional attire several other materials are prepared such as silk female bag, curtain, cushion cover, tie, salwar for female etc. which price is varies depending open the size and designs. In the below table a comparison in price between some simple and decorated common fabric has made;

Table 4.12
A comparison of price in the most common silk cloth

<table>
<thead>
<tr>
<th>Types of cloth</th>
<th>Price (approximate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muga plain mekhela</td>
<td>800.00</td>
</tr>
<tr>
<td>Muga mekhela with single line design</td>
<td>1200.00</td>
</tr>
<tr>
<td>Muga mekhela with two or more line design</td>
<td>1500.00</td>
</tr>
<tr>
<td>Muga plain chadar</td>
<td>1500.00</td>
</tr>
<tr>
<td>Muga chadar with designs in both sides</td>
<td>1800.00</td>
</tr>
<tr>
<td>Muga chadar with design in both side and figure in body</td>
<td>2200.00</td>
</tr>
<tr>
<td>Muga plain set of mekhela chadar</td>
<td>2300.00-2500.00</td>
</tr>
<tr>
<td>Muga set with design in whole body</td>
<td>3500.00-4000.00</td>
</tr>
<tr>
<td>Eri shawl for male</td>
<td>1000.00</td>
</tr>
<tr>
<td>Eri shawl for female with only both side design</td>
<td>800.00</td>
</tr>
<tr>
<td>Eri shawl for female with both side design and side border</td>
<td>1200.00</td>
</tr>
<tr>
<td>Pure mulberry chadar with design</td>
<td>700.00</td>
</tr>
<tr>
<td>Mulberry chadar with design and gariali (mixing cotton yarn)</td>
<td>500.00</td>
</tr>
<tr>
<td>Pure mulberry set with design</td>
<td>1500.00</td>
</tr>
<tr>
<td>Mulberry set with design and gariali</td>
<td>1200.00</td>
</tr>
</tbody>
</table>

Therefore, the silk provides handsome income for the villagers.

4.4 Provider of Wage Earning

The silk generally reared by the villagers with the help of family members and neighbours. However, they appoint wage labour part timely but not regularly for reeling purpose. The wage has fixed at the time of appointment and generally, wages has fixed
as per day. Wage have to given in the form of cash money. As like as reeling, in the
weaving activity some villagers use wage labour against cash money or weaving cloth.

However, besides in the above mentioned purpose sometimes the rearer have to
give to very little amount to some younger boys for expelled the birds and bats with
bow and arrow, but it is not recognized as wage. Sometimes, for eri and mulberry
rearing collection of host plant done by young boys and girls, where the rearer gives a
very small amount, which is not also regarded as wage. The necessary equipments to
rear and reel has prepared themselves by the villagers so there is no necessary to
engage wage labour for it.

4.5 Employment generation

Due to its quick return the industry attracts people and thus it is one of the
largest employers. It is also source of recurring cash returns. It played a full and part
time employment to several hundreds of people in Dhakuakhana area. As the industry
is labour oriented, all the family members of a farming community could take part in it,
still it is mainly a women leaded industry. A family may produce average 9-10 kg of
muga yarn from whom they may income approximately Rs.30,000.00-Rs.35000.00 in
a year and from the fabric the amount has been increased. Today, a several number of
Self Help Group are formed by the village women, who have engaged in the
programme of muga rearing, reeling, harvesting, spinning, weaving and marketing.
Various fairs and festivals conducted in different areas help them to earn money.
Before few decades ago, people cannot find a market to sale their product. However,
now the practitioners find a market through government and non-government agencies
and thus the source is still increasing. In the earlier period, some desired children
cannot go to school or colleges due to lack of money but now when the women
employed in this additional income apart from main occupation their children goes to
school or colleges and thus it open the doors of education for future generation. In the
below table 4.14 the annual income of the villagers and income from sericulture is
shown.
Table: 4.13

Annual income and income from sericulture of the household of the villages

<table>
<thead>
<tr>
<th>Amount on income (in Rs.)</th>
<th>No. of household regarding Annual Income</th>
<th>%</th>
<th>No of household regarding the income from sericulture</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10,000</td>
<td>98</td>
<td>26.27</td>
<td>124</td>
<td>33.24</td>
</tr>
<tr>
<td>11,000-20,000</td>
<td>1</td>
<td>0.26</td>
<td>80</td>
<td>21.44</td>
</tr>
<tr>
<td>21,000-30,000</td>
<td>13</td>
<td>3.48</td>
<td>38</td>
<td>10.18</td>
</tr>
<tr>
<td>31,000-40,000</td>
<td>32</td>
<td>8.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41,000-50,000</td>
<td>28</td>
<td>7.50</td>
<td>9</td>
<td>2.41</td>
</tr>
<tr>
<td>51,000-60,000</td>
<td>23</td>
<td>6.16</td>
<td>2</td>
<td>0.56</td>
</tr>
<tr>
<td>61,000-70,000</td>
<td>29</td>
<td>7.77</td>
<td>4</td>
<td>1.07</td>
</tr>
<tr>
<td>71,000-80,000</td>
<td>27</td>
<td>7.23</td>
<td>17</td>
<td>4.23</td>
</tr>
<tr>
<td>81,000-90,000</td>
<td>34</td>
<td>9.11</td>
<td>1</td>
<td>0.28</td>
</tr>
<tr>
<td>91,000-1,00,000</td>
<td>21</td>
<td>5.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,01,000-1,10,000</td>
<td>27</td>
<td>7.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,11,000-1,20,000</td>
<td>24</td>
<td>6.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,21,000-1,30,000</td>
<td>18</td>
<td>4.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,31,000-1,40,000</td>
<td>14</td>
<td>3.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,41,000-1,50,000</td>
<td>15</td>
<td>4.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,51,000-1,60,000</td>
<td>10</td>
<td>2.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,61,000-1,70,000</td>
<td>9</td>
<td>2.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,71,000-1,80,000</td>
<td>4</td>
<td>1.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,81,000-1,90,000</td>
<td>6</td>
<td>1.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,91,000-2,00,000</td>
<td>7</td>
<td>1.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,01,000+</td>
<td>31</td>
<td>8.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>373</strong></td>
<td><strong>100.48</strong></td>
<td><strong>373</strong></td>
<td><strong>99.68</strong></td>
</tr>
</tbody>
</table>

Table: 4.13 reveal the annual income and income from sericulture activities. Among 373 families highest 34 families has the annual income in between 81000-90000, where the percentage is 9.11%. Again, highest 124 families, 34.83% out of 373 earns 11000-20000 per year. Highest earnings from sericulture are 81000-90000 by one family, where the percentage is 0.28%. Again, highest 124 families, 34.83% out of 373 earns 11000-20000 per year.
The silk product of Assam is a much sought after article in and outside the state for its durability and attractive texture. An interesting feature of the material is that the golden tings of the cloth brighten with every wash. It earns foreign exchange from many countries. From the past, there was a regular trade of silk yarn and cocoon and cloth between the states.

Indigenous market share of major silk product is mekhela (80%), chader (15%), saree (3%), mekhela chader set (10%), and others (2%). Silk is the cultural dress of the tidies of here. In Dhakuakhana, its purchase is highest during marriage and ceremonial months starting from October to April. Any occasion has not completed without wearing the silk. During the famous Phat Bihu of Dhakuakhana, muga riha and mekhela are sold locally in extensive manner. During the festive season, various trade fair and exhibitions have organized in different districts of the state as well as in Delhi and other cities too. People of different state and country residing there visited to the exhibitions and attracted to the exquisite materials of silk.

Therefore, through sericulture, the incidence of unemployment, disguise unemployed and seasonal unemployment is relive largely. Involvement of female labours is present in almost all the activities of silkworm cultivation.