CHAPTER – V

CONCLUSION

SILK INDUSTRY

Assam possessed a suitable environment for rearing of silkworms on a commercial scale. All the four prominent varieties of silk, namely, *muga*, *eri*, *pat* and *tasar* were found in Assam. The first three varieties were reared. But the *tasar* used to be a wild variety along with other wild varieties like *ban muga*, *salthi*, *ampatoni*, *deoruga*, etc. Besides, there were two other special kinds of *muga* silk, namely, *champa* and *mezankuri*. But regarding the origin of the silk industry in Assam, there is a difference of opinion among the people.

Silk was believed to be discovered first in China. Hence, there is a belief that from there it entered Assam at an earliest time. But this cannot be fully accepted as Assam exported the *muga* silk and *eri* cloth to China, whereas China exported Chinese silks to Assam. This shows that indigenous variety of silk did exist in Assam which had a demand in China. Likewise, the Chinese silk also had a demand in Assam.

An independent silk culture did exist in Assam as testified by the well known ancient Indian texts like the *Arthasastra* of Kautilya and *Harshacharita* of Banabhatta. Assam holds monopoly in the world for its *muga* silk production and is also famous as the original home of *eri* silk. The other variety of domesticated silk, the *pat* might have entered Assam from the neighbouring area of Bengal at a very early period and has become a local variety like the other two domesticated silk.

Amongst the three varieties of silk, the *muga* was the most common and the *pat* was the least common. The *eri* was also reared in a considerable quantity. The life-cycle of these silkworms passes through four well defined stages. The manufacturing process involves the steps of rearing, reeling and spinning and weaving together constituting the silk culture. In pre-colonial Assam, all castes and classes of people were permitted by social usage to practise the *muga* and *eri* culture. But, the *pat* or mulberry culture was mainly practised by the people of *katoni* or *jugi* caste.

The silk weaving was universally practised in every Assamese household by the womenfolk as a past time for domestic use. It was not a professional occupation. There was no particular caste reserved for weaving in the Assamese society. Every Assamese household possessed a loom. Two types of traditional looms were used by the Assamese women, one was the throw-shuttle loom used in the plains and the other was the throw-shuttle loin loom used in the hill areas. The knowledge of dyeing was known to the weavers. Many garments of different varieties were woven by the silk weavers which were used by the Assamese people.

During the pre-colonial period full royal patronage was provided towards the silk industry in Assam and the silk products enjoyed the reputation of being a royal gift. The Ahom period provided the greatest patronage for developing the silk industry in pre-colonial Assam. The silk of Assam was praised by the foreign travellers who then visited Assam. It also attracted the interests of the foreign trading companies like the French and English who tried to establish their control over the silk trade in Assam.

Finally, the British after expelling the Burmese gradually occupied Assam and the silk was one of their foremost commodities of export from Assam. After coming in contact with the Ahom Kingdom, the British realised about the commercial potentiality of the *eri*, *pat* and *muga* silk of Assam. The then international situation was also favourable for the British to export silk from Assam. David Scott believed that the silk industry could contribute towards the financial well being of the people. Scott even personally started the mulberry silk cultivation, but his premature death in 1831 put an end to his endeavour.

For a period after the death of Scott, quite indifference was showed by the Company towards the silk industry of Assam. No investment was made by them to develop the industry. But in 1853 when A. J. Moffatt Mills advised the Company authority to encourage the development of all the exportable products from Assam, the British authority decided to start the cultivation of the domesticated silkworm of Assam on its own on a commercial scale in order to encourage its production.

The *eri* silkworm was selected as the domesticated variety to start this experimental commercial cultivation. The British authority also made a thorough investigation to enquire about the different varieties of wild silkworms of Assam which included the *tasar*. From the year 1866-67 to 1889 several experiments were made to cultivate the *eri* silkworm on a commercial scale. Inspite of having few initial successes, all these experimental commercial cultivation ultimately ended in a failure.

Actually all these experimental commercial cultivation were done by the foreign entrepreneurs and the British Government officials at their personal level. There was no direct cultivation by the Colonial Government and the only thing they provided was financial assistance. The Colonial Government in Assam did not take any measure to protect the experimental *eri* silkworm cultivation when these were destroyed by disease, caterpillars and by floods. The British even regarded the

traditional belief of cleanliness followed by the native people during the rearing of silkworms as superstition.

The British Government brought the experimental commercial *eri* silkworm cultivation to a close. Then the silk trade between Assam and England was conceived in two forms: export of thread or export of seed cocoons. But the coarser and uneven silk threads of Assam were found to be of no use for the British manufacturer. Hence, a decision was taken only to export the seed cocoons from Assam which had a disastrous effect on the local production of silk items and was found to be very detrimental for the growth of the silk industry in Assam.

During the 19th century the Colonial Government did not take any measure of noteworthy significance to develop the indigenous silk industry of Assam on modern lines. Rather, the colonial authorities took certain adverse measures like imposition of several taxes in general, taxes on the *soom* tree plantations in non-forest areas, imposed restrictions on clearing the forest, extended jute cultivation in the *eri* silk cultivated area, started tea plantations in *soom* tree plantation areas, imported *pat* thread from Bengal, China and other countries, etc to destroy the traditional silk industry of Assam and thereby to replace its product in the market with similar items imported from outside.

Inspite of this apathy from the Colonial Government, the silk culture continued to be an important occupation in Assam. But the condition of the majority of those engaged with it was very depressive one as the *kayans* and the *byaparis* started to dominate the entire business involved in it. Situation was slightly better for the weavers of Sualkuchi who worked independent of the *kayans*. Infact in Sualkuchi

silk culture from its traditional level had reached a commercial stage with the weavers becoming professional and attaining a high degree of skill in weaving the silk fabrics.

But in general the condition of the silk industry was depressive. There was need for taking appropriate step to revive the condition of the silk industry. Fortunately, the Gauhati Industrial Conference of 1913 recommended the creation of Department of Industries combining it with the Department of Co-operative Societies under one official for the development of prominent cottage industries like sericulture and weaving, both silk and cotton. Accordingly, in 1918 the Department of Industries was created in Assam which took measures for reviving the silk industry.

Weaving was one of the subjects initially transferred to the Department of Industries. Hence, from the beginning the Department of Industries took measures for the development of silk weaving. The initial measure was the establishment of a weaving institute at Gauhati for providing training in silk weaving. Subsequently, weaving institutes were also opened at Khasi and Jayantia Hills, Tura and Sylhet. For providing training in improved methods of silk weaving Peripatetic Weaving Demonstration Parties were formed for both the Brahmaputra Valley and the Surma Valley. A Government Emporium of Cottage Products was opened at Gauhati to find markets for cottage products and to provide raw materials to the cottage workers.

Before the close of the year 1918-19, sericulture was also transferred as a subject to the Department of Industries. Thereafter two Sericulture Stations were established at Titabar and Shillong for supply of disease free layings and cocoons amongst the silk rearers. Later on, two more Sericulture Stations were established at Senchoa and Gaurisagar. To teach and propagate improved methods of silk rearing

amongst the people, Peripatetic Sericultural Demonstration Parties were formed which covered all the districts of Assam.

Co-operative societies were also formed amongst those associated with silk weaving and sericulture for uplifting the position of the silk industry in the province. Co-operative Weaving Inspectors were also appointed for the two Valleys of the province. The Assam Co-operative Home Industries Society was organized at Gauhati which had its own factory there for the manufacture of high class silk fabrics. Some silk weaving factories were also formed in the province, mostly at Sualkuchi. The silk weavers of Sualkuchi even opened shops for selling their silk fabrics.

The Colonial Government provided at times financial assistance for developing the silk industry in Assam. Several industrial enquiries were made about the machineries, technologies, dealership, etc related with silk weaving and sericulture. However, the Colonial Government continued its silk trade in the 20th century which provided tough competition to the local silk products and affected the condition of those associated with the silk industry. Still, the Colonial Government provided a modern look to the indigenous silk industry of Assam.

In the post-colonial period, the Government of Assam specially created a Department of Sericulture and Weaving to look after the silk industry in the State. In this direction, the department received assistance from the Central Silk Board, Central Handicraft Board, Central Handloom Board, the Assam Khadi and Village Industries Board amongst others. All the Five Years Plans and Ad-hoc Annual Plans in between sanctioned large amount of funds for undertaking schemes for developing the silk industry in the State.

With the allotted fund, the State Government all throughout the post-colonial period till 2000 A.D. established *Eri* Seed Grainages, *Eri* Concentration Centres, *Eri* Spinning and Training Centres, Basic *Muga* Seed Farms, *Muga* Nursery and Multiplication Centres, *Muga* Village Grazing Reserves, Muga Reeling Units, Mulberry Seed Farms, Collective Mulberry Gardens, Mulberry Nursery cum Chowki Rearing Centres, *Mulberry* Reeling Units, Mulberry Graft Nurseries, Chowki Rearing Centres, *Tasar* Cocoon Rearing Farm, *Tasar* Composite Centre, *Tasar* Seed Station, *Tasar* Grainage cum Training Centre, *Tasar* Block Rearing Centre and *Tasar* Multiplication Centre for developing the silk industry in the State.

Besides, there were Cocoon Growers Co-operative Societies, Cocoon Marketing Societies, Reelers Co-operative Societies, Peripatetic Sericultural and Weaving Demonstration Parties, Weaving Training Institute, Weaving Training Classes with Handloom Production Centres, Weavers Extension Service Units, Dyeing and Printing Parties, different sales outlets or emporiums, etc established for the development of silk industry in the State. But still there is lot to be done for developing the silk industry in Assam so that it attains the commercial viability at the earliest. The *pat* and *tasar* silk production is insufficient and has to be brought from outside. The weaving techniques need modernisation for which semi-automatic and power-looms should be introduced. Arrangements should be made locally for the production of the loom accessories.

BELL METAL INDUSTRY

Bell metal (*kanh*) is prepared by mixing copper (80%) and tin (20%). By using the traditional method variety of bell metal products are manufactured by the *kanhars*.

These products are part and parcel of the Assamese culture. In pre-colonial Assam, Sapatgram, Bilasipara, Sarthebari, Raha and Titabar were the prominent centers of the bell metal industry in the Brahmaputra Valley. While, Lakhipur, Kharilpar and Manipuri villages of the Cachar district were the important bell metal industrial centres in the Barak Valley. However, Sarthebari has the highest concentration of artisans.

Actually, during the colonial period in the 20th century, the bell metal industry existing in other places of Assam got more or less declined and it continued its existence only in Sarthebari. Hence, nothing can be ascertained about the entry of bell metal smithy in Assam. Whether, it has developed within the State or have entered from outside.

There is a popular belief in Sarthebari that the bell metal smithy entered Assam during the Mauryan period. As per the belief, a person called Satnath established a bell metal producing unit, i.e. *garshal* at Sarthebari during the Mauryan period. This person is considered as the earliest *kanhar* of Sarthebari. There is also a belief that during the Gupta Age, there was the migration of the bell metal artisans from Nepal to Assam. Many people believed that it was the Muslims who taught the Assamese people the knowledge of preparing bell metal products.

Whatever may be the origin of bell metal smithy, the bell metal industry greatly flourished in Assam. Ruling dynasties of Assam as well as the elitist section of the Assamese society provided the needed patronage to the bell metal industry. The Ahom period was the most developing period for the bell metal industry in Assam. Besides, the customary value provided to the bell metal products, growth of *Satra*

institutions, etc greatly contributed in the expansion and development of the bell metal industry in pre-colonial Assam.

There is an organised structure on a co-operative basis for the working of the bell metal industry in Assam. Even today, this structure remained the same. Only male labour is associated with the bell metal industry as it involved hard labour. The system of co-operative working is called the *ojha-pali* system. The *kanhars* are united through a *khep* which may alter after every six months. Every *garshal* used to have an *ojha-kanhar*, the master craftsmen and to assist him there are other *kanhars* who are called the *palis*.

The *ojha-kanhar* used to take all the responsibilities of the *garshal* and the quality of the items produced there used to depend on his artistic skill and technical expertise. The profit of the *garshal* is divided in the form of wages among the *kanhars*. In the profit, the *ojha-kanhar* has half a share more than the *palis*. The *ojha-kanhar* receives the additional share of profit as he used to provide the tools, working shed and raw materials for manufacturing the products.

The production and marketing of the bell metal products in pre-colonial Assam was controlled by the *kanhars*. The products were manufactured according to the demand placed by the customers. As such the *kanhars* could establish a direct relationship with the customers. For manufacturing the products, the customers provided the making cost to the *kanhars*. The making cost used to differ from product to product. Except, the *kansari* caste of the Surma Valley, no other occupational castes or sub-castes were associated with the manufacture of bell metal products in Assam.

The only requirement to become a *kanhar* was a good physique and a willingness to work hard. For learning, he had to join under an *ojha-kanhar* in a *garshal* as a novice. The tools as well as implements used by the *kanhars* were all locally made. The products were made out of them by following the hammering method. These products were of different varieties which used to meet the different needs of the people.

However, in the colonial period, the situation was not favourable for the further development of the bell metal industry in Assam. Rather as already mentioned, the bell metal industry gradually declined from its traditional centres. It was only in Sarthebari that the bell metal industry survived with pride. The Colonial Government showed no eagerness to develop the industry and its organisational framework, tools and implements used, method of production and quality of products produced remained as it was during the pre-colonial period.

The large scale entry of cheap machine made goods of similar nature resulted in the low sale of bell metal products; non-existence of professional caste among the bell metal workers, other than the *kansari*; monetisation of economy with heavy taxation; etc greatly threatened the overall existence of the bell metal industry in colonial Assam. Further, the entry of *kayans* and *byaparis* into the bell metal industry by taking advantage of the financial problems faced by the *kanhars* increased the problems of the industry.

By advancing bell metal and money, the *kayans* and also the *byaparis* gradually brought the *kanhars* within their control. They broke away the age old direct relationship which once existed between the *kanhars* and their customers. With the market being under their control, this business class started exploiting the *kanhars*

through different ways making their life very miserable. Infact, the whole control of the bell metal industry went into their hands. Then the world wide economic depression broke out reaching its extreme level in 1929 which brought the bell metal industry to a declining condition.

Henceforth, the bell metal industry started to decline gradually from its different centres. But an exception to this decline was seen at Sarthebari where the *kanhars* continued their bell metal smithy inspite of unfavourable situations. This resulted in popularising and spreading the bell metal smithy to the adjoining villages.

Traditionally, the *kanhars* of Sarthebari followed a system called *prabakh khata* or *prabah*. Under this system, they moved to different places and established *garshal* there on a temporary basis. In the *garshal* they manufactured products which were sold locally. This system contributed a lot to the *kanhars* in continuing their traditional occupation by remaining outside the control of the *kayans*.

Further, the *kanhars* of Sarthebari under the leadership of Kohi Ram Das organised themselves to work independently of the *kayans*. Initially they formed a union, the *Asom Kanhar Sangha* under which later on a co-operative store was also started. Thereafter the union came to be known as the *Asom Samabai Kanhar Sangha*. Later on the *Sangha* also got registered under the section 2 of the 'Assam Co-operative Act of 1912'.

The *Sangha* started to produce bell metal of its own, provided raw materials to the *kanhars*, sold their products and provided them wages at increasing rate. Further, it removed two cruel practices. By adopting these measures, the *Sangha* protected the

bell metal industry in Sarthebari and the *kanhars* of the area. The *Sangha* did it without receiving any assistance from the Colonial Government.

On their part, the Colonial Government provided few stipends and scholarship for receiving training in bell metal works outside the province. For providing institutional training within the province, bell metal classes were started in the Sibsagar Polytechnic Institute, His Royal Highness The Prince of Wales Technical School and Sarthebari High English School. For sale of bell metal products display was made in different exhibitions and arrangement was made in the Government Emporium of Cottage Products at Gauhati.

These colonial measures were far from being enough and were adopted very lately when bell metal industry had already started perishing from its traditional centres. It can be said that the Colonial Government was not very interested in reviving the bell metal industry for which the industry could not make any development in the colonial period.

In the post-colonial period, the bell metal industry in Assam denotes the bell metal industry at Sarthebari. This was because the industry had its notable existence only in Sarthebari and its adjoining villages. There are few bell metal producing units in Bilasipara and Sapatgram. In these units Bengali *bati* and Manipuri *bati* are produced. In some new places like Hajo, Ganeshpara, Aakhoibari Kumargaon, etc the bell metal production units were also found. But all these new units were off-shoots of Sarthebari.

The organizational pattern, method of production, tools and implements used and quality and shape of products produced remained the same in post-colonial period

with that of pre-colonial and colonial period. The only difference was that a rolling machine was provided by the Central Government and winding machine was used by the *kanhars*. Few bell metal production units have also started employing some unskilled workers as wage earners. There was no other notable change in the bell metal industry.

The *Sangha* continued to work from its headquarter at Sarthebari with its branch cum sale offices established at different places in the State for the progress and well being of the bell metal industry in the State. The *Sangha* placed memorandums to the various Ministers of Government of Assam from time to time and to the then Chief Minister of Assam in 1993 placing their basic problems like financial constraint, lack of raw materials, unequal competition with machine made products, technological backwardness, etc and also suggested measures to solve these problems.

Besides, the representatives of the *Sangha* put forward their problems as well as remedial measures in the Assam Industries Conference held in 1967. Then two Plan proposals were also placed by the *Sangha* before the Government of Assam for development of the bell metal industry . But the outcome of all these memorandums, representations and plans by the *Sangha* was not fruitful as the State Government did not initiate any whole hearted measure for regenerating the bell metal industry in the State.

Financial assistances were provided by the State Government from time to time. Raw material was also supplied for few years. Few training programmes were conducted. The Central Government provided a rolling machine on a subsidized rate. Then a Common Facility Service Centre was established with modern machineries, but it did not start functioning. Few survey studies were also conducted. The Khadi

and Village Industries Board of Assam included bell metal industry in its Schedule of Industries. But all these measures were of no practical use as its implementation was neglected.

The only beneficial measure for the *Sangha* and the bell metal industry was the exemption of sales tax to be paid till 31st March, 1985 by the Asom Gana Parishad Government in 1988. But no legislation was made to exempt bell metal products from the purview of the sales tax in future. Still, the *Sangha* continued to work for the development of the bell metal industry. It along with the business class determined the wages to be paid to the *kanhars*. It also decided to pay the price of *mulmara* to the *kanhars* which forced the business class to do so. Further the *Sangha* through its branch cum sale offices made arrangements for the sale of the bell metal products. But for a better future of the bell metal industry, a comprehensive plan should be made and materialized by the government.

FINDINGS

On the basis of the study conducted on the silk and bell metal industry in colonial and post-colonial Assam it has been found that:

- The silk and bell metal industry are both traditional and indigenous industries of Assam. But the amount of importance provided to the silk industry by the government during the colonial and post-colonial period was not provided to the bell metal industry.
- The Colonial Government from the very beginning of their rule showed favourable attitude towards the silk of Assam, both raw and manufactured.

 During the 19th and 20th century, the Colonial Government continued its silk

trade in Assam. At the same time, the Colonial Government through its Department of Industries took measures which provided a modern look to the silk industry of Assam. But in the case of bell metal industry, the Colonial Government neither was involved in any form of trade nor took any noteworthy measures for developing the bell metal industry.

- In the post-colonial period, the State Government established the Department of Sericulture and Weaving. Then on all India level, the Central Government established the Central Silk Board. But no such separate department was established either in the State level or Central level for the development of the bell metal industry in Assam. Even the categorization of the bell metal industry was not a fixed one.
- Financial allocations were made in the Five Year Plans and Ad-hoc Annual Plans for undertaking schemes for the development of the silk industry in post-colonial Assam. But in these Plans no such financial allocation was made for the development of the bell metal industry in post-colonial Assam. Even the name of the bell metal industry did not feature in any of the Plans till the year 2000 A.D.
- With a separate department and fund allocation, various developmental measures were taken by the Government of Assam with the assistance of other stakeholders for the development of the silk industry in the post-colonial Assam. But in the case of the bell metal industry, neither there was a separate department and fund allocation to undertake measures for developing the industry. With little governmental support, the *Asom Samabai Kanhar Sangha Ltd.* continued to be the only organization in the post-colonial Assam working

continuously for the development of the bell metal industry since its formation in the colonial period.

• The working of the bell metal industry in the post-colonial Assam centered round the *Asom Samabai Kanhar Sangha Ltd.* with its headquarter at Sarthebari and branch cum sale offices at different places in the State. But there was no such common organization under which the silk industry functioned in the post-colonial Assam.