## CHAPTER – III SILK INDUSTRY IN COLONIAL AND POST-COLONIAL ASSAM

## **COLONIAL PERIOD**

The commercial potentiality of *eri*, *pat* and *muga* silk of Assam was known to the British since the early days of their contact with the Ahom kingdom. As such, the British visualized the silk of Assam as an exportable commodity to England. The Continental System had prohibited the entry of Italian silks in the British market. This resulted in the rapid increase of demand for Indian silk in England. Assam was an important silk producing region in India. After occupying Assam in 1826, the British decided to export silk from Assam to England. China was until then the prominent silk supplier to England and Assam with its huge silk potential was looked upon as an alternative source for silk supply.

With the formal occupation of Assam, the British diverted their attention towards its silk industry. Hence, there began a real test of the silk industry's resilience

<sup>&</sup>lt;sup>1</sup> Priyam Goswami, *Indigenous Industries of Assam Retrospect and Prospect*, Anshah Publishing House, Delhi, 2005, p. 25

<sup>&</sup>lt;sup>2</sup> It was a system started by Napoleon Bonaparte, the King of France by issuing two decrees, namely, the Berlin Decree in 1806 and the Milan Decree in 1807 in order to destroy the British trade and commerce as well as to industrially strangulate England.

<sup>&</sup>lt;sup>3</sup> Priyam Goswami, Assam in the Nineteenth Century: Industrialization and Colonial Penetration, Spectrum Publications, Guwahati, 1999, p. 53

<sup>&</sup>lt;sup>4</sup> Ibid. p. 54

with the entry of the British into Assam.<sup>5</sup> The silk production and manufacture until then was a purely domestic work. There was no system of breeding the silkworms on a large scale. The weavers mainly produced enough for domestic consumption. It was the surplus of raw and manufactured silk after consumption which was sold out. Though the silk was exported both in raw and woven form from pre-colonial times, yet there was no regular trade in silk yarns and fabrics or any fixed market where they could be purchased in large quantities.<sup>6</sup> The Ahom rulers no doubt turned the silk of Assam into a commercial commodity. But the silk industry in pre-colonial Assam was not a commercial one. Rather, at the commencement of the colonial rule, the silk industry in Assam was an important indigenous industry at the cottage level which provided the basic requirement of clothing and an additional source of income to the Assamese people.

David Scott considered no other industry more suitable than the silk for the material well-being of the people. For him, the soil of Assam and the genius of her people both favoured the production of the silk and silk manufactures.<sup>7</sup> As the people of Assam were universally acquainted with the silk culture, there was no need for European supervision and the people would engage more in silk production if it could be shown as a highly profitable commodity under the colonial economic set up. Further, the export of raw silk would make a considerable enhancement in the revenue

Mahua Bhattacharjee, Silken Hues, Muted Voices: Women in the Silk Industry of Assam, DVS Publisher, Guwahati, 2014, p. 50

<sup>&</sup>lt;sup>6</sup> Report on the Administration of the Province of Assam, 1880-1881, Assam Secretariat Printing Office, Shillong, 1882, p. 5

<sup>&</sup>lt;sup>7</sup> Bengal Political Consultation, 13 October, 1826, No. 44

of the Company's exchequer.<sup>8</sup> Besides, at a personal level Scott also favoured the silk products of Assam for its consistent quality and competitive price.<sup>9</sup>

Hence, along with sericulture, Scott laid emphasis on the weaving of the produced silk yarn. In early 1830, Scott put forward an elaborate scheme before the Government of Bengal in order to produce quality goods on a commercial scale out of the silk of Assam. His scheme was to plant mulberries in 1000 *bighas* of land and to distribute 500 reels to the local artisans who were to be trained in the improved methods of spinning and weaving by the spinners and weavers from Bengal. The required expenditure for it will be met by imposing extra cess on the areas under cultivation. But, the authorities in Calcutta were not at all convinced with the scheme put forward by Scott and turned it down as a doubtful experiment. This disapproval did not dampen the spirit of Scott and he privately continued with his scheme in 1831 at Darrang with the help of convict labour. 11

David Scott towards the close of 1831 met with premature death and his successors showed utter indifference towards that scheme as it was a personal experiment started by Scott even after disapproval by the government towards any such project. This greatly affected the success of the scheme. Finally, in December, 1832, when the Board of Trade expressed an unfavourable opinion on the market value of the silk of Assam, Robertson brought the experiment of Scott to a close.<sup>12</sup>

<sup>&</sup>lt;sup>8</sup> Bengal Political Consultation, 30 December, 1826, No. 66

<sup>&</sup>lt;sup>9</sup> Nirode K Barooah, *David Scott in North-East India 1802-1831*, Munshiram Manoharlal, New Delhi, 1970, p. 105

<sup>&</sup>lt;sup>10</sup> Bengal Political Consultation, 7 May, 1830, No. 51

<sup>&</sup>lt;sup>11</sup> Bengal Political Consultation, 5 November, 1832, No. 53

<sup>&</sup>lt;sup>12</sup> Bengal Political Consultation, 17 December, 1832, No. 44

Thereafter in between 1834 and 1840, cocoons and thread of the *muga* worm along with specimen of woven cloth were submitted to the sub-committee of the Agricultural and Horticulture Society of Bengal for approval. The opinion of the sub-committee on the products was favourable, yet the silk trade in Assam was not stimulated in any manner and correspondingly for a long time no capital investment was made to develop the silk industry in the province.<sup>13</sup>

Further, in early 1833, Jenkins reported that both raw and manufactured silk ceased to be an important article of production. The plantations of different trees for feeding of the worms were neglected. All this was to facilitate the importation of cheap cotton textiles into the province. If we look at the account of Assam provided by William Robinson in 1841 it is very much clear that the *eri* and *muga* silk were then quite extensively produced in Assam. But, the mulberry or *pat* silk production was not that extensive one. This decline in production of *pat* silk as per opinion of the British officials was because of the fact that the *jugis* or *katonis* who were only engaged in the *pat* silk culture were looked upon in the Assamese society as a degraded caste and by giving up this profession, they tried to rise up in the social scale. If

But the real cause of the decline in *pat* silk production was the importation of *pat* thread from Bengal, China and other countries.<sup>17</sup> However, the quantity of

<sup>&</sup>lt;sup>13</sup> Nirode K Barooah, op. cit. p. 106

<sup>&</sup>lt;sup>14</sup> H. K. Barpujari, (ed.), *The Comprehensive History of Assam*, *Volume-V*, Publication Board Assam, Gauhati, 2004, p. 99

William Robinson, A Descriptive Account of Assam, Sanskaran Prakashak, Delhi, 1975, pp. 69-70

Rai Bahadur Kanak Lal Barua Bahadur, Note on the Industrial Condition and Possibilities of Assam, Assam Secretariat Printing Office, Shillong, 1916, p. 13

<sup>&</sup>lt;sup>17</sup> H. K. Barpujari, (ed.), Volume-V, op. cit. p. 99

importation cannot be ascertained as no concrete statistical information of that period was available. A real threat was also poised towards the *muga* silk as the British authority took a decision to impose taxes on the *soom* tree plantation in the homesteads which greatly discouraged the *muga* rearing in Assam. Further, the expansion of tea gardens considerably reduced the plantation areas of *muga* food plants and wild population of *muga* silkworms. W.W. Hunter also mentioned that the decrease of silk production during the British period was due to increase in supply of European cotton and woollen fabrics in the market. <sup>19</sup>

The situation took a turn in favour of the silk industry from the second half of the 19<sup>th</sup> century when the British became interested in the commercial prospects of the domesticated *eri*, *pat* and *muga* silkworm of Assam. This may be because A. J. Moffatt Mills in his report on Assam submitted to the Imperial Government of India towards the close of 1853 stated that "nothing is more desirable than to encourage all products which form the main exports of Assam". Silk was amongst the exportable products from Assam. Hence, the British authority in Assam decided to cultivate the domesticated silkworm on its own and thereby to encourage its production. This decision of colonial cultivation of silk on a commercial scale proved that the policy of Scott was not wrong though the authority at that time could not realize its effectiveness.

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<sup>&</sup>lt;sup>18</sup> Prabin Baishya, *The Silk Industry of Assam*, Spectrum Publications, Guwahati, 2005, pp. 43-44

<sup>&</sup>lt;sup>19</sup> Raju Phukan, Muga Silk: Problems and Prospects of Muga Silk Industry of Assam, India, VDM Verlag, Berlin, 2010, p. 54

<sup>&</sup>lt;sup>20</sup> A. J. Moffatt Mills, *Report on the Province of Assam*, Assam Publication Board, Gauhati, 1984, p. 15

<sup>&</sup>lt;sup>21</sup> J. Geoghegan, Silk in India, Superintendent of Government Printing India, Calcutta, 1872, p. 43

The British authority made a thorough investigation about the different varieties of wild silkworms of Assam including the *tasar*.<sup>22</sup> Actually some misapprehensions prevailed among the British silk spinners regarding the nature of the silkworms which furnish the silks of Assam. Mr. Thomas Wardle, a member of the Science and Art Department of the Committee of Council on Education, South Kensington, London in his pamphlet on the Wild Silks of India, mistakenly included the domesticated *muga* and *eri* silk of Assam. Then in a lecture delivered on Silk Spinning in the Technical College, Glasgow, the *tasar* silkworm was wrongly mentioned as a cultivated or domesticated silkworm of Assam.<sup>23</sup> Besides, from 1857 onwards there began the utilization of waste silk in Europe resulting in the improvement of trade in waste and wild silk in India. In this perspective, the silkworms of Assam were considered as having great possibilities.<sup>24</sup>

On investigation, eight species of wild silkworms were found in Assam. Out of these, three were the wild forms of the domesticated *eri*, *pat* and *muga* silkworm. But even then, it was clearly mentioned by the investigators that these wild silkworms might possess scientific interest, but have no commercial value in present or in future. The cocoons of the wild silk were so less in number that even their cost of collection can never be paid from it.<sup>25</sup> The *tasar* silk, no doubt was a domesticated variety in some provinces of India. But in Assam, Colonel Keatinge, the then Chief

<sup>&</sup>lt;sup>22</sup> L. Liotard, *Memorandum on Silk in India*, *Part-I*, Superintendent of Government Printing India, Calcutta, 1883, p. 6

E. Stack, 'Silk in Assam' in *Notes on Some Industries of Assam From 1884 to 1895*, Assam Secretariat Printing Office, Shillong, 1896, p. 1

<sup>&</sup>lt;sup>24</sup> G. N. Gupta, A Survey of the Industries and Resources of Eastern Bengal and Assam for 1907-08, Secretariat Printing Office, Shillong, 1908, pp. 23-24

<sup>&</sup>lt;sup>25</sup> E. Stack, op. cit. pp. 1-2

Commissioner of the province in 1877 gave the opinion that "to attempt to create a *tasar* silk industry in this province would be simply to court failure."<sup>26</sup>

The colonial cultivation of the domesticated silkworm of Assam on a commercial scale was actually an experimental measure as until then no commercial cultivation of silk was undertaken even by the natives. Leaving aside the scheme of *pat* silk cultivation undertaken by Scott, there was also no other experience of silk cultivation on the colonial side. Hence, utmost attention was paid towards selecting the area for the experimental silk cultivation. A decision was taken to select an area in the Brahmaputra Valley of Assam. This was because there was no silk culture of noteworthy importance in the Barak or Surma Valley of Assam. The Surma Valley was not in general an area of silk cultivation. Only silk cultivated there was the *eri* silk on a small extent which also began to decline after the rapid spread of jute cultivation. It was aptly remarked by B. C. Basu in his report on the silk industry of Assam that "there is so little amount of silk in the Surma Valley that I did not consider it at all necessary to extend my enquiry to that part of the province".<sup>27</sup> Even G. N. Gupta earlier in his report had made the statement that "the use of silk in the Surma Valley was very rare".<sup>28</sup>

Prior to the starting of the experimental silk cultivation, the most vital issue that arose before the British authority was regarding the selection of the variety of the domesticated silkworm to be cultivated. While selecting amongst the three available

<sup>&</sup>lt;sup>26</sup> Ibid. p. 2

<sup>&</sup>lt;sup>27</sup> Rai Bhupal Chandra Basu Bahadur, *The Silk Industry of Assam*, Assam Secretariat Printing Office, Shillong, 1915, p. 6

<sup>&</sup>lt;sup>28</sup> G. N. Gupta, op. cit. p. 24

varieties of domesticated silkworm, the *pat* was outright considered as unfit for cultivation because of the costliness of its silk, then scantiness of supply and difficulties involved in extending its cultivation. The remaining two varieties, *muga* and *eri* were considered as suitable for cultivation as were then produced in considerable quantity and being of indigenous variety were adaptable to the local climatic conditions.<sup>29</sup> But being an experimental cultivation that also on a commercial scale, the decision was taken to begin the silk cultivation with the *eri* silkworm.

Actually in comparison to the *muga*, the *eri* silkworm was cultivated to a greater or less extent in every district of the province. The *eri* silk was cheaper, more abundant and reared entirely indoors. Being reared completely indoors, its cultivation does not require the troublesome necessity of watching day and night like the *muga* silkworm rearers. There was not much skill required in handling the *eri* silk. H. Z. Darrah on the suitability of *eri* silkworm cultivation commented that "it was difficult to imagine a combination of circumstances which promised fairer for the commercial success of any commodity." He further stated that "*eri* silk had the greatest potential and that it would one day form one of the most important staples of Assam". There was also an increasing demand for *eri* silk in the British market. This demand was chiefly amongst the British silk spinners as improvement was made in the spinning machinery which enabled them to spin the intractable *eri* cocoon.<sup>30</sup>

For the first time, a European during 1866-67 tried to cultivate *eri* silkworm in the neighbourhood of Rangia, in Kamrup. But he was compelled to abandon it after

<sup>&</sup>lt;sup>29</sup> E. Stack, op. cit. p. 2

<sup>&</sup>lt;sup>30</sup> H. Z. Darrah, 'Eri Silk of Assam' in *Notes on Some Industries of Assam From 1884 to 1895*, Assam Secretariat Printing Office, Shillong, 1896, pp. 81-82

losing the entire crop because of disease. Then six years later in 1872-73, Mr. C. H. Lepper was commissioned by *Messrs. Lister & Company* to take up land and try the experiment of rearing the *eri* silkworm on a large scale to prove practically the possibility of procuring silk in sufficient quantity for business or commercial purpose. Mr. Lepper selected the site for the experiment at Lakhimpur as he found the climatic conditions there exceptionally favourable with abundant supply of food for the silkworms. At Lakhimpur, Mr. Lepper initially tried to involve the natives to extend the cultivation of the *eri* silkworm by promising to buy from them all their cocoons at a fixed rate which was in between Rs. 1- Rs. 4 per seer or Rs. 50 a maund. But no native people came forward to accept this proposal and Mr. Lepper personally had to take up the land to start the rearing of the *eri* silkworm with hired labour from the locality. 32

In the beginning the cultivation showed good result with the *eri* silkworms suitably adapting to the breeding conditions and producing cocoons. But the local people were found to be inefficient for undertaking the cultivation work as they were reluctant to work as hired labour. With no alternative left, Mr. Lepper had to procure labour from outside which proved to be very difficult as well as costly. As such Mr. Lepper advised *Messrs. Lister & Company* to discontinue with the cultivation thereby bringing the experiment to a close. <sup>33</sup> Later on in June, 1880 Mr. Lepper at the instruction of Mr. Lister shared about his experience of the *eri* cultivation and stated that "the difficulty of collecting labour and the apathy and independent position of the

<sup>&</sup>lt;sup>31</sup> E. Stack, op. cit. pp. 4-5

<sup>&</sup>lt;sup>32</sup> H. Z. Darrah, op. cit. p. 83

<sup>&</sup>lt;sup>33</sup> E. Stack, op. cit. p. 5

peasantry in Assam have always appeared to me as sufficient to prevent any large enterprise of this nature succeeding and I have always so represented the case".<sup>34</sup>

This abrupt end of Mr. Lepper's experimental *eri* silk cultivation at Lakhimpur did not dampen the colonial spirit. In 1886, the subject of growing *eri* silk received a good deal of attention. Mr. H. Z. Darrah obtained permission from the Local Government to put forward an offer to pay half the cost of any experiment of *eri* silk cultivation provided the experimenter would give him statistics about the cost, outturn, area, etc. Many tea planters promised to try and three of them started the silk cultivation in the same year. But none of them carried an experiment through to completion and no statistics of any kind were obtained or furnished.<sup>35</sup> The same year a British official Mr. H. M. Crowe of Pathalipam also started the cultivation of the *eri* silk. He planted two acres of castor-oil plants and also *keseru* for rearing of the *eri* silkworms on the banks of the river Subansiri. But the very next year the whole area was washed away by the river water. Still during this one year period of experiment, Mr. Crowe provided time to time information to Mr. Darrah where it was mentioned that he found great difficulty in keeping the wild caterpillars away from the plants which proved to be a drawback to large scale cultivation of the *eri* silk.<sup>36</sup>

Another experiment on the *eri* silk cultivation was conducted in 1886 in the district of Kamrup by Mr. A. C. Campbell. Mr. Campbell was the then Deputy Commissioner of Kamrup district and he tried at his own expense the rearing of *eri* silkworm. This experiment was conducted by Mr. Campbell in his own compound

<sup>34</sup> H. Z. Darrah, op. cit. p. 85

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<sup>35</sup> Ibid. pp. 85-86

<sup>&</sup>lt;sup>36</sup> Ibid. p. 99

with castor leaves bought from outside as there was no castor plants in his premises. But inspite of all these difficulties, two or three crops of silkworm were successfully raised without any kind of disease. This looked very encouraging and Mr. Ward, the then Chief Commissioner of Assam sanctioned a grant of Rs. 1,200 to enable Mr. Campbell to grow 20 acres of castor-oil plant and to try the experiment of rearing on a more extended scale. With a part of that grant, Mr. Campbell procured castor seeds from Bengal and on sowing it showed good results. But when the number of silkworms crossed over a lakh yielding several thousand of cocoons, the whole crop was destroyed by disease. The specimens of the diseased silkworms and cocoons were forwarded for investigation to Mr. Wood Mason, Superintendent of Indian Museum, who identified the disease as pebrine.<sup>37</sup> This brought another commercial experiment of the *eri* silk cultivation to a disappointing end inspite of initial success. Most importantly once again it reflected that large scale cultivation of the *eri* silk was very much prone to disease.

Three years later in 1889, another experimental commercial cultivation of the *eri* silk was carried on by Mr. F. Mackenzie, a tea planter of Cachar in the Surma Valley. Mr. Mackenzie was very sanguine of success and believed that there was money to be made out of the *eri* silk. Prior to starting his experimental cultivation in January 1889, he made a careful observation of the *eri* silk cultivation to have an overall idea of the process involved in it. For his experiment, Mr. Mackenzie secured assistance from the Colonial Government on the condition that the cost to government should not exceed Rs. 1,500. He bought castor seed from Patna and along with the local Cachar variety sowed it in 20 acres of land. In comparison to the Patna variety,

<sup>&</sup>lt;sup>37</sup> Ibid. p. 86

the Cachar variety yielded better result. But the castor plants were all destroyed by caterpillars and the *eri* silkworms had to be fed on some other trees. Even then the silkworms were growing, but just before they were ready to spin their cocoons, almost all of them were affected by a disease which was identified by Mr. Cotes of the Indian Museum as flacherie.<sup>38</sup>

If we look at the several unsuccessful colonial attempts made for cultivating the *eri* silkworm at commercial scale, it becomes clear that all these experimental works were done by the foreign entrepreneurs and British Government officials at a personal level. There was no direct government cultivation and the only thing they provided was financial assistance. For the successive failures in these experiments, the primary reasons were the infection caused by disease like pebrine and flacherie and destruction of the castor plants by caterpillars, while the secondary reasons were non-availability of efficient local labour and flood. But it is quite interesting that during the same period the local population continued with their *eri* silk cultivation. For the local tribes like the Boros, Meches, Rabhas, etc, the *eri* silk was an easy means of quick cash. They cultivated and sold it in the annual fairs or weekly hats. With the income generated from it, these tribesmen met their revenue demands.<sup>39</sup>

It was quite unbelievable that the castor plant that thrived in such luxuriance around the cottages of the villagers could not be cultivated on a large scale by the Europeans and this must be due to their inadequate expert knowledge on sericulture.<sup>40</sup>

<sup>&</sup>lt;sup>38</sup> Ibid. pp. 87-93

<sup>&</sup>lt;sup>39</sup> B. C. Allen, *Monograph on the Silk Cloths of Assam*, Assam Secretariat Printing Office, Shillong, 1899, p. 9

<sup>&</sup>lt;sup>40</sup> G. N. Gupta, op. cit. p. 24

As per the local belief, the personal cleanliness of the men or women related to the rearing of the *eri*, *muga* or *pat* silkworm was the secret of success. These silkworms as stated earlier were regarded by the native rearers as *doyang bostu* meaning sacred beings which was required to be handled with care and respect. A single touch of impure body was enough to finish the entire crop in a week.<sup>41</sup> This cleanliness was probably not at all maintained by the foreigners when they reared the *eri* silkworm on a commercial scale with hired labour.

Actually this traditional belief of cleanliness was nothing, but probably the scientificity involved in the indigenous silkworm rearing process in Assam. However, the British authority regarded all these traditional belief of cleanliness as superstitions and hence considered the native rearers as conservative and un-enterprising. Same opinion was even put forward by the Indian officials working under the Colonial Government. For instance Rai Bhupal Chandra Basu Bahadur in his report on the silk industry of Assam stated that "the rearing of silkworms in Assam is surrounded by an amount of prejudice and superstition which to an outsider seems incredible and which may prove a serious obstacle to any improvement that we may try to introduce". <sup>42</sup>

Apart from the decision to start indigenous silkworm rearing, the British Government did not even take any measures for improving the silkworm rearing practice in the commercial experiments conducted by the foreign entrepreneurs and their own officials at personal level. The Colonial Government in Assam looked on impassively when the whole broods of the *eri* silkworm in the experimental cultivation area were destroyed by disease. Similar outbreak of disease amongst the

<sup>&</sup>lt;sup>41</sup> L. Liotard, op. cit. p. 8

<sup>&</sup>lt;sup>42</sup> Rai Bhupal Chandra Basu Bahadur, op. cit. p. 5

silkworm had taken place in other parts of India as well as world. But proper method of treating the silkworm from the disease was invented in the mid 1880s and it could have been applied in Assam.<sup>43</sup> Hence, at the end of the 19<sup>th</sup> century it was rightly stated by B. C. Allen that "giving too much importance to the failure that has been met by the Europeans in cultivating the *eri* silkworm is unreasonable and further experiments will definitely disclose some means of overcoming the difficulties that have led to the failures so far".<sup>44</sup>

G. N. Gupta also stressed on the need of carrying on further experiments. But he emphasised on following the scientific principles while carrying on with the experiments. It was because by scientific culture of the silkworms, dangers from disease have been greatly reduced in Bengal and elsewhere. Mr. Maxwell Lefroy, the Imperial Entomologist had shown the way to control the insect-pests which devastated large plantations of castor planted for the purpose of the *eri* silkworm rearing. A Government Farm was also established at Shillong where since 1904 European univoltine *pat* silkworm imported from France was successfully raised. Thereafter the local *pat* silkworm also yielded good result showing lots of promise for the future of the silk industry of Assam.<sup>45</sup>

The repeated failures meted out at the commercial cultivation of the *eri* silk had convinced the Colonial Government that it would be futile to waste time and money to try to produce any domesticated variety of silk in Assam, that also on its

<sup>43</sup> Maxwell Lefroy and E. C. Ansorge, Report on an Inquiry into the Silk Industry in India, 1916,

*Volume- I*, Superintendent Government Printing, Calcutta, 1917, pp. 62-63 <sup>44</sup> B. C. Allen, op. cit. p. 10

<sup>&</sup>lt;sup>45</sup> G. N. Gupta, op. cit. p. 25

own. Instead of establishing a silk industry in Assam on a commercial scale, the need of the hour would be to view the silk trade from a different perspective. Keeping in tune with this new perspective, silk trade between Assam and England was conceived in two forms: export of thread or export of cocoons. But the silk threads of Assam were coarser and uneven as the indigenous process of reeling was at its crudest form. As such these silk threads from Assam were found unfit for any purpose of the British manufacturer. Hence, it was believed that instead of investing in machinery in Assam for the manufacture of silk threads, it would be more profitable to export the cocoons.

Manufacture of silk fabrics out of the waste cocoons was a flourishing industry in England for which there was a large exportation of cocoons from China. At that time China was the principal source of supply of waste cocoons to England and the English manufacturers were largely dependent on Chinese suppliers. But when they discovered that the Brahmaputra Valley of Assam was abundant with the silk cocoons, the British traders pounced at the opportunity. However, one should not feel that this was a very encouraging sign for the growth and development of the silk industry in Assam. Rather the policy of exporting cocoons had a disastrous effect on the production of silk items which had a large domestic consumption as well as demand outside.

<sup>&</sup>lt;sup>46</sup> Priyam Goswami, 2005, op. cit. p. 28

<sup>&</sup>lt;sup>47</sup> E. Stack, op. cit. p. 3

<sup>&</sup>lt;sup>48</sup> Priyam Goswami, 2005, op. cit. p. 29

<sup>&</sup>lt;sup>49</sup> E. Stack, op. cit. p. 3

On the basis of the recommendation made by A. J. Moffatt Mills, though the Colonial Government in Assam showed favourable opinion towards the cultivation of silk on a commercial scale, yet they did not take any measure of noteworthy significance to inspire the local population towards the commercial rearing of silkworm on the basis of scientific principles and for developing the traditional method of silk weaving on modern lines. Negligence was showed towards changing the traditional outlook towards the silk culture. Whatever impetus was provided by the colonial authorities in the form of promises to buy all the produced *eri* cocoons and to pay half the cost of any experiment of the *eri* silk cultivation was not at all within the reach of the general people as they did not possess the required capital to start on their own the commercial cultivation of silk which also involves labour, land, etc in a large scale.

Leaving aside the personal efforts of the foreign entrepreneurs and few British officials like David Scott, Mr. H. Z. Darrah, Mr. H. M. Crowe, Mr. A. C. Campbell and Mr. Ward, practically no effective measure was taken by the Colonial Government till the first decade of the 20<sup>th</sup> century for the development of the silk industry in Assam. 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 which greatly discouraged the *muga* silk cultivation, imposed restrictions on clearing the forest which led to the extinction of the *mezankuri* and *champa* variety of the *muga* silk<sup>50</sup>, extended jute cultivation in the Surma Valley resulting in the extinction of the *eri* silk cultivation there, started tea plantations in some of the *soom* 

<sup>&</sup>lt;sup>50</sup> Ibid. p. 21

tree plantation areas leading to the decay of the *muga* silk industry<sup>51</sup>, imported the *pat* thread from Bengal, China and other countries leading to declination in the *pat* silk industry, 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 apathy of the Colonial Government, the silk culture continued to be an important occupation in Assam because as already stated this was something universally practised in every Assamese household producing items required in everyday life. Labour involved there was mostly from within the household and hence was unpaid. No doubt male labour was there, but female labour was the larger one.<sup>52</sup> However, the condition of the majority of those engaged with it was very depressive one as the *kayans* started to dominate the entire business involved in it. The *kayans* made advances to the *eri* cultivators and took repayment afterwards in thread or cloth which was commonly exposed for sale in the petty markets.<sup>53</sup> In the case of the *muga* silk, the *kayans* used to pick up the silk in the villages and the cultivators also being impelled by their need used to come occasionally to the shop of the *kayans* to sell the silk.<sup>54</sup> Majority of the silk weavers were in a depressed condition as they were completely in the hands of the *kayans* because they lacked in capital and credit facilities.<sup>55</sup>

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<sup>&</sup>lt;sup>51</sup> Sudeshna Purkayastha, *Indigenous Industries of Assam*: 1870-1925, KP Bagchi and Company, Kolkata, 2005, p. 35

<sup>&</sup>lt;sup>52</sup> Mahua Bhattacharjee, op. cit. p. 60

<sup>&</sup>lt;sup>53</sup> E. Stack, op. cit. p. 11

<sup>&</sup>lt;sup>54</sup> Ibid. p. 19

<sup>&</sup>lt;sup>55</sup> H. K. Barpujari, (ed.), Volume-V, op. cit. p. 100

For establishing their control over the weavers, the *kayans* advanced them with cocoons and pay them sometimes in cocoons as the wages of their labour. For instance, if an *eri than* could be woven from  $2^{1}/_{2}$  seers of cocoons, about 5 seers were advanced and after finishing the weaving, the weaver kept remaining  $2^{1}/_{2}$  seers of cocoons which was priced at Rs. 5 or Rs. 6 as the wage for their labour. It took about three months for a weaver if full time was devoted in completing the weaving of an *eri than* and the earnings in a day used to be about  $1^{1}/_{2}$  to 2 *annas*. The cocoons required were acquired from different areas of Assam by the *kayans* and they used to sell it to the weavers at higher rates. G. N. Gupta was himself surprised to find poor Assamese women buying silk cocoons in the Palashbari market from the *kayans* who imported large quantities of it from North Assam.

Situation was slightly better for the weavers of Sualkuchi who worked independently of the *kayans*. These weavers used to buy cocoons of their own and after weaving used to directly sell their cloths at a good margin of profit. For selling, the weavers directly used to go to the *hats* or to the *kayans*, or sold it to a *byapari*, who for a small profit took it to the *hats* or to the *kayans*. The average earning of the independent weavers of Sualkuchi was 3 to 4 *annas* a day. But the entire export business in both raw silk and finished goods was in the hands of few *kayans*, who had neither interest in the welfare of the weavers nor in the introduction of any improvement in the silk industry. Their concern was only to keep the profits of the silk business to themselves with utmost possible little payment to the weavers.<sup>58</sup>

<sup>&</sup>lt;sup>56</sup> G. N. Gupta, op. cit. p. 28

<sup>&</sup>lt;sup>57</sup> Ibid. p. 26

<sup>&</sup>lt;sup>58</sup> Ibid. p. 28

Not to talk of the export or external business of silk, the internal business was also dominated by the *kayans*. By taking cocoons as advance, the weavers not only lost their independence, but also lost their direct touch with the consumers thereby affecting their income and level of competence. Same was the case for silk rearers as for selling their cocoons or raw silk, they had to go to the *kayans* who already as mentioned had dominating influence on the entire silk business. All this had a disastrous effect on sericulture and its position was far from being satisfactory. The rearing of the *pat* silk got seriously declined, while that of *mezankuri* and *champa* varieties was nearly extinct. There was also fall in the output of the *muga* silk and the demand for the *eri* silk also decreased.<sup>59</sup>

The need of the hour was to take appropriate step for reviving the condition of the silk industry in Assam. It was only in Sualkuchi where the silk industry from its traditional level had reached a commercial stage with the weavers becoming professional and attaining a high degree of skill in weaving of silk fabrics. <sup>60</sup> But the then policy of the Colonial Government was not very much favourable towards reviving any traditional industry although silk of Assam was an item having global demand. However, the Gauhati Industrial Conference of 1913 recommended the creation of the Department of Industries combining it with the Department of Cooperative Societies under one official for the development of prominent cottage industries like sericulture and weaving, both silk and cotton. Further, recommendations were also made for appointing government experts to demonstrate better methods of rearing silk, reeling and spinning of silk yarn and weaving; a

<sup>&</sup>lt;sup>59</sup> Rai Bahadur Kanak Lal Barua Bahadur, op. cit. p. 3

<sup>60</sup> Rai Bhupal Chandra Basu Bahadur, op. cit. p. 50

government sericulture farm for supply of disease free stocks; co-operative societies amongst the silk rearers and weavers; government aid to start silk weaving factories; etc.<sup>61</sup>

The Department of Industries which finally came into existence in 1918 gradually tried to follow the recommendations and this fostered a new lease of life to all those related with the silk industry in the province. The development of weaving industry was amongst the subjects which were initially transferred to the Department of Industries. Silk weaving was a special feature of this weaving industry and there was a commercial demand for the Assamese hand woven silk fabric. Already in 1913 a Weaving Master was appointed for Assam and demonstrators trained in the Serampur Government Weaving Institute, Bengal were appointed by the Local Boards for training the weavers of the province in improved technology. But the outcome of this measure was not satisfactory especially in the Assam (Brahmaputra) Valley as these demonstrators were not expert in silk weaving. It was because cotton weaving was prominently taught in the Serampur Institute. Hence, a decision was taken to open a weaving school in the province to suit the local requirement. Accordingly the school was informally started at Gauhati with the name as the Gauhati Weaving Institute in 1919 under a competent teacher having expertise in theory and practice of silk weaving as well as experience in the peripatetic demonstration in the villages of weavers.62

<sup>61</sup> Rai Bahadur Kanak Lal Barua Bahadur, op. cit. pp. 12-14

<sup>&</sup>lt;sup>62</sup> K. L. Barua, Report of the Department of Industries, Assam, For the Year 1919-20, Assam Secretariat Printing Office, Shillong, 1920, pp. 1-2

The Gauhati Weaving Institute mainly imparted training in silk weaving and successfully carried out experiments in reeling, spinning and weaving of local silk on improved machines. A decision was taken to send the first batch of successful students as peripatetic demonstrators into the villages. The Institute was formally opened in July, 1920 and its teaching staff consisted of a Head Teacher, Assistant Teacher and Weaving Mechanic. 17 students, 13 boys and 4 girls were admitted into the Institute. Gradually, other weaving institutes were also established in the province, like Khasi and Jaintia Girl's Weaving School, Shillong; Tura Industrial School; Surma Valley Technical School, Sylhet and many other private institutions. But none of these institutions put much emphasis on the development of the silk weaving as was done by the Gauhati Weaving Institute.

A private workshop was attached to the Gauhati Weaving Institute in 1921-22 where Assamese carpenters manufactured fly-shuttle looms, sleys, warping mills, creels, etc. These modern weaving equipments were introduced to the public through the Peripatetic Weaving Demonstration Parties.<sup>66</sup> The modern weaving equipments became very popular amongst the people as it improved their traditional weaving practices. The people decided to go for improved appliances in place of their country made accessories.<sup>67</sup> As such the people started placing direct orders to the private

<sup>&</sup>lt;sup>63</sup> Ibid. p. 2

<sup>&</sup>lt;sup>64</sup> K. L. Barua, Report of the Department of Industries, Assam, For the Year 1920-21, Assam Government Printing Office, Shillong, 1921, p. 1

<sup>&</sup>lt;sup>65</sup> K. L. Barua, Report of the Department of Industries, Assam, For the Year 1925-26, Assam Government Printing Office, Shillong, 1926, p. 18

<sup>&</sup>lt;sup>66</sup> K. L. Barua, Report of the Department of Industries, Assam, For the Year 1921-22, Assam Government Printing Office, Shillong, 1922, p. 2

<sup>&</sup>lt;sup>67</sup> K. L. Barua, Report of the Department of Industries, Assam, For the Year 1924-25, Assam Government Printing Office, Shillong, 1925, p. 1

workshop. In 1925-26, there was so much demand from the public for looms and sleys that many orders had to be refused.<sup>68</sup>

Some hand machines invented by local mechanics for the spinning of the *eri* were tested at the Institute by experts and were found to be unsuitable. Weaving experiments were also conducted in twill and satin weaving of the *muga* and mill spun *eri*, mixed noil and *eri*, cotton and *eri* and *muga* and *eri*.<sup>69</sup> A *muga* reeling and twisting machine was invented in 1922 which was awarded a gold medal at the Gauhati Industrial Exhibition. From that year onwards, lessons on dyeing were also provided in the Institute. But there was no expert to provide systematic instructions in dyeing, bleaching and finishing.<sup>70</sup> In 1924-25 a demand was raised for the creation of a female weaving section and the appointment of a Dyeing Instructor in the Institute.<sup>71</sup>

New varieties of fabrics like silk scarves, silk sarees with gold lace borders, mixed *muga* and spun silk shirtings, etc were woven in the Institute and sold with the sale proceeds being deposited in the Treasury.<sup>72</sup> From 1923-24 onwards dobbies and jacquards were introduced in the Institute which helped the students in making attractive designs.<sup>73</sup> In 1927 the Institute was shifted permanently to its newly constructed building at the Ambari area of Gauhati. The permanent building of the Institute consisted of a main building with classrooms and offices, weaving shed,

<sup>&</sup>lt;sup>68</sup> K. L. Barua, 1925-26, op. cit. p. 3

<sup>69</sup> K. L. Barua, 1919-20, op. cit. p. 2

<sup>&</sup>lt;sup>70</sup> K. L. Barua, Report of the Department of Industries, Assam, For the Year 1922-23, Assam Secretariat Printing Office, Shillong, 1923, p. 2

<sup>&</sup>lt;sup>71</sup> K. L. Barua, 1924-25, op. cit. p. 3

<sup>&</sup>lt;sup>72</sup> Ibid. p. 2

<sup>&</sup>lt;sup>73</sup> K. L. Barua, Report of the Department of Industries, Assam, For the Year 1923-24, Assam Government Printing Office, Shillong, 1924, p. 2

dyeing laboratory, hostels, etc. During that year a female weaving section was separately started with a female instructor or weaving mistress and a textile designer was also appointed.<sup>74</sup>

With the Institute being shifted to its permanent building, there arouse the demand for introduction of power-loom weaving which was not possible until the electric installation at Gauhati was completed. The dyeing section of the Institute became popular with the public utilizing it freely for dyeing colours of different shades in their fabrics. A practical dyer was demanded for the section. Some fine printing blocks for the dyeing was bought and variety of fast colours was stocked in the Institute. But no instructor for dyeing was immediately appointed in the Institute by the Colonial Government and this created problem in providing instruction in dyeing. Besides, technical advice in dyeing was also essential for the creation of dyeing establishments in different parts of the province. Finally in 1935-36, a Dyeing Instructor was appointed in the Institute.

The Gauhati Weaving Institute made arrangement for the display and sale of the silk fabrics manufactured by its students at the Institute by participating in different exhibitions and industrial fairs. In 1926 the annual session of the Indian

<sup>&</sup>lt;sup>74</sup> R. N. Phukan, Report of the Department of Industries, Assam, For the Year 1927-28, Assam Government Printing Office, Shillong, 1928, p. 6

<sup>&</sup>lt;sup>75</sup> Ibid. p. 7

R. N. Phukan, Report of the Department of Industries, Assam, For the Year 1928-29, Assam Government Printing Office, Shillong, 1929, p. 7

J. N. Chakravarty, Report of the Department of Industries, Assam, For the Year 1929-30, Assam Secretariat Printing Office, Shillong, 1930, p. 6

<sup>&</sup>lt;sup>78</sup> S. L. Mehta, Report of the Department of Industries, Assam, For the Year 1935-36, Assam Secretariat Printing Office, Shillong, 1936, p. 8

National Congress was held at Pandu. An all India Level Industrial Exhibition was organised during this annual session where a gold medal was awarded to the Institute. The Institute also directly sold its silk fabrics through the Government Emporium of Cottage Products established at Gauhati in 1920. The Institute even demonstrated amongst the public the working of modern silk weaving accessories introduced at that time. For instance foot silk reeling machine and fly-shuttle looms were demonstrated in 1920 at Golaghat on the occasion of the meeting of the Assam Students Conference. A similar demonstration was given in the same year during the Christmas holidays at Dibrugarh at the request of a number of Assamese ladies of that town. The same is a superior of the same should be superior of the same should be superi

In 1935 for popularising the silk weaving in Assam on the lines followed in Benaras, the Colonial Government for a period of 5 years introduced a new silk weaving course in the Gauhati Weaving Institute with the already existing courses and a qualified professional weaver of Benaras was appointed as instructor for the new course. <sup>82</sup> In 1936-37, the Colonial Government appointed a managing committee for the Institute consisting of 7 members with the Deputy Commissioner, Kamrup as President. In the same year 2 power-looms driven with electricity, 1 pirn winder and 1 semi-automatic loom were added to the equipment section of the Institute. <sup>83</sup> A power-driven Fancy Twisting Machine was also installed in the workshop of the Institute in

<sup>&</sup>lt;sup>79</sup> K. L. Barua, Report of the Department of Industries, Assam, For the Year 1926-27, Assam Government Printing Office, Shillong, 1927, p. 3

<sup>80</sup> K. L. Barua, 1920-21, op. cit. p. 5; K. L. Barua, 1921-22, op. cit. p. 2

<sup>&</sup>lt;sup>81</sup> K. L. Barua, 1920-21, op. cit. p. 2

<sup>&</sup>lt;sup>82</sup> S. L. Mehta, 1935-36, op. cit. p. 8

<sup>83</sup> S. L. Mehta, Report of the Department of Industries, Assam, For the Year 1936-37, Assam Government Printing Office, Shillong, 1938, pp. 11-12

1938.<sup>84</sup> Even the Colonial Government in 1940 sanctioned the installation of a Silk Throwing Plant in the Institute for bringing about further improvement in the silk weaving.<sup>85</sup>

For the first time 2 Peripatetic Weaving Demonstration Parties were formed during 1921-22 with the passed out students of the Gauhati Weaving Institute in order to provide training in up-to-date weaving technology amongst the people. Each party consisted of 6 Weaving Demonstrators under a Weaving Assistant working separately in the Assam Valley and Surma Valley. Both the parties carried out demonstration work at the important centres of silk production. The 2 Peripatetic Demonstration Parties initially worked in the Sibsagar district of Assam Valley and Sylhet and Cachar district of Surma Valley. Their work was very successful and demands were made the very next year for such demonstration from the people of other districts. The establishment of at least 2 more Peripatetic Demonstration Parties became very necessary. But funds were not available at that time to fulfill the requirement. The stablishment of a stablishment of available at that time to fulfill the requirement.

Finally in 1923-24, because of the growing public demand, the Assam Valley Peripatetic Weaving Demonstration Party was split up and demonstrators were sent to Kamrup and Lakhimpur districts. Then in 1925, 1 more peripatetic party was created for the Assam Valley. The 2 peripatetic parties then functioned with headquarters at Jorhat and Gauhati. The 12 demonstrators of the 2 parties were equally distributed

<sup>&</sup>lt;sup>84</sup> M. Khurshid, *Report of the Department of Industries*, *Assam*, *For the Year 1938-39*, Assam Government Printing Office, Shillong, 1940, p. 11

M. H. Hussain, Report of the Department of Industries, Assam, For the Year 1940-41, Assam Government Printing Office, Shillong, 1942, p. 13

<sup>&</sup>lt;sup>86</sup> K. L. Barua, 1921-22, op. cit. p. 1

<sup>&</sup>lt;sup>87</sup> K. L. Barua, 1922-23, op. cit. p. 2

among the 6 districts of the Assam Valley. The Surma Valley Peripatetic Weaving Demonstration Party had its headquarter at Silchar. The peripatetic party stationed at Jorhat was called the Upper Assam Party which worked in the districts of Lakhimpur, Sibsagar and Nowgong, while, the other peripatetic party stationed at Gauhati was called the Lower Assam Party which worked in the districts of Darrang, Kamrup and Goalpara. For the Surma Valley, another peripatetic party was created in 1928 for the district of Sylhet. Thereafter, the number of Peripatetic Weaving Demonstration Parties became 4, two for each of the Valleys with headquarters at Gauhati, Jorhat, Sylhet and Silchar. These 4 parties continued their demonstration work during the colonial period for the popularisation and development of the silk weaving in the province. The working of the Peripatetic Weaving Demonstration Parties during the colonial period can be judged from the following table 3.1:91

<sup>&</sup>lt;sup>88</sup> K. L. Barua, 1925-26, op. cit. p. 1

<sup>&</sup>lt;sup>89</sup> K. L. Barua, 1926-27, op. cit. p. 2

<sup>&</sup>lt;sup>90</sup> R. N. Phukan, 1928-29, op. cit. p. 3

K. L. Barua, 1921-22, op. cit. p. 2; K. L. Barua, 1922-23, op. cit. pp. 1-2; K. L. Barua, 1923-24, op. cit. pp. 1-2; K. L. Barua, 1924-25, op. cit. pp. 1-2; K. L. Barua, 1925-26, op. cit. pp. 1-2; K. L. Barua, 1926-27, op. cit. p. 2; R. N. Phukan, op. cit. pp. 2-4; R. N. Phukan, 1928-29, op. cit. pp. 3-5; J. N. Chakravarty, 1929-30, op. cit. pp. 7-8; I. Majid, *Report of the Department of Industries, Assam, For the Year 1930-31*, Assam Secretariat Printing Office, Shillong, 1931, p. 7; I. Majid, *Report of the Department of Industries, Assam, For the Year 1931-32*, Assam Secretariat Printing Office, Shillong, 1932, p. 8; I. Majid, *Report of the Department of Industries, Assam, For the Year 1932-33*, Assam Government Printing Office, Shillong, 1934, p. 7; S. L. Mehta, *Report of the Department of Industries, Assam, For the Year 1933-34*, Assam Government Printing Office, Shillong, 1934, p. 7; S. L. Mehta, *Report of the Department of Industries, Assam, For the Year 1934-35*, Assam Secretariat Printing Office, Shillong, 1935, pp. 8-9; S. L. Mehta, 1935-36, op. cit. p. 7; S. L. Mehta, 1936-37, op. cit. pp. 8-10; M. Khurshid, 1938-39, op. cit. pp. 8-10; S. L. Mehta, *Report of the Department of Industries, Assam, For the Year 1939-40*, Assam Government Printing Office, Shillong, 1941, pp. 9-11; M. H. Hussain, 1940-41, op. cit.p. 11

**Table: 3.1 Working of the Peripatetic Weaving Demonstration Parties** 

Year	Area of	Modern Weaving Instruments	<b>Total Sale Proceeds of</b>
	Coverage	Introduced	<b>Demonstrated Fabrics</b>
			Remitted to Treasury
			Rs. a. p.
1921-22	84 villages	162 fly-shuttle frame looms, 18	64-6-0
		fly-shuttle sleys, 24 warping	
		mills, 3 dobbies, 165 reeds, 152	
		heald sets, 184 shuttles	
1922-23	190 villages	127 fly-shuttle frame looms, 69	
		fly-shuttle sleys, 28 warping	
		mills, 12 dobbies, 467 steel reeds,	
		436 heald sets, 389 shuttles, 3	
		reeling machines	
1923-24	200 villages	125 fly-shuttle frame looms, 168	269-2-6
		fly-shuttle sleys, 36 warping	
		mills, 16 dobbies, 157 steel reeds,	
		129 heald sets, 183 shuttles, 17	
		hand creels	
1924-25	178 villages	109 fly-shuttle frame looms, 149	
		fly-shuttle sleys,15 warping mills,	
		2 dobbies, 139 steel reeds, 69	
		English heald sets, 17780 wire	
		healds, 134 English shuttles, 7	
		hand creels	

1925-26	193 villages	122 fly-shuttle frame looms, 236	168-14-6
		fly-shuttle sleys, 19 warping	
		mills, 2 lattice dobbies, 294 steel	
		reeds, 181 English heald sets, 3	
		hand creels	
1926-27	304 villages	138 fly-shuttle frame looms, 213	251-10-3
		fly-shuttle sleys, 22 warping	
		mills, a large number of reeds and	
		healds, 26 hand creels, 2	
		jacquards, 2 hattersley looms, 1	
		salvation army loom, 2 carpet	
		looms, 1 reeling machine	
1927-28	410 villages	103 fly-shuttle frame looms, 160	194-11-0
		fly-shuttle sleys, 20 warping mills	
		with reeds, healds and shuttles, 1	
		dobby, 2 jacquards, 2 hattersley	
		looms	
1928-29	513 villages	288 fly-shuttle frame looms and	
		sleys, 26 warping mills, 1 dobby,	
		2 jacquards, 2 hattersley looms,	
		numerous sets of reeds, healds	
		and other accessories	
1929-30	588 villages	336 fly-shuttle frame looms and	
		sleys, 17 warping mills, 1 dobby,	

		3 jacquards, 1 hattersley loom,	
		some weaving accessories	
1930-31	639 villages	462 fly-shuttle frame looms and	237-8-3
		sleys, 47 warping mills, 3	
		jacquards, 1 hattersley loom, 15	
		hand creels, 700 charkas	
1931-32	526 villages and	280 fly-shuttle frame looms and	104-15-0
	71 co-operative	sleys, 36 warping mills, 4	
	societies, 24	warping drums, 3 jacquards, 3	
	schools, 35	hattersley looms	
	factories		
1932-33	563 villages and	360 fly-shuttle frame looms and	
	70 co-operative	sleys, 50 warping mills, 3	
	societies, 24	jacquards, 21 hand creels	
	schools, 28		
	factories, 3 jails		
1933-34	615 villages,	451 fly-shuttle frame looms and	
	104 co-	sleys, 46 warping mills, 5	
	operative	jacquards	
	societies, 24		
	schools, 37		
	factories, 2 jails		

1934-35	669 villages,	104 fly-shuttle frame looms, 349	
	122 co-	fly-shuttle sleys, 46 warping	
	operative	mills, 14 warping drums, 10	
	societies, 33	jacquards, 6 hand creels, 6	
	schools, 39	dobbies, 17 pirn winding charkas	
	factories, 2 jails		
1935-36	697 villages,	15 fly-shuttle frame looms, 421	102-7-3
	117 co-	fly-shuttle sleys, 10 dobbies, 26	
	operative	warping drums, 16 jacquards, 3	
	societies, 33	automatic looms, 100 spinning	
	schools, 33	charkas, some weaving	
	factories, 2 jails	accessories	
1936-37	978 villages,	636 fly-shuttle frame looms and	113-2-9
	129 co-	sleys, 46 warping mills, 39	
	operative	warping drums, 5 dobbies, 20	
	societies, 38	jacquards, 1 hattersley loom, 2	
	schools, 37	power-looms, 6 automatic or	
	factories	semi-automatic looms, some	
		weaving accessories	
1938-39	1000 villages,	474 fly-shuttle frame looms and	
	137 со-	sleys, 19 warping mills, 33	
	operative	warping drums, 1 dobby, 3	
	societies, 49	jacquards, 23 hand creels, 27 eri	
	schools, 40	spinning charkas, some weaving	
	factories	accessories	

1939-40	1082 villages,	505 fly-shuttle frame looms and	
	130 со-	sleys, 2 warping mills, 18	
	operative	warping drums, 2 dobbies, 1	
	societies, 54	jacquard, 30 hand creels, 8 eri	
	schools, 34	spinning charkas, large number of	
	factories	reeds, healds and shuttles	
1940-41	1007 villages,	481 fly-shuttle frame looms and	
	101 co-	sleys, 29 warping drums, 2	
	operative	dobbies, 2 jacquards, 26 hand	
	societies, 49	creels, 1 <i>eri</i> spinning charka, 34	
	schools,	winding charkas, large number of	
	26factories, 34	reeds, healds and shuttles	
	rural uplift		
	centres		

The table 3.1 other than showing the villages and sectors attended by the Peripatetic Weaving Demonstration Parties also points out about the instruments that had been introduced by the demonstrators for modernisation of the silk weaving. A certain amount of money as shown in the table was also deposited in the treasury as sale proceeds of the demonstrated fabrics. The demonstrators who had been appointed were all passed out students of the Gauhati Weaving Institute.

The Government Emporium of Cottage Products was opened at Gauhati in 1920 for finding a wider market for the various cottage products of the province as

well as for supplying raw materials required by the cottage workers. <sup>92</sup> It had 2 sections, the Emporium and the Store. In the Emporium section, the cottage workers, especially the silk manufacturers deposited their finished products for sale on commission. While in the Store section, raw materials such as looms, weaving accessories and yarns of various kinds and counts, silk cocoons, gold laces, etc were kept for sale or supply to the cottage workers and to the public. With the limited sources at disposal, the Emporium assisted the cottage workers and ex-students of the Gauhati Weaving Institute with work more or less on a regular basis. All the Government Weaving Schools and some private factories and schools looked up to the Emporium for looms, accessories and yarns. <sup>93</sup>

As far as the silk industry was concerned, the Emporium and Store section continued to be a centre for the selling of silk products as well as for supplying silk yarn and weaving accessories to the silk weavers in the province during the colonial period. The very next year of its formation, the Emporium in 1921-22 sold silk fabrics as well as the *muga* and *eri* silk yarn both in and outside the province and the total value of the silk products sold amounted at 7, 555 rupees-3 anna-0 paisa. <sup>94</sup> In collaboration with a Calcutta farm, samples of silk from Assam were sent to United Kingdom for finding overseas market. Then through the Store section, silk yarn worth 6,970 rupees-12 anna-4 paisa, fly-shuttle looms worth 1,437 rupees-12 anna-6 paisa, *charkas* or spinning wheels worth 113 rupees-10 anna-3 paisa and other weaving accessories worth 5,193 rupees-11 anna-9 paisa were supplied to the weavers at wholesale prices. <sup>95</sup>

<sup>92</sup> K. L. Barua, 1920-21, op. cit. p. 5

<sup>93</sup> K. L. Barua, 1925-26, op. cit. p. 8

<sup>94</sup> K. L. Barua, 1921-22, op. cit. p. 4

<sup>&</sup>lt;sup>95</sup> Ibid. p. 5

The selling of the silk fabrics and yarn as well as supply of the silk yarn and weaving accessories continued until the Colonial Government in 1929-30 temporarily closed the Emporium section for selling of the finished products and decided to run the Store section as a purely government institution. The decision to close the Emporium section was taken as it sustained losses in the past and its capital dwindled from Rs. 29,000 in 1920-21 to 16, 830 rupees -6 anna-11 paisa in 1929-30. But in 1933, the Emporium sent a small collection of silk fabrics to the Industrial Exhibition held at Silchar which had a very good response. Thereafter, a persistent demand was made for establishing a branch of the Emporium in the Surma Valley which was finally established at Sylhet in 1935. The Emporium and its Sylhet branch did their best to advertise and sale the products of the silk weavers, especially those of Sualkuchi. But, the branch of the Emporium was shifted from Sylhet to Karimganj in 1939 as it was the main centre of handloom weaving in Sylhet district.

Like the weaving of silk and selling of finished silk products, sericulture also received equal attention from the Colonial Government after the creation of the Department of Industries in the province. Before the close of the year 1918-19, sericulture was also transferred as a subject to the Department of Industries. In the same year a site at Titabar with 67 *bighas* of land was selected for establishing a separate Sericulture Station for the *muga* silk as per the recommendation of silk specialist Mr. Maxwell Lefroy. The Colonial Government sanctioned a lump sum

<sup>&</sup>lt;sup>96</sup> J. N. Chakravarty, 1929-30, op. cit. p. 17

<sup>&</sup>lt;sup>97</sup> I. Majid, 1933-34, op. cit. p. 19

<sup>98</sup> S. L. Mehta, 1935-36, op. cit. p. 18

<sup>&</sup>lt;sup>99</sup> S. L. Mehta, 1936-37, op. cit. p. 9

<sup>&</sup>lt;sup>100</sup> M. Khurshid, 1938-39, op. cit. p. 9

amount of Rs. 18,000 towards it.<sup>101</sup> The very next year in 1920-21, the area of the station was extended to 100 *bighas* and rearing of the *eri* and *pat* silk were also started there along with the *muga* silk and its two varieties, *champa* and *mezankuri*. Further, a proposal was made for setting up a nursery in a hill station for raising a strong variety of silkworm. This was approved by the Colonial Government and a site in Shillong was selected for it.<sup>102</sup>

However, because of scarcity of funds the proposal for setting up a nursery in a hill station could not be immediately materialized. But it was not given up as it was a well known fact that without hill rearing strong races of the *muga*, *eri* and *pat* could not be raised. Finally, during 1925-26 at Wah Jylonnoh, Shillong the Sericulture Station was started with 11 acres of land. Within few years of the setting up of the 2 Sericulture Stations, one in the plains and another in the hills, utmost attention was paid towards production of layings and disease free cocoons of the *muga*, *eri* and *pat* silk and distributing or selling or supplying them amongst the weavers, rearers and weaving or rearing co-operative societies, etc so that good quality of silk yarns could be obtained. The following tables 3.2 and 3.3 will give an idea of the layings and cocoons of the *muga*, *eri* and *pat* silk reared and distributed or sold or supplied along with the total sale proceeds from the Titabar and Shillong Sericulture Station respectively:

<sup>&</sup>lt;sup>101</sup> K. L. Barua, 1919-20, op. cit. p. 3

<sup>&</sup>lt;sup>102</sup> K. L. Barua, 1920-21, op. cit. pp. 3-4

<sup>&</sup>lt;sup>103</sup> K. L. Barua, 1921-22, op. cit. p. 4

<sup>&</sup>lt;sup>104</sup> K. L. Barua, 1925-26, op. cit. p. 4

R. N. Phukan, 1927-28, op. cit. pp. 9-10; R. N. Phukan, 1928-29, op. cit. pp. 8-10; J. N. Chakravarty, 1929-30, op. cit. pp. 11-14; I. Majid, 1930-31, op. cit. pp. 16-17; I. Majid, 1931-

**Table 3.2: Titabar Sericulture Station** 

Year	Variety	Layings	Layings	Cocoons	Cocoons	Total Sale
		Reared	Distribut	Obtained	Distributed/	Proceeds
			ed/ Sold/		Sold/	Remitted to
			Supplied		Supplied	Treasury
						Rs. a. p.
1927-28	Muga	2701		78920	•••••	883-7-9
	Eri	307	2702			
	Pat	537	1753		11440	
1928-29	Muga	992		25350		352-5-9
	Eri	417	2259			
	Pat	723	195		6960	
1929-30	Muga	1747	55	47937	5750	449-14-6
	Eri	425	2660		2829	
	Pat	584	594		8080	
1930-31	Muga		210	95539	18945	
	Eri		3799	36684	890	
	Pat		1651	193122	22620	
1931-32	Muga	2160	295	28122	5035	497-2-6
	Eri	294	3472	24073	75	
	Pat	1059	2461	232105	26495	
1932-33	Muga	2608	580	40276	5234	350-12-0
	Eri	284	2155	38226	100	
	Pat	844	7042	181885	2700	
1933-34	Muga	3499	555	70560	22698	326-2-3
	Eri	204	5193	25813	572	
	Pat	678	9745	147969	4700	

32, op. cit. pp. 16-20; I. Majid, 1932-33, op. cit. pp. 14-17; I. Majid, 1933-34, op. cit. pp. 13-16; S. L. Mehta, 1934-35, op. cit. pp. 13-17; S. L. Mehta, 1935-36, op. cit. pp. 12-15; S. L. Mehta, 1936-37, op. cit. pp. 14-18; M. Khurshid, 1938-39, op. cit. pp. 16-21; S. L. Mehta, 1939-40, op. cit. pp. 18-22; M. H. Hussain, 1940-41, op. cit. pp. 19-24

1934-35	Muga	1728	665	42048	28384	391-6-0
	Eri	179	2835	18670	130	
	Pat	637	8080	134255	1500	_
1935-36	Muga	1439	74	31559	21902	401-4-0
	Eri	199	5793	23159	75	
	Pat	700	18221	176295		
1936-37	Muga	1762	40	45970	32950	474-12-3
	Eri	334	8594	37846	45	
	Pat	1170	27173	200829		
1937-38	Muga		270		30395	433-13-6
	Eri		5765		787	
	Pat		19867			
1938-39	Muga	2391	30	50800	44590	547-7-3
	Eri	484	13310	55897	288	
	Pat	1576	33945	311721		
1939-40	Muga	1156		26950	9180	357-4-3
	Eri	452	6304	43282	467	
	Pat	1676	30220	253768		
1940-41	Muga	2250	22	64025	43675	507-14-6
	Eri	283	2535	26427	5925	
	Pat	1526	29770	295743	250	

**Table 3.3: Shillong Sericulture Station** 

Year	Variety	Layings Reared	Layings Distributed/ Sold/ Supplied	Cocoons Obtained	Cocoons Distributed/ Sold/ Supplied	Total Sale Proceeds Remitted to Treasury Rs. a. p.
1927-28	Muga				••••	40-5-0
	Eri					
	Pat	149	50		5840	
1928-29	Muga			•••••		15-2-0
	Eri	5	••••			

	Pat	181	375		••••	
1929-30	Muga					9-10-0
	Eri		5		••••	
	Pat	296	355	62186	800	
1930-31	Muga	40	••••	800	•••••	65-12-3
	Eri	15	173	3240	••••	
	Pat	330	1379	96328	600	
1931-32	Muga	35		16		78-2-3
	Eri	15	14	3096	••••	
	Pat	150	1437	43024	40	
1932-33	Muga	151	•••••	2855	2500	82-1-6
	Eri	10	300	2276	200	_
	Pat	180	3605	45635	930	
1933-34	Muga		••••		•••••	
	Eri	10	475	2750	200	
	Pat	138	4530	52314	•••••	
1934-35	Muga	3	••••	150	100	98-7-9
	Eri	23	485	5100	•••••	
	Pat	297	25681	88894	600	
1935-36	Muga		•••••		••••	85-15-0
	Eri	15	•••••	2283	•••••	
	Pat	503	10755	131983	15000	
1936-37	Muga		•••••		••••	139-13-0
	Eri	17	420	5555	100	
	Pat	222	17933	77368		
1937-38	Muga					201-0-3
	Eri					
	Pat					
1938-39	Muga					194-10-0
	Eri	40	1350	7156	50	
	Pat	880	25861	260382		

1939-40	Muga					317-6-0
	Eri	30	585	4937		
	Pat	1042	29784	25416	900	
1940-41	Muga	85	•••••	761		265-8-9
	Eri	31	1055	4006		
	Pat	792	31116	231048		

As indicated in the tables 3.2 and 3.3, all the layings reared and cocoons obtained were not distributed or sold or supplied by the Sericulture Stations. Some of the layings were kept for future rearing and cocoons were reeled into yarn for sale. The free distribution of layings and cocoons was also prohibited from 1928. <sup>106</sup> Anyway, the 2 Sericulture Stations worked in conjunction with one another and both were necessary, one for raising healthy disease resistant seeds and the other to demonstrate rearing in improved methods. <sup>107</sup> Later on, 2 more Sericulture Stations were established by the Colonial Government at Senchoa in 1942 and at Gaurisagar in 1945. <sup>108</sup>

It was found that the supply of disease free seeds from the Titabar and Shillong Sericulture Stations was not itself enough for improving the position of the silk industry. The silk rearing conditions in the villages had to be improved and like silk weaving, peripatetic demonstration had to be started to teach and propagate improved methods of silk rearing to the people concerned. Hence, it was recommended in 1926-27 that a staff of Peripatetic Sericultural Demonstrator should

<sup>&</sup>lt;sup>106</sup> R. N. Phukan, 1928-29, op. cit. p. 10

<sup>&</sup>lt;sup>107</sup> I. Majid, 1930-31, op. cit. p. 18

Census of India, 1961, Volume-III, Assam, Part VII-A, Selected Handicrafts of Assam, Government of India Publication, Delhi, 1966, p. 39

be immediately appointed.<sup>109</sup> The very next year in 1927-28, 6 Peripatetic Sericultural Demonstrators were appointed to demonstrate scientific rearing and growing of improved seeds in the selected villages.<sup>110</sup>

These Sericultural Demonstrators were sent in batches after being provided with necessary training in the Titabar Sericulture Station. The first batch was sent to the selected centres of Lakhimpur and Nowgong district, while the second batch was sent to different parts of Sibsagar, Darrang, Sylhet and Cachar district. Their work was to distribute disease free seeds, erect rearing houses, grow food plants, displaying and supplying improved rearing and spinning appliances as well as disinfectants, etc.<sup>111</sup> The peripatetic sericultural demonstration showed positive results. The *pat* rearing in the Assam Valley, especially in the Sibsagar and Nowgong district, while the *eri* rearing in the Surma Valley were reported to have increased.<sup>112</sup>

But the need of the hour was to have more Peripatetic Sericultural Demonstrators to work in every district of Assam. As the Sericultural Demonstrators were limited in number due to paucity of funds, their activity was restricted to certain centres. However, in co-operation with the Co-operative Inspectors, attempts were made by the Sericultural Demonstrators to help those co-operative societies whose members undertook silk weaving. The Peripatetic Sericultural Demonstrators also worked in conjunction with the Weaving Demonstrators in the villages where improved handlooms were introduced.<sup>113</sup> As expected, all these combined efforts

<sup>&</sup>lt;sup>109</sup> K. L. Barua, 1926-27, op. cit. p. 6

<sup>&</sup>lt;sup>110</sup> R. N. Phukan, 1927-28, op. cit. p. 10

<sup>&</sup>lt;sup>111</sup> R. N. Phukan, 1928-29, op. cit. p. 11

<sup>&</sup>lt;sup>112</sup> J. N. Chakravarty, 1929-30, op. cit. p. 16

<sup>&</sup>lt;sup>113</sup> I. Maiid, 1931-32, op. cit. p. 20

showed good results and the rearers in 1934-35 demanded more disease free seeds as well as more demonstrators to teach improved methods of rearing, spinning and reeling of the *eri*, *muga* and *pat* silk. Fortunately, a temporary Sericultural Demonstrator was appointed in that year for the flood affected areas of the Nowgong district.<sup>114</sup>

The absence of more permanent Peripatetic Sericultural Demonstrators and persistent demands for more Sericultural Demonstrators mainly in Assam Valley forced the Sericultural branch of the Department of Industries to send occasionally experienced rearers from the Titabar Sericulture Station to help the village rearers. Fortunately, the Imperial Government of India appointed 20 more officers designated as Seed Examiners and Demonstrators in important sericultural centres from October, 1935. After this appointment, 26 demonstrators, 6 old and 20 new devoted their attention towards the production and distribution of disease free or cellular seeds, extension of the *pat* silk cultivation, teaching of reeling and spinning to the rearers, construction of model rearing houses, etc. In addition to this, the rearers of the *eri*, *muga* and *pat* silkworm henceforth got their seeds examined in their homes by the sericultural staff. To supervise the activities of the newly appointed Seed Examiners and Demonstrators, 2 more Sericultural Supervisors were also appointed.

<sup>&</sup>lt;sup>114</sup> S. L. Mehta, 1934-35, op. cit. p. 17

<sup>&</sup>lt;sup>115</sup> S. L. Mehta, 1935-36, op. cit. p. 16

<sup>&</sup>lt;sup>116</sup> S. L. Mehta, 1936-37, op. cit. p. 19

<sup>&</sup>lt;sup>117</sup> M. Khurshid, 1938-39, op. cit. p. 21

Co-operative societies were formed amongst those associated with silk weaving and sericulture for uplifting the condition of the silk industry in the province. In 1919, the Assam Co-operative Home Industries Society was organized at Gauhati with initial jurisdiction over the districts of Kamrup and Darrang to assist the silk weavers in marketing their goods without taking the assistance of the *kayans*. This co-operative society had its own factory at Gauhati where the silk fabrics were manufactured and were sold through the Government Emporium. Thereafter many silk weaving and spinning co-operative societies were formed like *Bebejia Boa-Kota Samiti*, *Dibrual Boa-Kota Samiti*, *Rampur Boa-Kota Samiti*, etc. Under a scheme of the Imperial Government of India, 2 Co-operative Weaving Inspectors were appointed, one each for the two Valleys of the province. The 2 Co-operative Weaving Inspectors visited the weaving villages and established some weaving co-operative societies in the villages.

From time to time financial assistance was provided by the Colonial Government for the development of the silk industry in the province. In 1923, a loan of Rs. 500 was granted for the opening of a *muga* farm. But the name of the person or institution who had received the loan has not been mentioned. Similarly, the very next year a loan of Rs. 400 was granted to an unknown person or institution for the opening of a sericulture farm. Then in 1926, the Colonial Government sanctioned an amount of Rs. 5,000 to the Government Emporium to introduce higher-purchase

<sup>&</sup>lt;sup>118</sup> K. L. Barua, 1919-20, op. cit. p. 2

<sup>&</sup>lt;sup>119</sup> K. L. Barua, 1921-22, op. cit. p. 2

<sup>&</sup>lt;sup>120</sup> S. L. Mehta, 1936-37, op. cit. p. 3

<sup>&</sup>lt;sup>121</sup> K. L. Barua, 1923-24, op. cit. p. 5

<sup>&</sup>lt;sup>122</sup> K. L. Barua, 1924-25, op. cit. p. 5

system amongst the silk weavers through their co-operative societies. Next, in 1929 a loan of Rs. 2,000 was granted to Kaliram Das of Sualkuchi for the improvement of his silk weaving factory. In 1930, a loan of Rs. 400 was granted to Binandi Ram Nath of Raha, Nowgong for the extension of his mulberry garden and construction of his extension shed. Few years later in 1934, a loan of Rs. 146 was again granted to an unknown person or institution for the improvement of sericulture. Thereafter in 1940, two industrial loans of Rs. 600 and Rs. 300 each were granted to Dharmaram Mohajan of Sualkuchi and Balit Ram Karikor of Sualkuchi respectively for the improvement of their silk weaving factories.

Some kind of inquisitiveness was shown by the people to know about the developments made in the silk industry of Assam. Hence, several enquiries were made about the silk industry from 1919-20 onwards like technique of silk reeling in a filature, quality of silk fabrics of Assam, manufacturers of silk cloths, whole sale suppliers of raw silk in the province, names and addresses of the manufacturers of Assam silk yarns and fabrics, instruction for rearing the several varieties of silks of Assam, names of dealers in *muga* and *eri* cocoons, manufacture of silk from plantain fibre, growing of mulberry trees, names of dealers in the *muga*, *pat* and *eri* fabrics, manufacturer of artificial silk fabrics, particulars about the silk industries of the province, money value of the annual production of the *eri*, *muga* and *pat* silk in Assam, names and addresses of the exporters of the Assam Silk, names and addresses of dealers of pierced *eri* cocoons and their rates, names and addresses of farms

<sup>&</sup>lt;sup>123</sup> K. L. Barua, 1926-27, op. cit. p. 7

<sup>&</sup>lt;sup>124</sup> J. N. Chakravarty, 1929-30, op. cit. p. 17

<sup>&</sup>lt;sup>125</sup> I. Majid, 1930-31, op. cit. p. 22

<sup>&</sup>lt;sup>126</sup> S. L. Mehta, 1934-35, op. cit. p. 19

<sup>&</sup>lt;sup>127</sup> M. H. Hussain, 1940-41, op. cit. p. 29

exporting silk wastes, facilities for training in sericulture, etc.<sup>128</sup> The inquisitive people may be from within the province or outside. But their willingness to know reflects that the silk industry of Assam was making ground to secure interest of the people.

A large number of weaving factories were formed at different places of Assam. As all these factories were named as Weaving Factories, it was difficult to judge whether those were engaged in silk or cotton weaving. Nothing much can be said about their registration. Still, few references were there regarding the silk weaving factory. In 1927-28 the silk weavers of Sualkuchi who were known for their conservatism, allowed the peripatetic weaving demonstrators to freely enter into their looms located inside their houses. New and attractive patterned silk shawls, saris, etc were introduced in Sualkuchi. Hence, it was felt that the country looms would be very soon replaced by improved fly-shuttle looms at Sualkuchi. During that year one Kaliram Das of Sualkuchi started a silk weaving factory and was provided assistance by the Lower Assam Peripatetic Weaving Party. Another silk weaving factory was established at Parakuchi known as the Assam Weaving Factory.

The next year in 1928-29, the Govindaram Factory was established at Sualkuchi which received assistance from the Lower Assam Peripatetic Weaving Party. It was reported that this factory of Sualkuchi and the Assam Weaving Factory

<sup>K. L. Barua, 1919-20, op. cit. p. 6; K. L. Barua, 1922-23, op. cit. p. 5; K. L. Barua, 1923-24, op. cit. p. 5; K. L. Barua, 1924-25, op. cit. p. 5; K. L. Barua, 1925-26, op. cit. p. 9; R. N. Phukan, 1928-29, op. cit. p. 15; J. N. Chakravarty, 1929-30, op. cit. pp. 18-19; I. Majid, 1930-31, op. cit. pp. 23-24; I. Majid, 1931-32, op. cit. pp. 23-24; I. Majid, 1932-33, op. cit. pp. 21-22; I. Majid, 1933-34, op. cit. pp. 21-22; S. L. Mehta, 1935-36, op. cit. p. 20; S. L. Mehta, 1936-37, op. cit. pp. 24-25</sup> 

<sup>&</sup>lt;sup>129</sup> See Report of the Department of Industries, Assam, From the Year 1919-20 to 1940-41

<sup>&</sup>lt;sup>130</sup> R. N. Phukan, 1927-28, op. cit. p. 4

of Parakuchi were manufacturing shawls and saris with *muga* and gold lace borders which had a good sale in the market.<sup>131</sup> In 1929-30, three prominent weavers of Sualkuchi jointly started a silk weaving factory, the Sankardev Silk Weaving Factory. Overall there were 50 fly-shuttle looms in Sualkuchi only for silk weaving. During the year the Lower Assam Peripatetic Weaving Party successfully introduced the jacquards at Sualkuchi for weaving floral designs. Silk shawls and sarees were given elaborate designs with the jacquard. *Muga* fabrics woven on fly-shuttle looms were bought and sold by the Emporium at Gauhati. <sup>132</sup>

During 1930-31, the Sankardev Silk Weaving Factory which had 7 jacquards along with fly-shuttle looms made a net profit of Rs. 2,500 inspite of the great economic depression prevailing at that time. In the same year, The Silk Weaving Factory was established at Nalbari which was provided assistance by the Lower Assam Peripatetic Weaving Party. In 1931-32, the Assam Silk Factory was established at Sualkuchi and as usual it received assistance from the Lower Assam Peripatetic Weaving Party. This peripatetic party as reported did lots of work at Sualkuchi as it was the only village of professional weavers in the Assam Valley. The overall industry was working there with success although the margin of profit had a decline because of the then prevailing economic depression.

By 1932-33, the Sankardev Silk Weaving Factory had 15 fly-shuttle looms and 8 jacquards with its products earning reputation for good workmanship. Overall

<sup>&</sup>lt;sup>131</sup> R. N. Phukan, 1928-29, op. cit. p. 4

<sup>&</sup>lt;sup>132</sup> J. N. Chakravarty, 1929-30, op. cit. pp. 6-7

<sup>&</sup>lt;sup>133</sup> I. Majid, 1930-31, op. cit. p. 8

<sup>&</sup>lt;sup>134</sup> I. Maiid, 1931-32, op. cit. p. 10

there were about 200 fly-shuttle looms and 14 jacquards working in full swing in Sualkuchi. As reported in 1933-34 most of the weavers in Sualkuchi started using the warping mill to do away with their traditional laborious process. The 4 silk weaving factories started there made satisfactory progress. By 1935-36, the number of silk weaving factories alone at Sualkuchi rose to 12. There were in total about 350 fly-shuttle looms and 45 jacquards in operation at Sualkuchi. The weavers were free from the control of the *kayans*. For sale, they send their agents with cloths to different parts of the province and also opened shops at Gauhati. They even advertised their goods in newspapers and monthly magazines. In 1936-37 some prominent silk weavers of Sualkuchi on a co-operative basis started a cloth shop under the name of Assam Co-operative Silk House at Gauhati. The Assam Co-operative Silk House ran successfully and even started a departmental store of its own called Kalpataru in 1941 at Gauhati.

This sudden increase in the number of silk weaving factory in Sualkuchi from 4 to 12 might be due to the efforts of Kaliram Baishya<sup>140</sup> who is even today

<sup>&</sup>lt;sup>135</sup> I. Majid, 1932-33, op. cit. p. 8

<sup>&</sup>lt;sup>136</sup> I. Majid, 1933-34, op. cit. p. 8

<sup>&</sup>lt;sup>137</sup> S. L. Mehta, 1935-36, op. cit. p. 7

<sup>&</sup>lt;sup>138</sup> S. L. Mehta, 1936-37, op. cit. p. 9

Kumudeswar Hazarika, Itihasar Chhan-Poharat Purani Guwahati, Saraighat Prakashan, Guwahati, 2002, p. 131

Kaliram Baishya of Sualkuchi met a British Weaving Master at Gauhati who took him to Calcutta and provided training on the then modern technology in silk weaving under his personal guidance. After his return to Sualkuchi, Kaliram Baishya made some innovations in the newly introduced fly-shuttle loom as per the local requirements which further increased the use of fly-shuttle loom in the area. For this technical expertise, the people of the locality started calling him Kaliram Karikar (*karikar* means expert artisan) as a mark of respect. (*The story is also cited in the book of Prabin Baishya, The Silk Industry of Assam, pp. 66-67*)

considered as the founder of modern silk industry at Sualkuchi by the people of the locality. He people of silk weaving factories in Sualkuchi rose to 16. New designs of sarees brought from Mysore and Madras were introduced there amongst the weavers. To provide further impetus to the industry at Sualkuchi, a proposal was made before the Colonial Government for the appointment of a designer to guide the weavers there. He people of the Colonial Government it seems that some silk weaving factories were there in Sualkuchi doing a good business during the colonial period. But during the case study, no silk factory of colonial period is found to be in existence at Sualkuchi. Only the Assam Co-operative Silk House started at Gauhati is in existence with its several branches at different places of Guwahati and also outside at Sualkuchi, Jorhat and Tezpur. He

The Colonial Government through the Department of Industries took certain measures for the development of the silk industry in Assam. But it also continued its silk trade in Assam during the 20<sup>th</sup> century. *Eri* cocoons of Assam were exported largely to Bombay and other parts of the country for spinning in power-mills on the plea that it was very economical. The mill spun *eri* yarn was brought back to Assam and was sold to the local weavers. Amongst the local weavers this *eri* yarn was largely used by the weavers of Sualkuchi for weaving *chadars* and suitings which had a ready sale both locally and outside the province. <sup>144</sup> Raw silk was largely exported to Assam from China, Japan and Italy creating competition for the local variety of

<sup>&</sup>lt;sup>141</sup> Information provided by respondents at Sualkuchi during the case study.

<sup>&</sup>lt;sup>142</sup> S. L. Mehta, 1939-40, op. cit. p. 10

Information gathered during the case study from the Sualkuchi branch of the Assam Cooperative Silk House.

<sup>&</sup>lt;sup>144</sup> K. L. Barua, 1919-20, op. cit. p. 2

silk.<sup>145</sup>There was also the entry of artificial silk into Assam which considerably lowered down the price of the *muga* and *eri* silk. There arose a fear that the artificial silk might capture the luxury market in Assam posing real threat to Assam Silk.<sup>146</sup>

During 1929-30 on account of importation of spun silk from Italy and Japan and raw silk from Japan and China, the prices of indigenous silk further came down. Here was importation of spun silk into Assam, there was also exportation of silk waste and cocoons from Assam. The economic depression which continued in the 1930s resulted in dumping of cheap silk goods from Japan and other countries which to an extent detoriated the condition of the silk weavers in Assam. However, inspite of the continuation of silk trade, the Colonial Government in the 20<sup>th</sup> century through the Department of Industries provided the indigenous silk industry of Assam a modern look. The silk rearers and weavers got acquainted with the then modern machineries. Some silk weaving factories were formed and shops were opened for the selling of the silk cloths.

## **POST-COLONIAL PERIOD**

The silk industry involving agro-industrial process was considered as an effective sector for providing employment and generating income to rural population. Sericulture was included in the Constitution of India as a subject in the State List so that the states could formulate policies of their own for developing this sector.<sup>150</sup> In

<sup>145</sup> K. L. Barua, 1920-21, op. cit. p. 4

<sup>&</sup>lt;sup>146</sup> R. N. Phukan, 1928-29, op. cit. p. 12

<sup>&</sup>lt;sup>147</sup> J. N. Chakravarty, 1929-30, op. cit. p. 6

<sup>&</sup>lt;sup>148</sup> I. Majid, 1933-34, op. cit. p. 19

<sup>&</sup>lt;sup>149</sup> I. Majid, 1932-33, op. cit. p. 8

D. V. Ramana, Economics of Sericulture and Silk Industry in India, Deep and Deep Publications, New Delhi, 1987, p. 61

Assam, the State Government established the Department of Sericulture and Weaving in 1948-49 for the development of the silk industry as well as handloom weaving which included weaving of silk. The Central Government in early 1949 established the Central Silk Board to assist the states in the formulation of the programmes and policies to develop the silk industry. The Central Handloom Board and Central Handloraft Board were established in 1952 which initiated measures for the development of the handloom activities in the country. In 1953, the Assam Khadi and Village Industries Board was constituted which worked for the development of silk spinning and weaving in the State as a part of its Village Industries Programme.

However, it was the Department of Sericulture and Weaving which primarily initiated policies for the development of the silk industry in Assam. For the smooth and effective functioning, the Department had two distinct branches, Sericulture and Weaving. The Sericulture branch primarily worked for the establishment of sericulture farms for the production and distribution of disease free seeds, mulberry cuttings of improved varieties, etc; demonstration cum training in up-to-date methods of silkworm rearing, reeling, etc by demonstration staff; experimental measures and training; propaganda and publicity; and increasing the area under sericulture. On the other hand, the activities of the Weaving branch were primarily confined to training in

<sup>&</sup>lt;sup>151</sup> K. C. Barua, Annual Report of the Department of Sericulture and Weaving, Assam, For the Year 1952-53, Government of Assam, Shillong, 1955, p. 1

<sup>&</sup>lt;sup>152</sup> D. V. Ramana, op. cit. p. 68

<sup>153</sup> Rekha Kalita, The Sericulture Industry of Assam, PeeGee India, Guwahati, 2013, p. 5

Amlan Baruah and S. B. Roy Choudhury, Assam State Gazetteer, Volume-I, Government of Assam, Guwahati, 1999, p. 434

up-to-date methods of weaving and designing; demonstration and introduction of improved appliances; development of dyeing and bleaching; and marketing. 155

The Department of Sericulture and Weaving separately established farms for the development of the *eri*, *muga*, *pat* and *tasar* silk in Assam. Rearing of the *tasar* silkworm was also introduced in the State. Earlier, *tasar* was a wild variety in Assam, but it was reared in other parts of the country. The *tasar* silkworm is highly valued as it produces a very fine silk and its waste is also used for the production of superior fabric. To undertake measures for the development of the silk industry, fund allocations were made in the Five Year Plans and the Ad-hoc Annual Plans. The fund allocation was made separately for sericulture and handloom weaving. In some Plans, fund allocations were even separately made for the *eri*, *muga* and *pat* silk industry. However, before the beginning of the Planning period in post-colonial India, the Department of Sericulture and Weaving established an *Eri* Seed Grainage at Haflong (1949) along with 2 new Sericulture Farms at Mangaldai (1949) and Jowai (1950). 159

The first Five Year Plan (1951-56) made a total fund allocation of Rs. 54.6 lakhs towards sericulture and weaving of which Rs. 51.7 lakhs was actually spent. <sup>160</sup> Under the first Five Year Plan Sericulture Farms were established at Howli (1952),

<sup>&</sup>lt;sup>155</sup> K. C. Barua, 1952-53, op. cit. pp. 1-2

Facts About Assam Silk, Department of Sericulture and Weaving, Government of Assam, Shillong, 1960, p. 14

S. N. Chowdhury, Muga Silk Industry, Directorate of Sericulture, Government of Assam, Guwahati, 1982, p. 101

<sup>&</sup>lt;sup>158</sup> See Five Year Plans and Annual Plans of the 20<sup>th</sup> Century drafted by Department of Planning and Development, Government of Assam

<sup>&</sup>lt;sup>159</sup> K. C. Barua, 1952-53, op. cit. p. 2

Second Five Year Plan, 1956-61, Volume-I, Department of Planning and Development, Government of Assam, Shillong, 1955, pp. 137-141

Diphu (1952), Aijal (1952), Pailapool (1956) and Agia (1956). But all these Sericulture Farms from the first Plan period onwards started to function as Mulberry Seed Farms for providing quality mulberry or *pat* seeds to the rearers. It was because separate farms were established for the development of the *eri* and *muga* silk industry in the State. A Collective Mulberry Garden was established at Dobba (1956) so that the mulberry rearers having small land holdings could utilise the mulberry leaves of the garden to feed the silkworms by paying a nominal rate as revenue to the government. Mulberry Reeling Units were established at Rawnapukhuri (1954) and Borchohoki (1956) where out of the mulberry cocoons yarn was produced with the help of reeling machines. <sup>161</sup>

To supply *muga* seeds amongst the rearers, a Basic *Muga* Seed Farm was established at Khanapara (1954). *Eri* Seed Grainages were established at places like Mussalpur (1953), Dhenubhanga (1953), Kokrajhar (1954), Ouguri (1955) and North Lakhimpur (1956) to increase the production and supply of disease free *eri* seeds to the rearers. *Eri* Concentration Centres were established at places like Rawnapukhuri (1953) and Kathiatali (1954) for providing leaves of the *eri* silkworm food plant to the landless *eri* rearers at a nominal rate as government revenue. Besides, *Chowki* Rearing Centres were established under the *Chowki* Rearing Scheme implemented by the State Government where the silkworms were reared by the trained departmental personnel to a certain stage and were then distributed to the rearers of the neighbouring areas. <sup>162</sup>

Glimpses of Silk Industry in Assam, Department of Sericulture and Weaving, Government of Assam, Shillong, 1957, pp. 34-35

<sup>&</sup>lt;sup>162</sup> Ibid. pp. 35-37

Attention was also paid towards demonstration cum training activities for the improvement of sericulture and silk weaving practices in the State. There was the Peripatetic Sericultural Demonstration Staff which in 1952-53 consisted of 70 Demonstrators, 3 Sericultural Supervisors, 12 Sericultural Inspectors and 4 Silk Reeling Supervisors. The staffs were headed by the Superintendent of Sericulture, Assam and Assistant Superintendent of Sericulture, Assam with headquarters at Titabar as well as the Superintendent of Sericulture, Autonomous Districts with headquarters at Haflong. These officials supervised the working of the staff and provided them guidance. The staff did extensive tour all over the State carrying on demonstration work on up-to-date methods of silkworm rearing, introduced time saving reeling appliances, distributed mulberry cuttings as well as disease free examined silk layings and rendered necessary technical assistance. <sup>163</sup>

For the demonstration and training in silk weaving, there were Peripatetic Weaving Demonstration Staffs travelling widely across the State. During 1952-53, there were 9 Peripatetic Weaving Parties consisting of 72 Weaving Demonstrators, 2 Co-operative Weaving Inspectors and 7 Weaving Assistants. The staff during that year visited 2,000 villages and distributed 700 fly-shuttle looms, 141 sleys, 7 chittaranjan looms and did propaganda with practical demonstrations. The very next year in 1953-54, there were 8 Peripatetic Weaving Parties consisting of 84 Weaving Demonstrators, 2 Co-operative Weaving Inspectors and 6 Weaving Assistants. These parties introduced 405 fly-shuttle looms and sleys, 18 chittaranjan looms and an improved process of loin weaving amongst the hill people. Further, they

<sup>&</sup>lt;sup>163</sup> K. C. Barua, 1952-53, op. cit. p. 7

<sup>&</sup>lt;sup>164</sup> Ibid. p. 16

provided assistance to 182 co-operative *boa-kata* societies, 18 *mahila samities*, 38 weaving schools, 10 rural upliftment centres and 2 *ashrams*. The Peripatetic Weaving Parties had their respective jurisdiction area as mentioned in the table 3.4 below so that they could provide satisfactory service to the weavers. The peripatetic service is the same of the sam

**Table 3.4: Jurisdiction of the Peripatetic Weaving Parties** 

Name of the Weaving Party	Jurisdiction	
Goalpara Weaving Party	Goalpara and Garo Hills	
Gauhati Weaving Party	Kamrup District	
Nowgong Weaving Party	Nowgong	
Golaghat Weaving Party	Golaghat and Jorhat Subdivisions	
Sibsagar Weaving Party	Sibsagar and Dibrugarh Subdivisions	
Tezpur Weaving Party	Darrang and North Lakhimpur	
Cachar Weaving Party	Cachar and Mizo Hills	
Central Weaving Party, Tribal	United Mikir and North Cachar Hills and Naga	
Areas	Hills	

Formal institutional training was provided in sericulture and weaving by the Department of Sericulture and Weaving so that the silk industry can be adopted as a primary occupation. The sericultural training course was conducted in the Titabar Sericulture Farm. The course included training on plantation of food plants for silkworms, rearing of silkworms and reeling and spinning. Sericulture training was

<sup>&</sup>lt;sup>165</sup> K. C. Barua, Annual Report of the Department of Sericulture and Weaving, Assam, For the Year 1953-54, Government of Assam, Shillong, 1956, pp. 15-16

<sup>&</sup>lt;sup>166</sup> Ibid. p. 17

also newly started in the Senchoa Sericulture Farm.<sup>167</sup> A few numbers of candidates undergoing sericultural training course were awarded with stipends every year by the State Government. The candidates both from the plains and the hills were granted stipends at the rate of Rs. 15 and Rs. 20 respectively. A departmental officer was also sent to Japan for higher training in sericulture.<sup>168</sup>

The weaving classes were mainly conducted in the Gauhati Weaving Institute established during the colonial period. It was then the only well equipped institution for providing training in silk weaving in up-to-date methods with modern equipments in the State. Other than this Institute, Weaving Training Classes were conducted at Sadiya, Tura, Lungleh, Haflong, Kohima, Aijal, Jowai, Mokokchung and Sarihajan. <sup>169</sup> The Gauhati Weaving Institute imparted training in spinning, weaving and dyeing. A few numbers of stipends were also granted to the deserving candidates of both the plains and the hills for undergoing training at the same rate as was provided for the sericultural training. <sup>170</sup> Under the scheme of the Central Handloom Board, arrangement was made for the establishment of a full-fledged dye house at Gauhati. <sup>171</sup>

Marketing was another sector which was provided importance by the Department of Sericulture and Weaving for the development of the silk industry in the State. For marketing, the Department had 2 Central Emporiums at Gauhati and Karimganj with its branches at Sibsagar, Nowgong, Raha, Charaibahi, Morigaon, Nalbari and Silchar. Approximately 1,46,575 yards of standardised silk fabrics were

<sup>&</sup>lt;sup>167</sup> K. C. Barua, 1952-53, op. cit. pp. 10-11

<sup>&</sup>lt;sup>168</sup> K. C. Barua, 1953-54, op. cit. p. 14

<sup>&</sup>lt;sup>169</sup> K. C. Barua, 1952-53, op. cit. pp. 13-14

<sup>&</sup>lt;sup>170</sup> K. C. Barua, 1953-54, op. cit. pp. 2, 14

<sup>&</sup>lt;sup>171</sup> K. C. Barua, 1952-53, op. cit. p. 16

sold under this section in 1952-53. During that year the Department participated in 11 exhibitions in and outside the State.<sup>172</sup> The very next year in 1953-54, 16 new branches of the 2 Central Emporiums were established under the schemes of the Central Handloom Board. These branches were established in different parts of the State, but the places of their establishment were not mentioned. Even 4 Marketing Organisation Centres were established in that year at Sibsagar, Nowgong, Nalbari and Silchar.<sup>173</sup> The quantum of silk fabrics sold by the 2 Central Emporiums and 4 Marketing Organisation Centres in 1953-54 is mentioned below in the table 3.5:<sup>174</sup>

Table 3.5: Quantum of Silk Fabrics Sold in 1953-54

Name of the Marketing Agency	Quantity of Silk Fabric (in	
	Yardages)	
Government Emporium, Gauhati	9,000	
Government Emporium, Karimganj	1,04,078	
Marketing Organisation Centre, Sibsagar	2,225	
Marketing Organisation Centre, Nowgong	2,725	
Marketing Organisation Centre, Nalbari	6,710	
Marketing Organisation Centre, Silchar	40,276	
	Total 1,65,014	

In 1951, the Central Silk Board started a special scheme called Establishment of a Voluntary Cocoon Market for proper marketing of the silk cocoons in the State.

Under that scheme some cocoon markets were organised at Dhopdhara and Palasbari

<sup>173</sup> K. C. Barua, 1953-54, op. cit. p. 3

160

<sup>&</sup>lt;sup>172</sup> Ibid. p. 17

<sup>&</sup>lt;sup>174</sup> Ibid. p. 17

in the district of Kamrup. But due to stoppage of fund from the Central Silk Board the scheme could not be successfully implemented. During the first Plan period, the Central Silk Board also undertook some other schemes for developing the silk industry in the State. The schemes were rearing of foreign races of Univoltine and Bivoltine silkworms in the hill station at Shillong, experimental research in mulberry cultivation at Titabar, establishment of a Regional Sericultural Research Station, establishment of a Basic *Muga* Farm, establishment of a Statistical Unit, establishment of a Reeling Unit at Gaurisagar, subsidy to *muga* seed cocoon growers and extension of the Shillong Sericulture Farm.

During the second Five Year Plan (1956-61) handloom co-operative sector was adjoined with sericulture and weaving with a total fund allocation of Rs. 142.50 lakhs of which Rs. 128.28 lakhs was actually spent. <sup>177</sup> In the second Five Year Plan period (1956-61), a Collective Mulberry Garden at Dhekiajuli (1958) and a Mulberry Reeling Unit at Pailapool (1959) was established for the development of the *pat* silk industry. To meet the increasing demand of the *muga* seeds 2 Basic *Muga* Seed Farms were established at Kokrajhar and Narayanpur in 1957. *Eri* Seed Grainages were established at Nongpoh and Goreswar in 1957. Eri Concentration Centres were established at Mazbat and Sapekhaiti in 1958. The rearing of the *tasar* silkworm was introduced in the State with the establishment of a *Tasar* Cocoon Rearing Farm at Kokrajhar in 1959 by the State Government with a view to produce seed cocoons for the *tasar* rearers. *Arjun* and *asan* seedlings were transplanted in the farm from the

<sup>&</sup>lt;sup>175</sup> K. C. Barua, 1952-53, op. cit. pp. 12-13

<sup>&</sup>lt;sup>176</sup> Glimpses of Silk Industry in Assam, op. cit. pp. 57-58

<sup>&</sup>lt;sup>177</sup> Third Five Year Plan, 1961-66, Volume-I, Department of Planning and Development, Government of Assam, Shillong, 1960, pp. 151-154

nurseries. A few broods of *tasar* were raised successfully with seed cocoons obtained from Bihar.<sup>178</sup>

In 1956-57 the Gauhati Weaving Institute was upgraded and enlarged and was renamed as the Assam Textile Institute where regular diploma, certificate and artisan courses were offered in both silk and cotton weaving. The Weaving Training Classes were extended to new places like Diphu, Doomdooma, Nowgong, Balipara and Dhubri. The Assam Khadi and Village Industries Board established in 1953 started marketing of the silk fabrics through its sales outlet called Khadi Gramodyog Bhandars. Then in 1958, the Assam Government Marketing Corporation Limited was established to look after the marketing of handloom and other handicraft products. It has its own sales emporium called Pragjyotika both in and outside the State through which it sold silk fabrics. Thereafter in 1960, the Assam Apex Weavers Co-operative Society Limited was established which contributed a lot in the marketing of the silk fabrics. It had its sales outlet called Jagaran both in and outside the State. There was a purchase committee which only purchased the fabrics from the weavers organised under co-operative societies.

There was no established marketing network or organisation for the sale as well as purchase of silk cocoons and silk yarn in the State. The *eri* and *muga* were usually marketed in cocoons and the *pat* was sold in the form of yarn. As such the

<sup>&</sup>lt;sup>178</sup> Census of India, 1961, Volume-III, Assam, Part VII-A, op. cit. pp. 36-37; Facts About Assam Silk, op. cit. pp. 12-14

<sup>&</sup>lt;sup>179</sup> Report on A Survey of Cottage Industries in Assam, Volume-I, Part-I (General), Department of Economics and Statistics, Government of Assam, Shillong, 1958, p. 47

<sup>&</sup>lt;sup>180</sup> Amlan Baruah and S. B. Roy Choudhury, op. cit. pp. 435-436

<sup>&</sup>lt;sup>181</sup> Ibid. p. 501

<sup>&</sup>lt;sup>182</sup> Ibid. p. 505

silk and cocoon market in the State was dominated by the merchants and middlemen and the producers were forced to sell their products in a buyer's market and were often exploited by the middlemen. The most important and biggest silk markets in the State were Palashbari in the district of Kamrup and Baithalangchu in the district of United Mikir and North Cachar Hills which were also entirely controlled by the merchants and middlemen. Finally, in 1961, 10 Cocoon Marketing Societies were organised in the State at different places at the initiative of the State Government. In 1962 all these societies were registered. The list of these Cocoon Marketing Societies along with its location and date of registration is mentioned below in the table 3.6:<sup>184</sup>

Table 3.6: List of Cocoon Marketing Societies in Assam (1961-62)

Name of the Societies	Location	Date of
		Registration
Dengaon Cocoon Marketing and	Dengaon (Diphu)	3-1-1962
Silk Grower's Society		
Nitaipanidihing Silk Grower's Co-	Nitaipanidihing (Sibsagar)	22-1-1962
operative Society		
Mohondijoa Cocoon Marketing and	Mohondijoa (United Mikir	26-2-1962
Silk Grower's Co-operative Ltd.	and North Cachar Hills)	
Nongpoh Silk Grower's Co-	Nongpoh (Shillong)	12-3-1962
operative Society Ltd.		
Boko Reshom Producers Samabai	Boko (Kamrup)	16-3-1962
Baithalangso Cocoon Marketing and	Baithalangso (United	20-3-1962

<sup>&</sup>lt;sup>183</sup> Report on A Survey of Cottage Industries in Assam, Volume-I, Part-I (General), op. cit. pp. 49-50

<sup>&</sup>lt;sup>184</sup> K. G. R. Iyer, Annual Report of the Department of Sericulture and Weaving, Assam, For the Year 1961-62, Government of Assam, Shillong, 1965, pp. 15-16

Silk Grower's Co-operative Society	Mikir and North Cachar	
Ltd.	Hills)	
Dhakuakhana Cocoon Marketing	Dhakuakhana (North	28-3-1962
and Silk Grower's Society	Lakhimpur)	
Behali Reshom Utpadan Samabai	Behali (Tezpur)	31-3-1962
Samiti		
Joypur Cocoon Marketing and Silk	Joypur (Cachar)	24-7-1962
Grower's Co-operative Society		
Mukdangra Cocoon Grower's Co-	Mukdangra (Tura)	28-12-1962
operative Ltd.		

The Central Handloom Board also sponsored few schemes during the second Plan period to place the handloom industry in an organised state and thereby to assist the disorganised handloom weavers of the State. The schemes were organisation of co-operative societies, subsidies on cost of transport of yarn, marketing, subsidy on sale of clothes, supply of fly-shuttle sleys and conversion of throw-shuttle looms, and propaganda and publicity. These schemes proved very beneficial for both silk and cotton weavers. 56 Weaving Co-operative Societies were registered which increased the total number of such societies in the State to 182. An amount of Rs. 2 lakhs was issued as loan to the Weaving Co-operative Societies for their working capital. Loan amounting to Rs. 50,000 was issued for financing the share capital of the weavers. 200 bales of silk yarn were brought and were sold to the weavers at cheap rate. 285 throw- shuttle looms were converted to fly-shuttle looms through the Weaving Co-operative Societies. With posters and pamphlets advertisement was made for providing wide publicity to the products of the handloom industry. 185

<sup>&</sup>lt;sup>185</sup> Annual Report of the All India Handloom Board For the Year 1957-58, Government of India Publication, Delhi, 1959, pp. 68-71

Focus was also specially laid down during the second Plan period for improving the condition of sericulture in the Barak Valley. There the Manipuri and Bengali communities mainly reared the *pat* cocoons, while the Kachari women were mostly engaged in the rearing of *eri* cocoons. The Department of Sericulture and Weaving with the Development Blocks of the Valley provided training in sericulture, production of the *eri* and mulberry seeds, financial assistance for constructing model rearing houses, mulberry cuttings, etc to attract more people towards sericulture. Owing to these measures sericultural activities increased in the villages like Pailapool, Dargarbond and Darmikhal. Two Cocoon Marketing Co-operative Societies were started at Dargarbond and Darmikhal villages. As already stated a Mulberry Seed Farm and a Mulberry Reeling Unit was established at Pailapool.

On 31<sup>st</sup> March 1960, the construction of the Assam Spun Silk Mills Ltd. was started at Jagiroad with a capital outlay of Rs. 85 lakhs. The construction was completed in November, 1961, and the mill went into production on 18<sup>th</sup> December, 1961 with the installed capacity of 3,000 spindles for spun silk yarn and 420 spindles for noil yarn. It was expected that by working in two shifts, the mill would produce 34,020 kg of spun silk yarn and 22,680 kg of noil yarn annually. The Spun Silk Mill was set up to find out new markets for the *eri*, *pat* and *muga* fabrics by producing standardised yarn and to ensure reasonable price to the cocoon rearers in the State. <sup>187</sup>

By the year 1965, the Spun Silk Mill consumed 6,000 kg of *pat* (mulberry) silk waste, 20,000 kg of *eri* silk waste and 30,000 kg of *muga* silk waste. Provisions were too made to increase the installed capacity of the mill from 3,000 to 8,000

<sup>186</sup> Census of India, 1961, Volume-III, Assam, Part VII-A, op. cit. p. 27

<sup>&</sup>lt;sup>187</sup> Amlan Baruah and S. B. Roy Choudhury, op. cit. p. 476

spindles so that it could consume all the silk waste available in the State. <sup>188</sup> The Spun Silk Mill continued to earn profit till 1981-82. But suddenly the performance detoriated when in 1982-83, the Mill incurred a net loss of Rs. 9.02 lakhs. Thereafter, the Mill failed to regain its lost position with its machines started becoming old and obsolete with the State Government taking no measures for renovation or replacement of its machineries. In the mid 1990s the Spun Silk Mill stopped its functioning. <sup>189</sup>

In 1960-61, the Handloom Research and Designing Centre was also established at Gauhati for evolving improved designs and techniques of production in order to improve the quality of handloom fabrics as well as to bring down the cost of production so as to foster its sale both within and outside the State. The Centre functioned like a servicing unit for the handloom weavers in the State providing them with technical knowledge in production of quality fabrics at a competitive cost for improving their economic condition. Mainly, the Centre created new designs in silk and cotton weaving and also created experiments for improving technology in weaving, bleaching and dyeing. The types of designs prepared in this Centre on different materials prepared from the *eri*, *muga* and *pat* variety of silk is mentioned below in the table 3.7:<sup>190</sup>

<sup>&</sup>lt;sup>188</sup> Industrial Programmes for the Fourth Plan for Assam, National Council of Applied Economic Research, New Delhi, 1966, p. 86

<sup>&</sup>lt;sup>189</sup> Amlan Baruah and S. B. Roy Choudhury, op. cit. p. 477

<sup>&</sup>lt;sup>190</sup> K. G. R. Iyer, 1961-62, op. cit. pp. 18-19

**Table 3.7: Designs Prepared on Silk Material** 

Name of the Material	Designs	Utility
Mill Spun Eri Mekhela	Cross Border and Butta	Ladies Wear
Handloom Eri Scarf Stole	Cross Border and Butta	Ladies Wear
Mill Spun Eri Riha	Cross Border and Butta	Ladies Wear
Eri Noil Shirting	Plain Coloured	Gents Wear
Mill Spun Muga and Eri	Plain Coloured	Gents Wear
Shirting		
Eri Noil Dress Material	Plain Coloured	Gents Wear
Muga Drill Cloth	Twill	Gents Wear
Muga Eri Suiting	Herringbone Twill	Gents Wear
Muga Scarf	Cross Border and Butta	Ladies Wear
	Design	
Muga and Pat Scarf	Cross Border	Ladies Wear
Muga and Eri Blouse Piece	Cross Border and Butta	Ladies Wear
and Scarf	Design	
Reeled Silk Blouse Piece	Different Colour	Ladies Wear
	Combination	
Silk Check Shirting	Plain Check	Gents Wear
Silk Check Blouse Piece	Check with Butta Design	Ladies Wear
Muga Mekhela	Cross Border and Butta	Ladies Wear
	Design	
Silk Sarees	Cross Border and Extra	Ladies Wear
	Warp Design	

The joint efforts made by the Department of Sericulture and Weaving along with the Central Silk Board, the Central Handloom Board, etc all throughout the 1950s showed a positive trend as far as the development of the silk industry in the State was concerned. During the year 1957-58, the handloom industry including sericulture provided total and partial employment to nearly 12 lakhs of people in the State. At the end of 1960, there were about 32,000 handlooms engaged in silk weaving in the State. In 1961, there were about 1,900 registered Weaving Cooperative Societies in the State with 30,007 numbers of weavers of whom 12,004 were males and 18,003 were females. Besides, there were 1,57,755 weavers outside the co-operative fold of whom 7,739 were whole time weavers and 1,50,016 were part time weavers. Again out of the whole time weavers, 4,592 were male and 3,147 were female. While, out of the part time weavers, 2,908 were male and 1,47,108 were female.

In the field of sericulture, a large quantity of *eri* cocoons was exported outside the country and considerable quantity of *eri* fabrics outside the State through different trade channels to Sikkim and Tibet via Kalimpong. A good quantity of *muga* yarn was also sent outside for use in embroidery, ornamental work and fishing line. The acreage under the *pat* cultivation got increased from 1,600 acres in 1953 to 2,300 acres by the end of 1961. <sup>194</sup> Infact, the raw silk production showed a more or less a progressive trend since 1950s with a decline in between as indicated in the table 3.8 below: <sup>195</sup>

<sup>&</sup>lt;sup>191</sup> Assam Gazette, Government of Assam, Shillong, 1962, p. 12

<sup>192</sup> Census of India, 1961, Volume-III, Assam, Part VII-A, op. cit. p. 36

<sup>&</sup>lt;sup>193</sup> Ibid. pp. 17-18

<sup>&</sup>lt;sup>194</sup> K. G. R. Iyer, 1961-62, op. cit. pp. 6-7

<sup>&</sup>lt;sup>195</sup> K. C. Barua, 1953-54, op. cit. p. 7; Census of India, 1961, Volume-III, Assam, Part VII-A, op. cit. p. 36

Table 3.8: Production of Raw Silk (1950-1961)

Eri Cut Cocoons		
	Muga Raw Silk	Mulberry Raw Silk
3,82,000	95,000	19,500
4,10,000	1,00,500	20,400
4,20,000	1,10,000	21,600
3,83,000	1,08,600	22,944
3,95,000	1,21,000	23,620
4,77,000	1,57,000	26,120
4,82,000	1,84,600	27,600
5,00,000	1,90,000	28,000
5,37,820	2,07,000	31,457
5,00,000	1,86,000	30,800
4,50,000	1,20,000	25,500
5,13,000	1,25,000	29,000
	4,10,000 4,20,000 3,83,000 3,95,000 4,77,000 4,82,000 5,00,000 5,37,820 5,00,000 4,50,000	4,10,000       1,00,500         4,20,000       1,10,000         3,83,000       1,08,600         3,95,000       1,21,000         4,77,000       1,57,000         4,82,000       1,84,600         5,00,000       1,90,000         5,37,820       2,07,000         5,00,000       1,86,000         4,50,000       1,20,000

The third Five Year Plan (1961-66) made separate fund allocations for sericulture and weaving and co-operative handloom. Rs. 75.09 lakhs was allotted for sericulture and weaving, while Rs. 65 lakhs was allotted for co-operative handloom. Under this Plan, an amount of Rs. 19.26 lakhs was spent for the development of the *eri* silk, Rs. 13.62 lakhs was spent for the development of the *muga* silk and Rs. 8.33 lakhs was spent for the development of the *pat* or mulberry silk industry respectively. Further, at the end of the third Five Year Plan, three Ad-hoc Annual

Fourth Five Year Plan of Assam (Proposals), Department of Planning and Development, Government of Assam, Shillong, 1968, p. 61

Plans were adopted from the year 1966 to 1969 under which a total fund of Rs. 9.05 lakhs, Rs. 9.55 lakhs and Rs. 9.14 lakhs were respectively allotted for the development of the *eri*, *muga* and *pat* or mulberry silk industry in the State. 197

The large allocation of fund made towards sericulture and weaving in the third Five Year Plan and three Ad-hoc Annual Plans helped in continuing the works for the development of the silk industry in the State during the 1960s. The *eri* silk industry greatly flourished in the plains as well as in the hill areas of Assam. By 1962-63, about 90 percent of the rural population in the districts of Sibsagar and Lakhimpur were connected with the *eri* silk industry. 4 new *Eri* Seed Grainages were established at places like Borduar (1962), Dengaon (1962) Dormikhal (1963) and Diphu (1963) with the total number of *Eri* Seed Grainage in the State increasing to 12. Besides, Private *Eri* Seed Graineurs were organised in important *eri* growing areas of the State. Even 80 selected *eri* seed cocoon growers were organised in 1962-63 for providing them with technical and financial assistance.

Initially in 1962-63, 95 number of Private *Eri* Seed Graineurs were established in the State and the quantity of layings prepared by these graineurs was 2,76,868.<sup>199</sup> Then in 1964-65, the number of Private *Eri* Seed Graineurs in the State rose to 100 and the quantity of layings prepared was 5,00,635. Further, the *Eri* Seed Graineur along with the 12 *Eri* Seed Grainage produced and distributed over 11 lakhs of *eri* layings which ultimately led to the production of 2.47 lakh kilograms of *eri* cut

<sup>197</sup> Preliminary Memorandum on The Fourth Five Year Plan of Assam, Department of Planning and Development, Government of Assam, Shillong, 1965, p. 45

<sup>&</sup>lt;sup>198</sup> K. G. R. Iyer, Annual Report of the Department of Sericulture and Weaving, Assam, For the Year 1962-63, Government of Assam, Shillong, 1966, pp. 1-4

<sup>&</sup>lt;sup>199</sup> Ibid. p. 4

cocoons in the State during that year. For increasing the quantity and improving the quality of the *eri* spun silk, 123 numbers of improved spinning *charkhas* were distributed at concessional rates amongst the deserving *eri* spinners in the State. Then in the *Eri* Seed Grainage at Nongpoh, special attention was paid towards the scientific segregation of superior varieties of *eri* silkworm and improving the grainage techniques.<sup>200</sup>

In 1965-66, the number of Private *Eri* Seed Graineurs in the State remained static at 100, but the quantity of layings prepared by the graineurs increased to 5,71,166. During that year, an *Eri* Concentration Centre was also established at Tingrai. Amongst the deserving *eri* spinners, 366 numbers of improved spinning *charkhas* were distributed at concessional rates.<sup>201</sup> In 1966-67, another *Eri* Seed Grainage was established at Rangsali increasing the total number of *Eri* Seed Grainage in the State to 13. An *Eri* Concentration Centre was also established at Nellie. But during that year, the number of Private *Eri* Seed Graineur in the State got reduced to 98 and correspondingly there was reduction in the quantity of layings prepared by them which stood at 3,59,715. Even, the numbers of improved spinning *charkhas* distributed was 314 which were lesser in number than distributed in the previous year.<sup>202</sup> The very next year in 1967-68, 4 *Eri* Concentration Centres were

<sup>&</sup>lt;sup>200</sup> K. N. Sharma, Annual Report of the Department of Sericulture and Weaving, Assam, For the Year 1964-65, Government of Assam, Shillong, 1967, pp. 5-7

<sup>&</sup>lt;sup>201</sup> J. M. Jala, Annual Report of the Department of Sericulture and Weaving, Assam, For the Year 1965-66, Government of Assam, Shillong, 1968, pp. 3-4

<sup>&</sup>lt;sup>202</sup> A. Ahmed, Annual Report of the Department of Sericulture and Weaving, Assam, For the Year 1966-67, Government of Assam, Shillong, 1969, pp. 4-5

established at Thaligram, Lakhimipathar, Hollogaon and Rengkhalan.<sup>203</sup> Another *Eri* Concentration Centre was established at Dellai in 1968-69.<sup>204</sup>

The *muga* silk industry greatly flourished all throughout the 1960s in the plain districts of Assam. But in the hill areas, the muga rearing was not feasible because of the cold climate and difficulties involved in growing food plants for the muga silkworms. There were already 3 Basic Muga Seed Farm in the State and 1 more was established at Dhakuakhana in 1961. This new Basic Muga Seed Farm was established in 20 acres of land where plantation of soom, sualu and dighlati tree was started. The plantation was to be completed by 1964 and the test rearing was to begin in 1968 after tree attains the age of 5 years. 205 In 1962-63 a Muga Nursery and Multiplication Centre was established at Sarupathar. The Centre was established to increase the area under the *muga* food plantation by producing and supplying soom and sualu seedlings to the muga rearers. The same year a new scheme called the Muga Village Grazing Reserve (VGR) Scheme was started to utilize the grazing reserves in different places of the State for plantation of muga food plants for rearing of the *muga* silkworms. The scheme was initially started at places like Jalbhari, Perabhari, Gobindapur, Dormikhal, Raidingia and Jajari. Further, 80 number of expert muga rearers from predominant muga growing areas in the State were selected for the production of good quality muga seed cocoons and the total production of these 80 selected muga rearers during the year stood at 13,09,000 cocoons. For increasing the quantity and improving the quality of the *muga* silk yarn, 417 improved *muga* reeling

<sup>&</sup>lt;sup>203</sup> Handbook on Assam Sericulture at a Glance, Directorate of Sericulture, Government of Assam, Guwahati, 1994, pp. 26-31

<sup>&</sup>lt;sup>204</sup> Ibid.

<sup>&</sup>lt;sup>205</sup> K. G. R. Iver, 1961-62, op. cit. pp. 7-8

machines were also distributed amongst the *muga* reelers mainly in the districts of Goalpara, Sibsagar and Lakhimpur. The total *muga* raw silk production in the State in 1962-63 was 45 thousand kilograms.<sup>206</sup>

By 1964-65, the number of selected expert *muga* rearers in the State rose to 128 and these rearers produced 19,39,950 number of good quality *muga* seed cocoons. Through the *muga* rearers and the Basic *Muga* Seed Farm, 5 lakhs of basic *muga* seed cocoons were produced and distributed which led to the production of 55 thousand kilograms of *muga* raw silk in the State during that year. 683 improved *muga* reeling machines were also distributed amongst the *muga* reelers in the State. Besides, experiments were going on the vegetative production of the *muga* food plants. <sup>207</sup> In 1965-66, a research sub-station was established in the Basic *Muga* Seed Farm at Dhakuakhana. For production of good quality *muga* seed cocoon, 142 number of expert *muga* rearers were selected in that year and 21,95,400 numbers of good quality *muga* seed cocoons were produced by them. The total *muga* raw silk production in the State during that year was 60 thousand kilograms. <sup>208</sup>

The acreage under the *muga* food plants in 1965-66 also got increased as village grazing reserves in 2 more places Pailapool and Lukakuchi were utilised under the *Muga* Village Grazing Reserve (VGR) Scheme.<sup>209</sup> In 1966-67, 2 new Basic *Muga* Seed Farms along with sub-station were established at Bordubi and Bhakatpara where experimental rearings were conducted and 6,500 number of seed cocoons were obtained in that year. Another *Muga* Nursery and Multiplication Centre was

<sup>&</sup>lt;sup>206</sup> K. G. R. Iyer, 1962-63, op. cit. pp. 5-7

<sup>&</sup>lt;sup>207</sup> K. N. Sharma, 1964-65, op. cit. p. 8

<sup>&</sup>lt;sup>208</sup> J. M. Jala, 1965-66, op. cit. p. 4

<sup>&</sup>lt;sup>209</sup> Ibid. p. 5

established at Kahibama. The *Muga* Village Grazing Reserve (VGR) Scheme for the *muga* food plantation and rearing was started in Senchoa and Thaligram. The total *muga* raw silk production in the State during the year was 68 thousand kilograms. 27 numbers of improved *muga* reeling machines were distributed amongst the *muga* reelers for increasing the output and improving the quality of the *muga* yarn.<sup>210</sup>

The mulberry or *pat* silk industry during the 1960s made a faster development in the hill areas in comparison to the plains. The foreign races of the *pat* silkworm thrives the most in the cold climate of the hills. The Shillong and Jowai Sericulture Farm became the prominent supplier of foreign race of the *pat* silkworm in the State. The two farms also prepared cross-breed seeds between the foreign and indigenous races of *pat* and supplied them to the rearers in the plain districts. During the year 1962-63, the production and supply of both foreign and cross-breed of *pat* seeds were satisfactory and results from the rearings in the villages were quite encouraging. Collective Mulberry Gardens were established at Darmikhal, Madaripur, Malanpur and Morigaon. A Mulberry Reeling Unit was established at Durllabcherra. Activities of the *Chowki* Rearing Centres were extended by helping the village rearers in solving their technical difficulties in addition to the supply of silkworms to the rearers.<sup>211</sup>

In the plain districts, the *Chowki* Rearing Centres distributed 32,490 layings of grown-up healthy *pat* silkworms amongst the rearers to step up the production of cocoons. Besides, Graft Nurseries were established at Agia, Mangaldai and Gangdubi which supplied 47,378 number of mulberry grafts, 21,750 number of mulberry cutting and 20,000 number of mulberry seedlings amongst the rearers. In the plain districts,

<sup>&</sup>lt;sup>210</sup> A. Ahmed, 1966-67, op. cit. p. 5

<sup>&</sup>lt;sup>211</sup> K. G. R. Iver, 1962-63, op. cit. pp. 7-8

the villagers reared the *pat* silkworm in their agricultural off season. Mainly, the people from the *Nath* community were involved in the rearing of the *pat* silkworm in the districts of Sibsagar, Nowgong and Darrang. While, in the Kamrup and Goalpara district, the tribal people were carrying forward the rearing of *pat* silkworm. The Department of Sericulture and Weaving tried to popularise the rearing of *pat* silkworm amongst all the communities and thereby induce commercial aspect of the *pat* silk industry amongst all. In 1962-63, all total 1,650 acres of land in the State was under the mulberry or *pat* silk cultivation and the total quantity of the *pat* raw silk production in the State was 13 thousand kilograms.<sup>212</sup>

In 1964-65, the area under mulberry or *pat* cultivation rose to 2,000 acres. *Chowki* Rearing Centres were established in different silk growing areas like Wahiajer, Tura, Gangdubi, Agia, Mangaldai, Sapekhaity, Morigaon, Borgaon and Borigaon and these new centres reared 29,669 numbers of *pat* silkworms to its third stage and supplied 27,669 layings of them to the rearers. The three Graft Nurseries prepared 1,52,557 numbers of mulberry grafts, but supplied only 36,615 numbers of them. All total 6 lakh of mulberry seeds were distributed and total yield of the *pat* raw silk in the State during that year was 14 thousand kilograms. For producing better quality of *pat* yarn, a Mulberry Reeling Unit was established at Mussalpur.<sup>213</sup>

By 1965-66, 95 percent of the total demand for the supply of *pat* seeds in the State was achieved. Cutting across the caste and creed barrier, the *pat* or mulberry culture spread amongst different communities particularly the people in the hills where soil, climate and attitude of the people were all conducive for the all round

<sup>212</sup> Ibid. pp. 8-14

<sup>&</sup>lt;sup>213</sup> K. N. Sharma, 1964-65, op. cit. pp. 8-9

development of it. The 11 Sericulture Farms did commendable work for the quantitative expansion and qualitative development of the mulberry silkworm by providing disease free *pat* seeds in the State. Through the 3 Graft Nurseries, 40,000 mulberry grafts were supplied to the mulberry growers. Collective Mulberry Gardens were also established at places like Durllabcherra, Karicherra and Charaibahi. The *Chowki* Rearing Centres continued to supply *pat* silkworms to the rearers after rearing it to the third stage in the centre. A total 30,209 numbers of layings were supplied from the *Chowki* Rearing Centres to the rearers in 1965-66. The total area under mulberry or *pat* cultivation got increased to 2,200 acres. Mulberry Reeling Units were established in important mulberry cocoon growing areas like Palengi, Dormikhal and Howli.<sup>214</sup>

The rearing of *pat* silkworms in the *Chowki* Rearing Centres by the departmental technical staff greatly minimised the mortality rate of the *pat* silkworms in the younger stages. All total, the *Chowki* Rearing Centres in 1966-67 supplied 33,372 numbers of *pat* layings to the rearers. The same year the Sericulture Farms altogether distributed 7.50 lakh layings of mulberry seeds and the total *pat* raw silk production was 16 thousand kilograms. Collective Mulberry Gardens were established at places like Behali, Mathurapara, Hollogaon, Thaligram, Chatianaguri and Barudalani. Mulberry Reeling Units were again established in important mulberry cocoon growing areas like Telikolla, Magela and Laina which contributed a lot in the increase of the raw *pat* silk production in the State during that year.<sup>215</sup>

<sup>&</sup>lt;sup>214</sup> J. M. Jala, 1965-66, op. cit. pp. 5-6

<sup>&</sup>lt;sup>215</sup> A. Ahmed, 1966-67, op. cit. pp. 5-6

Formation of Cocoon Marketing Societies had begun since 1961. With the formation of these societies, there started the practice of gradual commercialisation of the *pat* cocoons, *eri* cocoons and *muga* cocoons. The marketing of these silk cocoons started in a systematic manner on a co-operative basis amongst the growers of the State so that the rearers receive the legitimate price for the cocoons. These Cocoon Marketing Societies used to purchase cocoons from the rearers and from these cocoons silk yarn was produced. However, in 1961-62 these societies failed to purchase any silk cocoon because no fund was sanctioned for it. It was in 1962-63 that the State Government sanctioned a sum of Rs. 24,150 as share capital and working capital loan to these Cocoon Marketing Societies. Even 13 *eri* spinning *charkas* and 20 reeling *bhiros* were also introduced amongst the members of these societies to organise reeling and spinning activities. This kind of assistance from the State Government facilitated the Cocoon Marketing Societies in undertaking its activities from 1962-63 onwards. The state of the cocoon Marketing Societies in undertaking its activities from 1962-63 onwards.

Other than the Cocoon Marketing Societies, the Department of Sericulture and Weaving decided to establish Silk Co-operative Societies to save the silk growers from the clutches of the middlemen. By 1964-65, there were 33 Silk Co-operative Societies of which 27 were Cocoon Growers' Co-operative Societies and 6 were Reelers and *Muga* Seed Growers' Co-operative Societies. In 1965-66, the number of Silk Co-operative Societies in the State got increased to 41. Out of these 41 Silk Co-operative Societies, 31 were Cocoon Growers' Co-operative Societies and 10

<sup>&</sup>lt;sup>216</sup> Assam Gazette, 1962, op. cit. pp. 15-17

<sup>&</sup>lt;sup>217</sup> K. G. R. Iyer, 1962-63, op. cit. pp. 14-15

<sup>&</sup>lt;sup>218</sup> K. N. Sharma, 1964-65, op. cit. p. 10

Reelers and *Muga* Seed Growers' Co-operative Societies. The total amount of business transactions of these Silk Co-operative Societies during that year was Rs.1,54,545.49 and the details of the business transactions are mentioned below in the table 3.9.<sup>219</sup>

Table 3.9: Business Transactions of Silk Co-operative Societies in 1965-66

Item	Quantity	Value
Eri Cocoons	16, 254.5 kilograms	Rs. 1,40,113.79
Muga Wastes	1,181.3 kilograms	Rs. 10,631.70
Reeling Muga Cocoons	3,00,000 numbers	Rs. 2,200.00
Pat Silk Yarn	20 kilogram	Rs. 1,600.00
		Total Rs. 1,54,545.49

In 1961, a Sericultural Training Institute was formally established at the Titabar Sericulture Station where a Certificate Course on Sericulture was provided with enrolment capacity of 25 trainees in a batch. Other than training in rearing, reeling and spinning, the trainees were given practical demonstrations in preservation and production of seeds. The trainees were also given theoretical and practical instructions on Botany, Zoology, Chemistry and Silk Testing and Conditioning as per the syllabus of the Institute. Trainees from the neighbouring North-Eastern States of Tripura and Manipur also came to this Institute for attending the Certificate course. As per the direction of the Central Silk Board, a scheme for the amalgamation of the research station and training institute at Titabar was under the consideration of the State Government. 221

<sup>220</sup> K. G. R. Iyer, 1961-62, op. cit. pp. 19-20

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<sup>&</sup>lt;sup>219</sup> J. M. Jala, 1965-66, op. cit. p. 7

<sup>&</sup>lt;sup>221</sup> K. N. Sharma, 1964-65, op. cit. p. 10

As earlier, the training on silk weaving continued mainly in the Assam Textile Institute along with Weaving Training Classes in various other places. But Handloom Production Centres were attached with the Weaving Training Classes only at Mussalpur, Ramphalbil, Shillong and Diphu.<sup>222</sup> By the year 1964-65, the Assam Textile Institute entered its ninth year of functioning and continued the Certificate, Diploma and Artisan Courses. Further, in that year a Six Month Re-orientation Course was started in the Institute to train up the untrained Weaving Demonstrators of the Department of Sericulture and Weaving. The Weaving Training Classes as earlier continued in different places of the State and during that year one more Weaving Training Class was started at Hatbar and thereby increasing the total number of such classes in the State to 26. From that year a follow up programme was also pursued by supplying sets of sleys with accessories to the ex-trainees of the Weaving Training Classes so that they could start an independent career of their own. The activities of the Weaving Training Classes during that year are mentioned below in the table 3.10:<sup>223</sup>

Table 3.10: Activities of the Weaving Training Classes in 1964-65

Number of	Number of	Quantity of	Amount of Sale	Sets of Sleys
Weaving	Student	Production of	Proceeds	Supplied
Training	Received	Cloths	Deposited	
Classes	Training			
26	352	27810.99 metres	Rs. 34, 273. 32 p	290

<sup>223</sup> K. N. Sharma, 1964-65, op. cit. pp. 11-12

<sup>&</sup>lt;sup>222</sup> K. G. R. Iyer, 1961-62, op. cit. p. 21

Further, the Peripatetic Weaving Demonstration Parties continued their demonstrative activities for the spread and development of the silk weaving activities in the State. During the 1960s there were all total 28 Peripatetic Weaving Demonstration Parties in the State out of which 8 weaving parties worked in the hill areas and remaining 20 in the plain areas. Under the budget of the Development Blocks, 5 Weaving Training cum Production Centres were started in 1962-63 at Salchapra, Mahakal, Desangpani, Dhemaji and Padumani where weaving demonstrators supervised and provided guidance to the trainees. The same year 5 Peripatetic Handloom Demonstration Centres were also established in the autonomous districts with headquarters at Nongpoh, Dilma, Aijal, Dergaon and Bagmara which provided necessary assistance to individual weavers and different organisations within their jurisdiction.

Besides, there were Weaver's Extension Service Units at concentrated weavers' areas in order to provide common service facilities and to guide weavers in the field of organisations, production of quality fabrics and marketing of their products. There were 15 Weaver's Extension Service Units in 1962-63 and its number rose to 23 in 1964-65 which further increased to 28 by 1966-67. Three Dyeing and Printing parties were constituted in 1962-63 with headquarters at Gauhati, Nowgong and Jorhat. Each party consisted of one Instructor and one Operator. These parties

<sup>&</sup>lt;sup>224</sup> K. G. R. Iyer, 1961-62, op. cit. p. 21; K. G. R. Iyer, 1962-63, op. cit. p. 22; K. N. Sharma, 1964-65, op. cit. p. 13; J. M. Jala, 1965-66, op. cit. p. 10; A. Ahmed, 1966-67, op. cit. p. 8

<sup>&</sup>lt;sup>225</sup> K. G. R. Iyer, 1962-63, op. cit. p. 24

<sup>&</sup>lt;sup>226</sup> Ibid. p. 32

<sup>&</sup>lt;sup>227</sup> K. G. R. Iyer, 1962-63, op. cit. p. 35; K. N. Sharma, 1964-65, op. cit. p. 13; A. Ahmed, 1966-67, op. cit. p. 8

<sup>&</sup>lt;sup>228</sup> K. G. R. Iyer, 1962-63, op. cit. p. 44

within their respective jurisdiction visited the Weaving Training Classes, Weaver's Extension Service Units, Handloom Production Centres, etc and provided technical guidance in dyeing and printing to the weavers. Further, in 1966-67, experiments on bleaching and dyeing of hand spun *eri* and spun *muga* yarn were conducted in the Handloom Research and Designing Centre. <sup>230</sup>

Handlooms were also distributed amongst the weavers by the State Government and details of this distribution from 1965-66 to 1968-69 is given below in the table 3.11:<sup>231</sup>

Table 3.11: Distribution of Handlooms from 1965-66 to 1968-69

Year	Number of Handlooms Distributed
1965-66	809
1966-67	1,487
1967-68	560
1968-69	627
Total	3,483

The Assam Industries Conference held in 1967 had a detail discussion on the silk industry of Assam with the focus on the targets to be achieved during the fourth Five Year Plan period (1969-74). The Conference was considerably impressed with the progress made by the silk industry in Assam under the impact of the Five Year

<sup>&</sup>lt;sup>229</sup> K. G. R. Iyer, 1962-63, op. cit. p. 44; K. N. Sharma, 1964-65, op. cit. p. 14; J. M. Jala, 1965-66, op. cit. p. 11; A. Ahmed, 1966-67, op. cit. p. 10

<sup>&</sup>lt;sup>230</sup> A. Ahmed, 1966-67, op. cit. p. 12

<sup>231</sup> Statistical Handbook of Assam for the year 1974, Directorate of Economics and Statistics, Government of Assam, Guwahati, 1975, p. 76

Plans. As an important agro-industry, it provided part or whole time occupation to nearly 18.5 lakh people which augmented the rural economy to a great extent. To further develop the *eri* silk industry in the State, a novel idea was taken in the Conference to establish another 20 *Eri* Concentration Centres and expand the already existing 13 *Eri* Seed Grainages with additional facilities so that 60 percent demand for *eri* seeds in the State could be met at the end of the fourth Five Year Plan period. As an incentive to the *eri* seed producers, a proposal was also put forwarded under the fourth Plan programme to provide a bonus at the rate of Rs. 10 per 1000 disease free *eri* layings to any graineur producing 8000 layings at the minimum per annum. Further, to help the deserving *eri* spinners a proposal was taken to provide them *eri* spinning machines at one-fourth rate of the actual price. 232

For the development of the *muga* silk industry, it was decided at the Assam Industries Conference to utilize under the fourth Plan programme about 2000 *bighas* of land under the grazing reserves for *muga* food plantations. Decision was taken to establish another Basic *Muga* Seed Farm with two sub-centres and multiplication zone. Improved *muga* reeling machines known as Trivedi-Type machines were proposed to be supplied to the deserving *muga* reelers of the State at concessional rates in the interest of better output and quality of *muga* yarn. A *Muga* Reeling Unit was also going to be established at Gaurisagar where improved *muga* reeling machines were to be provided in adequate numbers.<sup>233</sup>

Report of Assam Industries Conference, 1967, Department of Industries, Government of Assam, Shillong, 1967, pp. 5-6

<sup>&</sup>lt;sup>233</sup> Ibid. pp. 6-7

For the development of the mulberry or *pat* silk industry, proposals were taken at the Assam Industries Conference to start 24 Collective Mulberry Gardens and 10 *Chowki* Rearing Centres during the fourth Five Year Plan period. A Parent Stock Station was to be established within this Plan period with all facilities in order to improve the strains of the *pat* silkworms. Existing 11 Sericulture Farms were to be strengthened with added facilities so that the total demand for the supply of *pat* seeds in the State could be effectively met at the end of the fourth Plan period. Establishment of reeling units were proposed in concentrated mulberry growing areas so that the quality of *pat* silk yarn could be further improved.<sup>234</sup>

During the fourth Five Year Plan (1969-74), seven schemes were undertaken in the field of sericulture at an outlay of Rs. 85 lakhs. The schemes were related with the expansion of the *eri*, *muga* and *pat* silk production, establishment of cocoon marketing and silk growers co-operative, publicity, training in sericulture, strengthening of staff, etc.<sup>235</sup> Out of these Rs. 85 lakhs, Rs. 40 lakhs was exclusively spent for undertaking the above mentioned schemes in the hill areas of the State. Again out of these Rs. 40 lakhs, Rs. 18.25 lakhs was allotted for the expansion of the *eri* silk industry as climatic conditions in the hills was very suitable for the extensive production of *eri* cut cocoons. The annual output of *eri* cut cocoons from the hills already stood at nearly 1.7 lakh kilograms. Of these *eri* cut cocoons, those produced in the Bhoi area of Khasi and Jayantia Hills and in the border areas of Garo hills were of superior quality from which fine quality of yarn were produced. While, the

<sup>&</sup>lt;sup>234</sup> Ibid. p. 7

Fifth Five Year Plan of Assam, Volume-II, (Sectoral Programmes), Department of Planning and Development, Government of Assam, Shillong, 1973, p. 92

*eri* cut cocoons produced in the United Mikir and North Cachar Hills were of little inferior quality and were utilised for production of coarser variety of spun silk.<sup>236</sup>

For the development of the *muga* silk industry in the hills, proposal was taken under the fourth Plan programme to establish a *muga* seed cocoon production centre, increase the area under *muga* food plants by utilising the government waste lands and provide bonus to the *muga* rearers. It will be noteworthy here to mention that the Garo Hills and the borders of the Khasi and Jayantia Hills were the main source of wild *muga* seed cocoons which were very much liked by the *muga* rearers. Likewise for further development of the *pat* silk industry, proposals were taken for the expansion of seeds production programme, expansion of foreign race stations, establishment of extension centres, establishment of mulberry nurseries, establishment of small reeling units and establishment of more collective mulberry gardens and *chowki* rearing centres.<sup>237</sup>

But, while the fourth Plan programme was in progress, in the year 1970 the Garo Hills along with the Khasi and Jayantia Hills seceded away from Assam leading to the formation of the new state of Meghalaya with Shillong as its capital.<sup>238</sup> The creation of Meghalaya was a set back as far as the development of the silk industry in the State was concerned as these hills were the important centres of sericultural activities and source of wild *muga* seed cocoons. But immediately during

<sup>&</sup>lt;sup>236</sup> Fourth Five Year Plan of Assam (Proposals), op. cit. pp.126-127

<sup>&</sup>lt;sup>237</sup> Ibid. pp. 127-128

<sup>&</sup>lt;sup>238</sup> Prabin Baishya, *Small and Cottage Industries: A Study in Assam*, Manas Publications, Delhi, 1989, p. 59

1970-71 a Wild Silk Worm Centre was established in the North Cachar Hills.<sup>239</sup> Another important measure taken towards the development of the silk industry in the State during the fourth Five Year Plan period was the taking over the authority of the Titabar Sericultural Training Institute in 1972 by the Central Silk Board and its subsequent conversion to a full-fledged research station during that year by establishing the Central *Muga Eri* Research Station there. In the same year the North Eastern Council was also established.<sup>240</sup>

In the field of the *eri* silk industry all total 26 *Eri* Concentration Centres were established in the State at places like Borsola (1969), Bokolia (1969-70), Barama (1970), Adarkona (1970-71), Rangjuli (1970-71), Kuchdowa (1970-71), Naharbari (1971), Jopa (1971), Rangsali (1971), Kandali (1971), Kalanga (1971-72), Lankgana (1972), Barshijhara (1972-73), Matia (1972-73), Salamatpur (1972-73), Lambopara (1972-73), Kamdewal (1973), Mullapara (1973), Gogamukh (1973-74), Lamusuk Sariahani (1973-74), Baldabaldi (1973-74), Donkamokan (1973-74), Rainadubri (1973-74), Bilaspur (1973-74), Nayakgaon (1973-74) and Bangshijhara (1973-74) under the fourth Plan.<sup>241</sup> Further, 3 *Eri* Seed Grainages were also established during the Plan at Jamuguri (1970), Demow (1971) and Rongagora (1973).<sup>242</sup> For the growth of the *muga* silk industry in the State, another Basic *Muga* Seed Farm along with a sub-centre was established at Barahibari in 1970-71 under the fourth Plan

<sup>&</sup>lt;sup>239</sup> Statistical Handbook of Assam for the year 1976, Directorate of Economics and Statistics, Government of Assam, Guwahati, 1977, p. 110

<sup>&</sup>lt;sup>240</sup> Prabin Baishya, *The Silk Industry of Assam*, Spectrum Publications, Guwahati, 2005, pp. 55-56

<sup>&</sup>lt;sup>241</sup> Handbook on Assam Sericulture at a Glance, op. cit. pp. 26-31

<sup>&</sup>lt;sup>242</sup> Ibid. pp. 10-11

period. In the same year at the same place a *Muga* Nursery and Multiplication Centre was also started.<sup>243</sup>

The acreage under the *muga* food plantation for rearing of silkworm was increased by using grazing reserves under the *Muga* Village Grazing Reserve (VGR) Scheme in 23 new places like Charduar (1969), Tulashimukh (1969-70), Mahmara (1969-70), Hollogaon (1969-70), Tengapukhuri (1970), Sualkuchi (1970), Boghidhola (1970-71), Padumani (1970-71), Borsola (1971), Kandali (1971-72), Pambari-Chutiagaon (1972-73), Gariabam (1972-73), Matia (1972-73), Nayagaon (1972-73), Noontala (1973), Bhuragarh (1973), Gogamukh (1973-74), Bhumakalbari (1973-74), Duleichera (1973-74), Baldabaldi (1973-74), Noltoli (1973-74), Tingrai (1973-74) and Bhagakabaru (1973-74).

The *pat* silk industry in Assam also progressed during the fourth Plan period. 22 new Collective Mulberry Gardens were established at places like Besseria (1969), Kacharipathar (1969-70), Deurichilabancha (1970), Gandhinagar (1970), Adarkona (1970-71), Borjan (1970-71), Kuchdowa (1970-71), Khagrapu (1970-71), Jopa (1971), Baitamai (1971), Sonari (1971-72), Rangsali (1971-72), Bokajan (1971-72), Budlung (1971-72), Bhumakalbari (1972), Dagaon (1972), Duligaon (1972-73), Bhuragarh (1973), Rangsali (1973), Noontala (1973), Matia (1974) and Menmeji (1974).<sup>245</sup> A Mulberry Reeling Unit was also established at Tinthengia in 1971-72.<sup>246</sup>

<sup>&</sup>lt;sup>243</sup> Ibid. pp. 16-17

<sup>&</sup>lt;sup>244</sup> Ibid. pp. 44-47

<sup>&</sup>lt;sup>245</sup> Ibid. pp. 32-37

<sup>&</sup>lt;sup>246</sup> Ibid. pp.38-39

Weaving sector was also provided due importance under the fourth Plan period. An amount of Rs. 35 lakhs was proposed to be spent for development for handloom weaving activities in the State. But against this proposed outlay, a sum of Rs 26.48 lakhs was actually spent in implementing the schemes like production of handloom fabrics, training in handloom weaving, research and designing centres and strengthening of staff.<sup>247</sup> All total 11,501 numbers of handloom were distributed by the State Government during the fourth Plan period and 49.21 lakh meters of silk cloth was produced.<sup>248</sup> Again Rs. 56 lakhs was sanctioned under the fourth Plan for the development of weaving within the co-operative fold. With this allotted money, 22 Weaver's Extension Service Units were expanded and strengthened. A reproduction unit was set up and attached to the Handloom Research and Designing Centre at Gauhati for reproducing designs in demand from time to time. Improved looms and appliances were supplied to the weavers at concessional rates. Further, on the recommendation of the Power-Loom Enquiry Committee, 10,000 power-looms were allotted to Assam to be set up for weaving mainly in the co-operative sector.<sup>249</sup>

The schemes for the development of silk industry in Assam during the fifth Five Year Plan period (1974-78) were similar in pattern like the previous Plan. Emphasis was laid down through the schemes on increasing the production of silkworm seeds, production of *eri*, *muga* and *pat* yarn, increase of sericultural training facilities, rationalisation of production techniques and standardisation of product. In implementing the schemes priority was given to the backward areas and

<sup>&</sup>lt;sup>247</sup> Fifth Five Year Plan of Assam, Volume-II, (Sectoral Programmes), op. cit. p. 93

Statistical Handbook of Assam for the year 1974, op. cit. p. 75; Statistical Handbook of Assam for the year 1976, op. cit. p. 113

<sup>&</sup>lt;sup>249</sup> Fourth Five Year Plan of Assam (Proposals), op. cit. p. 62

people belonging to scheduled castes, scheduled tribes, other backward classes and poorer sections of the society. The total budget outlay for sericulture in the fifth Five Year Plan was Rs. 2.18 crores. For the development of handloom weaving during the same Plan a sum of Rs. 92 lakhs was proposed and the target of handloom fabric production was estimated at 58 lakh meters. While, an amount of Rs.160 lakhs was allotted for the development of weaving within the co-operative fold during the fifth Plan period.<sup>250</sup>

For further increasing the supply of disease free *eri* seeds to the rearers, 4 more *Eri* Seed Grainages were established in the State under the fifth Plan. Three of these *Eri* Seed Grainages were established in 1975 at Jonai, Borbaha and Deomornai, while the fourth *Eri* Seed Grainage was established at Khejurband in 1976. Eri Concentration Centres were established at 30 new places like Hauchara (1974), Pakhamara (1974), Malipur (1974), Balipara (1974), Balikandi (1974-75), Parkupahar (1974-75), Khithila (1975), Tupia (1975), Khelmati (1975), Beloguri (1975), Koola (1975-76), Ulubari (1975-76), Bakarnguri (1975-76), Fagunagaon (1975-76), Ballamguri (1975-76), Toptola (1975-76), Dhupguri (1975-76), Sirathan (1975-76), Mahanpur (1975-76), Nimua (1976), Ratanpur (1976), Uzanpara (1976), Sengaigaon (1976), Tokankata (1976), Dosobai (1977), Lakhijan (1977), Bogari (1977-78), Japrajan (1977-78), Punia (1978) and Umkashi (1978). Eri total production of *eri* cut cocoons during the fifth Plan period was 536 thousand kilograms.

<sup>&</sup>lt;sup>250</sup> Fifth Five Year Plan of Assam, Volume-II, (Sectoral Programmes), op. cit. pp. 93-96

<sup>&</sup>lt;sup>251</sup> Handbook on Assam Sericulture at a Glance, op. cit. pp. 10-11

<sup>&</sup>lt;sup>252</sup> Ibid. pp. 26-31

<sup>253</sup> Statistical Handbook of Assam for the year 1978, Directorate of Economics and Statistics, Government of Assam, Guwahati, 1979, p. 103; Statistical Handbook of Assam for the year 1980, Directorate of Economics and Statistics, Government of Assam, Guwahati, 1981, p. 138

Then Basic *Muga* Seed Farms were established at 3 different places like Kharangma (1975), Jogduar (1976) and Turukpara (1978).<sup>254</sup> The *Muga* Village Grazing Reserve (VGR) Scheme was started in another 15 places like Lanka (1974), Rupahi (1974), Malipur (1974), Punia (1974), Budhungpahar (1974-75), Piplibari (1974-75), Panjan (1974-75), Hahim (1975), Pirakata (1975-76), Tipamai (1975-76), Saplai (1975-76), Rangrangapara (1975-76), Balimara (1976-77), Sapekhati (1977-78) and Sewaguri (1978).<sup>255</sup> 5 *Muga* Nursery and Multiplication Centres were started at places like Sualkuchi (1974), Khanapara (1975), Naharani (1976), Madan (1976) and Hallungapara (1977).<sup>256</sup> The total *muga* raw silk production during the fifth Plan period was 182 thousand kilograms.<sup>257</sup> At the Labang area of Haflong sub-division in the North Cachar Hills district, a Government *Tasar* Composite Centre and a *Tasar* Seed Station was established in 1975-76 for the development of the *tasar* silk industry in the State.<sup>258</sup>

Under the fifth Plan period, 2 Mulberry Seed Farms were established in 1975-76 at Tarioni and Sangbar. Collective Mulberry Gardens were established at another 28 places like Jamalpur (1974-75), Sakhati (1975), Beloguri (1975), Dusutimukh (1975), Naharani (1975-76), Bachhagaon (1975-76), Soutali (1975-76), Chiringholla (1975-76), Arimora (1976), Ratanpur (1976), Dudhnoi (1976-77), Chutianala (1976-77), Dolakharia (1976-77), Punia (1977-78), Umpani (1977-78),

<sup>&</sup>lt;sup>254</sup> Handbook on Assam Sericulture at a Glance, op. cit. pp. 16-17

<sup>&</sup>lt;sup>255</sup> Ibid. pp. 44-47

<sup>&</sup>lt;sup>256</sup> Ibid. pp. 16-17

<sup>&</sup>lt;sup>257</sup> Statistical Handbook of Assam for the year 1978, op. cit. p. 103; Statistical Handbook of Assam for the year1980, op. cit. p. 138

<sup>&</sup>lt;sup>258</sup> Handbook on Assam Sericulture at a Glance, op. cit. p. 48

<sup>&</sup>lt;sup>259</sup> Ibid. pp. 18-19

Chirimthopi (1977-78), Rengjangphung (1977-78), Birsingki (1977-78), Matikhula (1977-78), Tarakasa (1977-78), Bithiphang (1977-78), Samelangso (1977-78), Dolamara (1977-78), Parkupahar (1977-78), Tichomgaon (1977-78), Sibnigaon (1977-78), Rongagarah (1977-78) and Sammanthi (1977-78). A Mulberry Reeling Unit was also established at Gaurisagar in 1975-76. The total *pat* raw silk production during the fifth Plan period was 30 thousand kilograms <sup>262</sup>

The North Eastern Council also undertook certain schemes in 1975-76 for the development of the *eri*, *muga* and *pat* silk industry in the State. The details of the schemes are provided below in the table 3.12:<sup>263</sup>

Table 3.12: Schemes Undertaken by the North Eastern Council in 1975-76

Variety of Silk	Scheme		
Eri	Establishment of two Eri Pilot Centre, one at Belo		
	and another at Tokankata. 6 hectares of land were		
	selected at both the places for establishing the centre.		
Muga	Establishment of a High Altitude Muga Seed Station at		
	Kharangma over 10 hectares of land.		
Pat	Establishment of three Mulberry Pilot Centre at		
	Chutianala, Sangbar and Ratanpur over 6 hectares of		
	land each.		

<sup>&</sup>lt;sup>260</sup> Ibid. pp. 32-37

<sup>261</sup> Ibid. pp. 38-39

Statistical Handbook of Assam for the year 1978, op. cit. p. 103; Statistical Handbook of Assam for the year 1980, op. cit. p. 138

<sup>&</sup>lt;sup>263</sup> Programme on Reorientation of Sericulture in Assam, North Eastern Council, Shillong, 1980, pp. 9-14

Towards the end of the year 1976-77, the Assam Khadi and Village Industries Board as per approval of the Khadi Commission set up a research centre at Guwahati to conduct research for the development of indigenous eri and muga silk of Assam. <sup>264</sup> Then in 1977 the North East Handloom and Handicrafts Development Corporation was established which played an important role in the promotion and growth of handloom and handicrafts industry of Assam and other North-Eastern States. The Corporation supplied raw materials and working capital to the handloom sector and provided facilities for the marketing of handloom products through its emporium named Purbashree located in different places like Shillong, Kolkata, Guwahati, Mumbai, Chennai and Bangalore. It followed a policy of outright purchase of finished handloom products from weavers, weaving self-help groups, weaving co-operative societies, etc. Handloom products were also displayed in various trade fairs and exhibitions held in different places like Brussels, Tokyo, New York and Berlin. Infact, a wide market for the silk products of Assam exists in countries like England, Italy, Switzerland, France, Singapore and Saudi Arabia.<sup>265</sup> The Assam Apex Weavers Cooperative Society Limited already established in 1960 was also reorganized in 1977 and was renamed as Assam Weavers and Artisans Co-operative Federation Limited.<sup>266</sup>

For the further promotion and development of silk weaving, 6,280 handlooms were distributed among the weavers during the fifth Plan period.<sup>267</sup> The distribution of

<sup>&</sup>lt;sup>264</sup> Amlan Baruah and S. B. Roy Choudhury, op. cit. p. 434

<sup>&</sup>lt;sup>265</sup> Amlan Baruah and S. B. Roy Choudhury, op. cit. pp. 433-434; *Industrialization in Assam and Economic Reforms*, Government of Assam Publication, Guwahati, 1998, p. 53

<sup>&</sup>lt;sup>266</sup> Amlan Baruah and S. B. Roy Choudhury, op. cit. p. 505

<sup>&</sup>lt;sup>267</sup> Statistical Handbook of Assam for the year 1978, op. cit. p. 104; Statistical Handbook of Assam for the year 1980, op. cit. p. 137

handlooms was much lesser in number than that was distributed during the fourth Plan period. At the beginning of the fifth Plan period in 1974-75, 26 Weaving Training Classes were running in different places of the State where 390 trainees were undergoing training.<sup>268</sup> But at the end of that Plan period in 1977-78, the number of such classes rose to 32 and the number of trainees was 485.<sup>269</sup> The number of Weavers Extension Service Units in 1974-75 was 35 which rose to 39 in 1977-78. The Weaving Training cum Production Centres and Peripatetic Handloom Demonstration Centres also continued their activities for the development of the weaving activities in the State. The total silk cloth production during the fifth Plan period was 56.06 lakh metres.<sup>270</sup>

At the end of the fifth Plan period in 1978, two Ad-hoc Annual Plans were adopted till 1980. During these Ad-hoc Annual Plan Period from 1978-80, measures were continuously taken for the development of sericulture and silk weaving activities in the State. An *Eri* Seed Grainage was established at Topatali in 1979.<sup>271</sup> *Eri* Concentration Centres were established at places like Langsoliet, Hidipi, Kathargaon, Upper Deopani and Linchika in 1979-80.<sup>272</sup> *Eri* Spinning and Training Centres were also established at Ratanpur and Kanduli in 1979.<sup>273</sup> Then in between 1978-80 the *Muga* Village Grazing Reserve (VGR) Scheme was started in 5 new places like Narayagaon (1978), Tingkhong (1978-79), Tamulbari (1979-80), Rangsali (1979-80)

<sup>&</sup>lt;sup>268</sup> Statistical Handbook of Assam for the year 1976, op. cit. p. 113

<sup>&</sup>lt;sup>269</sup> Statistical Handbook of Assam for the year1980, op. cit. pp. 128-129

<sup>&</sup>lt;sup>270</sup> Statistical Handbook of Assam for the year 1978, op. cit. p. 107; Statistical Handbook of Assam for the year1980, op. cit. p. 129

<sup>&</sup>lt;sup>271</sup> Handbook on Assam Sericulture at a Glance, op. cit. pp. 10-11

<sup>&</sup>lt;sup>272</sup> Ibid. pp. 26-31

<sup>&</sup>lt;sup>273</sup> Ibid. pp. 42-43

and Laimekuri (1979-80).<sup>274</sup> *Muga* Nursery and Multiplication Centres were started at places like Turukpara (1978) and Madang (1979).<sup>275</sup> A *Muga* Reeling Unit was established at Khanapara in 1978.<sup>276</sup>

For the development of the *pat* silk industry, a Mulberry Seed Farm was established in 1978-79 at Rangati.<sup>277</sup> 6 new Collective Mulberry Gardens were established in between 1978-80 at places like Kowabil (1978-79), Ambuk (1979), Khulaguri (1979), Laimekuri (1979-80), Muthade (1979-80) and Halakguri Chengeli (1979-80). <sup>278</sup> A Mulberry Reeling Unit was also established at Tingrai in 1979.<sup>279</sup> Further, the North Eastern Council in 1979-80 established 3 Mulberry Nursery cum *Chowki* Rearing Centres in Bholaguri, Tingrai and Kumarhata.<sup>280</sup> Also in 1979-80, a Government *Tasar* Grainage cum Training Centre was established at Sikilangsu in the Haflong sub-division of the North Cachar Hills district. In 1980, a *Tasar* Block Rearing Centre was established at Barolanglai in the Haflong sub-division of the North Cachar Hills district.<sup>281</sup> In 1979-80, the total number of sericultural villages in the State was 6,863 and the total number of families engaged in the *eri*, *muga* and *pat* or mulberry silk industry was 54,576, 3,372 and 19,427 respectively.<sup>282</sup> The

<sup>&</sup>lt;sup>274</sup> Ibid. pp. 44-47

<sup>&</sup>lt;sup>275</sup> Ibid. pp. 16-17

<sup>&</sup>lt;sup>276</sup> Sericulture Manual, Directorate of Sericulture, Government of Assam, Guwahati, 2002, pp. 95-96

<sup>&</sup>lt;sup>277</sup> Handbook on Assam Sericulture at a Glance, op. cit. pp. 18-19

<sup>&</sup>lt;sup>278</sup> Ibid. pp. 32-37

<sup>&</sup>lt;sup>279</sup> Ibid. pp. 38-39

<sup>&</sup>lt;sup>280</sup> Programme on Reorientation of Sericulture in Assam, op. cit. pp. 13-14

<sup>&</sup>lt;sup>281</sup> Handbook on Assam Sericulture at a Glance, op. cit. p. 48

<sup>&</sup>lt;sup>282</sup> Statistical Handbook of Assam for the year1981, Directorate of Economics and Statistics, Government of Assam, Guwahati, 1982, p. 98

production of raw silk in Assam during the period from 1978-80 is mentioned below in the table 3.13:  $^{283}$ 

Table 3.13: Production of Raw Silk in Assam from 1978-80

Year	Production of Raw Silk (in Thousand Kilograms)				
	Eri Cut Cocoons	Muga Raw Silk	Pat Raw Silk		
1978-79	181	24	16		
1979-80	191	45	8		
Total	372	69	24		

In the field of weaving, 35 Weaving Training Classes were going on in different places of the State where 525 trainees were provided training during the Adhoc Annual Plan period from 1978-80.<sup>284</sup> The numbers of handlooms distributed during that period was 3,250.<sup>285</sup> From 39 Weavers Extension Service Unit in 1977-78, the number rose to 41 in 1978-79. <sup>286</sup> But the very next year in 1979-80, the number of Weavers Extension Service Unit became 63 which was very encouraging. 287 During 1978-79 there were 295 Weaving Demonstration Circles in Assam which covered 5,305 villages where 2,14,216 numbers of weavers were engaged in silk weaving.<sup>288</sup> The very next year in 1979-80, the number of Weaving Demonstration Circles got reduced to 206 which covered 4,413 villages where 2,14,838 numbers of weavers

<sup>283</sup> Ibid. p. 104

<sup>284</sup> Statistical Handbook of Assam for the year1980, op. cit. pp. 128-129; Statistical Handbook of Assam for the year1981, op. cit. pp. 106-107

<sup>&</sup>lt;sup>285</sup> Statistical Handbook of Assam for the year1981, op. cit. p. 109

<sup>&</sup>lt;sup>286</sup> Statistical Handbook of Assam for the year 1980, op. cit. p. 128

<sup>&</sup>lt;sup>287</sup> Statistical Handbook of Assam for the year1981, op. cit. p. 106

<sup>&</sup>lt;sup>288</sup> Statistical Handbook of Assam for the year 1980, op. cit. p. 136

were engaged in silk weaving. Although there was reduction in the number of Weaving Demonstration Circles and villages covered in 1979-80 in comparison to the figures of 1978-79, but there was increase in the total number of weavers engaged in silk weaving. 1,680 numbers of spinning *charkhas* were in operation in 1978-79 which got reduced to 1,601 in 1979-80. During the Ad-hoc Annual Plan period the number of reeling units in the State was 25 and the quantity of cocoons reeled was 23,699 in thousand kilograms and total silk yarn produced in reeling units was 4,470 in thousand kilograms. The total silk cloth produced during the Ad-hoc Annual Plan period was 5,31,484 in thousand meters.

The Economic Survey (1980-81) conducted in Assam on the eve of implementation of the sixth Five Year Plan (1980-85) found that the level of industrial development in the State was not encouraging even after three decades of planning. Hence, the sixth Five Year Plan (1980-85) tried to further develop the silk industry in Assam on modern lines by developing its infrastructural facilities. For implementing the schemes to develop the *eri*, *muga* and *pat* or mulberry silk industry in the State a total outlay of Rs. 8.16 crores was sanctioned during the sixth Plan period. All the schemes aimed at infrastructural development of all sericultural institutions with buildings, electrification, modern equipments and appliances, etc.

<sup>&</sup>lt;sup>289</sup> Statistical Handbook of Assam for the year1981, op. cit. p. 108

<sup>&</sup>lt;sup>290</sup> Statistical Handbook of Assam for the year1980, op. cit. p. 133; Statistical Handbook of Assam for the year1981, op. cit. p. 99

<sup>&</sup>lt;sup>291</sup> Statistical Handbook of Assam for the year1981, op. cit. pp. 102-103

<sup>&</sup>lt;sup>292</sup> Statistical Handbook of Assam for the year1980, op. cit. p. 129; Statistical Handbook of Assam for the year1981, op. cit. p. 107

<sup>&</sup>lt;sup>293</sup> Economic Survey, Assam, 1980-81, Directorate of Economics and Statistics, Government of Assam, Guwahati, 1982, p. 30

Separately, for the development of handloom weaving Rs.6.68 crores was sanctioned in the sixth Plan with the target of handloom production expected at 63.40 lakh metre.<sup>294</sup>

Under the sixth Plan, *Eri* Seed Grainages were established at places like Jonai (1980), Harinagar (1980), Lakhimipathar (1980), Dhenubhanga (1980), Umsowai (1981), Ratanpur (1981), Adarkona (1982), Tingrai (1982) and Tinsukia (1982).<sup>295</sup> *Eri* Concentration Centres were established at places like Franchnagar (1980), Deithar (1980), Lanku (1980), Kabikara (1981), Garmari (1983), Maibing (1985), Barrowpur (1985) and Hatsingimari (1985).<sup>296</sup> Further, *Eri* Spinning and Training Centres were also established at places like Dhenubhanga (1980), Barama (1980), Pub-Barshiral (1981), Nellie (1982), Jamuguri (1982), Dotoma (1984), Goreswar (1984), Rawnapukhuri (1984), Garpara (1984), Jonai (1984), Bamgaon (1984), Fekamari (1985), Snyanthaibari (1985), Khutabari (1985), Borduar (1985), Tokankata (1985), Lakhimipathar (1985) and Nablaidisa (1985).<sup>297</sup> In the beginning of the sixth Plan in 1980-81, the number of families engaged with *eri* silk industry in the State was 52945 which increased to 83864 at the end of that Plan period in 1984-85.<sup>298</sup> The acreage under food plants for the *eri* silkworm was 1998 acres in 1980-81 which increased to

<sup>&</sup>lt;sup>294</sup> Sixth Five Year Plan (1980-85) Assam, Department of Planning and Development, Government of Assam, Guwahati, 1979, pp. 101-102

<sup>&</sup>lt;sup>295</sup> Handbook on Assam Sericulture at a Glance, op. cit. pp. 10-11

<sup>&</sup>lt;sup>296</sup> Ibid. pp. 26-31

<sup>&</sup>lt;sup>297</sup> Ibid. pp. 42-43

Statistical Handbook of Assam for the year1982, Directorate of Economics and Statistics, Government of Assam, Guwahati, 1983, p. 108; Statistical Handbook of Assam for the year1987, Directorate of Economics and Statistics, Government of Assam, Guwahati,1988, p. 90

1670 hectares in 1984-85.<sup>299</sup> The total quantity of *eri* cut cocoons produced during the sixth Plan period was 992 thousand kilograms.<sup>300</sup>

For the development of the *muga* silk industry under the sixth Plan, Basic *Muga* Seed Farms with Sub-Centre were established at Kapahua (1980-81) and Garpara (1982). Then *Muga* Nursery and Multiplication Centres were established at Rangsali (1980), Mahmara (1980) and Nabazar Kanwargaon (1981). The *Muga* Village Grazing Reserve (VGR) Scheme was extended to new places like Lamku (1980), Kakojanbari (1981) and Sukani (1982). Several Muga Reeling Units were also established at places like Nahazar Naharani Kanwargaon (1983), Sualkuchi (1984), Jaldhapara (1984), Tengapukhuri (1984), Gaurisagar (1984), Gogamukh (1984), Ghilamara (1984) and Kuchdowa (1985). The number of families engaged with the *muga* silk industry in the State in 1980-81 was 3395 which increased to 12454 in 1984-85. The acreage under food plants for the *muga* silkworm in 1980-81 was 570 acres which increased to 1,167 hectares in 1984-85. The total quantity of *muga* raw silk produced during the sixth Plan period was 234 thousand kilograms.

<sup>&</sup>lt;sup>299</sup> Ibid.

Statistical Handbook of Assam for the year1982, op. cit. p. 118; Statistical Handbook of Assam for the year1984, Directorate of Economics and Statistics, Government of Assam, Guwahati, 1985, p. 115; Statistical Handbook of Assam for the year1987, op. cit. p. 95

<sup>&</sup>lt;sup>301</sup> Handbook on Assam Sericulture at a Glance, op. cit. pp. 16-17

<sup>&</sup>lt;sup>302</sup> Ibid. pp. 44-47

<sup>303</sup> Sericulture Manual, op. cit. pp. 95-96

Statistical Handbook of Assam for the year1982, op. cit. p. 108; Statistical Handbook of Assam for the year1987, op. cit. p. 90

<sup>&</sup>lt;sup>305</sup> Ibid.

Statistical Handbook of Assam for the year1982, op. cit. p. 118; Statistical Handbook of Assam for the year1984, op. cit. p. 115; Statistical Handbook of Assam for the year1987, op. cit. p. 95

Then for the growth of the *pat* or mulberry silk industry in the sixth Plan period, a Mulberry Seed Farm was established at Hiloibam in 1980-81. 307 Collective Mulberry Gardens were established at places like Akorabari (1980), Dagaon (1980), Samdhara (1980), Bhumka (1980), Bandhari (1981), Hirapara (1981), Sapekhaity (1981), Matikhola (1981), Chinakona (1982), Deodhai (1982), Jibangram (1983), Bonyaguri (1984), Labang (1985) and Barowapu (1985). 308 Then Mulberry Reeling Units were established at Phillobari (1980), Borgora (1980-81), Diphu (1981), Kowabil (1981), Pailapool (1984), Adabari (1984) and Gaurisagar (1984). 309 The number of families engaged with the *pat* or mulberry silk industry in the State in 1980-81 was 19,420 which increased to 20,698 in 1984-85. 310 The acreage under food plants for the *pat* silkworm in 1980-81 was 990 acres which increased to 900 hectares in 1984-85. 311 The total quantity of the *pat* raw silk produced during the sixth Plan period was 57 thousand kilograms. 312

The number of sericultural villages in the State was 6,910 in 1980-81 which got slightly reduced to 6,863 in 1984-85. But there was improvement in the overall production of silk in the State under the sixth Plan period. There were 25 reeling units

<sup>307</sup> Handbook on Assam Sericulture at a Glance, op. cit. pp. 18-19

<sup>&</sup>lt;sup>308</sup> Ibid. pp. 32-37

<sup>&</sup>lt;sup>309</sup> Ibid. pp. 38-39

<sup>310</sup> Statistical Handbook of Assam for the year1982, op. cit. p. 108; Statistical Handbook of Assam for the year1987, op. cit. p. 90

<sup>311</sup> Ibid.

<sup>312</sup> Statistical Handbook of Assam for the year1982, op. cit. p. 118; Statistical Handbook of Assam for the year1984, op. cit. p. 115; Statistical Handbook of Assam for the year1987, op. cit. p. 95

<sup>313</sup> Statistical Handbook of Assam for the year1982, op. cit. p. 108; Statistical Handbook of Assam for the year1987, op. cit. p. 90

in active condition during the entire sixth Plan period. The reeling units reeled 42,534 thousand kilograms of cocoons and from these cocoons 9,555 thousand kilograms of silk yarn were produced.<sup>314</sup> The number of spinning *charkhas* in operation in 1980-81 was 1,196 which increased to 2,012 in 1984-85.<sup>315</sup> For the development of weaving, 48 Weaving Training Classes were going on in different places of the State where 150 trainees were provided training in 1980-81.<sup>316</sup> The number of such classes and trainees increased to 64 and 927 respectively in 1984-85.<sup>317</sup>

In 1980-81, the number of Weaver Extension Service Units was 50 which increased to 55 in 1984-85.<sup>318</sup> During 1980-81 there were 206 Weaving Demonstration Circles in Assam which covered 4,413 villages.<sup>319</sup> The number of Weaving Demonstration Circles increased to 241 in 1984-85 and it covered 6,733 villages during that year.<sup>320</sup> But the Peripatetic Handloom Demonstration Circles no longer functioned from 1984-85 onwards. However, more Handloom Production Centres were formed from 1980-81 onwards with the Weaving Training Classes and its number stood at 12 in 1984-85.<sup>321</sup> The total number of handlooms distributed

Statistical Handbook of Assam for the year1982, op. cit. pp. 112-113; Statistical Handbook of Assam for the year1984, op. cit. p. 114; Statistical Handbook of Assam for the year1987, op. cit. p. 94

<sup>315</sup> Statistical Handbook of Assam for the year1982, op. cit. p. 109; Statistical Handbook of Assam for the year1987, op. cit. p. 91

<sup>316</sup> Statistical Handbook of Assam for the year1982, op. cit. pp. 114-115

<sup>317</sup> Statistical Handbook of Assam for the year 1987, op. cit. pp. 96-97

Statistical Handbook of Assam for the year1982, op. cit. p. 114; Statistical Handbook of Assam for the year1987, op. cit. p. 96

<sup>319</sup> Statistical Handbook of Assam for the year1982, op. cit. p. 116

<sup>320</sup> Statistical Handbook of Assam for the year 1987, op. cit. p. 98

<sup>&</sup>lt;sup>321</sup> Ibid. p. 96

during the sixth Plan period was 15,883.<sup>322</sup> 24,348 fly-shuttle looms and 143 semi-automatic looms were also distributed to the deserving weavers in the State.<sup>323</sup> The total quantity of silk cloth produced during the sixth Plan period was 23,48,083 in thousand metres.<sup>324</sup> The details of the silk weavers, both part time and whole time during the sixth Plan period is mentioned below in the table 3.14:<sup>325</sup>

Table 3.14: Silk Weavers during Sixth Plan Period (1980-85)

Year	Part Time Weavers	Whole Time	Total
		Weavers	Weavers
1980-81	2,28,480	17,030	2,45,510
1981-82	1,52,373	8,808	1,61,181
1982-83	1,71,677	12,223	1,83,900
1983-84	2,07,051	18,622	2,25,673
1984-85	2,19,540	20,649	2,40,189

If we look carefully in the table 3.14, it reveals that the total number of silk weavers and part time silk weavers was decreasing, while the number of whole time weavers was increasing which shows that the silk weaving was gradually adopted by

<sup>322</sup> Statistical Handbook of Assam for the year1982, op. cit. p. 119; Statistical Handbook of Assam for the year1984, op. cit. p. 120; Statistical Handbook of Assam for the year1987, op. cit. p. 100

<sup>&</sup>lt;sup>323</sup> Annual Plan (1985-86) Assam, Department of Planning and Development, Government of Assam, Guwahati, 1984, p. 41

Statistical Handbook of Assam for the year1982, op. cit. p. 115; Statistical Handbook of Assam for the year1984, op. cit. p. 117; Statistical Handbook of Assam for the year1987, op. cit. p. 97

<sup>325</sup> Statistical Handbook of Assam for the year1982, op. cit. p. 117; Statistical Handbook of Assam for the year1984, op. cit. p. 119; Statistical Handbook of Assam for the year1987, op. cit. p. 99

the people in the State as a key occupation instead of being traditionally a subsidiary source of income. The Central Silk Board established its Regional Development Office at Guwahati in 1981 which was a major initiative as far as the development of the silk industry in the State was concerned. The same year a *Muga* Raw Material Bank was also set up at Sibsagar. Then in 1982, the Central *Muga Eri* Research Station established at Titabar in 1972 by the Central Silk Board was bifurcated into Regional Sericultural Research Station at Titabar for mulberry or *pat* research and Regional *Muga* Research Station at Boko for exclusive research on *muga* silk. Thereafter in 1983-84, a *Muga* Seed Development Project (MSDP) was initiated under the aegis of the Central Silk Board so that the large amount of disease free *muga* layings could be produced which would help in commercialisation of the *muga* silk production in the State.

While the sixth Plan period was in progress, the Department of Sericulture and Weaving in 1983 was bifurcated by the State Government into two halves and there emerged the Directorate of Sericulture and the Directorate of Handloom and Textile. Under the sixth Plan period, the North Eastern Council in 1980-81 sponsored a Cold Storage Plant at Khanapara at a total cost of Rs. 3.37 lakhs to preserve basic *muga* seed cocoons in summer and winter season. Then in 1881-82 the North Eastern Council sponsored a *Muga* Plant Nursery of 4 hectares in Boko for supplying planting materials for afforestation under the Social Forestry Programme. A

<sup>&</sup>lt;sup>326</sup> Prabin Baishya, 2005, op. cit. pp. 58-59

Dilip Chandra Das, A Study of Muga Culture with Reference to Income and Employment Generation in Kamrup District, (An Unpublished Thesis), Department of Commerce, Gauhati University, 2002, pp. 19-20

<sup>&</sup>lt;sup>328</sup> Industrialization in Assam and Economic Reforms, op. cit. p. 53

silk reeling unit was also established by the North Eastern Council at Gaurisagar in 1981-82.<sup>329</sup>

The main thrust of the seventh Five Year Plan (1985-90) was to bring more people above the poverty line. Most of the people in the rural areas of Assam were engaged with sericulture and silk weaving as subsidiary practices. A greater section of these people were below the poverty line. Hence, to bring them above the poverty line, the silk industry in the seventh Plan period was treated as a priority sector industry. For developing the silk industry, emphasis was laid on modernisation of the production process and development of human resources involved with the silk industry. Non availability of disease free quality seeds was considered as the major obstacle for the growth of the silk industry in the State. For quality *eri* and *muga* seeds, the State had to depend on its own resources. Only for quality *pat* or mulberry seeds, the State could look forward to seed units of the Central Silk Board. There was also no facility for higher training either in the *eri* or *muga* culture in the State. Hence, it was very necessary to start a diploma course in non-mulberry silk culture in the Sericultural Training Institute at Titabar. The serious process of the serious process of the serious process of the Sericultural Training Institute at Titabar. The serious process of th

In the field of the *eri* silk industry, an allotment of Rs. 350 lakh was made for implementing the schemes related with its development during the seventh Plan period. Focus was laid on introducing commercial outlook in the *eri* silkworm rearing and implementing modern method in rearing operation so that the production of *eri* 

<sup>&</sup>lt;sup>329</sup> Mid-Term Appraisal of The Sixth Five Year Plan (1980-85) Assam, Department of Planning and Development, Government of Assam, Guwahati, 1983, pp. 42-43

<sup>&</sup>lt;sup>330</sup> Seventh Five Year Plan (1985-90) Assam, Department of Planning and Development, Government of Assam, Guwahati, 1984, p. 110

<sup>&</sup>lt;sup>331</sup> Ibid. pp. 111-112

cut cocoons in the State gets boosted up. For this, decision was taken to provide incentive, both in cash and kind to all the *eri* silk rearers in the State. The rate of incentive was fixed at Rs.1,000 each to be provided to atleast 10,000 number of *eri* silk rearers. To produce quality spun yarn, an improved spinning machine called Ambar *Charka* was to be provided in the *Eri* Spinning and Training Centres. In these Centres, 3 months training was to be started in spinning with the capacity of 30 trainees in a batch and the trainees were to be provided with a monthly stipend of Rs. 125. At the end of the training, an Ambar *Charka* was to be provided freely to the trainees thereby enabling them to start improved *eri* spinning on their own at their homes. All the *Eri* Seed Grainages were to be placed under the technical control of an Officer in the rank and status of Superintendent.<sup>332</sup>

Under the seventh Plan, an *Eri* Seed Grainage was established at Bhergaon in 1986. 333 *Eri* Concentration Centres were established at places like Dhansiri (1986), Gurmow (1986), Uzirbari (1986), Hamren (1986), Harangaju (1986), Kaki (1986), Khagrabari (1987), Jakhalabanda (1987), Guabari (1987) and Pramila (1987). 334 *Eri* Spinning and Training Centres were also established at places like Khola (1986), Longkena (1989) and Chandrapur (1990). 335 The number of families engaged with the *eri* silk industry in the State in the beginning of the seventh Plan in 1985-86 was 89,025 which increased to 1,14,201 at the end of that Plan period in 1989-90. 336 The acreage under food plants for *eri* silkworm was 1,680 hectares in 1985-86 which

<sup>&</sup>lt;sup>332</sup> Ibid. pp. 116-118

<sup>333</sup> Handbook on Assam Sericulture at a Glance, op. cit. pp. 10-11

<sup>&</sup>lt;sup>334</sup> Ibid. pp. 26-31

<sup>335</sup> Sericulture Manual, op. cit. pp. 96-97

<sup>&</sup>lt;sup>336</sup> Statistical Handbook of Assam for the year1987, op. cit. p. 90; Statistical Handbook of Assam for the year1991, Directorate of Economics and Statistics, Government of Assam, Guwahati, 1992, pp. 94-95

increased to 1,908 hectares in 1989-90.<sup>337</sup> The total quantity of *eri* cut cocoons produced during the seventh Plan period was 1,703 thousand kilograms.<sup>338</sup>

The commercial rearing of the *muga* silkworm was conducted in Upper Assam for which seed cocoons were to be brought also from Lower Assam. Hence, seed carrying vans were necessary so that the seed cocoons do not get destroyed during the transit. Hence, two numbers of seed carrying vans were sanctioned for purchase in the Seventh Plan period. Decisions were also taken during this Plan period to reorganize the entire process of *muga* raw silk production in modern lines. The Basic *Muga* Seed Farms were to be developed and private seed growers were to be provided with financial assistance so that the required supply of disease free layings could be meted out. Atleast 500 private *muga* seed growers were to be provided with financial assistance at the rate of Rs. 1,000 each.<sup>339</sup>

Further, the existing 42 number of *Muga* Village Grazing Reserves with sufficient plantations were to be provided with facilities like cocoonage house, barrack for the rearers, water supply, etc so that sufficient number of cocoons were produced for reeling. Each of the private *muga* rearers were also to be provided with subsidy amounting to Rs. 1,000 for purchasing of seed cocoons, maintaining of rearing appliances, etc. Further, it was proposed to pay the *muga* seed growers the entire seed money along with 25 % of labour wages involved in case of failure of crop because of natural calamities. 10 number of *Muga* Reeling Units with 10 machines in

<sup>337</sup> Ibid.

<sup>338</sup> Statistical Handbook of Assam for the year1987, op. cit. p. 95; Statistical Handbook of Assam for the year1988, Directorate of Economics and Statistics, Government of Assam, Guwahati, 1989, p.105; Statistical Handbook of Assam for the year1990, Directorate of Economics and Statistics, Government of Assam, Guwahati, 1991, p. 116

<sup>&</sup>lt;sup>339</sup> Seventh Five Year Plan (1985-90) Assam, op. cit. pp. 118-119

each of these units were also to be established at different parts of the State. To implement all these *muga* silk related schemes, an amount of Rs. 326 lakhs was sanctioned during the seventh Plan period.<sup>340</sup>

For the development of the *muga* silk industry under the seventh Plan, Basic *Muga* Seed Farms with Sub-Centre were established at Longkham Umransu and Hamren in 1986.<sup>341</sup> The *Muga* Village Grazing Reserve (VGR) Scheme was extended to new places like Subankhata (1986), Kakodonga (1986), Kohara (1986), Luitpar (1987) and Silapathar (1989).<sup>342</sup> Then Muga Reeling Units were also established at places like Sakhati (1986), Bhogagabharu (1986) and Dhakuakhana (1988).<sup>343</sup> The number of families engaged with the *muga* silk industry in the State was 18,093 in 1985-86 which increased to 25,941 in 1989-90.<sup>344</sup> The acreage under food plants for the *muga* silkworm was 1,415 hectares in 1985-86 which increased to 1,589.50 hectares in 1989-90.<sup>345</sup> The total quantity of *muga* raw silk produced during the seventh Plan period was 266 thousand kilograms.<sup>346</sup> During this Plan period in 1987, the Central Silk Board established an exclusive research and training institute for *muga* silk named as the Central *Muga* Research and Training Institute at Lahdoigarh in Jorhat.<sup>347</sup>

<sup>&</sup>lt;sup>340</sup> Ibid. pp. 119-122

<sup>&</sup>lt;sup>341</sup> Handbook on Assam Sericulture at a Glance, op. cit. pp. 16-17

<sup>&</sup>lt;sup>342</sup> Ibid. pp. 44-47

<sup>343</sup> Sericulture Manual, op. cit. pp. 95-96

<sup>&</sup>lt;sup>344</sup> Statistical Handbook of Assam for the year1987, op. cit. p. 90; Statistical Handbook of Assam for the year1991, op. cit. p. 94-95

<sup>&</sup>lt;sup>345</sup> Ibid.

Statistical Handbook of Assam for the year1987, op. cit. p. 95; Statistical Handbook of Assam for the year1988, op. cit. p. 105; Statistical Handbook of Assam for the year1990, op. cit. p. 116

<sup>&</sup>lt;sup>347</sup> Prabin Baishva, 2005, op. cit. p. 59

In the earlier Plans, the non-mulberry sectors in the State received more attention than the *pat* or mulberry sector resulting in lesser development of it. There is no well organised foreign and bio-voltine seed stations in Assam resulting in non-availability of disease free mulberry seeds in adequate number. The State had to depend on outside agencies for supply of seeds which was of irregular nature. Hence, a proposal was made for the establishment of a Bio-Voltine Seed Station with the financial assistance of the North Eastern Council. Under the State Hill Plan, a Foreign Race Seed Station was also going to be established in the State. For increasing the commercial mulberry seed production, the existing 9 Mulberry Seed Farms were to be modernised and 30 number of selected individual seed cocoon growers were to be placed under each of these farm so that they could supplement the farm production. Each of these individual seed cocoon grower were to be provided with financial assistance of Rs. 3.000.<sup>348</sup>

Then irrigation facilities were to be provided to the mulberry plantations in the existing 9 Mulberry Seed Farms and 50 Collective Mulberry Gardens for better yield of mulberry leaves. To encourage commercial mulberry rearing for better production of reeling cocoons, the potential mulberry growers were to be organised and provided with financial assistance of Rs. 1,000 each for building up the rearing houses and maintaining the gardens. The number of such mulberry growers was expected to be 6,230. For carriage of mulberry cuttings and cocoons, the purchase of two mini trucks was sanctioned. 5 Mulberry Reeling Centres with sophisticated and modern equipments were to be established in the State. The existing old twisting machine at Sualkuchi was also to be replaced with a new one. The fund allocation for

<sup>&</sup>lt;sup>348</sup> Seventh Five Year Plan (1985-90) Assam, op. cit. pp. 122-123

implementing these entire mulberry silk related schemes during the seventh Plan period was Rs. 347 lakhs. 349

For the growth of the *pat* or mulberry silk industry in the seventh Plan period, a Mulberry Seed Farm was established at Kanduli in 1986.<sup>350</sup> Collective Mulberry Gardens were established at places like Bathowpuri (1986), Geruwa (1986), Charingia (1986), Jiadhol (1986), Sonariati (1986), Chringthapi (1987), Kanduli (1987), Kazigaon (1988), Bengtol (1988) and Grahampur (1989).<sup>351</sup> Then a Mulberry Reeling Unit was established at Dullabcherra in 1986. <sup>352</sup> The number of families engaged with the *pat* or mulberry silk industry in the State was 27,739 in 1985-86 which increased to 35,489 in 1989-90.<sup>353</sup> The acreage under food plants for the *pat* silkworm was 905 hectares in 1985-86 which increased to 1,082.20 hectares in 1989-90.<sup>354</sup> The total quantity of the *pat* raw silk produced during the seventh Plan period was 69 thousand kilograms.<sup>355</sup> In the year 1986-87 a *Tasar* Multiplication Centre was established at Umkhremi in the Diphu sub-division of the Karbi Anglong district.<sup>356</sup>

<sup>&</sup>lt;sup>349</sup> Ibid. pp. 123-125

<sup>&</sup>lt;sup>350</sup> Handbook on Assam Sericulture at a Glance, op. cit. pp. 18-19

<sup>351</sup> Handbook on Assam Sericulture at a Glance, op. cit. pp. 32-37; Sericulture Manual, op. cit. p. 103

<sup>352</sup> Sericulture Manual, op. cit. pp. 97-98

<sup>353</sup> Statistical Handbook of Assam for the year1987, op. cit. p. 90; Statistical Handbook of Assam for the year1991, op. cit. pp. 94-95

<sup>354</sup> Ibid.

Statistical Handbook of Assam for the year1987, op. cit. p. 95; Statistical Handbook of Assam for the year1988, op. cit. p. 105; Statistical Handbook of Assam for the year1990, op. cit. p. 116

<sup>356</sup> Handbook on Assam Sericulture at a Glance, op. cit. p. 48

For ensuring security of the silk growers, there were 53 Silk Growers Cooperative organised in the State. But all these co-operatives were in a declining
condition requiring revitalisation. As such in the seventh Plan, an amount of Rs. 5
lakhs was allotted with a scheme of providing share capital loan and working capital
loan as well as grants to these co-operatives.<sup>357</sup> Under the aegis of the Assam
Government Marketing Corporation Limited, an Export Oriented Production Package
Centre was opened at Sualkuchi in 1985 to explore the export market for the *muga*, *pat* and *eri* products.<sup>358</sup> Then in 1986 a proposal was put forward for the
establishment of an Institute of Design Management and Technology at Sualkuchi
under the Ministry of Textiles, Government of India to impart fashion education.
However the proposal was not materialised.<sup>359</sup>

The number of sericultural villages in the State was 6,994 in 1985-86 which increased to 7,102 in 1989-90.<sup>360</sup> There were 25 reeling units in active condition in 1985-86 which increased to 27 in 1987-88, but again it decreased to 26 in 1988-89 and remained the same at the end of the seventh Plan.<sup>361</sup> The total quantity of mulberry cocoons reeled in the seventh Plan period was 36,776 thousand kilograms and from these mulberry cocoons 2,858 thousand kilograms of *pat* yarn was

<sup>357</sup> Seventh Five Year Plan (1985-90) Assam, op. cit. p. 126

<sup>&</sup>lt;sup>358</sup> Amlan Baruah and S. B. Roy Choudhury, op. cit. p. 501

<sup>&</sup>lt;sup>359</sup> Industrialization in Assam and Economic Reforms, op. cit. p. 56

<sup>360</sup> Statistical Handbook of Assam for the year1987, op. cit. p. 90; Statistical Handbook of Assam for the year1991, op. cit. p. 94

Statistical Handbook of Assam for the year1987, op. cit. p. 94; Statistical Handbook of Assam for the year 1990, op. cit. p. 114; Statistical Handbook of Assam for the year1991, op. cit. p. 102

produced.<sup>362</sup> Actually from the year 1988-89 onwards statistical data was provided separately for *muga* cocoons reeled and the quantity of *muga* yarn produced. Hence from 1988-1990, the number of *muga* cocoons reeled was 29,28,165 from which 288.206 kilograms of *muga* yarn was produced.<sup>363</sup> The number of spinning *charkhas* in operation in 1985-86 was 2,341 which increased to 9,441 in 1989-90.<sup>364</sup>

For the development of handloom weaving Rs. 892 lakhs was sanctioned during the seventh Plan period.<sup>365</sup> In 1985-86, there were 67 Weaving Training Classes going on in different places of the State where 1,100 trainees were provided training.<sup>366</sup> The number of such classes and trainees increased to 96 and 1,555 respectively in 1989-90.<sup>367</sup> In 1985-86, the number of Weaver Extension Service Units was 59 which increased to 89 in 1989-90.<sup>368</sup> During 1985-86 there were 241 Weaving Demonstration Circles in Assam which covered 7,145 villages.<sup>369</sup> The number of Weaving Demonstration Circles increased to 261 in 1989-90 and it covered 7,377 villages during that year.<sup>370</sup> The number of Handloom Production Centres in

<sup>&</sup>lt;sup>362</sup> Statistical Handbook of Assam for the year1987, op. cit. p. 94; Statistical Handbook of Assam for the year1990, op. cit. p. 114; Statistical Handbook of Assam for the year1991, op. cit. pp. 102-103,

<sup>&</sup>lt;sup>363</sup> Statistical Handbook of Assam for the year1991, op. cit. pp. 102-103,

<sup>364</sup> Statistical Handbook of Assam for the year1987, op. cit. p. 91; Statistical Handbook of Assam for the year1991, op. cit. p. 97

<sup>&</sup>lt;sup>365</sup> Seventh Five Year Plan (1985-90) Assam, op. cit. p. 144

<sup>366</sup> Statistical Handbook of Assam for the year1987, op. cit. pp. 96-97

<sup>&</sup>lt;sup>367</sup>Statistical Handbook of Assam for the year1991, op. cit. p. 105

<sup>&</sup>lt;sup>368</sup> Statistical Handbook of Assam for the year1987, op. cit. p. 96; Statistical Handbook of Assam for the year1991, op. cit. p. 105

<sup>&</sup>lt;sup>369</sup> Statistical Handbook of Assam for the year1987, op. cit. p. 98

<sup>&</sup>lt;sup>370</sup> Statistical Handbook of Assam for the year1991, op. cit. p. 108

1985-86 was 17 which increased to 22 in 1989-90.<sup>371</sup> The total number of handloom distributed during the seventh Plan period was 35,933.<sup>372</sup> The total quantity of silk cloth produced during the seventh Plan period was 41,37,447 in thousand metres.<sup>373</sup> There was a slight increase in the number of silk weavers, both part time and whole time during the seventh Plan period. In 1985-86 there were all total 2,51,019 numbers of silk weavers, out of whom 2,28,530 were part time weavers and 22,489 were whole time weavers.<sup>374</sup> At the end of this Plan period in 1989-90, the total number of silk weavers increased to 2,51,822 out of whom 2,28,967 were part time weavers and 22,855 were whole time weavers.<sup>375</sup>

Again at the end of the seventh Plan period in 1990, two Ad-hoc Annual Plans were adopted till 1992. During this Ad-hoc Annual Plan period, a sum of Rs. 6.47 crores was sanctioned for the general areas and Rs. 2.39 crores for the hill areas to undertake schemes for the development of sericulture and weaving activities in the State. Further, an additional amount of Rs. 1.40 crores was also sanctioned during this period.<sup>376</sup> Under this Ad-hoc Annual Plan period, *Eri* Concentration Centres were

<sup>&</sup>lt;sup>371</sup> Statistical Handbook of Assam for the year1987, op. cit. p. 96; Statistical Handbook of Assam for the year1991, op. cit. p. 105

<sup>372</sup> Statistical Handbook of Assam for the year1987, op. cit. p. 100; Statistical Handbook of Assam for the year1988, op. cit. p. 110; Statistical Handbook of Assam for the year1990, op. cit. p. 124

<sup>&</sup>lt;sup>373</sup> Statistical Handbook of Assam for the year1987, op. cit. p. 97; Statistical Handbook of Assam for the year1988, op. cit. p. 107; Statistical Handbook of Assam for the year1990, op. cit. p. 119

<sup>&</sup>lt;sup>374</sup> Statistical Handbook of Assam for the year1987, op. cit. p. 99

<sup>&</sup>lt;sup>375</sup> Statistical Handbook of Assam for the year1991, op. cit. pp. 108-109

<sup>&</sup>lt;sup>376</sup> Handbook on Assam Sericulture at a Glance, op. cit. p. 1

established at places like Amridisu (1991), Gogamukh (1992) and Lamahuk (1992).<sup>377</sup> Then in between 1990-92 the *Muga* Village Grazing Reserve (VGR) Scheme was started in new places like Langrajhar (1991), Kharibhata (1991) and Baida (1992).<sup>378</sup> A *Muga* Reeling Unit was established at Barahibari in 1991. Then in 1990-91, a Muga Parent Stock Station was also established at Turukpara, Boko.<sup>379</sup> Collective Mulberry Gardens were established in between 1990-92 at places like Bagharpur (1991) and Baitamari (1992). <sup>380</sup> A Mulberry Reeling Unit was established at Charingia in 1991.<sup>381</sup>

In 1990-91, the total number of sericultural villages in the State was 7129 which increased to 8107 in 1991-92.<sup>382</sup> The number of families engaged in the silk industry in 1990-91 was 1,18,410 in *eri*, 26,087 in *muga* and 37,052 in *pat* or mulberry. This figure of families engaged in silk industry slightly increased in 1991-92 to 1,22,572, 26,757 and 37,402 in *eri*, *muga* and *pat* respectively.<sup>383</sup> The total area under food plants for silkworm in 1990-91 was 4,807.97 hectares which increased to 4,911.48 hectares in 1991-92.<sup>384</sup> During the annual Plan period from 1990-92, the total silk production in the State stood at 946 thousand kilogram of *eri* cut cocoons,

<sup>&</sup>lt;sup>377</sup> Ibid. pp. 26-31

<sup>&</sup>lt;sup>378</sup> Ibid. pp. 44-47

<sup>&</sup>lt;sup>379</sup> Sericulture Manual, op. cit. pp. 95-96

<sup>&</sup>lt;sup>380</sup> Ibid. p. 103

<sup>&</sup>lt;sup>381</sup> Ibid. p. 97

<sup>&</sup>lt;sup>382</sup> Statistical Handbook of Assam for the year1992, Directorate of Economics and Statistics, Government of Assam, Guwahati, 1993, p. 108

<sup>383</sup> Ibid.

<sup>&</sup>lt;sup>384</sup> Ibid. p. 109

140.5 thousand kilogram of *muga* raw silk and 36.35 thousand kilogram of *pat* raw silk.<sup>385</sup>

During this Ad-hoc Annual Plan period, 102 Weaving Training Classes were going on in different places of the State where 1,650 trainees were provided training in 1990-91, but the number of trainees decreased to 1,500 in 1991-92. The number of handlooms distributed during that period was 14,706. The number of Handloom Production Centres in 1990-91 became 23 and it did not increase in 1991-92. The number of Weavers Extension Service Unit in 1990-91, the number decreased to 95 in 1991-92. However, the number of Weaving Demonstration Circles in Assam during the period 1990-92 remained static at 263 covering 7,186 villages and 7,391 villages in 1990-91 and 1991-92 respectively. In 1990-91, there were 2,51,373 numbers of silk weavers out of whom 2,28,993 were part time and 22,380 were whole time weavers. This figure of total silk weavers slightly increased in 1991-92 to 2,51,515 with 2,27,824 as part time and 23,691 as whole time weavers.

<sup>&</sup>lt;sup>385</sup> Ibid. pp. 110-111

<sup>&</sup>lt;sup>386</sup> Statistical Handbook of Assam for the year 1991, op. cit. p. 105; Statistical Handbook of Assam for the year 1992, op. cit. pp. 126-129

<sup>&</sup>lt;sup>387</sup> Statistical Handbook of Assam for the year1991, op. cit. p. 110; Statistical Handbook of Assam for the year1992, op. cit. p. 132

<sup>&</sup>lt;sup>388</sup> Statistical Handbook of Assam for the year1991, op. cit. p. 105; Statistical Handbook of Assam for the year1992, op. cit. pp. 126-129

<sup>389</sup> Ibid.

<sup>&</sup>lt;sup>390</sup> Statistical Handbook of Assam for the year1991, op. cit. p. 108; Statistical Handbook of Assam for the year1992, op. cit. p. 130

<sup>&</sup>lt;sup>391</sup> Statistical Handbook of Assam for the year1991, op. cit. p. 109

<sup>&</sup>lt;sup>392</sup> Statistical Handbook of Assam for the year 1992, op. cit. p. 131

From the statistics of the silk weavers, it has been noticed that there was increase in the total number of silk weavers as well as whole time weavers, whereas decrease was there in the number of part time weavers. 6,026 numbers of spinning *charkhas* were in operation in 1990-91 which increased to 7,440 in 1991-92.<sup>393</sup> The number of reeling units in the State was 26 in 1990-91 and it increased to 27 in 1991-92.<sup>394</sup> The quantity of mulberry cocoons reeled from 1990-92 was 1,25,707.365 kilograms and total *pat* yarn produced in reeling units was 2,360.842 kilograms. During the same period 330 numbers of *muga* cocoons were reeled and 172.974 kilograms of *muga* yarn was produced.<sup>395</sup> The total silk cloth produced during this Ad-hoc Annual Plan Period was 19,03,371 in thousand meters.<sup>396</sup>

The eighth Five Year Plan (1992-97) like the seventh Plan focused on the development of the silk industry in the State as a priority sector industry. At the end of the seventh Plan, the silk industry involved more than 1.75 families in the State generating a gross income of Rs. 15 cores annually.<sup>397</sup> The priority was given to the following areas like plantation of more food plants for silkworm, production and distribution of disease free silkworm seed and marketing of products. The financial outlay for the silk industry during the eighth Plan period was fixed at Rs. 20.80 crores.<sup>398</sup> For the development of handloom weaving, Rs. 4 crores was sanctioned out

<sup>&</sup>lt;sup>393</sup> Ibid. p. 111

<sup>&</sup>lt;sup>394</sup> Ibid. p. 122

<sup>&</sup>lt;sup>395</sup> Ibid. p. 123

<sup>&</sup>lt;sup>396</sup> Statistical Handbook of Assam for the year1991, op. cit. p. 105; Statistical Handbook of Assam for the year1992, op. cit. p. 129

<sup>&</sup>lt;sup>397</sup> Eighth Five Year Plan (1992-97) Assam, Department of Planning and Development, Government of Assam, Guwahati, 1991, p. 120

<sup>&</sup>lt;sup>398</sup> Ibid. p. 128

of which Rs. 3.30 crores was to be spent for the ongoing schemes and the remaining 0.70 crores for initiating new schemes in the eighth Plan period.<sup>399</sup>

In between 1992-97 the *Muga* Village Grazing Reserve (VGR) Scheme was started in new places like Fatiabam (1994) and Nowboicha (1996). 400 A *Muga* Reeling Unit was established at North Lakhimpur in 1993. 401 Eri Spinning and Training Centres were established at Maibong and Dhalpukhuri in 1996. 402 The Central Silk Board established a Demonstration cum Technical Service Centre at Sualkuchi in 1996. This centre used to provide training to the *pat*, *muga*, *tasar* reelers and *eri* spinners of the North-Eastern States through power driven (pedal system also available) reeling cum twisting machines. Such machines were also sold by this Centre at a 50% subsidy on the selling price. Further, the Centre demonstrated an improved semi-automatic pedal driven handloom which weaves 6 to 7 meters of cloth in a day with uniform texture. 403 In 1996, the North-Eastern Development Finance Corporation Limited was also inaugurated with headquarter at Guwahati for providing attention to the industrial and infrastructural development of the North-Eastern region. The silk industry of Assam, particularly its sericultural sector was considered as the targeted area of working by this finance corporation. 404

In 1992-93, the total number of sericultural villages in the State was 8,046 which increased to 8,190 in 1996-97. The number of families engaged in the silk

<sup>&</sup>lt;sup>399</sup> Ibid. p. 108

<sup>400</sup> Sericulture Manual, op. cit. p. 100

<sup>&</sup>lt;sup>401</sup> Ibid. pp. 95-96

<sup>&</sup>lt;sup>402</sup> Ibid. pp. 96-97

<sup>&</sup>lt;sup>403</sup> Prabin Baishya, 2005, op. cit. pp. 59-60

<sup>&</sup>lt;sup>404</sup> Industrialization in Assam and Economic Reforms, op. cit. pp. 61-62

Statistical Handbook of Assam for the year1993, Directorate of Economics and Statistics, Government of Assam, Guwahati, 1994, p. 114; Statistical Handbook of Assam for the year1997, Directorate of Economics and Statistics, Government of Assam, Guwahati, 1998, p. 106

industry in 1992-93 was 1,23,327 in *eri*, 26,974 in *muga* and 37,521 in *pat* or mulberry. His figure of families engaged in the silk industry slightly increased in 1996-97 to 1,28,186, 29,409 and 38,822 in *eri*, *muga* and *pat* or mulberry silk industry respectively. He total area under food plants for the *eri* silkworm in 1992-93 was 2,103.64 hectares which increased to 2,993.07 hectares in 1996-97. Similarly, the area under food plants for the *muga* silkworm in 1992-93 was 1,957.67 hectares which increased to 2,624.25 hectares in 1996-97. In 1992-93, the area under the *pat* silkworm food plants was 1,680.55 hectares which increased to 2,267.42 hectares in 1996-97. The total silk production in the State during the eighth Plan period was 2,773.63 thousand kilogram of *eri* cut cocoons, 381.77 thousand kilogram of *muga* raw silk and 115.21 thousand kilogram of *pat* raw silk.

During this eighth Plan period, the number of Weaving Training Classes in different places of the State remained static at 102 where 1,650 trainees were provided training all throughout this Plan period. The number of Handloom Production Centres in 1992-93 was 20 and it remained the same all throughout this Plan

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<sup>406</sup> Statistical Handbook of Assam for the year 1993, op. cit. p. 114

<sup>407</sup> Statistical Handbook of Assam for the year1997, op. cit. p. 106

Statistical Handbook of Assam for the year1994, Directorate of Economics and Statistics, Government of Assam, Guwahati, 1995, p. 86; Statistical Handbook of Assam for the year1997, op. cit. p. 106

<sup>&</sup>lt;sup>409</sup> Ibid.

<sup>&</sup>lt;sup>410</sup> Ibid.

Statistical Handbook of Assam for the year1993, op. cit. p. 118; Statistical Handbook of Assam for the year1995, Directorate of Economics and Statistics, Government of Assam, Guwahati, 1996, pp. 96-97; Statistical Handbook of Assam for the year1997, op. cit. p. 107

Statistical Handbook of Assam for the year1993, op. cit. pp. 132-135; Statistical Handbook of Assam for the year1994, op. cit. p. 94; Statistical Handbook of Assam for the year1995, op. cit. p. 104; Statistical Handbook of Assam for the year1997, op. cit. p. 114

period.<sup>413</sup> Similarly, the number of Weavers Extension Service Unit in 1992-93 was 98 and it remained the same all throughout the eighth Plan period.<sup>414</sup> Again the number of Weaving Demonstration Circles in Assam and villages covered by it remained static at 263 and 7,819 respectively.<sup>415</sup> In 1992-93, there were 2,60,357 numbers of silk weavers out of whom 2,34,198 were part time and 26,159 were whole time weavers.<sup>416</sup> This figure of total silk weavers slightly increased in 1996-97 to 3,07,356 with 2,81,183 as part time and 26,173 as whole time weavers.<sup>417</sup>

From the statistics of the silk weavers, it has been noticed that there was a great increase in the total number of silk weavers as well as part time weavers, whereas there was a negligible increase in the number of whole time weavers. The large increase in the number of part time weavers indicates the fact that the adoption of weaving as a subsidiary occupation continued. The number of handlooms distributed during that Plan period was 24,557. 418 4,991 numbers of spinning *charkhas* were in operation in 1992-93 which increased to 6,626 in 1996-97. The number of reeling units in the State was 23 in 1992-93 and it increased to 25 in 1996-97. The quantity of mulberry cocoons reeled during this Plan period was

<sup>&</sup>lt;sup>413</sup> Ibid.

<sup>414</sup> Ibid.

Statistical Handbook of Assam for the year1993, op. cit. pp. 136-137; Statistical Handbook of Assam for the year1994, op. cit. p. 95; Statistical Handbook of Assam for the year1995, op. cit. p. 105; Statistical Handbook of Assam for the year1997, op. cit. p. 115

<sup>416</sup> Statistical Handbook of Assam for the year 1993, op. cit. pp. 136-137

<sup>417</sup> Statistical Handbook of Assam for the year 1997, op. cit. p. 115

<sup>&</sup>lt;sup>418</sup> Statistical Handbook of Assam for the year1993, op. cit. p. 138; Statistical Handbook of Assam for the year1994, op. cit. p. 96; Statistical Handbook of Assam for the year1995, op. cit. p. 106; Statistical Handbook of Assam for the year1997, op. cit. p. 116

<sup>&</sup>lt;sup>419</sup> Statistical Handbook of Assam for the year1995, op. cit. p. 98; Statistical Handbook of Assam for the year1997, op. cit. p. 108

<sup>420</sup> Statistical Handbook of Assam for the year1995, op. cit. p. 102-103; Statistical Handbook of Assam for the year1997, op. cit. pp. 112-113

43,681.525 kilograms which was much lesser in quantity than the cocoons reeled during the last two Ad-hoc Annual Plan periods. The total *pat* yarn produced from these reeled mulberry cocoons was 4,327.381 kilograms. During the same Plan period, 13,25,000 numbers of *muga* cocoons were reeled and 432.459 kilograms of *muga* yarn was also produced.<sup>421</sup> The total silk cloth produced during the eighth Plan Period was 51,16,680 in thousand meters.<sup>422</sup>

The ninth Five Year Plan period (1997-2002) marked the end of the 20<sup>th</sup> century and beginning of the 21<sup>st</sup> century. This Plan stressed on the fact that the silk industry which involves an agro-industrial process helps both the rural and urban population of the State in generating self-employment. While formulating schemes for the silk industry sector, the ninth Plan took the objective of alleviating rural poverty through promoting as well as generating economic activities in this sector. Hence, many labour intensive programmes were introduced at different levels in the silk industrial sector during the ninth Plan period. For implementing the schemes related to the silk industrial sector in the ninth Plan period, a total of Rs. 15.35 crores was sanctioned till the end of the century in 1999-2000. Value While for development of handloom weaving, Rs. 1.91 crores was sanctioned till the year 1999-2000.

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<sup>&</sup>lt;sup>421</sup> Ibid.

<sup>&</sup>lt;sup>422</sup> Statistical Handbook of Assam for the year1993, op. cit. pp. 132-135; Statistical Handbook of Assam for the year1994, op. cit. p. 94; Statistical Handbook of Assam for the year1995, op. cit. p. 104; Statistical Handbook of Assam for the year1997, op. cit. p. 114

<sup>&</sup>lt;sup>423</sup> Annual Plan (1997-98), Department of Planning and Development, Government of Assam, Guwahati, 1996, p. 80

<sup>&</sup>lt;sup>424</sup> Annual Plan (1997-98), op. cit. p. 82; Annual Plan (1999-2000), Department of Planning and Development, Government of Assam, Guwahati, 1999, pp. 75-76

<sup>&</sup>lt;sup>425</sup> Annual Plan (1999-2000), op. cit. pp. 62-63

During this Plan period, 2 mini Spun Silk Mills were established at Kokrajhar and Chhaygaon in 1997 so that the increasing quantities of the *eri*, *muga* and *pat* silk waste could be consumed and more spun silk yarn and noil yarn could be produced in the State. Then in 1999 the already established Central *Muga* Research and Training Institute at Lahdoigarh in Jorhat by the Central Silk Board was upgraded and renamed as Central *Muga Eri* Research and Training Institute with a mandate to serve as apex research and development institute for both the *muga* and *eri* silk. The Central Silk Board also provided at 50% subsidy 100 numbers of *muga* reeling machines and 100 numbers of *eri* spinning machines in this Plan period.

At the end of 20<sup>th</sup> century in 1999-2000, there were 8,648 sericultural villages in the State. The total number of families engaged in *eri* silk industry was 1,19,534, *muga* silk industry was 17,882 and *pat* or mulberry silk industry was 31,385. The area under food plants for *eri* silkworm was 4,313 hectares, *muga* silkworm was 3,916 hectares and mulberry silkworm was 3,354 hectares. The total silk production was 629 thousand kilogram of *eri* cut cocoons, 81.6 thousand kilogram of *muga* raw silk and 18.20 thousand kilogram of *pat* raw silk. The number of weaving training classes and trainees there in, Weavers Extension Service Unit, Weaving Demonstration Circle and villages covered, Handloom Production Centre and Reeling Unit remained same in 1999-2000 with the figures at the end of the eighth Plan period

<sup>&</sup>lt;sup>426</sup> Industrialization in Assam and Economic Reforms, op. cit. p. 50

<sup>&</sup>lt;sup>427</sup> Prabin Baishya, 2005, op. cit. p. 60

<sup>428</sup> Rekha Kalita, op. cit. p. 47

<sup>429</sup> Statistical Handbook of Assam for the year 2001, Directorate of Economics and Statistics, Government of Assam, Guwahati, 2002, p. 94

<sup>&</sup>lt;sup>430</sup> Ibid. p. 96

in 1996-97. In the reeling units, 5,893 kilograms of mulberry cocoons and 2,54,025 number of *muga* cocoons was reeled which produced 602 kilograms of *pat* yarn and 31 kilograms of *muga* yarn respectively. 1832 2,185 numbers of handlooms were distributed in 1999-2000. 1999-2000 was 2,84,997 out of which 2,62,407 were part time weavers and 22,590 were whole time weavers. 1999-2000 was

In order to know about the present condition of the silk industry and the effectiveness of the policies adopted by the government, case study has been conducted in Dhakuakhana, Boko and Sualkuchi as these areas are famous for its *muga*, *eri* and *pat* silk industry respectively. Dhakuakhana<sup>435</sup>is a sub-division of the Lakhimpur district of Assam. Its geographical location is in between latitude 27.6° to 27.36°N and longitude 94.24° to 94.42°E. The river Brahmaputra and Subansiri flows through the area. The area is inhabited by the people of Tai-Ahom, Mishing, Deuri, Chutia, Koch, Kalita, Matak, Sonowal Kachari, etc community. <sup>436</sup> In the Dhakuakhana town area, a Basic *Muga* Seed Farm was established in 1961 which is found in a running condition. The Farm produces *muga* cocoons and seeds which are sold amongst the *muga* rearers of Dhakuakhana and the nearby places. The amount

<sup>&</sup>lt;sup>431</sup> Ibid. pp. 100-103

<sup>&</sup>lt;sup>432</sup> Ibid. pp. 100-101

<sup>&</sup>lt;sup>433</sup> Ibid. p. 104

<sup>&</sup>lt;sup>434</sup> Ibid. p. 98

<sup>&</sup>lt;sup>435</sup> The case study in Dhakuakhana is conducted in between 5.1.2017 to 9.1.2017.

Bandana Mahan, Silk Industry in the Socio-Economic Life of the Tai-Ahoms of Dhakuakhana, Lakhimpur, Assam, (An Unpublished Thesis), Department of Anthropology, Gauhati University, 2013, p. 54

collected from the sale is deposited in the government treasury. A research sub-station is also there along with the Farm.

For case study three villages of the area, namely, Jalbhari, Perabhari and Gobindapur is selected because as per the reports of the government the *Muga* Village Grazing Reserve Scheme was started in these villages in 1962-63 for the cultivation of *muga* food plants as well as for the rearing of *muga* silkworms there. The *muga* village grazing reserves are in existence in each of this village. Some *muga* rearers<sup>437</sup> of these villages provided the information that they use the village grazing reserves for the rearing of the *muga* silkworms mostly in the *soom* and also in *sualu* trees. According to the rearers they have to pay 10 percent of the total cocoons produced in a brood to the State Government as a fixed nominal rent for using the grazing reserve for rearing. Usually in a year two broods of *muga* namely, *katia*, and *jethua* are reared by the people. The other three broods namely, *jarua*, *aharua* and *bhadia* are difficult to be reared because of weather, temperature fluctuation and flood.

These rearers are associated with the *muga* rearing as a hereditary occupation. Few of them also have land for cultivation of food grains. Normally a *muga* rearer used to produce in between 10,000 to 15,000 of cocoons in a brood. As two broods can be satisfactorily cultivated, the sale of the *muga* cocoons provides the rearer an

<sup>&</sup>lt;sup>437</sup> Interview was taken with Robin Koch (age 42), Bhupen Koch (age 48) and Ratul Tayeng (age 38) at Jalbhari Village of Dhakuakhana on 5.1.2017; with Dipak Doley (age 56), Tarun Doley (age 50) and Bhupen Pegu (age 40) at Perabhari Village of Dhakuakhana on 7.1.2017; with Jadu Moran (age 43), Biswa Gogoi (age 61) and Pradip Kachari (age 64) at Gobindapur Village of Dhakuakhana on 9.1.2017.

estimated annual income in between Rs.1 lakh to Rs. 1.2 lakh. The rearers used to sale their cocoons mostly to the agents. Few rearers used to reel the cocoons into yarn in their individual reeling machines. On the present condition of their occupation, the rearers told that there has been a decrease in the production of *muga* cocoons in the area during the last 15 to 20 years.

The rearers informed that the flood creates a lot of problems for them. Further, there has been a gradual reduction in the total area of the grazing reserves because of soil erosion during flood over the years. The rearers also have their personal *muga* cultivation area (*soomoni bari* in local language) which are equally affected by flood. At times after flood these areas are completely covered with sand which increases the temperature level and this greatly affects the *muga* cultivation. The Assam Science Technology and Environment Council in its study on the environment in Assam has mentioned about the problems of flood affecting the sericultural practices in Dhakuakhana and neighouring areas.<sup>438</sup>

The rearers also told that other than flood and soil erosion, there has been large scale deforestation in the area during 1990s as many people got attracted towards tea cultivation resulting in the establishment of many tea gardens. This deforestation greatly affected the *muga* food plantation area. Some rearers have also started *eri* rearing which involved less labour in comparison to *muga* as *eri* can be reared indoors. The *eri* yarn and garments had a good sale and demand in Arunachal Pradesh. The *muga* silkworm at times also gets infected by disease which destroys the complete brood. The rearers as are not very much educated believe the infection as a

<sup>438</sup> State of Environment, Assam, ASTEC Publication, Guwahati, 2006, p. 177

curse of god for which there is no remedy. As such most of them do not prefer the use of any pesticide or insecticide in *muga* cultivation. The birds, caterpillars and windy storms at times also create problems for the *muga* rearers.

There are not many reeling machines in the area as informed by some of the *muga* weavers<sup>439</sup>of the villages. The *muga* yarn produced by these reeling machines from the locally produced cocoons is not sufficient for weaving. As such *muga* yarn has to be brought from outside places like Lakhimpur, Sibsagar, Jorhat, Boko, etc. There are agents who used to provide them the *muga* yarn from outside places. These agents also used to bring the order and buy the finished products.

The weaving is done at home by using the fly-shuttle loom. Mostly the women in the household are involved in weaving. For designing Doobi machines are mainly used. Jacquard is also used, but mostly for *eri* and cotton weaving. The *muga* weavers generally used to weave clothes like *mekhela*, *chadar*, *riha*, blouse piece, *sari* etc. The weavers also informed that other than *muga*, the weaving of *eri* and cotton are gaining popularity in the area as its products are cheaper and has a good demand in Arunachal Pradesh. The estimated income of these *muga* weavers used to vary in between Rs. 4,000 to Rs. 6,000 in a month. But there is no guarantee of earning this amount every month.

Actually there is no silk weaving factory in these villages. No professional silk weavers are there for weaving. Weaving is a part time occupation for the womenfolk.

(age 48) and Sewali Gogoi (age 55) at Gobindapur Village of Dhakuakhana on 8.1.2017.

<sup>439</sup> Interview was taken with Gita Koch (age 35) and Anima Tayeng (age 45) at Jalbhari Village of Dhakuakhana on 5.1.2017; with Rani Doley (age 52), Praneswari Timung (age 59) and Rina Pegu (age 39) at Perabhari Village of Dhakuakhana on 6.1.2017; with Renu Panging

There used to be normally 1 or 2 looms for weaving in the household. The highest number of loom found in a household is 10 at Gobindapur. The owner<sup>440</sup> of the looms is involved with the business of silk garments. He used to buy the *muga* yarn from outside. Sometimes, he used to buy cocoons locally from which he reels the yarn for weaving with the help of his 2 reeling machines. He used to get orders from outside and at times through agents. Normally, the orders used to come in large numbers in between the month of September and April. Hence, during that period he used to hire weavers from the neighbouring villages to operate the looms. The weavers are paid on the basis of the quality and quantity of clothes woven.

Some of the agents<sup>441</sup>inform that they used to buy *muga* cocoons and clothes from the rearers and weavers respectively. The clothes are sold both inside and outside the State. For the weavers, they also used to bring orders and supply them with the *muga* yarn. The agents informed that there is no non-Assamese agent in the area. They also used to do business in *eri* and cotton. They run their business on a commission basis and their income on an average can be estimated in between Rs. 15,000 to Rs. 20,000 in a month.

Regarding Government assistance, it can be said that seed and cocoons are bought from the Farm at Dhakuakhana. The village grazing reserves are used for rearing. Sometimes training on rearing and weaving is provided at Dhakuakhana, Dhemaji and Lakhimpur. Besides, from the last two years a non-governmental

Information provided by Haresh Panging (age 57), owner of the looms at Gobindapur Village of Dhakuakhana on 8.1.2017 during interview.

<sup>&</sup>lt;sup>441</sup> Interview was taken with Dhanesh Pegu (age 53) and Rajib Dutta (age 48) at Perabhari Village of Dhakuakhana on 6.1.2017; with Kumud Kachari (age 57) and Olen Taid (age 44) at Gobindapur Village of Dhakuakhana on 9.1.2017.

organization, *Centre for Microfinance and Livelihood*, an associate of Tata Trust is working in the Dhakuakhana area for helping the local rearers and weavers with some financial loans, training, etc.

Boko<sup>442</sup>is a town in the Kamrup (Rural) district of Assam. Its geographical location is in between latitude 25.58° to 25.97°N and longitude 91.14° to 91.23°E. The area is inhabited by the Assamese, Rabha, Boro, Garo, Muslim, etc community. Three villages of the area Langkona, Pyranga and Batakuchi have been selected for the case study. Visit has been also made to the Turukpara area of Boko where *muga* farms and research station have been established by the State Government and the Central Silk Board respectively. Langkona has an Eri Concentration Centre established in 1972 and the village is an *eri* production area. Pyranga is another *eri* production area where the Indian Institute of Entrepreneurship formed a Cluster on *Eri* Silk in 2009 and thereafter the *eri* production as well as weaving has developed there a lot. Batakuchi is an area where *muga* culture is practised by the villagers.

The Department of Sericulture and Weaving established a *Muga* Seed Farm and Sub-centre at Turukpara in 1978. In the same year a *Muga* Nursery and Multiplication Centre was also established there. Then in 1990-91, a *Muga* Parent Stock Station was also established at Turukpara. Within the same campus, a Sericulture Cocoon Bank with a cocoon market centre was also established in 2012. The total area of the sericulture campus at Turukpara is 30 *bigha* where *muga* silkworm is reared in *soom* trees along with few *sualu* trees. In general, *jethua*, *aharua* and *katia* broods are reared in the Farm. The total production of the Farm is in

<sup>&</sup>lt;sup>442</sup> The case study in Boko is conducted in between 12.2.2017 to 22.2.2017.

between 50,000-2,00,000 cocoons in a brood. The produced cocoons are sold by the Farm to the buyers mainly from Boko, Palashbari, Sualkuchi, etc.

For production of *muga* seeds, a certain amount of cocoons are kept in the Farm itself. The *muga* seed thus obtained are used by the Farm for rearing. At times, the *muga* seeds are also sold to the rearers of Boko, Tura, Karbi Anglong, Lakhimpur, Dhakuakhana, etc. The amount collected from the sale of cocoon and seed is deposited in the Government treasury. Adjacent to the sericulture campus of the State Government at Turukpara, the Central Silk Board in 1982 has established the Regional *Muga* Research Station for conducting research on *muga* silk. The Station is satisfactorily functioning and is continuing its research activities. At times, the Station also used to conduct some programmes for the *muga* and *eri* rearers of the neighbouring areas.

The *Eri* Concentration Centre in Langkona is in a running condition. The rearers of the village used to get castor leaves from the Centre to feed the *eri* silkworms at a nominal rate as Government revenue. Besides, the *eri* seeds are sold from this centre amongst the rearers of the village and of the neighbouring villages. But the overall condition of the *eri* silk industry in this village is not found to be satisfactory. Some of the rearers<sup>443</sup> of the village said that there are now a day only few families involved with *eri* rearing in the village. The young generation is not attracted towards it as it requires lot of labour and time. The income is also not sufficient in comparison to time and labour spent. The *eri* weaving is done at home by

<sup>&</sup>lt;sup>443</sup> Interview was taken with Kanak Rabha (age 60), Putul Rabha (age 55) and Gobinda Boro (age 44) at Langkona Village of Boko on 14.2.2017.

the women weavers<sup>444</sup>. Like a tradition, almost every household has a loom, mostly throw-shuttle. The clothes produced are mostly for own consumption with surplus being sold in the local market.

The *eri* culture prevailed in the Pyranga village from a very long time. The village is divided into two halves, Pub-Pyranga and Paschim-Pyranga inhabited by the Rabha and the Muslim community respectively. The Rabha community is mainly engaged in the rearing of the *eri* silkworms, while, the Muslim community is engaged in the spinning and weaving of the *eri* silk. Until the last 10 years, the whole *eri* production in the village was done traditionally and was confined to domestic use with the surplus production being sold in the local market.

As informed by some of the rearers<sup>445</sup> and weavers<sup>446</sup> of the village, they were unaware about the commercial importance of the *eri* silk. The rearers told that earlier *eri* rearing for them was a subsidiary or part-time occupation with farming being the main one. Some of these rearers were engaged in business like selling of food grains, vegetables, etc. There was also an insufficient food plant in the village to feed the *eri* silkworms. They had to collect leaves of the *era* and *keseru* trees from the adjoining areas which become very troublesome during rainy season. The rearers were ignorant

Interview was taken with Yamini Medhi (age 49), Sabitri Rabha (age 52) and Dalimi Rabha (age 40) at Langkona Village of Boko on 15.2.2017.

Interview was taken with Mukul Rabha (age 65) and Karun Rabha (age 58) at Pyranga Village of Boko on 17.2.2017; with Chitra Rabha (age 47) and Dhaneswar Rabha (age 51) at Pyranga Village of Boko on 18.2.2017.

Interview was taken with Fatima Bibi (age 58), Sajida Khatun (age 49) and Majoni Begum (age 41) at Pyranga Village of Boko on 19.2.2017; with Hemlata Rabha (age 45) and Parbati Rabha (age 52) at Pyranga Village of Boko on 20.2.2017.

about the systematic plantation of the *eri* food plants and no information or training was provided to them by the Department of Sericulture and Weaving in this direction.

However, in 2008 the Indian Institute of Entrepreneurship (IIE) organised a field level workshop in Pyranga village on the potentiality of *eri* silk industry. During the workshop the IIE realised the possibility of transforming the traditional *eri* culture of Pyranga on a commercial basis. To visualise the possibility, the IIE in July, 2009 started a Cluster on *Eri* Silk project in Pyranga with the vision of transforming Pyranga to a unique *eri* silk hub with better and diversified products to create a national and international market. The cluster covered 200 artisans from Pub-Pyranga and Paschim-Pyranga.<sup>447</sup>

The rearers informed that under the initiative of IIE, they were provided training in scientific rearing of *eri* silkworm and systematic plantation of *eri* food plants. The training programmes were mostly conducted in the Regional *Muga* Research Station at Turukpara, Boko. After the training, Self-Help Groups were formed amongst them for the collective plantation of *eri* food plants. The Directorate of Sericulture also provided the rearers with seedlings of *eri* food plants. This greatly helped the rearers in increasing locally the quantity of food plants to feed the *eri* silkworms. There is both collective and individual area under the *eri* food plants in the village which greatly helped the rearers in rearing *eri* silkworms. With sufficient quantity of food plants being available, 4 broods of *eri* silkworm are reared in a year.

From the 4 broods, an individual *eri* rearer can produce 30,000 to 35,000 cocoons in a year which provides an estimated income of Rs. 1 lakh annually. Most of

<sup>&</sup>lt;sup>447</sup> Project Report on Cluster on Eri Silk in Pyranga Village, Boko, IIE, Guwahati, 2015

the produced *eri* cocoons in the village are sold to the weavers of the village. The weavers used to spin the cocoons for the yarn from which they weave cloths like *mekhela*, *chadar*, *barkapor*, stole, *kurta* piece, wrapper, plain *eri* fabric, purse, jacket, etc. For spinning, the weavers used the spinning machine. Weaving is done with fly-shuttle loom. For designing doobi and jacquard machines are used.

The weavers were provided training by the IIE in using modern technology in spinning, weaving and designing; product diversification; blending and natural dyeing. The weavers informed that *eri* can be blended with cotton. The weavers are able to prepare different colours for dyeing. The *eri* weavers working on a full time basis can earn Rs. 10,000 to Rs. 12,000 in a month, while, a part time weaver earns in between Rs.5,000 to Rs.6,000. The weavers used to sell their products through agents. Sometimes, they used to participate in the exhibitions, trade fairs, etc which provided them an exposure as well as extra income. The *eri* products of this village have a demand in foreign countries like Bhutan and Nepal.

Batakuchi, a village situated near the border of the Garo hills is now a day a prominent *muga* producing area. Some *muga* rearers<sup>448</sup>of the village informed that they have started *muga* rearing from the last 20-25 years. In this regard they have been helped by the *muga* research station at Boko. They have been provided training in sericulture at Boko and also at Lahdoigarh in Jorhat. The research station of Boko has also initially provided them disease free *muga* seeds.

The *muga* rearing is done in the forest area in the foothills of the Garo hills where the temperature is found to be suitable for rearing of silkworms. There is a

<sup>&</sup>lt;sup>448</sup> Interview was taken with Haliram Rabha (age 54), Pankaj Rabha (age 36), Ranjit Rabha (age 60) and Ratan Das (age 47) at Batakuchi Village of Boko on 21.2.2017.

large area covered with forest there where by securing permission verbally from the local forest officials, they used to plant *soom* trees for rearing the *muga* silkworms. Wild varieties of *muga* silkworm are also available in these forests which on rearing provides better yield of cocoons. This is because the wild *muga* variety is stronger and is less infected by disease.

The rearers used to mainly sale the *muga* cocoons in the market. Few rearers are engaged in the *muga* seed business. The produced seeds are sold in Chirang, Baksa, Udalguri, Dhemaji, etc. The rearers also used to reel the *muga* cocoons into yarn in their individual reeling machines and the yarn is mainly sold in the market. Weaving is done by the women in the household. But as informed by some of the weavers<sup>449</sup> the weaving is not done on a commercial basis. Only in a year they used to get one or two order for weaving plain *muga* piece (*muga thaan kapor*). The weaving is done with fly-shuttle loom.

Few non-governmental organisations like *Guldasta*, *Erifed*, *Resham Gram*, *Eri Boa-Kata Somonnoi Samiti*, etc are engaged in the *eri* and *muga* business in the Boko area. This NGO's used to bring large orders for *eri* and *muga* products from different sectors like NRL, IOCL, Kingfisher, Wallmart, etc. For completing the orders, the NGO's used to involve the local rearers and weavers of the area on contractual basis. These NGO's put much emphasis on product diversification so that they can get national and international orders.<sup>450</sup>

<sup>&</sup>lt;sup>449</sup> Interview was taken with Geeta Rabha (age 49), Padmini Rabha (age 38) and Anita Rabha (age 52) at Batakuchi Village of Boko on 22.2.2017.

<sup>&</sup>lt;sup>450</sup> Information provided by Chandan Keshab (age 60), who runs the NGO Guldasta at Boko on 16.2.2017 during interview.

Sualkuchi<sup>451</sup> is a census town in the Kamrup district of Assam. Its geographical location is in between latitude 26.17°N and longitude 91.57°E. The area is inhabited by different Hindu communities. It is the most prominent silk weaving centre of Assam. All the varieties of silk are woven there. But majority of the weavers are engaged in weaving of the *pat* silk. As per the census conducted in 2017 by the *Sualkuchi Tant Shilpa Unnayan Samiti* along with IIT, Guwahati there are 5,672 *pat* looms in Sualkuchi.

In Sualkuchi, the silk weaving is done on a commercial basis. There are silk weaving factories, both small and large in size which depends on the number of looms engaged in weaving and the quantity of clothes produced. The small factories are in the household of the loom owners, while large factories used to have a separate establishment. These factories are both registered and non-registered. The factories either have their own shops for selling their cloths at Sualkuchi or they used to tie up with the sellers from outside. The cloths are also sold through the co-operative societies like *Kalpataru*, *Resham Samabai*, *Resham Pratisthan*, etc. Few factory owners also used to participate in the national and international exhibitions for selling their products.

The commercialisation of silk weaving led to the entry of professional weavers from outside in Sualkuchi. Both male and female weavers are there. All the weavers are Hindu. Only a nominal percent of the local population of Sualkuchi is involved in the silk weaving. Majority of the weavers are Bodo people from Chirang, Baksa, Udalguri, Kokrajhar, etc. These weavers are paid on a weekly basis depending

<sup>&</sup>lt;sup>451</sup> The case study in Sualkuchi is conducted in between 26.3.2017 to 30.3.2017.

on the quality and quantity of clothes woven by them. Further, they are paid an advance amount by the loom owners at the time of appointment which is like a booking amount.

Some of the *pat* silk weavers<sup>452</sup> of Sualkuchi provided the information that the *pat* yarn comes from China and Bangalore for weaving. The Chinese quality is superior to that of Bangalore. It is more shiny and durable and hence costlier than the Bangalore silk. The Chinese silk for its superior quality is used by the Sualkuchi weavers to weave the *dig* (warp/length) of the garments, while the *bani* (width/weft) are woven with the Bangalore silk. The *pat* yarn from outside used to come in dyed form or sometimes acid or chemical dye is done locally.

The *pat* silk yarn produced in Assam is not used by the weavers of Sualkuchi as they are of inferior quality. According to some factory owners<sup>453</sup> the reeling technology of the *pat* silk in Assam is not very developed for which the yarn produced from the local *pat* cocoons is not smooth and strong. However, they used to bring the *nuni pat* from Nowgong district, especially from the Jajari area. *Pat* thread can be mixed with synthetic thread. These synthetic threads are the Thailand and Viscon thread which comes from outside the State. For decoration *guna* (golden colour thread) comes from Surat.

<sup>&</sup>lt;sup>452</sup> Interview was taken with Mukunda Boro (age 44) and Hemlata Boro (age 48) at Sualkuchi on 26.3.2017; with Rekha Das (age 27) and Pinky Kalita (age 29) at Sualkuchi on 27.3.2017; with Raju Swargiary (age 34) and Namita Rabha (age 40) at Sualkuchi on 28.3.2017; Nabajyoti Das (age 38) and Mira Baishya (age 42) at Sualkuchi on 29.3.2017.

<sup>&</sup>lt;sup>453</sup> Interview was taken with Hira Lal Kalita (age 50) and Biswajit Kalita (age 45) at Sualkuchi on 26.3.2017; Dipak kr. Baishya (age 47) and Bhrigumoni Kalita (age 54) at Sualkuchi on 27.3.2017; Sanjib Das (age 41) and Khagen Kalita (age 64) at Sualkuchi on 28.3.2017; Ratan Baishya (age 38) and Animesh Baishya (age 52) at Sualkuchi on 29.3.2017.

Normally *kingkhap*, *kaziranga*, *japi*, *dhol*, *pepa*, etc design are woven in the *pat* garments. For designing doobi and jacquard machines are used. Computer added designing is done for which designing centre is there in Sualkuchi. The designed cards are placed in the doobi and jacquard machines for weaving of the designs. The weaving is done with the help of fly-shuttle looms. The factory owners informed that they are not interested in using power-loom or semi-automatic loom, etc.

In the wake of product diversification which began from last few years of the 20<sup>th</sup> century, other than the traditional dress material stall, shelwar, shirt, scarf, curtain, pursue, etc are also made out of the *pat* silk by the weavers of Sualkuchi. Likewise from the *eri* silk different products like cushion cover, file cover, curtain, bed sheet, jacket, wall hanging, etc are made in addition to the traditional dress material. While, from the *muga* silk, products like pursue, shoe, sandal, umbrella, sari, etc are produced along with *mekhela*, *chadar* and *riha*. The *tasar* silk is used for weaving *mekhela* and *chadar* and is also used for blending with the *eri* and *muga* silk. These product diversifications as per some of the factory owners are made with the prime intention of capturing the national and international market as well as to attract the tourists.

The factory owners informed that the *pat* and *tasar* silk is brought in the form of yarn. The *tasar* yarn comes from Bihar, Jharkhand and West Bengal as the local production is insignificant. The *muga* and *eri* silk is brought in the form of cocoons which are locally reeled and spun into thread respectively with the help of machines. The *muga* cocoons come from Jorhat, Sibsagar, Lakhimpur, Boko, etc. While, the *eri* cocoons are brought from Boko, Palashbari, Vijaynagar, Karbi Anglong, etc. For

weaving, the weaving accessories like shuttle, bobbin, etc comes from outside, mainly Gujarat.

A silk testing laboratory is opened at Sualkuchi in 2015 to test the authenticity of the silk products of Sualkuchi so that quality could be maintained and no adulterated silk products could be sold in the market as the Sualkuchi silk. The laboratory technician<sup>454</sup> informed that it is the only silk testing laboratory of Assam in the private sector. The authenticity of the silk products is determined through microscopic cross section test and acid or chemical test. After testing an authenticity tag is provided to the product by the laboratory.

Further, process is going on to provide a trade mark 'Sualkuchi's' to the locally woven products of Sualkuchi by the *Sualkuchi Tant Shilpa Unnayan Samiti*. Permission for the trade mark has been granted by the Patent and Trade Mark Organisation, Government of India. It is expected that trade mark will be provided by the end of this year. Some of the registered factories also are authorised to use the Silk Mark and Geographical Indication (GI) Mark.

A *Muga* Village Grazing Reserve is there in Sualkuchi where in a small quantity *muga* silkworm is reared by the government and cocoons produced are sent to the farm at Khanapara for reeling. An employee of the farm told that local people are not interested in sericulture and hence they do not rear *muga* silkworm. No other farm or institute established by the government in the 20<sup>th</sup> century for the development of silk industry at Sualkuchi is in a running condition there. An institute

<sup>&</sup>lt;sup>454</sup> Information provided by Ankumoni Kalita (age 37), the laboratory technician of the Silk Testing Laboratory at Sualkuchi on 30.3.2017 during interview.

called the 'Sualkuchi Institute of Fashion Technology' is established in 2008 which provides certificate and diploma courses in weaving and designing.

On the basis of the documents of the government and case study, it has been found that the silk industry in Assam still has a long way to go for attaining a developed stage. The production of the *muga* and *eri* silk can be considered as satisfactory. In terms of *muga* silk, there is decline in Dhakuakhana, but correspondingly there has been a great increase in Boko. The *eri* silk is more or less produced in almost every district of Assam. But the *pat* and *tasar* silk production in the State is not satisfactory. The *pat* silk production has to be increased by extending its cultivation and at the same time its reeling technology has to be improved. While, more effort should be directed towards producing the *tasar* silk, as its rearing is a recent introduction and is confined only to the hill areas of Assam.

Further, in the field of weaving, power-loom and semi-automatic loom should be introduced along with continuing the fly-shuttle loom. This would greatly increase the production of the silk fabrics and would lower down the prices. Otherwise, the silk fabrics, particularly of the mulberry or *pat* variety will continue to face competition from the mulberry fabrics which enters the market in the State from different places of the country like Benaras, Bhagalpur, Ludhiana, Kanchipuram, Kashmir, etc.<sup>455</sup> Locally small industries also should be set up for producing the loom accessories.

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<sup>&</sup>lt;sup>455</sup> Prabin Baishya, 2005, op. cit. pp. 125-126