

C H A P T E R - I XC O N C L U S I O N

CHAPTER - IXC O N C L U S I O N

Total impact of sericulture and the main orchard crop on the economic development of Malda district and some tentative suggestions for development of sericulture and mango orchard of the district have been narrated in this concluding chapter.

Of the 5.76 lakh number of villages in India, sericulture is practised in more than 42,435 villages.

India has the unique distinction of being the only country in the world producing all the four commercially known varieties of silk, viz., 'mulberry', 'Tasar', 'Eri' and 'Muga'. India ranks third among the mulberry silk producing countries of the world (next to China and Japan) accounting for more than 8% of the total world production. While India is the second largest producer of 'Tasar' Silk (next to peoples' Republic of China) accounting for about 10% of the total Tosar silk output in the world. India has the world monopoly for the renowned golden yellow silk; 'Muga' produced mainly in the State of Assam. While the activities relating to mulberry cultivation and production of reeling Cocoons are agricultural in character, the reeling of raw and production of hand spun silk yarn are cottage based industries in rural and semi-urban centres places, employing hand and/or power driven appliances with skilled labour.

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Sericulture industry can be broadly classified into two district sectors 'mulberry' and non-mulberry. Each sector in turn is divided into three well-defined sections:-

- i) production of reeling Cocoons.
- ii) production of raw silk and
- iii) utilisation of bye-products, viz. pupae and silk waste.

Mulberry sericulture is practised mainly in the States of Karnataka, Andhra Pradesh, West Bengal, Tamil Nadu, Jammu and Kashmir, Assam and Uttar Pradesh, where tribal population is very thin.

The Non-mulberry sericulture comprising of 'Tasar' 'eri' and 'Muga' sectors is practised in the states of Bihar, Madhyapradesh, Orissa, West Bengal, Assam and North Eastern states where sizeable population of the silk worm rearers belongs to the tribals and other weaker sections of the society. With an agricultural base and industrial superstructure and essentially a labour intensive set-up, sericulture is an effective tool for generating gainful employment to the retarded sections of the community.

From the discussions in the foregoing chapters it can be said that the economic activity of Malda district centres round two important activities, viz. mango and sericulture.

A large portion of the total population of the district is engaged in sericulture and mango orchard. So, sericulture

and mango orchard can be termed as major labour intensive and employment generating sectors next to agriculture of Malda district. A good year of the mango production brings prosperity to a large section of the population of Malda. About 3 lakhs of people get employment during mango season at Malda.

At present there are about 34,250 rearers' family in this district spreadin over 394 villages. Presently, sericulture provides wholetime and part-time employment to about 1,60,000 persons in this district. Moreover, about 1,30,000 people are indirectly engaged in the ancillary trade of sericulture of Malda district (vide Chapter No.1). These sericulture and mango of Malda have got a vast background on the development of the district. During the ancient period the Malda district area was famous for silk. During Hindu period this area used to produce 'Dukul Khouma bastra' - the different categories of Silk clothes. Moreover, raw silk and silk clothes used to be exported to foreign countries from this area through the then ports 'Tamralipti' and 'Septagram'. During muslim regime sericulture was developed to a greater extent. At that time Kushida, Elachi Dams, Hamman, Chowthan, Muslins etc. were produced at Malda. These muslins would be exported to Mecca, Jidda, Pegu and Malacca. Even in 1680 East India Company established a business centre at old Malda and through that business centre they used to purchase huge silk clothes and raw silk from Malda and export them through the nearest port Hooghly. Afterwards East India Company established another factory at Mokhdumpur village of Malda district which is

at present the old Collectorate building of Malda district. From these two business East India Company used to buy huge raw silk and silk clothes for export.

During the reign of Nawab Alibardi Old Malda was a top place for dealing in raw silk, Cocoons, Clothes, mangoes and other agricultural crops. There was a special type of cloth available at Malda which was known as 'Maldiki Kapar'. That fine cloth was made of silk and cotton threads. 4000 hand-driven weaving machines were used at Malda in the weaving of silk clothes. Entire raw materials for this silk industry would be available from this district area. Many female workers of Malda would do the Embroidary works on cotton clothes on wage basis. They were mostly mullim women and were known as 'Butadar'. Silk clothes like 'Matka', 'Garad', etc. would be produced at Malda and sent to Murshidabad for colouring.

During the reigns of Nawabs of Murshidabad mangoes of Malda earned name and fame for its taste and flavour. The famous 'Fazli' mango of Malda district was named after some 'Fazlul bibi' of Nimai Sarai village of Malda district. Huge mangoes would be exported to Calcutta, Dacca, Rajshahi, Noakhali, Faridpur and other districts of East Bengal (Bangladesh) through river routes from Malda district (vide chapter No. II).

The 'Diara' area of Malda district is specially famous for sericulture and mango orchard. The 'Diara' area consists of Manikchak, Kaliachak and Englishbazar police stations. The soil

of this area is of light variety with a sandy appearance. Due to this favourable soil condition huge mulberry cultivation and silk worm rearing are seen throughout Kaliachak, Manikchak and Englishbazar police station areas of Malda district. Moreover, huge number of cheap skilled labourers are available in this area. So, 'Diara' wrea consisting of Kaliachak, Manikchak and Englishbazar is by far the best area for the production of mulberry trees and tending the silk worms in order to produce maximum Cocoons. Besides Englishbazar, Manikchak and Kaliachak Police Station. Other mango growing areas of Malda district are old Malda, Kharba, Harishchandrapur and Retua Police Station. Some mango orchards are also seen in Gazole, Habibpur and Bamongola Police Station areas. So, it can be said that mango is extensively grown over the whole district with the exception of some small areas of 'Barind' tract and some small areas of the 'Diara' strip along the Ganges. But Englishbazar is by far the best mango growing area of Malda district (vide chapter No. III).

Sericulture is a cottage industry with an agricultural base, industrial superstructure and an essentially labour intensive set up. Sericulture is an effective tool for generating gainful employment to the rural people especially to the retarded sectors of the community.

Plantation of mulberry and rearing of Cocoons are within agricultural sector. Reeling, weaving, twisting and winding of silk including colouring are within the industrial sector.

Problems are faced by the sericulturists from the beginning. That is mulberry plants do not fetch good yield unless and until these are properly nurtured and disinfected. These leaves of mulberry trees are the only food of silk worms on which the production of Cocoons on which the production of Cocoons depends to a large extent. Then problems may come at the time of rearing silk worms. For better Cocoons good variety of eggs or layings are required for rearing. Otherwise the silk worms will suffer from various diseases which may curtail the production of expected Cocoons. That is why it is always suggested to take disease free good variety layings from the Government nurseries which will yield maximum Cocoons of good quality. Quality silk is available from quality Cocoons. Moreover, at the time of hatching period, care should be taken about room temperature, moisture of the air etc. It is really a tedious job to rear the silk worms properly in a thatched room.

Just after the production of Cocoons the question of reeling comes. Generally it is done in hand-driven winding machines on cottage scale. But for huge production of silk thread, power-driven doubling, twisting and winding machines can be used. After reeling comes the question of weaving silk clothes. Weaving is also done by local weavers on a cottage scale. It can be done on a large scale by establishing mechanised weaving mills introducing power-driven looms for weaving wearables like silk-sarees, 'Garad', 'Matsa', Silk shirting etc.

Mango is a perishable orchard fruit. Annually mango trees yield huge mangoes which are consumed by the people both at the green and ripe stages as food. Through primary processing raw mangoes can be used for the preparation of 'chutney'. Ripe mangoes are used through processing for the preparation of Jelly, Jam Squash etc.

Mango plantation is a long-drawn process. Saplings are made ready after proper ~~xxxx~~ inarching or grafting for good quality mango. Then plantation is started to make a mango orchard. When the trees become matured flowers and mangoes grow accordingly. However, there are several pesticides of mangoes. Proper medicines must be applied during proper time to check the early mango drop and other diseases which hamper the production of mangoes (vide chapter No. IV)

Before independence Nawabganj, Sibganj, the two mango growing police station areas were within the Malda district. Moreover, Bholahat, the famous sericultural Police Station area was also in Malda district. Sibganj was famous for the production of silk clothes like 'Matka' and 'Gared'. Before independence most of the districts of East Bengal (Bangladesh) were the markets for Malda mango. Huge Cocoons used to be produced at Bholahat and Sibganj with other areas of 'Diara' region of Malda district

Before 1947 silk industry used to be financed by 'Marwaris' only. There was no organised reeling industry nurseries

and different sericultural co-operative societies in the district save and except a co-operative society for advancing loan to the sericultureist (vide Chapter No. II).

After independence although the district has lost five important police station areas viz. Nawabganj, Sibganj, Bholahat, Rohanpur and Nachol, yet the district has improved a lot in sericulture in a planned way. After independence ~~xxxx~~ although the district has lost a vast market of East Bengal for its mangoes, but it has been compensated by extending markets in Assam and Tripura for Jaldai Mango. Moreover, a remarkable improvement has been made by establishing mango-processing industry in this district which was absent before independence. The department of sericulture has made different plans for the overall improvement of sericulture. Moreover, different financial organisation including Commercial banks are extending SF and MF loans for sericulture (both for rearing Cocoons and reeling), and for mango processing industry. The sericulturists and mango traders are now getting more incentives for the improvement of sericulture and mango-processing in this district. For this reasons more people are getting employment in these two sectors (vide chapter No. III).

At present there is no problem of financing sericulture. The nature of financing sericulture is based on subsidy given by sericulture department and loan from nationalised banks. For schedule caste or scheduled tribe or small farmer or medium farmer 50% subsidy of the project cost is given by sericulture

department, Government of West Bengal. 50% as loan from nationalised bank, 25% is Entrepreneurs' own investment.

In case of financing mango orchard only own investment of the ~~maxx~~ owners is available. Here is the problem. No credit is available specially for nurturing mango orchard. However, credit is available from D.I.C. and W.B.F.C. and other commercial banks for mango processing industry only. Finance is available as term loans from different commercial processing under district credit plan. United Bank of India is the lead bank of the district in extending credits for different small scale industries and for all other economic activities of the district (vide chapter No. - V).

From the sample survey of different sericultural villages of Malda district it has been found that in maximum cases the relationship of the hired labourer with the sericulturists is good. In the same process it has been revealed that the relationship of the labourer of mango orchard with the owner is also good. Because the labourers get some extra mangoes over and above their daily wages. In case of mulberry plantation and rearing of Cocoons the hired labourers are treated just like the family members of the sericulturists (vide chapter No. VI).

The land area of this district which is just on the southern side of the river "Kalindri" is known as 'Diara'. 'Diara' area is the most fertile and populous area of the district. The 'Diara' area consists of the Manikchak, Kaliachak and Englishbazar

police station areas. Here mulberry is grown. Because the soil of this area is of light variety with a sandy appearance. For these reasons maximum number of sericulture villages are located in this area of Malda district.

Moreover, the soil condition of 'Diara' region is also favourable for the growth of mango orchards. For this reason, Englishbazar which is within 'Diara' tract is by far the best mango growing area of the district.

Other areas of the district are not so much famous for sericulture because of soil condition. Kharba, Ratua and Barishchandrapur are located within 'Tal' area of the district. The area of land situated just north side of Kalindri river is known as 'Tal'. Tal means the land which floods deeply as the rivers rise and drains meandering streams into swamps.

Moreover, old Malda, Gazole, Habibpur, and Bamon-gola Police Station areas are located within 'Barind' region. This day the area to the east of the Mahananda is called the 'Barind'. Its characteristic feature is relatively high land of the red clay of the old alluvium. This area is ~~six~~ suitable for the production of paddy only but not for sericulture or mango (vide chapter No. VII).

It is not troublesome in Englishbazar and Kaliachak police station area of Malda district to findout particular plots where mulberry, mango trees and cottages of rearing Cocoons

are existing side by side. Moreover, in Kaliachak Englishbazar and Manikchak, people can get work throughout the year either in mango orchard or in mulberry orchard including the rearing of silk-worms. Si, there is the linkage between sericulture and mango trade in Malda for which the people of Malda get more occupational benefits in comparison with the people of other agricultural district of West Bengal (vide chapter No. VII).

Infrastructural facilities for the growth of silk and mango processing industries in Malda are very favourable. Soil and climatic conditions are congenial for the growth of mulberry and mango orchards in this district.

The Government of West Bengal should be moved to set up a mango research unit at Malda with sufficient number of experts to advise mango growers and traders the right type of medicine and manure and the right time of its application. Also they may take up an orchard in every block of the district and they themselves may manure and spray the trees to show the result and thus encourage other growers. A large scale canning factory can be set up in Malda which may employ many unemployed persons.

Different industries may also be started from the Kernel and peels of mangoes at Malda. Because Kernel's give a valuable semisolid fats and the mango peels having intoxicating small may also be used in pharmaceutical drugs and medicine. More mango processing factories should be established in the growth centres of Malda district.

About 6.4% of the net cropped area of the district is under mango cultivation. The average area under mangoes in West Bengal to be 69,960 hectares forming about 61.2% of the total estimated area under all fruits. Malda itself accounts for about 25% of the total area under fruit and produces about 30% of the states production. Of course, there are several small and cottage industries on silk and mango in this district but there is an ample scope for the establishment of reeling and weaving mills of silk on a large scale in this district. Moreover, mango processing industries can also be started on a large scale in English Bazar, Manikchak, Kaliachak and Old Malda of Malda district generating further employment. There is an organised modern filature at Badhughat under Englishbazar Police Station of Malda district under the supervision and control of the Department of sericulture, Malda.

There is only one mechanised silk weaving mill in Malda under the supervision and control of the R.I.C. (A Government of India undertaking). But there is the ample prospect of establishing more silk reeling and weaving factories in this district. There is no crisis of raw silk and skilled labour. Only proper initiative is to be taken for the establishment of such industries which will develop the economic conditions of the people of Malda. Because these factories will produce such goods which have got vast market at home and abroad (vide chapter No. VI).

But unfortunately there is no special Directorate under the Department of agriculture in West Bengal for the proper supervision of mango orchard and mango production whereas there is a special Directorate for bananas under agricultural department in Andhra Pradesh in India.

There is no arrangement for organised marketing of mangoes at Malda. Steps should be taken to establish a modern wholesale market for mangoes at Malda.

We know that there are Tea Board and Coffee Board in India for the plantation of Tea and Coffee trees. But unfortunately still there is no such organisation in India to look after the plantation of mango orchard whereas mangoes can bring huge foreign exchange and can offer employment to huge number of people in India if proper attention is given to the mango production.

Sufficient arrangement should be made for the preparation of grafting of mango sapling for preparing new mango orchard in this district.

Of course, cutting of mango trees has been stopped to some extent due to the introduction of a new Government order. But proper supervision must be made in this regard. So, Government should be more active in conserving and extending mango orchard in Malda district. Different financial agencies should come forward to extend long-term credit for mango plantation in

Malda district which is almost absent at present in Malda.

There is a prospect of mango processing industry in Malda. Sufficient ripe mangoes are available. Production of mango products like prickles, Jam, Jelly has been started here on a very small scale. But these products are demanded in huge quantity by institutional consumers like hotels, hostels, defence, etc. Moreover, there is good export markets for these products.

So the existing resource availability and ~~great~~ potential demand for mango products should be harnessed by setting up a large unit to produce mango products. If such activity is initiated, the mango growers will get encouragement to produce more mangoes.

Further, the prospective unit will help the expansion of existing primary processing units and this will generate additional employment to the local people.

In view of all these potential factors, a mango processing unit with a capacity of processing 3 tonnes of mangoes per day of eight hours would be suitable to start with. Such a unit would need about Rs. 1,42,000 to invest in plant and machinery, Rs. 1,46,000 for land and Building and Rs. 4,00,000 as working capital. It can provide employment to 88 persons. Finance can be available from different financial institutions through D.I.C. for such mango processing unit. Moreover, there are good number of prospective entrepreneurs. This type of mango processing unit can be established in large number in English-

bazar, Old Malda, Manikchak, Ratusa and Kaliachak Police Station areas in Malda district.

Sericulture is the largest agro-industrial activity of the district discussed earlier in other chapters. The mulberry growers are usually the rearers of silk Cocoons, and the members of the rearers' family undertake the reeling of silk as their major occupation. So, in order to develop sericulture mulberry plantation should be developed in a planned way. People of 'diara' region should be attracted by the Department of sericulture, Malda for rearing more silk worms so that the volume of production of Cocoons can be increased. Annual Action Plans should be drawn by the Directorate of sericulture, Malda in such a way so that all the rearers' families can get all modern amenities and facilities for producing more Cocoons.

Moreover, arrangement for adequate facilities for reeling silk thread should be made by the Department of sericulture, Malda, so that the entire produced Cocoons of this district can be utilised for reeling within the district and this will generate more employment in Malda district.

In order to ensure the rate of growth of industrialisation, availability of adequate infrastructural facilities shall have to be generated. For mango processing, sericulture or any other industry infra-structural facilities are required.

The infra-structural facilities required for in-

dustrialisation are power, transport net work of railways and roads, communication facilities, like post office, telephone and telegraph, credit facilities, developed plots for setting up industries; assured markets etc. are also available in Malda district to a certain extent. The detailed discussion regarding infrastructural facilities available in Malda and growth centres has been made in the chapter No. VI.

The Government of West Bengal and the Central Government have also played very important role in developing sericulture and in extending mango orchard and the processing of its fruits in Malda.

At present sericulture department, Government of West Bengal, Malda is equipped with one organisation for rural works and 4 seed production farms for supplying eggs of high yielding variety to the rearers of Cocoons (vide chapter No. VIII).

There is one 100 Basin State Filature at Madhughat, Malda for producing high grade silk yarn by reeling high yielding Cocoons of exotic races. This filature is financed, managed and controlled by the Deputy Directorate of Sericulture, Government of West Bengal, Malda.

Moreover, the Department of sericulture, Government of West Bengal has set up 31 young silk worm rearing centres at Malda in different tracts to supply silk worms after rearing upto

2nd stage under the Intensive Sericulture Development Project Scheme.

The Government of West Bengal has made several schemes for the integrated development of Malda sericulture so that the work from the stage of worm rearing upto the stage of weaving of silk clothes can be done at Malda on large scale.

To improve the quality of silk yarn different training Centres have been established by the Department of Sericulture, Government of West Bengal, Malda.

The sericulture Department, Government of West Bengal, takes several plans and projects in every 5 years plan for the development of sericulture, throughout the State. But out of these remarkable plans and projects are chalked out specially for the development of sericulture of Malda.

Under Central Silk Board, there is a regional Development office at Maheshmati under Englishbazar Police Station, Malda. This office maintains a raw material Bank for the purchase of mulberry Cocoons under the Central Sericulture research Institute, Berhampur (Murshidabad district), West Bengal. Under the regional office of Malda, there are four research stations which may be stated as follows:-

1. Regional Sericulture Research Station Mothabari, Malda.
2. Research Extension-cum-Development Centre at Mothabari under Kaliachak Police Station (Malda).

3. Research Extension-cum-Development Centre, Sujapur
(Kaliachak Police Station), Malda.
4. Research Extension-cum-Development Centre, Chanchal
(Kharba Police Station).

The functions of the above stations are to impart training to sericulturists and maintain research works on mulberry cuttings and quality of silk worms and to extend co-operation for the development of Malda sericulture in collaboration with the Deputy Directorate of sericulture, Malda, Government of West Bengal (vide Chapter No. VIII).

Recently it is known from the statement of Sri A. B.A. Ghani Khan Chowdhury, Minister of planning implementation, Government of India, that the Central Government has sanctioned 14 crores of rupees for the development of sericultural industry of Malda district during 1986-87. This news was published in "Ananda Bazar Patrika" on 14th November, 1985.

From this news it is understood that the Central Government is also interested in developing sericultural industry in Malda district where there is sufficient infrastructural facilities for this particular industry.

But it is very regrettable that the Government of West Bengal has not yet taken any remarkable step in extending mango orchard or the market of mango trade. Only a small amount of loan is granted to those persons who take initiative to start

the manufacturing of pickles chutney, Jelly, Jam, etc. on cottage scale basis by the Government of West Bengal through District Industries Corporation.

Of course, as per instruction of the Central Government, recently at Manikchak and Ratus agricultural farms mango research works have been started under the supervision of Kalyani University and Cooch Behar agricultural College (vide chapter No. VIII).

Moreover, the agricultural marketing department, Government of West Bengal, Malda, is trying to reduce the wastage of Malda mango. (vide chapter No. VIII).

About 44.38 lakh persons are engaged in sericulture throughout India. Statewise employment position in sericulture industry has been shown in Table No. 9.1.

From the Table No. 9.1., it is clear that West Bengal has taken a remarkable place regarding the employment in sericulture industry in India. Out of total 2.24 lakh persons engaged in sericulture in West Bengal, about 1,60,000 persons are engaged in sericulture in Malda district only.

So, this district has got special features favourable for silk industry. For this reason such huge persons have got their jobs in sericulture of Malda.

In producing raw silk (Mulberry) Karnataka, Andhra

Pradesh, Tamil Nadu and West Bengal States are now top of the list of other provinces of India. Karnataka produces 3,200 tons, Andhra Pradesh 750 tons Tamil Nadu 500 tons and West Bengal 664 tons. (91)

As stated earlier, Malda contributes about 90% of the total silk production of the state. Almost the entire production of the district is despatched to other districts like Murshidabad, Birbhum and Bankura for weaving of silk wearables. About 30% of raw silk of best quality finds its market in Benaras, Bhagalpur and other silk weaving centres outside West Bengal. The only mechanised weaving centre of the district is run by the R.I.C. Ltd., (A Govt. of India undertaking). Sale of silk fabrics is being done through their own sales emporium established at Malda town.

So the silk industry of West Bengal has its roots in Malda. This industry with an export potential has ~~xxx~~ its ups and downs. And consequently, the people engaged in the industry are worst affected with the fluctuations of crop, market and similar factors. The present policy of allowing rebates and subsidy no doubt, serves as incentives to the industry. But certain other measures like introduction of compulsory scientific methods of pricing Cocoons, extensive training in improved methods of rearing and reeling, assured price to the

91. Silk in India, Statistical Biennial, 1984, published by Central Silk Board, Bangalore.

rearers and reelers for their produces, establishment of more mechanised weaving centres and such other effective steps should be undertaken as a package deal immediately to revitalise the industry in Malda district.

Table - 9.1.State-wise Employment in Sericulture Industry
(1982-83)

States	Lakh persons.
Andhra Pradesh	8.38
Arunachal Pradesh	0.02
Assam	2.70
Biher	1.30
Himachal Pradesh	0.25
Jammu and Kashmire	0.02
Karnataka	25.65 (25.65)
Madhya Pradesh	0.34
Maharashtra	0.08
Manipur	N.A.
Meghalaya	0.17
Nagaland	0.08
Orissa	0.22
Punjab	0.08
Tamil Nadu	2.75
Tripura	N.A.
Uttar Pradesh	0.10
West Bengal	2.24
Total:	<u>44.38</u>

Source: Silk in India; statistical Biennial, 1984,
published by Central Silk Board, Bangalore.