



**GOVERNMENT OF INDIA
TARIFF COMMISSION**

**REPORT ON THE
CONTINUANCE OF PROTECTION
TO THE SERICULTURE INDUSTRY**



BOMBAY, 1958

PRINTED IN INDIA, BY THE MANAGER, GOVT. OF INDIA PRESS,
NASIK ROAD, PUBLISHED BY THE MANAGER OF PUBLICATIONS, DELHI
1959

Price : Rs. 4·00 or 6sh. 6d.

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PANEL FOR THE INQUIRY

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GOVERNMENT OF INDIA
MINISTRY OF COMMERCE & INDUSTRY
RESOLUTION

Tariffs

New Delhi, the 18th November 1958.

No. 36(3)-T.R./56.—The Tariff Commission has submitted its Report on the continuance of protection to the Sericulture Industry on the basis of an inquiry undertaken by it under sections 11(e) and 13 of the Tariff Commission Act, 1951. Its recommendations are as follows :—

- (1) Protection to the sericulture industry should be continued for a further period of five years, *i.e.*, up to 31st December, 1963, and that the existing rates of protective duty on tariff items Nos. 46, 46(1), 47(a), 47(b), 47(c), 47(1), 48(a), 48(b) and 48(c) should be maintained.
- (2) The present concession of duty-free imports of silk worm seed should be continued.
- (3) All sericultural States should give high priority to the setting up of necessary organisation for production and distribution of disease free layings through Government and aided grainages to meet the full requirements of silk worm seeds in their areas.
- (4) The Central Silk Board should give the highest priority to its scheme for the organisation for silk worm seed production and take appropriate steps for establishing the Central Foreign Race Seed Station as early as possible. The Board should also see that the State Governments establish matching organisations in their respective areas for the evolution of suitable cross-breed races and take appropriate steps for their rearing on a commercial scale.
- (5) The suggestions of the Japanese Experts, Dr. Y. Tazima and Mr. S. Karasawa, with regard to rearing of silk worms with a view to producing cocoons of better quality should be carefully considered by the Central Silk Board and the State Governments concerned and implemented as far as possible, having regard to the local conditions of each sericultural region.
- (6) The State Governments should take positive steps to encourage formation of rearers' co-operative societies for chowki rearing and for marketing of cocoons.
- (7) So long as the present installed capacity of silk filatures in the States of Mysore and Jammu and Kashmir is not fully utilised, no new capacity should be licensed in those areas.

- (8) The Governments of Mysore and Jammu and Kashmir should consider the feasibility of enforcing compulsory testing of filature silk produced in their States and take appropriate steps for the purpose as early as possible.
- (9) Government and the Central Silk Board should give the highest priority for the establishment of the research stations at the five centres proposed by the Board and take necessary steps to enable them to start work as early as possible.
- (10) The Central Silk Board should take positive measures to accelerate the pace of development of Tassar Silk industry and render such financial and technical assistance as is necessary for this purpose.
- (11) Filature units should immediately introduce the system of grading of cocoons and produce raw silk of different grades. When new hybrid races are being produced, it is essential to standardise the cocoons by restricting industrial rearing to one or two races during one season so that silk of uniform quality can be produced. Unless these preparatory processes are brought up to a high standard of efficiency along with the modernisation of reeling equipment, our efforts for the improvement of quality of raw silk may not achieve the anticipated measure of success.

2. Government accept recommendations (1) and (2) and the necessary legislation in regard to recommendation (1) will be undertaken in due course.

3. Government have taken note of recommendations (3) to (11) and steps will be taken to secure their implementation, to the extent possible.

ORDER

ORDERED that a copy of the Resolution be communicated to all concerned and that it be published in the *Gazette of India*.

(S. RANGANATHAN)

Secretary to the Government of India.

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REPORT ON THE CONTINUANCE OF PROTECTION TO THE SERICULTURE INDUSTRY

1.1. The sericulture industry was first granted protection in 1934 on the recommendation of the Tariff Board. Subsequently four **Previous tariff inquiries.** tariff inquiries were undertaken by the Tariff Board/Commission during the the years 1938, 1948, 1951 and 1953. The history of tariff protection to the industry up to 31st December, 1953 is given in paragraph 1 of the Commission's Report (1953). The Commission undertook the last inquiry into the question of continuance of protection to the industry early in 1953 and submitted its Report to Government on 4th July, 1953 recommending continuance of protection to the industry for a further term of five years, namely, till 31st December, 1958. The Commission also recommended reduction in the rates of protective duty from the then existing levels to 30 per cent. *ad valorem* (exclusive of surcharge) on tariff items Nos. 46 [raw silk and silk cocoons], 47(a) [silk yarn including thrown silk warps] 47 (b) [yarn spun from silk waste] and 48 [silk fabrics].

1.2. By Resolution (Tariffs), No. 36 (4)-T. B./53 dated 31st December, 1953 Government of India accepted the recommendation that protection granted to the industry should be extended for a further period of five years from 1st January, 1954. As regards rates of duty, Government observed that while they fully appreciated the desirability of reducing the price of raw silk, they doubted if costs could be reduced quickly by adopting improved methods of production in a cottage-cum-small scale industry like sericulture. Further owing to consumers' preference for imported raw silk and other factors, the market price of imported raw silk was much higher than its landed cost. A reduction in import duty was unlikely in those circumstances to be passed on to consumers. Government, therefore, decided that the rates of protective duty should not be reduced. It was added that the position would be kept under close and careful watch and suitable action taken if and when necessary. The rates of protective duty on I.C.T. items 46, 46 (1), 47, 47 (1) and 48 were continued by Notification No. 36 (4)-T-B./53 dated 31st December, 1953 of the Ministry of Commerce and Industry. The period of protection was extended up to 31st December, 1958, by the Indian Tariff (Amendment) Act, 1954. The rates of duty were modified with effect from 16th May, 1957 by the Finance (No. 2) Act, 1957. The current rates of protective duty are given in paragraph 13.

2. The present inquiry was undertaken under Section 11(e) read with Section 13 of the Tariff Commission Act, 1951 under which we **Present inquiry** are authorised to inquire into and report on any further action required in relation to the protection granted to an industry with a view to its increase, decrease, modification or abolition according to the circumstances of the case.

3.1. Questionnaires were issued on 4th February, 1958 to producers of silkworm eggs, silkworm rearers, reeling establishments including filatures, domestic basin units and charkha reelers. On the same day questionnaires were issued to importers and consumers

Method of inquiry (producers of silk fabrics including handlooms). Questionnaires were also forwarded to various Associations of producers, importers/trade and consumers. Letters were sent to all State Governments requesting detailed information on the present position of the sericulture industry in their States and the progress made since the last inquiry. The Central Silk Board was requested to furnish a comprehensive memorandum on various aspects of the industry. Collectors of Customs were requested to furnish information regarding C.I.F. prices of latest consignments of raw silk, silk yarns and silk fabrics imported through their ports. The Indian Standards Institution, Delhi, the Silk and Art Silk Mills' Research Association, Bombay, the Khadi and Village Industries Commission, Bombay, the Central Sericultural Research Station, Berhampore, the State Trading Corporation of India (Private) Ltd., New Delhi and Silk Marketing Co-operative Societies at Kanpur, Bombay and Bangalore were addressed for information on specific points relating to the industry. A press note was issued on 11th February, 1958 inviting interested parties to obtain copies of the relevant questionnaires and send their replies. A list of firms/bodies/associations to whom questionnaires or letters were issued and those who replied is given in Appendix I.

3.2. Shri R. S. Bhatt, Member, visited the sericultural centres at Malda in West Bengal and Chaibasa in Bihar in April, 1958. Dr. S. K. Muranjan, Shri J. N. Dutta and Shri R. S. Bhatt, Members visited sericultural centres in Jammu and Kashmir State in May 1958. Shri J. N. Dutta and Shri R. S. Bhatt also visited Punjab Government Sericultural Mulberry Farm at Amritsar on 2nd June, 1958. Shri C. Ramasubban, Chairman visited a few sericultural centres in Mysore State on 24th and 25th June, 1958. He also received a deputation of the representatives of the various Associations at Bangalore. Shri R. S. Bhatt, Member visited Mysore State from 5th July to 7th July, 1958.

3.3. Shri U. R. Padmanabhan, Cost Accounts Officer of the Commission visited a few sericultural units in Mysore and West Bengal and examined the costs of production of mulberry leaves, cocoons, raw silk, spun silk yarn and silk fabrics. A list of mulberry gardens, silkworm rearing units, filature units, silk yarn and fabric manufacturing units visited by him for this purpose is given in Appendix II.

3.4. A public inquiry was held in the Commission's Office in Bombay on 22nd and 23rd July, 1958. A list of persons who attended the public inquiry is given in Appendix III. The representative of the Government of Jammu and Kashmir who was unable to attend the public inquiry, met the Commission on 5th August, 1958.

4. Since the first tariff inquiry the scheme of protection to the sericulture industry has been based on the cost of production of mulberry raw silk for the reason that any measure

Scope of the inquiry of protection granted to the mulberry silk industry would adequately protect the non-mulberry section of the industry also. The developmental requirements of the non-mulberry silk industry however have been kept in view in the formulation of our recommendations. The scope of the inquiry embraces (i) raw silk and silk cocoons, (ii) silk waste and noils, (iii) silk yarn including thrown silk warps and yarn spun from silk waste or noils, (iv) silk sewing thread and (v) fabrics not otherwise specified containing more than 90 per cent. of silk including such fabrics embroidered with artificial silk covered respectively by I.C.T. items Nos. 46, 46 (1), 47, 47(1) and 48. For the purpose of protective tariffs the term silk includes both mulberry silk and non-mulberry silk such as Tassar, Eri and Muga.

5. In its last Report (1953) the Commission made certain recommendations in addition to the continuance of tariff protection for the development of sericulture industry. In the Resolution dated 31st December, 1953 Government stated that necessary steps would be taken to implement them as far as possible. The ancillary recommendations and the extent to which they have been implemented are indicated below :

Implementation of the Commission's recommendations on matters other than tariffs in its last Report (1953).

5.1. Recommendation 1.

"Quantitative basis should be adopted for import licensing of raw silk and imports of foreign silk should be rigidly regulated so as to allow only as much import as would be required to fill the gap between the country's requirements and the indigenous production. The issue of licences should be so administered as to ensure an even flow of imports into the country. To facilitate regulation of imports on the above lines, the Central Silk Board should collect each month from the various States, figures of production of raw silk and forward such information to the Ministry of Commerce and Industry and the Import Control Authorities."

Implementation.

We are informed that the Central Silk Board has been furnishing first to the late Ministry of Production and subsequently to the Ministry of Commerce and Industry and the Chief Controller of Imports monthly figures of production of raw silk in various States. From 1st January, 1955 to 30th June, 1956 imports of raw silk were canalised through and distributed by the Central Silk Board. From the licensing period July-December, 1956 imports are arranged through the State Trading Corporation of India (Private) Ltd., but distribution of imported raw silk continues to be handled by the Central Silk Board.

5.2. Recommendation 2.

"The present export control policy, which restricts export of silk waste to the surplus available after meeting the requirements of the spun silk industry should be continued."

Implementation.

This is dealt with under recommendation No. 7 in paragraph 5.6.

5.3. Recommendation 3.

"State Governments should enact at an early date the necessary legislation for the establishment of cocoon markets and for regulating the prices of cocoons. The ceiling and floor prices of cocoons should be fixed at Rs. 1-6-0 and Rs. 1-4-0 per lb. respectively."

Implementation.

We are informed that the Central Silk Board addressed all State Governments concerned in February, 1954 on the question of establishment of cocoon markets and for regulating prices of cocoons in their areas. The Government of Mysore State have enacted the Mysore Silk Worm Seed (Control of Distribution) Act in 1952. This act provides for regulating by licences the production and rearing of silk worm seeds, sale and purchase of silk worms cocoons etc. It also enables the State Government to notify cocoon markets in the State, grade silk worm cocoons in those markets, fix prices for the various grades of cocoons and generally regulate the sale and purchase of cocoons. Though the Mysore Government has applied in August 1954 the provisions of this legislation to Mysore Seed Cocoon producing areas mainly for the purpose of distribution of examined seed, they have not yet brought into force the provisions relating to notified cocoon markets and regulation of prices of cocoons. The State Government claim that the enforcement of the Act has enabled them to practically eradicate pebrine from that area and produce better quality of cocoons. They have made arrangements to extend the Act to the Kolar area from 1st October, 1958 and to the entire State by the end of 1960-61. Along with extension of the Act, the State Government propose to open cocoon markets and to fix the prices of cocoons. They have, however, expressed the view that without the introduction of legislation on the lines of the Mysore Act all over India, complete success cannot be achieved as prices of cocoons are determined by prices of raw silk. In West Bengal, there is at present only a voluntary cocoon market at Malda. The price of cocoons is determined on an estimate of yield by a visual and factual inspection. As there is a risk of error in the estimation of yield by the above method, the prices need not generally go with quality. The West Bengal Government have, therefore, under consideration certain measures for stabilisation of raw silk market. The measures include (a) enactment of legislation for establishment of independent warehouses for storing standardised raw silk and for their proper supervision and control and (b) introduction of a system of control over seed production and the

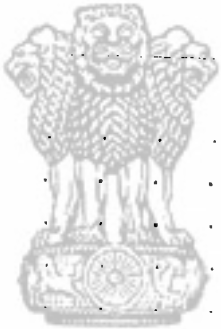
licensing of purchase and sale of cocoons of tested quality at controlled prices. In Jammu and Kashmir the State Government purchase the entire quantity of cocoons at fixed prices from rearers to whom seeds are supplied free. We deal with this matter in paragraph 7.5.

5.4. Recommendation 4.

"The Government of India should increase their grants to the Central Silk Board so as to enable the Board to extend increased financial assistance to the Central Sericulture Research Station, Berhampore, and to the Research Institute in Mysore."

Implementation.

The Government of India have placed adequate funds at the disposal of the Central Silk Board as indicated by the following table:—



| | Grants Rs. | Loans Rs. |
|-------------------|---------------|--------------|
| 1949-50 | 6 lakhs | .. |
| 1950-51 | 2 " | .. |
| 1951-52 | 2 " | .. |
| 1952-53 | 4.5 " | .. |
| 1953-54 | 16 " | .. |
| 1954-55 | 30 " | 38 lakhs |
| 1955-56 | 35 " | 15 " |
| 1956-57 | 32.2 " | 27 " |
| 1957-58 | 47.6 " | 33.4 " |

For the period of the Second Five Year Plan, an amount of Rs. 5 crores has been provided for development of the sericulture industry. So far as the Central Sericultural Research Station, Berhampore is concerned, its activities are being extended. Up to June 1957 the Deputy Director of Sericulture of the Government of West Bengal was in additional charge of the Station. Since then, a full-time Director of Research has been appointed. The progress of work already done at the Station and its expansion scheme were reviewed by a special committee headed by the Chairman of the Central Silk Board in 1957. On its recommendation funds have been allotted for expansion of the Station during the Second Five Year Plan period. The Central Silk Board has given adequate financial assistance to the Research Institute at Channapatna.

5.5. Recommendations 5 and 6.

“The Governments of various silk producing States should encourage research activities in their States by increased financial assistance.”

“Research, particularly in respect of mulberry cultivation and breed of silk worms, is of vital importance to the development of the Sericulture Industry. The Central Silk Board should, therefore, go ahead with its proposed scheme of setting up regional research stations with emphasis on the above two aspects and implement it as early as possible. For co-ordinating research activities of these regional stations a Central Research Station should also be established at a convenient place.”

Implementation.

In order to move the State Governments concerned to allot increased funds for research the Central Silk Board has been meeting 50 per cent. of the expenditure on schemes submitted by State Governments for establishment and development of research stations in their States. An expert committee of the Board had recommended the setting up of regional research stations in Mysore, Madras, West Bengal and Assam. The grants sanctioned by the Board to the various States on this account were as follows:

| | 1952-53 to 1955-56 | 1956-57 | 1957-58 |
|---------------------------|--------------------------|----------|----------|
| | Rs. | Rs. | Rs. |
| Mysore | 7,34,790 | 1,77,100 | 15,000 |
| West Bengal | 46,875 | .. | .. |
| Madras | 1,45,000 | .. | .. |
| Jammu & Kashmir | .. | 2,34,070 | .. |
| Assam | 73,000 | 37,515 | 86,772 |
| Bihar | .. | .. | 48,000 |
| Orissa | .. | .. | 7,954 |
| | 9,90,665 | 4,48,685 | 1,56,826 |

We are informed that owing to procedural delays in obtaining matching grants from the State Governments and the time taken in construction of buildings, the States could not utilise the grants fully in the initial years. But the rate of utilisation has increased year by year. The nucleus Research Station at Channapatna is being expanded into a full-fledged Regional Research Station. A Regional Research Station at Titabar (Assam) was opened in 1955 for carrying on research work particularly on Eri and Muga silk. The Government of West Bengal utilise such results of research carried out at the

Central Sericultural Research Station, Berhampore, as are of commercial value. Research in sciences basic to sericulture is also done at the Calcutta University Science College. In addition to the expansion of the Central Sericultural Research Station, Berhampore which will co-ordinate the activities of the regional research stations, the Central Silk Board has taken steps to start an All India Sericultural Training Institute in Mysore at a cost of Rs. 9.56 lakhs and a Central Foreign Race Seed Station in Kashmir at a cost of Rs. 7.84 lakhs.

5.6. Recommendation 7.

“To enable the spun silk industry to obtain its raw material at economic price, the Central Silk Board should examine the question of fixation of a reasonable price for silk waste throughout India in consultation with the various State Governments concerned.”

Implementation.

We are informed that the question was examined in December 1953 in all its bearings by the Technical Committee of the Central Silk Board and the conclusion reached was that the best way of stabilising internal prices of silk waste at a reasonable level would be by regulating the export of surplus waste. For this purpose the Committee recommended that the six months' requirements of Mysore Spun Silk Mills Ltd., should be assessed every six months and whatever surplus is available after meeting those requirements and also after keeping in reserve a further quantity equal to three months' requirements of the mills should be allowed to be exported. We understand that this recommendation has been accepted and that export of silk waste is allowed in accordance with the above formula.

5.7. Recommendation 8. *सत्यमेव जयते*

“To enable the Commission to take timely action to suitably modify the scheme of protection if and when the c.i.f. prices fall appreciably below or rise above the figures adopted in this report, the Central Silk Board should collect monthly statistics of c.i.f. prices as well as the export quotations relating to raw silk in Japan and furnish them regularly to the Commission”.

Implementation.

The Central Silk Board is regularly furnishing to the Commission monthly statistics of c.i.f. prices as well as export quotations relating to raw silk in Japan.

5.8. Recommendation 9.

“The Central Silk Board should appoint a Committee of its own, composed of experts to go into the question of (i) suitability of the existing as well as proposed areas for mulberry cultivation (including trees), (ii) improvement in the quality and yield of

mulberry leaves and (iii) improvement in the renditta. Any extension of the existing areas or introduction of sericulture in new areas should be undertaken on the advice of the Committee”.

Implementation.

The Technical Development Committee of the Central Silk Board considered this recommendation in February 1954. In view of the fact that this Committee consists of experts in sericulture industry, it was thought that a separate committee was not necessary. The Central Silk Board is guided by its Technical Development Committee on all matters relating to the extension of the existing areas or introduction of sericulture in new areas.

5.9. Recommendation 10.

“The Central Silk Board should initiate a scheme at an early date for improving the quality of the indigenous charkha silk by the use of improved types of charkha basins. So far as filature is concerned, the quality should be improved as in Japan by the adoption of latest improved types of reeling filature machinery.”

Implementation.

The Central Silk Board has been assisting the State Governments in improving the method of reeling by (a) substituting domestic basins or other improved appliances in place of existing crude charkhas and (b) modernising the filature machinery. The Government of Mysore have informed us that out of about 5,000 charkhas in that State, substitution by improved domestic basins has been effected to the extent of 1,300. Their target for replacement is about 1,000 per year. There are about 1,300 filature basins under Government control and management out of which 750 are working. These filatures are being modernised by the installation of new machinery for reeling and by instituting central cooking system and other minor improvements. We understand that 168 improved filatures manufactured in Mysore have so far been installed and that the target for modernisation is 250 per year. In West Bengal there are 1,610 charkha reeling units (with 4,267 basins) and 53 improved charkha units (with 603 basins). Steps have also been taken to introduce improved silk reeling machines. According to the State Government 30 improved reels have been manufactured already and they hope to manufacture 50 more this year against a target of 650 a year. The State Government propose to establish a filature unit with 100 basins at Malda. They have provided in the Second Plan Period for an increase of 950 basin (300 in filature and 650 of improved type). As regards Jammu and Kashmir, there are 738 filature basins (436—Italian and 302 Local) in the two Government factories, one at Jammu and the other at Srinagar. As the reeling plants are very old, the State Government have made plans to replace them by modern filatures. Government have made a provision in the Second Five Year Plan for installation of multi-end Japanese type machinery. Four 20-end Japanese type reeling basins are at present working in Jammu.

5.10. *Recommendation 11.*

"The Central Silk Board should take early action to ensure that the draft standards for raw silk are finalised and strictly adhered to by the producers of raw silk. As regards silk cocoons, silk yarn and silk fabrics, the Silk Board should lay down the order of priorities and have standards formulated by the Indian Standards Institution accordingly."

Implementation.

The Indian Standards Institution has published 21 standards on grading and classification of raw silk. The Textile Division Council of the Indian Standards Institution had decided in March 1957 that it was not advisable to take up the work of formulation of standards for silk fabrics, in which an element of fashion plays important part. The Institution has stated that no proposal has been received for silk cocoons. We understand that it has not been possible for the industry to adopt the standards as the bulk of production of raw silk continues to be on charkha. The Central Silk Board is of the view that until production techniques are standardised and the denier-age of silk is brought into a uniform procedure, it would not be possible to enforce the standards.

5.11. *Recommendation 12.*

"The Industry should take all possible steps to improve the quality of the indigenous silk and also to reduce its price."

Implementation.

We are informed by the Central Silk Board that the sericulture industry is taking steps for improvement of the quality of indigenous silk and also for reduction of its cost by introduction of improved mulberry grafts, by rearing of examined silk worm seed prepared by the Government and aided grainages and by introduction of improved appliances in reeling.

6.1. Since the last inquiry there have been two significant developments of vital importance to the sericulture industry. First, the Central Silk Board prepared a plan for the development of sericulture industry in India, for implementation during the period of the Second Five Year Plan. This plan was examined by the Village and Small Scale Industries (Second Five Year Plan) Committee which recommended an allocation of a sum of Rs. 6 crores for the purpose. The Planning Commission has agreed to provide a sum of Rs. 5 crores for the growth and expansion of the sericulture industry during the Second Plan period. Of this amount, a sum of Rs. 4 crores is to be spent on implementation of schemes to improve methods employed in mulberry cultivation, seed production, silkworm rearing and reeling of raw silk besides initiating schemes on sericulture research and training through the agency of the States. The balance amount of Rs. 1 crore is to be spent by the Board on its administration and

Our approach to the scheme of protection.

other important schemes to be executed directly by it. The Board has been giving substantial financial assistance in the form of grants-in-aid and loans to various sericultural States since 1953-54. The volume of grants and loans has been substantially increased from 1956-57, the amounts being Rs. 59·24 lakhs in 1956-57 and Rs. 80·97 lakhs in 1957-58. Secondly, the Board has now expanded its activities over a wide range, embracing all operations connected with the sericulture industry. In addition to giving financial assistance, it has been sponsoring various schemes that are calculated directly or indirectly to promote the expansion and improvement of this ancient industry. We may briefly mention some of the important activities of the Board :

- (i) It imported about 55,000 mulberry saplings of improved varieties from Japan and distributed them among the various sericultural States.
- (ii) It deputed 17 technical officers of the States to Japan and China for higher training in sericulture and secured the services of three experts from Japan to advise the States on the development of Sericulture in the country.
- (iii) It attends to the distribution of imported raw silk with a view to maintaining stability in the price of raw silk in the country.
- (iv) It advises Government about the policy to be followed from time to time regarding export of silk waste.
- (v) It has initiated action on the establishment of two service institutions: (a) All India Sericultural Training Institute in Mysore and (b) Central Foreign Race Seed Station in Kashmir, both of which will be administered directly by the Central Silk Board. सत्यमेव जयते

6.2. The history of the growth of Sericulture in various States, particularly Mysore, and Jammu and Kashmir has shown that it has developed under direct encouragement and assistance of State Governments. Looking to the experience of other silk producing countries like Japan it has become evident that Government encouragement and assistance in the form of financial aid and scientific research are essential for the development of this industry. In the past, rapid progress was not possible of achievement owing to inadequacy of financial resources and lack of research facilities. Now there is a central co-ordinating agency, namely, the Central Silk Board which has on its Technical Development Committee experts in sericulture to tender advice and guidance; financial assistance is given in a progressively increasing measure; and research facilities and technical knowledge and experience of other silk producing countries are being made available to all States in which sericulture is practised. What is now needed is a simultaneous effort to carry the fruits of research and improved methods of mulberry cultivation, seed production, silkworm rearing and reeling together with the necessary equipment to the mulberry farmers, silkworm rearers and reeling centres. We are

convinced that if the State Governments put forth through their Extension Services efforts commensurate with the considerable financial outlay under the plan and various schemes now in progress, it would be possible to achieve results that would be of permanent benefit to the sericulture industry in the country.

6.3. The main objectives of our scheme of protection and the Plan submitted by the Central Silk Board to be executed during the Second Plan period are identical. They are (a) to increase the volume of production of raw silk in the country, (b) to improve the quality of indigenous silk and (c) to reduce its cost of production. In the context of the developments mentioned above and in view of the identity of objectives our approach is first to review the scheme of protection and secondly to watch the progress of important schemes that have been or are to be initiated for bringing about improvements in the various sections of the industry and to assess how far they are likely to fulfil the objectives of increased output and improvement in the quality of Indian raw silk during the Plan period.

7.1. Sericulture is at present carried on in sixteen States but only in four, namely, Mysore, West Bengal, Jammu and Kashmir and Assam it forms a major occupation of a section of their population. Among them **Present position and progress of the industry.** Mysore State alone produces about 60 per cent. of the total output of raw silk in the country. In Mysore, West Bengal, Jammu and Kashmir, Madras, Punjab and Himachal Pradesh, production of silk is mainly of mulberry type while in the States of Assam, Bihar, Manipur, Madhya Pradesh and Orissa sericulture is largely of non-mulberry type. In Kerala, Tripura and Bombay sericulture has been introduced only recently.

7.2. Since the last inquiry, the sericulture industry has achieved a measure of progress. The total production of raw silk increased from 24.88 lakh lbs. in 1953 to 31.38 lakh lbs. in 1957, indicating a rise of about 26 per cent. Of this the production of mulberry silk rose from 19.68 lakh lbs. in 1953 to 24.76 lakh lbs. in 1957, constituting about 79 per cent. of the total production. This was brought about by an increase in acreage under mulberry cultivation, larger distribution of disease free layings and improved methods of rearing. While the output of cocoons has increased the renditta does not show much improvement. As a result, little progress has been achieved in improving the quality of raw silk. While some States have taken steps to introduce improved domestic basins in place of traditional charkha, the bulk of raw silk is still reeled on the old type of charkha. The output of filature raw silk increased in absolute terms from 2.85 lakh lbs. in 1953 to 2.96 lakh lbs. in 1957; but the ratio of filature silk to the total mulberry raw silk dropped to 12 per cent. in 1957 from 14 per cent. in 1953. Prices of indigenous filature silk have, except for a brief period in 1956, ruled above the estimated fair ex-works prices of this variety of silk at the time of the last inquiry.

7.3. In the sericulture industry there are five different stages in the production of silk, namely, (i) cultivation of mulberry, (ii) rearing of silk worms (including seed and cocoon production), (iii) reeling of raw silk from cocoons, (iv) production of raw silk, silk twisting and spun silk yarn and (v) silk weaving. We propose to review briefly the progress achieved since the last inquiry under these heads.

7.4. *Mulberry cultivation.*

7.4.1. *Mysore.*—In Mysore State, the area under mulberry cultivation which was 1·10 lakh acres in 1951-52 increased to 1·55 lakh acres in 1956-57 including 25,000 acres in Kollegal area, transferred from the former Madras State to Mysore under the States Reorganisation Act from 1st November, 1956. The entire increase in acreage has taken place in the rain-fed area, the irrigated area remaining unchanged at 19,000 acres. While the rain-fed area under mulberry cultivation increased, the yield of mulberry leaves per acre declined from 4,000 lbs. in 1952-53 to 3,400 lbs. in 1956-57 with consequent rise in the cost of production due to uneven distribution of rainfall and drought conditions during the past three years. In the deep well irrigated areas also there was a slight rise in the cost of leaves due to high cost of manure. With regard to replantation of the old Mysore mulberry the sericulturists replant their gardens once in 10 or 11 years. The Department has made arrangements to supply for plantation seedlings of local mulberry which yield more than ordinary bush mulberry. We understand that improved mulberry grafts suitable for irrigated areas have been produced at the State graft nursery at Kanwa by introducing foreign scions on the local stock which have shown remarkable improvement in the yield as well as in the quality of leaves. Improved mulberry has reflected satisfactorily on the development of silkworms and increased yield of silk. The nursery at Kanwa produces mulberry grafts on a large scale and distributes it to sericulturists to replace the existing old mulberry gardens. It has produced nearly four lakhs grafts during the last three years, and has replaced nearly 200 acres of local mulberry. The yield has gone up from 14,000 lbs. to 21,000 lbs. per acre in Government institutions indicating a rise of 50 per cent. It is estimated that with sericulturists the improvement may be taken at 40 per cent. The average cost of production of mulberry leaf on irrigated lands in State farms is about 6 nP. per lb. now; allowing 10 per cent. for extra cost on cultivation it is claimed that there will be an overall improvement of about 30 per cent. This would reduce the cost of production of leaf by about 2 nP. per lb. We understand the work of determining suitable grafts for rain-fed areas which form about 85 per cent. of acreage under mulberry cultivation in Mysore is progressing.

7.4.2. *West Bengal.*—In West Bengal mulberry is mainly of bush type though the Department of Sericulture encourages planting of trees. The area under mulberry cultivation increased from 11,850 acres in 1953 to 14,000 acres in 1957 which is wholly rain-fed the irrigated area being negligible. In the alluvial soil of West Bengal the yield of mulberry leaves per acre is as high as 10,000 lbs. In recent

times there has been no replantation of old gardens but plantation of trees is proceeding. The Department of Sericulture supplies mulberry saplings from its nurseries and schemes for increasing the production and supply of graft saplings of better varieties including Japanese have been taken up under the Second Five Year Plan.

7.4.3. *Jammu & Kashmir*.—The entire mulberry plantation in Jammu and Kashmir is of tree type. The number of trees have increased from 17·50 lakhs in 1952 to about 22 lakhs in 1956-57, which is an estimated figure since no census of trees has been taken in recent years. Mulberry is a reserved tree and belongs to Government. There are stringent rules for cutting mulberry leaves except for the rearing of silk worms. Every rearer is entitled to get his leaves free whether from State or private trees provided they are not required for a similar purpose by the owner. Mulberry trees grow all over the State and are scattered in cultivable fields, village commons, pathways, hill-slopes and on canal banks. The trees are not in uniform bearing condition and so it is not possible to ascertain the yield of leaf per tree or per acre. The annual plantations made by the Sericulture Department of Jammu & Kashmir serve two purposes:

- (a) to replenish those that get lost due to age, damage, etc. and
- (b) to augment leaf supply of the best possible grafted varieties of imported as well as indigenous mulberries. The Department distributes all plants among peasants free of cost for plantation and in the past five years over 15·50 lakhs tall plants have been distributed. We are informed that the leaf yielding capacity of the existing plantation can be increased considerably provided the peasantry pays more intelligent attention to the trees and a planned programme of rejuvenation and rational pruning of trees can be undertaken with their co-operation.

7.4.4. As regards the other areas where mulberry silk is produced, mention may be made of Punjab, where mulberry is only of tree type and scattered all over the State. There were about 1·50 lakh trees in 1957 and it is estimated that a well-matured tree yields about 60 lbs. of mulberry leaves. In other areas the acreage under mulberry cultivation is comparatively small.

7.4.5. As the cost of leaf accounts for about 60 per cent. of the cost of cocoons efforts have been directed to reduce it by improving the yield and quality of mulberry leaf through the introduction of improved grafts in place of existing mulberry. The Central Silk Board imported about 35,000 mulberry saplings from Japan in 1956-57 and distributed them among several States to serve as nucleus stock of nursery for grafting with local varieties of mulberry. In addition, the Board has sanctioned during the period 1953-54 to 1957-58 a sum of Rs. 6·18 lakhs on schemes for establishment of 22 model nurseries in various States. We, however, understand that owing to delay in acquisition of lands and procedural and administrative difficulties, preliminary work in laying out the nurseries was commenced only recently. As the replacement of existing plantations with improved varieties of mulberry grafts is of a high magnitude involving

heavy expenditure, time and labour, the Board intends to intensify the work and to enlist the co-operation of private nursery men and organise co-operative societies of farmers at an appropriate time. The success of the scheme of new plantation or replacement of old plantations by improved grafts would depend upon the creation of favourable conditions in each region. In Mysore where the bulk of mulberry area is rain-fed, the primary requirement would be extension of irrigation facilities. We are informed that the Mysore Government have, with the assistance of the Central Silk Board, extended financial aid for sinking 125 wells; and it expects to replant about 1,500 acres in irrigated areas by the end of the Second Plan period. At the public inquiry the Director of Sericulture, Mysore State, stated that the sericulturist suffers a disadvantage in replanting old gardens by graft, namely, he loses two to three crops during the replacement period. Though it is demonstrated that his sacrifice would be amply rewarded in due course by increased production from new gardens, the farmer is not easily persuaded to switch over from present mulberry to grafts. The problem is present also in West Bengal. In Kashmir, where only mulberry trees are grown, the problem is different. Mulberry being a reserved tree, it is difficult to induce private farmers to take to plantation of improved grafts as, maintenance of new grafts along with existing trees is at present the responsibility of Government. The execution of schemes of replantation by improved grafts requires constant attention and care, experiment and research followed by vigorous extension service to bring home to the farmers the benefits of planting improved varieties of mulberry. Moriculture in almost all States forms part of their sericulture departments. From what we could see during our visits to the States it appeared to us that its separation from State Agricultural department has not been satisfactory. After all, moriculture is a part of agriculture and should receive full assistance from the experts of the respective State Agricultural departments in the matter of improved methods of cultivation. We, therefore, suggest that the State Governments should take steps for better co-ordination between their Agricultural and Sericulture departments in the work of replantation of mulberry by improved grafts in their areas.

7.4.6. In this connection we should like to mention that since different races of silk worms are to be reared in different parts of the country selection of mulberry needs to be done with great care with due regard to the nutritional value of the leaves for the race of silk worms reared in the area. The Central Research Institute at Berhampore has a department which conducts experiments in soil analysis and nutritional value of mulberry leaf. The activities of this Institute are being expanded. We, therefore, suggest that the sericultural states should take advantage of the research facilities available at the Institute when required. In addition to the efforts for improving the yield and quality of leaf it is very important that the existing gardens and trees are properly maintained and looked after.

7.4.7. At the public inquiry the accuracy of the figures of yield of leaves furnished by State Governments was doubted by some

representatives. It was explained by the representatives of the Mysore and West Bengal Governments that generally the yields of leaf per crop is calculated on the basis of 16 lbs. of leaves per lb. of cocoons, though in nurseries actual weighment is done in working out the yield of leaf per acre. In respect of other agricultural produce crop yields are calculated by actual weighment in lots selected by random sampling; similarly in the case of mulberry leaf, yield per acre may be worked out. We, therefore, suggest that the major sericultural States should adopt the method of random sampling and calculate the yield of mulberry leaf by actual weighment.

7.4.8. The Japanese Experts Dr. Y. Tazima, Head of the Morphological Genetics Division, National Institute of Genetics, Mishima, Japan and Mr. S. Karaswa, Chief Secretary to the Committee of Sericulture and Silk Industry in Japan have made several suggestions in connection with the methods of cultivation, plucking of leaves and pruning of gardens. Their recommendations deserve careful consideration and we hope that the State Governments concerned would adopt them wherever possible.

7.5. *Rearing of silk worms (including seed and cocoon production).*

7.5.1. In sericulture production of silk worm seed occupies a very important place and requires constant attention and care. First, silk worm eggs should be free from disease because diseases like pebrine and flacherie take a heavy toll and if no preventive action is taken, the entire industry may be wiped out from the affected region. It is, therefore, imperative that in order to save the industry from destruction, only examined seeds should be distributed for industrial rearing. Secondly, it is necessary to maintain improved stock of silk worm by selection of cocoons and moths used for the production of seed. We have found that all silk producing States in the country have recognised the importance of maintaining the quality of the seed but with the exception of Jammu and Kashmir and Punjab most of them have yet to complete the necessary organisation for meeting the entire requirements of disease free seeds in their respective States. In Government and aided grainages cellular seeds are produced by Pasteur system under which every mother moth is crushed and examined under a microscope. If traces of disease are found in any moth its seeds are destroyed. Equally important, in the present condition of the industry, is the need for cross-breeding and selecting the silk worm races which can be acclimatised in the temperate and tropical regions in the country. This is essential because it has been acknowledged that the indigenous races of silk worm whether in Mysore or West Bengal yield smaller amount of cocoons for an ounce of seed and the quality of silk produced from them is generally inferior as judged by International standards. In order to increase the yield of cocoons and to improve the quality of raw silk, Mysore State had started cross-breeding between, Mysore female and Japanese Male

as early as 1927. The results of these experiments were beneficial and it is claimed that at present nearly 95 per cent of the production of industrial cocoons in Mysore is from cross-breeds only. Most of the principal sericultural States meet their requirements of silk worm seeds from internal production. Only the State of Jammu and Kashmir is still partially dependent upon imported seed. The measures adopted by the State Governments with the object of organising supply of disease free seeds as well as of improving the silk worm races in their regions are briefly narrated below:

7.5.2. *Mysore*.—For the production of disease free seeds Mysore State maintains 35 Government grainages in which 107 lakhs of disease free layings are produced; in addition there are 210 aided grainages which produce 233 lakhs of disease free layings. The total estimated annual requirements of disease free layings are about 800 lakhs of which 340 lakhs, namely, 42·50 per cent. are at present met from the supervised seed organisation. The Mysore Government have enacted the Mysore Silk Worm (Control and Distribution) Act, 1952 with the ultimate object of supplying the entire quantity of disease free seeds through Government and aided grainages only. The State Government supply microscopes, sprayers etc. at half the cost to aided grainages and each graineur is paid a bonus of Rs. 2·50 for every 1,000 disease free layings produced by him. It is claimed by the Director of Sericulture, Mysore State, that pebrine disease, the most serious of the silk worm diseases, is practically controlled in seed cocoon areas, and the entire requirements of the disease free layings of this area by way of supervision and technical assistance are provided by the State Government. Mysore is predominantly a multi-voltine area. It is reported that the old cross-breeds which were started in 1927 and had conferred economic advantage over the pure Mysore breed are now being replaced by a better race of silk worms. Government institutions have distributed 1·21 lakh disease free layings of this race during 1957-58. This race of silk worm being popular the demand for seeds is increasing and the department is making arrangements to increase its production. However, the difficulty in the production of cross-breed disease free layings arises from the inadequate production of univoltine and bivoltine seed cocoons, which in tropical climate need considerable attention and expenditure. Their basic production should, therefore, remain always in the hands of Government institutions which are capable of giving scientific and technical attention. Secondly, production of these cocoons has to be passed on to the already existing aided institutions with necessary finance and technical assistance. The department of Sericulture has drawn up a programme of replacing the present silk worm races by new ones. The activities of the two hill stations for increasing supply of basic seed have been expanded. With the assistance of the Central Silk Board the Department has brought into existence a large mulberry garden in the Bangalore District and lands are being acquired for additional foreign race producing stations in Mysore District; this work is of great economic advantage and its results are attainable in much lesser time than reduction in the cost of mulberry.

The cost of 100 cross-breed disease free layings in Government and aided grainages ranges from Rs. 3·80 to Rs. 4·17. The average selling price of seeds from Government grainages is Rs. 4 per 100 disease free layings.

7.5.3. *Jammu and Kashmir*.—Jammu and Kashmir State is a univoltine area and as there are no indigenous silk worm races, it has always depended for its seed requirements from foreign countries. Rearing of imported Japanese, Chinese and European pure races is being conducted in the last three years. At present the requirements of reproduction seed are met by imports. The State Government maintain four Government grainages, two in Kashmir and two in Jammu. There are also two breeding centres but the seed cocoons produced in these centres are transferred to Jammu grainages for examination. The estimated requirements of silk worm seeds for the State is about 53,000 ounces. Though Government grainages are equipped to produce 60,000 ounces of seeds per year, they are actually producing only 45,000 ounces of seed and the remaining 8,000 ounces are imported from abroad mainly for reproduction purposes. The State Government have taken measures to ensure that only disease free layings are supplied for industrial rearing. As a rule seed rearers' houses are disinfected annually free of cost. The seed cocoon growers are encouraged to improve their rearing methods by providing them with thermometers and rearing trays, and by giving subsidy for erecting shelves for rearing, heating and lighting. The cost of production of disease free seeds per ounce is about Rs. 9·87; but the seeds prepared in the State's own grainages as well as imported from abroad are supplied free of cost to the rearers. The Central Silk Board has already provided grants for establishing a Basic Seed Station at Mirgund in Kashmir. It is, therefore, expected that the Government grainages will be able to increase the supply of disease free seeds and evolve improved races of silk worms suitable for Jammu and Kashmir State.

7.5.4. *West Bengal*.—The West Bengal Government maintain 17 Government and 21 aided grainages which produce 72 lakh of disease free layings as against the estimated annual demand of 250 lakhs. In the past 4 years the production of F-1 cross breed layings has been negligible. However, steps are now being taken to increase the production of cross-breed cocoons through implementation of development schemes for production of univoltine silk worm races Kalimpong under the Second Five Year Plan. Field trials with F-1 cocoons have given encouraging results. We are informed that after the Kalimpong Station goes into operation increased supply of F-1 layings will be given for industrial rearing. The average cost of production per ounce of disease free layings is Rs. 2·06 and the average selling price per ounce of indigenous multivoltine race is Rs. 2·00 to 2·50 and of F-1 cross layings Rs. 4·00 per ounce. The State Government proposes to take legal measures for prohibiting the supply of unexamined seeds for industrial rearing.

7.5.5. *Punjab*.—The production of silk worm seed in Punjab is carried out by the two Government grainages which produced a

total quantity of 3267 ounces of seeds in 1956-57. The quantity of cross breed layings was, however, only 450 ounces. The Punjab Government have enforced the Punjab Silk Worm Seed Control Act to ensure the supply of disease free seeds for industrial rearing. It is reported that the State Government are making efforts to obtain univoltine basic seeds from Japan and China and as soon as they are imported the work of cross-breeding will be taken up. The total requirements of seeds are estimated to be 3,500 ounces and the State is at present self-sufficient in this respect. The average cost of silk worm seed is Rs. 3.00 per ounce and the selling price is reported to be Rs. 3.25 per ounce.

7.5.6. *Bihar*.—In Bihar both mulberry and non-mulberry sericulture is practised, though the production of mulberry is comparatively small. Production of disease free seeds is carried out in Government grainages only. There were 6 seed supply stations and 17 sub-stations for Tassar and 2 seed supply stations for Eri. For supply of mulberry silk worm seed there is a mulberry-cum-grainage farm at Roshna. For supply of Tassar silk worm seed, the State Government maintain a seed station at Chaibasa. The total requirements of silk worm seeds have been estimated at 1,44,000 ounces for Tassar, 17,000 ounces for Eri and 1,100 ounces for mulberry. As against this demand, the annual production by the various Government grainages and farms was 2,520 ounces for Tassar, 550 ounces for Eri and 100 ounces for mulberry which were supplied free of cost to rearers. Bihar Government have reported that it would be possible to meet the requirements of mulberry disease free layings by 1961; but in the case of non-mulberry seeds they are unable to state when it will be possible to be self-sufficient.

7.5.7. *Assam*.—In Assam the Government maintain 11 grainages which produce mulberry silk worm seeds, 8 Eri grainages and 3 Muga seed farms. Mulberry grainages supply about 9 lakh disease free layings as against requirements of 10 lakhs. The balance of the requirement is met through selected rearers. A nominal charge is made for the seed supplied by Government grainages. With regard to Muga seed about 10 per cent. of the total requirements of examined seed is supplied by the Government organisation. As regards Eri, negligible proportion is given by way of protected seed at present.

7.5.8. A statement showing the requirements of seed, production of examined seed under the control of Government, percentage of examined seed to the requirements and the number of Government and Government aided grainages in the various States is given in Appendix IV.

7.5.9. At the public inquiry the consensus of opinion was that all major sericultural States should prohibit by legislation the distribution of unexamined silk worm seed in their respective areas. Mysore, Jammu and Kashmir, Madras and Punjab have already passed the necessary legislation though in Mysore its application is being gradually extended beyond seed production areas. It was, however, realised that the

enactment of such legislation pre-supposes the organisation for the production and distribution of examined seed. We are, therefore, of the view that as this is a very important aspect of sericultural development all sericultural States should give high priority to the setting up of necessary organisation for production and distribution of disease free layings through Government and aided grainages to meet the full requirements of silk worm seeds in their areas.

7.5.10. The Central Silk Board has been giving financial assistance to States to strengthen the existing seed producing institutions with additional equipments and to open new production centres so that the States may become self-sufficient in the matter of examined seed requirements. The assistance has been in the form of securing refrigerators for the aided graineurs, mountages for supply to the seed cocoon rearers, bakelite cellules, microscopes and suitable buildings for carrying out seed production on more systematic and scientific lines. During the period from 1953-54 to 1956-57 grants sanctioned towards improvement of seed organisations amounted to Rs. 29.71 lakhs. One of the basic requirements of the sericulture industry in India is the organisation for silk worm seed production. Considerable difficulties have been experienced in the States in maintaining a programme for seed supply for want of adequate facilities for preservation and multiplication of foreign races of silk worms. In view of the great importance of producing basic seeds for cross-breeding and evolving high yielding silk worm races the Central Silk Board has initiated a scheme for the establishment of a Central Foreign Race Seed Station entirely financed and controlled by it in the univoltine area of Kashmir. This Station would not only cater to the requirements of the univoltine areas which are at present met by imports but also the needs of the States where cross-breed layings are produced. This station is expected to commence operations early next year. Since the future development of the industry in various parts of the country depends primarily on the evolution of better silk worm races suitable for each sericultural region we attach great importance to the proposed organisation for silk worm seed production. We, therefore, recommend that the Central Silk Board should give the highest priority to this scheme and take appropriate steps for establishing the Foreign Race Seed Station as early as possible. The Board should also see that the State Governments establish matching organisations in their respective areas for the evolution of suitable cross-breed races and take appropriate steps for their rearing on a commercial scale.

7.5.11. Imports of silk worm seed which falls under tariff item No. 87 are at present allowed duty free under a Ministry of Finance Notification dated 17th January, 1953. We recommend that this concession should be continued.

7.5.12. The raw material from which silk is produced is the cocoon spun by the silk worm and the object of rearing the silk worm is the production of cocoons. In our country the production of cocoons is essentially a cottage industry ancillary to agriculture. The

silk worm must be fed on mulberry leaf during its larval stage and it requires much constant attention and various services have to be rendered at frequent intervals throughout day and night for successfully rearing it. The conditions necessary for the purpose are equable temperature, good ventilation, freedom from damp, drought and heat. The methods of rearing differ in each region according to its climatic conditions. The rearing of young worms during their first two stages requires special care and attention because the rate of mortality during this period is fairly high which ultimately affects the yield of cocoons per ounce of seed. We understand that in Kashmir collective rearing is done in the reproduction zones under close departmental supervision and all expenditure in this connection is borne by the State. Thus, the seed cocoon rearer gets hatched worms instead of seed and gains an advantage of about 12 days over the rearers who receive seeds directly. The seed thus incubated under technical supervision is free from defects to which it would be liable at the hands of rearers in their homes where proper attention and favourable conditions do not always obtain. We understand that in West Bengal a Young Silk Worm Rearing Centre has been opened at Jalalpur. This co-operative organisation looks after the rearing of young worms upto second stage and thereafter silk worms are reared in the homes of respective rearers. We are, therefore, of the view that the rearers should be encouraged to form co-operative societies for the purchase of seeds as well as for chowki rearing. We are informed that in Japan rearing of young worms is undertaken as a co-operative effort.

7.5.13. The production of cocoons per ounce is an indication of the skill of the rearer as well as the measure of improvement made in the methods of rearing. A statement showing the yield per ounce of seeds in 1956-57 as compared with that in 1937-38 and 1947-48 is given below :

| | | No. of cocoons per ounce of seed | | |
|-----------------|-------------|----------------------------------|------------------------|------------|
| State | | 1937-38 | 1947-48 | 1956-57 |
| Mysore | Pure Mysore | 50 | | |
| | Cross breed | 70 | Cross breed | 77 |
| West Bengal | Nismo | 28 | Baranally (univoltine) | 47 |
| | Nistid | 45 | Nistai | 56 |
| | | | Hybrid | 80 |
| Jammu & Kashmir | Kashmir | 62 | | |
| | Jammu | 87 | | 60 (Green) |
| Punjab | | 69 | | 80 (Green) |
| | | | | 76 |

From a study of the figures of yield of cocoons per ounce of seed it would appear that the average yield is somewhat low because we understand that out of one laying nearly 90 per cent. of silk worms should normally hatch and grow to full size for spinning cocoons. At present, however, nearly 40 to 45 per cent. of silk worms perish in the

initial stages and this involves considerable waste. With improvement in the methods of rearing and careful attention in the first two stages of the silk worm's life, it would be possible to reduce this high rate of mortality and increase the outturn of cocoons. Even though the seed may be disease free, we are of the view that lack of care on the part of rearers causes this avoidable waste. The Japanese experts Dr. Y. Tazima and Mr. S. Karasawa have made several recommendations for rearing of silk worm with a view to producing cocoons of better quality. We recommend that their suggestions should be carefully considered by the Central Silk Board and the State Governments concerned and implemented as far as possible having regard to the local conditions of each sericultural region.

7.5.14. Cocoon prices :

7.5.14.1. We give below a table showing the trend of prices of cocoons and raw silk in the Bangalore Market for the past 8 years.

Yearly average of index numbers of prices of reeling Cocoons, charkha raw silk and filature raw silk

[Base: January 1950—100.]

| Year | Reeling cocoons | Charkha raw-silk superfine | Filature raw silk |
|------------------|-----------------|----------------------------|-------------------|
| 1950 | 90 | 103 | 107 |
| 1951 | 83 | 72 | 80 |
| 1952 | 45 | 61 | 65 |
| 1953 | 60 | 60 | 77 |
| 1954 | 72 | 72 | 89 |
| 1955 | 55 | 58 | 70 |
| 1956 | 56 | 58 | 69 |
| 1957 | 71 | 70 | 79 |
| 1958 (Jan.-June) | 81 | 89 | 86 |

[Source : Central Silk Board]

A statement showing the prices of cocoons and raw silk in the Bangalore Market from January 1954 to June 1958 is given in Appendix V. The prices realised by the cocoon rearers, in 1954 and 1955, barring seasonal variations ruled on the whole higher than the price of Rs. 1-6-0 per lb. of cocoons adopted by the Commission for estimating the fair ex-works price of raw silk at the last inquiry. In 1956 prices were somewhat depressed but resumed their upward course in 1957 and in the first quarter of 1958 first quality cocoons were quoted from Rs. 1-94 to Rs. 2-44 per lb. in Mysore State.

7.5.14.2. With a view to stabilizing the prices of cocoons and thereby assuring a minimum economic price to the rearers, it was recommended in our last report (1953) that various State Governments should enact

necessary legislation for the establishment of cocoon markets and for regulating the prices of cocoons. The Mysore Government have expressed the view that while the Mysore legislation which has been introduced in seed production areas carried along with it the advantage of regulated cocoon markets, it could not be completely successful as the prices of cocoons depended mostly on the trend of raw silk prices which was an all-India factor. The Director of Industries, West Bengal has informed us that a voluntary cocoon market has been established at Malda. In Jammu and Kashmir the State Government purchase all cocoons produced in the State at a fixed price. We have to consider how far the notified markets and regulation of prices with a floor and a ceiling would promote the interests of the rearers for whose benefit they are proposed to be created. If such a legislation were enforced, the rearers would be required to take their cocoons for sale in market in notified area at fixed prices while at present they are selling them at market prices either in their own or neighbouring villages. In Mysore there are at present voluntary cocoon markets run under Government supervision as well as a number of cocoon markets run by private brokers. The method of transaction in the latter is that the rearers bring cocoons to the market which are auctioned by chit system to reelers. The brokers normally advance money to the rearers and also supply silk worm eggs so that a steady flow of cocoons is maintained. It has been reported to us that the brokers charge commission of 25 nP. per 12 lbs. of cocoons from seller and purchaser but no interest is charged on the money advanced to the rearers. The brokers also extend accommodation to the reelers in respect of payment of cocoons purchased by them. It would appear that the financing of cocoon rearing plays an important part in the present organisation of the cocoon market. Before notified markets are created, it would be necessary to make some arrangement for financing both rearers and reelers for carrying on their operations. Secondly, floor and ceiling prices of cocoons will have to be based on cost of production of cocoons in each area. Further, prices will have to be graded according to the quality of cocoons, for, in the absence of such gradation, rearers of cocoons of good quality will always be at a disadvantage; and this will be detrimental to the progress of the industry. Above all, prices of cocoons do not determine but are to a large extent determined by the prices of raw silk. It will be seen from the table showing the index numbers of cocoons and raw silk that the prices of cocoons generally moved in sympathy with those of raw silk. In view of this the ceiling price of cocoons may be pierced at any time when the prices of raw silk shoot up. It has also to be remembered that prices of cocoons have a vital relation to the prices of other agricultural crops grown in the area. At the public inquiry these issues were discussed in detail and it was found that neither the creation of notified markets nor the regulation of prices with a ceiling would be feasible in the present circumstances. It was suggested that a floor price for cocoons in each area may be fixed so as to ensure a minimum return to the growers. There was, however, general agreement that cocoon rearers should be encouraged to form co-operative societies for marketing of cocoons. We believe that co-operative organisations have an important role to play in the development of sericulture

industry. The Central Silk Board has forwarded to us its views in support of the formation of co-operatives in various sectors of the industry. The Board has also stated that the Reserve Bank of India has been requested to undertake an investigation into the requirements of working capital of various sectors in the industry. The Board has recommended the formation of rearers' co-operative societies for assisting rearers by providing financial assistance by way of short term loans for collective purchase and supply of equipment, manure and marketing of cocoons. We are in agreement with this suggestion, and recommend that the State Governments should take positive steps to encourage the formation of rearers' co-operative societies for chowki rearing and for marketing of cocoons.

7.6. *Cocoons and reeling :*

7.6.1. *Mysore.*—Since the last inquiry, production of cocoons in Mysore State, including the Kollegal district, rose from 210 lakh lbs. in 1953 to 300 lakh lbs. in 1957. In Mysore there are three types of reeling, viz., filatures; domestic basins and charkhas. The number of filature basins installed in the State is 1,700 of which 1,000 are actually in operation. Of these, 1,300 are under Government ownership and control and only 750 are actually working. The number of domestic basins is 1,300 which are working at present; the number of charkhas is 5,000 of which 4,000 to 5,000 are working. The average renditta in the State is reported to be about 19 in 1957-58 as compared with 17 in 1953. This loss in renditta is stated to be due to adverse seasonal conditions and inadequate manuring of mulberry gardens. In respect of newly evolved races which are now being reared on commercial scale it is claimed that the renditta is as low as 8. Mysore has also commenced the modernisation of Government filatures by installing new machinery for reeling and by instituting central cooking system and other minor improvements. The improved filature eight-end basins with overhead reels are designed on the model of Japanese basins and are manufactured at the Government workshop in Mysore. The quality of silk produced in these basins has improved and the cost of reeling has also come down to some extent. The Central Silk Board has given grants to the extent of Rs. 2·19 lakhs and an equal amount by way of interest bearing loans for modernisation of Government Silk Filatures at Kanakapura and Mysore. We are informed that there has been very little change in the quantity of waste per lb. of raw silk. The following statement gives the production of raw silk and silk waste in Mysore State from 1952-53 to 1956-57 :—

| Year | Production of raw silk (Lakh lbs.) | Production of silk waste (Lakh lbs.) |
|-------------------|------------------------------------|--------------------------------------|
| 1952-53 | 12·45 | 4·15 |
| 1953-54 | 14·95 | 4·70 |
| 1954-55 | 17·80 | 5·25 |
| 1955-56 | 18·35 | 7·80 |
| 1956-57 | 18·65 | 8·45 |

The bulk of the silk produced in the State is from old silk worm races and is reeled on charkha. The Mysore Government have taken up the programme of replacing the old charkha by improved domestic basin with the assistance of the Central Silk Board and there are now about 1,300 domestic basins working (including 500 in Kollegal district) as against 200 at the time of last inquiry. These units are producing silk of improved quality and are obtaining higher prices for their product over that of the charkha silk.

7.6.2. Jammu and Kashmir.—During the period from 1953 to 1957 the quantity of cocoons produced increased from 24·82 lakh lbs. in 1953 to 26·87 lakh lbs. in 1956; but it decreased to 21·92 lakh lbs. in 1957. This was due to adverse weather conditions and failure of crops in the past two years. The present average renditta is reported to range for different races between 10·50 to 13·50. The Government Silk Filatures consist of 436 Italian type basins and 302 local basins. The filatures operate on the average for about 15 to 20 days in a month during the year as the output of cocoons in Kashmir is not adequate. In addition, there are 4 Japanese reeling basins working at Jammu. The Central Silk Board has already extended financial assistance of Rs. 2·60 lakhs for modernisation of Government filatures and we understand that an order for Japanese machinery has already been placed. It is claimed that in Government filatures cocoons are graded into A and B quality and silk produced from A grade cocoons comes up to the international standard. We were informed by the representative of Jammu and Kashmir that even with the present raw material, the introduction of modern methods of reeling and improvement of filature machinery would enable Kashmir to produce 'A' grade silk. The production of raw silk and silk waste from 1953 to 1957 was as under :—

| Year | Production of raw silk (Lakh lbs.) | Production of silk waste (Lakh lbs.) |
|------|------------------------------------|--------------------------------------|
| 1953 | 1·49 | 0·76 |
| 1954 | 1·68 | 0·93 |
| 1955 | 1·60 | 1·06 |
| 1956 | 1·77 | 1·27 |
| 1957 | 1·43 | 1·15 |

7.6.3. West Bengal.—From 1953 to 1957 production of cocoons rose from 64·65 lakh lbs. to 79·75 lakh lbs. At the time of the last inquiry in 1953 the renditta in the State was 18 for indigenous and 16 for hybrid variety. The present renditta reported by the State Government for indigenous Nistary race is 22 maximum and 16 minimum. In order to improve the renditta the State Government have taken steps to organise the production of cocoons by cross-breeding between the selected combinations of foreign univoltine and indigenous multi-voltine races. The total number of charkha units in the State is reported to be

1,610 having 4,267 basins and the total number of improved charkha units 53 having 603 basins. We understand that the Department of Sericulture has a programme to replace the old charkhas by improved domestic basins at the rate of 50 a year. The production of raw silk and silk waste from 1953 to 1957 was as under :—

| Year | Production of raw silk (Lakh lbs.) | Production of silk waste (Lakh lbs.) |
|----------------|------------------------------------------|--------------------------------------------|
| 1953 | 3.12 | 2.10 |
| 1954 | 3.33 | 2.16 |
| 1955 | 3.62 | 2.21 |
| 1956 | 3.87 | 2.38 |
| 1957 | 4.12 | 2.14 |

7.6.4. In Uttar Pradesh the Doon Valley Sericulture Society Private Ltd., is running a unit with 40 improved domestic basins. The Society has stated that it has installed a simplex dryer of Italian make for drying cocoons by hot air. In Punjab, Assam and Bihar the mulberry cocoons are reeled on old type charkha.

7.6.5. In our last Report we had recommended that the Central Silk Board should initiate a scheme for improving the quality of the indigenous charkha silk by the use of improved types of basins. Further, so far as filature was concerned the quality should be improved as in Japan by the adoption of latest improved types of reeling filature machinery. In pursuance of these recommendations the Board has taken action for introducing an improved basin constructed by Shri B. B. Roy, one of the Technical Officers of West Bengal, with necessary financial assistance. In order to stimulate the replacement of charkha by improved basins the Board invited specific schemes based on phased programmes of modernisation from the State Governments concerned. The Standing Committee of the Board decided that the State Governments might be permitted to select such reeling basins as were found suitable for replacement of the charkha basins, provided the cost of each basin did not exceed a sum of Rs. 500 and that the design of the cooking and reeling operations carried on separately with satisfactory performance. Further the model constructed by Shri B. B. Roy was recommended for trial and adoption with such modifications as might be considered necessary having regard to the local conditions in the States. The Japanese system of reeling is the key-note of the modernisation of reeling equipment. The mechanical improvements which are essential features of that system have been incorporated in the improved type of basins that are to replace the charkhas without disturbing the rural economy. The Board has appointed a Sub-Committee to go into the question of formulating the pattern of assistance to filature units and to assess the needs of each of them. In the meantime, the Technical Development Committee of the Board has recommended that

a sum of Rs. 1,000 per basin may be sanctioned for modernisation of filature machinery, 50 per cent being treated as subsidy from the Board and the balance 50 per cent as loan under the usual conditions. As mentioned above the Governments of Mysore and Jammu and Kashmir have already availed themselves of financial assistance from the Central Silk Board and have taken steps to improve the charkha and filature machinery in their respective States. The Board has recommended the establishment of a model 100 basin filature unit in Malda, West Bengal, for which a loan of Rs. 10 lakhs has been sanctioned. Similarly, we understand that other sericultural States where the industry is in the initial stages of development, have been provided with adequate funds to start reeling units of two-end basins. The total amount sanctioned by the Board in the past 4 years towards this aspect of the industry was Rs. 4.79 lakhs. With liberal financial assistance available from the Central Silk Board we hope the States concerned will expedite the process of replacing charkha with improved domestic basin and carry out the programme of modernisation of filatures as early as possible.

7.6.6. In order to provide facilities for testing of the indigenous raw silk the Central Silk Board has sanctioned grants to the States of Mysore and West Bengal to construct new buildings specially suited for silk testing and to acquire equipment for carrying out all aspects of silk testing and conditioning. The State of Assam have also been sanctioned grants to organise small units for testing silk in that State to meet the needs of reeling units. The Doon Valley Sericulture Society has recently purchased with financial assistance from the Uttar Pradesh Government silk testing and conditioning equipment and has stated that all the raw silk produced in the filatures of the Society will henceforth be tested and graded before marketing.

7.6.7. At the public inquiry it was represented that the quality of silk has not shown much improvement since the last inquiry. The quality of silk depends primarily upon two factors: (i) improvement in the quality of cocoons, and (ii) method of reeling. Efforts are in progress to improve the quality of cocoons through the evolution of hybrid races suitable for the climatic conditions in each region. This is, however, a long term problem. The immediate task is to improve reeling methods and equipment making the best use of raw material available at present.

7.6.8. Reeling of cocoons like the treatment of other textile fibres includes the preparatory processes, namely, selection of cocoons of good quality, their preservation and storage, stifling and grading of cocoons, cooking and finally reeling on charkha, improved domestic basins or filature equipment. Ordinarily, the majority of charkha reelers are not very careful in all these operations and the quality of raw silk produced by them is in any case of inferior type and makes no pretence of being comparable with internationally graded silk. The case is somewhat different in respect of reelers with improved domestic basins and it has been acknowledged that since progressive reelers have adopted the improved domestic basins in place of the old charkha, they are more careful in the selection of cocoons and method of cooking; and raw

silk produced by them is of an improved quality and, therefore, commands a premium over the price of charkha silk. In Kollegal District alone there are as many as 500 improved domestic basins and the reelers have already realised the economic benefits of the improved reeling equipment. The filature units in the country are endeavouring to bring up the quality of their raw silk to the international grades. It is, therefore, important that they should pay careful attention to the preparatory processes. In the matter of selection of cocoons we have received information that some filature units in Mysore are unable to secure cocoons of good quality which are usually taken up by charkha reelers having local influence and are therefore obliged to purchase cocoons of inferior quality left with the rearers. This is rather a paradoxical situation because reeling units which attempts to produce raw silk of superior quality have to be content with inferior raw material while charkha units which are incapable of producing silk of higher grade obtain raw material of first grade quality. We believe that the filature units should frame their policies of purchase of cocoons suitably and secure raw materials of the best quality available, for, it is obvious that without cocoons of good quality high grade silk cannot be produced. Secondly, the present method of stifling cocoons by sun-drying and steaming is found to be defective, the modern method being the hot air drying process. Except at Kollegal and at Doon Valley the hot air process is not yet applied. It is desirable that other filature units should adopt this process and acquire the necessary equipment as soon as possible. Thirdly, during the course of our investigation we have found filature units do not systematically grade the cocoons before reeling. In Government Filatures, Srinagar cocoons are graded roughly as superior, medium and inferior. In Mysore Filatures or at Kollegal no systematic grading is attempted. Unless cocoons are graded according to their size, it would be impossible to produce silk of superior quality. We, therefore, recommend that filature units should immediately introduce the system of grading cocoons and produce raw silk of different grades. When new hybrid races are being produced, it is essential to standardise the cocoons by restricting industrial rearing to one or two races during one season so that silk of uniform quality can be produced. We wish to emphasize that unless these preparatory processes are brought up to a high standard of efficiency along with the modernisation of reeling equipment, our efforts for the improvement of quality of raw silk may not achieve the anticipated measure of success.

7.6.9. The cost of production of filature raw silk as furnished by State Governments and a few private filature units is high and ranges from Rs. 30·46 per lb. to Rs. 42·26 per lb. We have found that both in Jammu and Kashmir and Mysore the filatures under Government management and control are working below installed capacity and consequently the cost of reeling automatically rises. During the discussion at the public inquiry, it was stated that the demand for Indian filature silk in the country being limited to about 3 to 3½ lakh lbs., filatures have to restrict their output by working only partially of their plant and machinery. It is important to bear in mind that customers prefer filature silk to charkha silk primarily because filature silk is expected to

be of superior quality. If, however, filatures, for various reasons described above, are unable to offer raw silk of quality comparable with international grade at an economic price, the demand is bound to remain stationary or may go down. On the other hand, filature units complain that they suffer losses in the working on account of high cost. This vicious circle can only be broken by a determined effort to improve the quantity of silk, which would stimulate demand and thereby reduce cost of reeling through increased output. These filature units are industrial undertakings which should be run on business considerations. We have found that there is considerable room for improvement in their management. The daily operations connected with the running of these establishments demand continuous attention and their management should therefore be vested in the hands of managers who have business experience and are acquainted with the technique and economics of silk production. We, therefore, suggest that the Governments of Mysore and Jammu and Kashmir should take appropriate steps to reorganise the management of the filatures under their ownership and control and ensure their working as business undertakings. Since the existing filature units in Jammu and Kashmir and Mysore are working below capacity and are being modernised, we consider that it would be wasteful to set up new filature units in these areas. We, therefore, recommend that so long as the present installed capacity of silk filatures in these States is not fully utilised, no new capacity should be licensed.

7.6.10. Production of raw silk.—There has been a steady increase in the production of raw silk—mulberry and non-mulberry types—from 24·88 lakh lbs. in 1953 to 31·38 lakh lbs. in 1957. The production of mulberry raw silk registered an appreciable increase from 1953 to 1957 though there was a slight decline in production in 1956 as a result of failure of crops in Mysore State. During the past three years the production of non-mulberry silk, especially of Eri and Muga type has also registered an increase. The following table gives the total production of raw silk for the years 1953 to 1957 :

(In lakh lbs.)

| Year | Mulberry raw silk | | | Non-mulberry raw silk | | | | Total (raw silk) |
|------|-------------------|---------|--------|-----------------------|------|------|-------|---------------------|
| | Filature | Charkha | Total | Tassar | Eri | Muga | Total | |
| 1953 | 2.85 | 16.83 | 19.68 | 2.76 | 1.13 | 1.31 | 5.20 | 24.8 |
| 1954 | 3.12 | 20.84 | 23.96 | 2.76 | 1.15 | 1.21 | 5.12 | 29.08 |
| 1955 | 3.12 | 21.12 | 24.24 | 2.94 | 1.37 | 1.58 | 5.89 | 30.13 |
| 1956 | 3.20 | 19.91 | 23.11 | 2.84 | 1.38 | 1.85 | 6.07 | 29.18 |
| 1957 | 2.96 | 21.80 | 24.76* | 3.15 | 1.57 | 1.90 | 6.62 | 31.38 |

*Includes 1.14 lakh lbs. of domestic basin-silk and 0.77 lakh lbs. of Duppon silk.

We are informed that a significant feature of the 1957 production was the output of domestic basin silk to the extent of about 114,400 lbs and a substantial production of about 76,600 lbs. of improved quality of Duppon silk. The production of charkha and filature silk of mulberry type since 1953 in the various silk producing States is given in Appendix VI. The proportion of filature silk continues to remain low as compared with charkha silk as the percentage of filature was only 12 per cent of the total production of mulberry raw silk in 1957.

7. 6. 11. *Production of silk waste :*

The following statement gives the total quantity of silk waste produced from 1953 to 1957:

| (In lakh lbs.) | | | |
|----------------|----------|--------------|-------|
| Year | Mulberry | Non-mulberry | Total |
| 1953 | 9.55 | 4.93 | 14.48 |
| 1954 | 11.16 | 5.10 | 16.26 |
| 1955 | 11.38 | 5.91 | 17.29 |
| 1956 | 11.42 | 5.97 | 17.39 |
| 1957 | 11.68 | 5.67 | 17.35 |

The trend of production of silk waste has been more or less similar to that of raw silk. There was a slight decline in the output of silk waste per lb. of mulberry raw silk which was 48.5 per cent in 1953. It was reduced to 46.6 per cent and 46.9 per cent in 1954 and 1955 respectively. But in the subsequent two years it has again risen to 49.4 per cent in 1956 and 47.2 per cent in 1957.

7.6.12. *Production of spun silk yarn.*

7.6.12.1. Mysore Spun Silk Mills Ltd., Channapatna, is the only unit in the country producing spun silk yarn. The production of spun silk yarn in this mill during the years 1953 to 1957 and January to March 1958 was as under :—

| Year | Spun silk yarn | Noil yarn | Consumption of silk waste |
|----------------------|----------------|-----------|---------------------------|
| | lbs. | lbs. | lbs. |
| 1953 | 39,611 | 61,037 | 4,19,928 |
| 1954 | 51,485 | 59,480 | 3,59,051 |
| 1955 | 53,666 | 52,868 | 3,37,370 |
| 1956 | 62,802 | 45,703 | 6,90,187 |
| 1957 | 64,981 | 58,678 | 5,14,863 |
| 1958 (January-March) | 12,987 | 13,826 | 60,811 |

The capacity of the mill has been estimated at about one lakh lbs. of spun silk yarn per year. The average production of spun silk yarn during the past 5 years amounted to 54,509 lbs. while in 1957 the production was about 65,000 lbs., the highest during the period. The mill has explained that it is unable to utilise the capacity due to the high cost of raw materials, namely, silk waste, because in spite of the present export policy for silk waste which takes into account its requirements of raw material, the prices of silk waste have ruled so high that it has not been able to obtain its requirements at economic prices. The mill has represented that in order to enable it to work economically the following measures should be taken :—

- (i) Levy of a duty on the exports of silk waste ;
- (ii) Export quotas of silk waste to be granted to only those dealers who supply an equal or such proportionate quantity as may be fixed with reference to stocks to local mills;
- (iii) Ban on imports of spun silk yarn.

It may be recalled that the Mysore Spun Silk Mills Ltd. was started with the object of utilising the filature and charkha silk waste for producing spun silk yarn at economic prices. Its ancillary aim was also to provide a cushion to the reelers against undue decline in prices of silk waste which was wholly exported before the mill was established. In view of this we consider that adequate quantity of raw material should be made available to the mill for working upto the installed capacity. This object has been secured by the restriction on export of silk waste of Mysore-Madras origin. The mill has, however, complained that it does not get raw materials at economic prices. We have examined the trends of prices of silk waste in the country as well as in the export markets. As the larger percentage of indigenous production of silk waste has to be exported, export prices naturally exert a pressure on the level of indigenous prices. Towards the end of 1956 owing to Suez Canal crisis export prices of filature silk waste touched as high as Rs. 9 to Rs. 10 per lb. Since July 1957, the trend of prices has been continuously downward and the prices in local markets have moved in sympathy with export prices. The spun silk mill utilises filature silk for purposes of blending with improved charkha and long charkha silk waste and this does not exceed about 20 to 25 per cent. of the total quantity of raw material required for the working. The realisation from silk waste goes to reduce the cost of production of raw silk. A levy on export of silk waste would tend to depress prices and as there is at present heavy accumulation of stocks and prices are low, the return to the reelers would be extremely meagre. An export levy in the present condition of the market is, therefore, not justified. In any case, this would create a conflict between the interests of raw silk producers and spun silk mills. We do not think that the raw silk producers should be put to any loss for arranging supplies of silk waste to Mysore Spun Silk Mills Ltd. A spun silk mill is a processing unit which should be in a position to pass on a rise in prices of its raw materials to some extent to the consumers of spun silk yarn. So far as

the suggestion of export quota is concerned, it is already being implemented by the export policy pursued by the Central Silk Board. In the past four years imports of spun silk yarn had to be arranged mainly because the Mysore Spun Silk Mills Ltd. was working much below its installed capacity and was not in a position to supply the requirements in the country. We have examined the figures of imports and have found that in 1957 imports were only 2,205 lbs. of spun silk yarn. In the present balance of payments position we do not think that excessive imports are likely to take place. The difficulties in the working of Mysore Spun Silk Mills Ltd., however, spring from other sources and we deal with this aspect in paragraph 18·1.

7.6.12.2. We are informed that arrangements have been made to establish a spun silk mill in Assam with 3,000 spindles for production of spun silk and noil silk from Eri empty cocoons and Muga waste. The total requirements of raw materials for the mill is estimated at 2·14 lakh lbs. In Malda, West Bengal about 5,000 displaced persons are engaged in spinning yarn from silk waste on ordinary 'Charkha', namely, spinning wheel.

7.7. Prices and marketing of raw silk :

7.7.1. The table of price indices under paragraph 7.5.14.1 shows the trend of raw silk prices in the Bangalore market for the past 8 years. Monthly prices of raw silk for the period 1-1-1954 to 30-6-1958 will be found in Appendix V. It will be seen that prices of raw silk registered a decline from September, 1950 till 1952 when there was an appreciable fall in prices. The prices of charkha raw silk fell from Rs. 36 per lb. in January 1950 to as low as Rs. 16 per lb. late in the year 1951. The corresponding figures for filature raw silk were Rs. 45 per lb. and Rs. 27 per lb. This decline appears to be due to very large imports of raw silk in 1951. The price in 1952 for charkha raw silk was Rs. 22. The maximum price in 1954 was Rs. 33·5 per lb. for charkha silk and Rs. 43 per lb. for filature raw silk. These prices were still lower than the prices in 1950. The canalisation of imports and their distribution through the Central Silk Board since 1955 have contributed in some measures to the stabilisation of the prices since then, as may be seen from the figures on page 32.

(Rupees per lb.)

| Year | Price of indigenous charkha silk in Bangalore market | | Price of indigenous filature silk in Bangalore market | | Release price of Central Silk Board for imported silk | |
|-------------------------------|------------------------------------------------------|-----------------------------|-------------------------------------------------------|---------|-------------------------------------------------------|---------------------------------|
| | Minimum | Maximum | Minimum | Maximum | Japanese 'A' Grade 20/22 Denier | Shanghai 20/22 Denier 'A' Grade |
| 1955 | 13.00 (All charkha silk) | 30.80 (All charkha silk) | 29.00 | 40.80 | 13-55 to 14-5-56 | 34.68 |
| 1956 | 20.00 (Superfine) | 30.80 (Superfine) | 28.00 | 34.80 | 15-5-56 to 15-5-57 | 33.50 |
| 1957 | 24.50 (Superfine) | 32.00 (Superfine) | 31.00 | 38.00 | 16-5-57 to 13-4-58 | 34.50 |
| 1958 (January-June) | 28.00 (Superfine) | 35.50 (Superfine) | 35.50 | 39.75 | from 14-4-58 | 35.25 |

7.7.2. Raw silk has been sold in the organised markets in various centres through established trade channels. Marketing of raw silk is important, for, rearers of cocoons would get a fair return provided raw silk prices were steady and maintained at remunerative levels. With restricted imports intended to meet only the specific requirements of a section of the weaving industry, there is a scramble for imported silk at high premium rates which again exert an upward pressure on the prices of indigenous raw silk. This trend is unhealthy because, on the one hand it makes raw silk dearer and therefore depresses the demand for it and on the other encourages everyone to make as much profit as possible. From the selling agency down to the producer of raw material there is a desire to take advantage of the situation of shortage. In sericulture there are three sections, Seed producers, Cocoons rearers and silk reelers engaged in the production of raw silk. The quickest way for them to make more profit is by lowering the quality of the material in each of these sections. We have noticed this tendency and therefore wish to draw the attention of the Central Silk Board and the State Governments concerned to this aspect so that they may exercise the necessary vigilance and supervision at the strategic points and take appropriate steps to curb this unhealthy tendency which may mar the efforts for the development of the industry. One of the positive steps in this direction is to attempt to stabilise the price of indigenous raw silk that would ensure on the one hand a fair return to rearers and on the other would have a fair relation to its cost of production. For this purpose the rearers of cocoons and reelers of raw silk should be encouraged to form co-operative societies so that they may constitute their own marketing organisation for selling their products.

7.7.3. The Central Silk Board has encouraged the formation of co-operatives and assisted the State Governments to the extent of 50 per cent of the expenditure. As a result of the Board's assistance a Silk Marketing Co-operative Society has been formed in Bangalore and it has commenced operations from November, 1957. Its membership is open to producers, consumers and traders. In West Bengal 18 reelers' co-operative societies have been formed with financial assistance from the Central Silk Board. There is an organisation under the Director of Industries of that State, known as Resham Silpi Sangha which controls Reelers' Societies and Weavers' Societies. The Sangha gets raw silk from certified reelers and arranges for weaving, printing or finishing through associated weavers and printing factories.

7.7.4. We understand that the Reserve Bank of India has been requested to consider the eligibility of the sericulture industry to be recognised as an approved industry under sub-section 17 (2) (bb) of the Reserve Bank of India Act which enables the Bank to provide short term accommodation for the financing of approved Cottage and Small Scale Industries; and that the Bank will take up its investigation for this purpose as early as possible. We consider that like the handloom weaving industry sericulture is essentially a cottage industry and its organisation on co-operative lines would assist its development on

sound basis. We hope that the Reserve Bank of India will carry out the necessary investigation and thereafter take such steps to render assistance to this industry as are found feasible.

7.8. Non-Mulberry Silk.—Non-mulberry silk which is produced in Assam, Bihar, Orissa, West Bengal and Madhya Pradesh consists of Tassar, Muga and Eri varieties. The bulk of the total production of non-mulberry silk is of Tassar variety followed by Muga and Eri. The following table shows the total production of non-mulberry silk of each variety in 1957 :—

| | Lakh lbs. |
|------------------|-----------|
| Tassar | 3.15 |
| Muga | 1.90 |
| Eri | 1.57 |

Tassar is a non-domesticated variety of silk worm reared on the leaves of Asan, Arjun, and Sal trees and is mainly found in the States of Bihar, Madhya Pradesh, Orissa and West Bengal. Reeling and weaving operations are carried out by the rearers themselves. Tassar silk in Bihar is produced by Adivasi families in Chota-Nagpur division and Santhal Parganas. Production of Tassar silk in Bihar which remained stationary at 1,04,000 lbs. a year during the years 1953 to 1956 increased to 120,000 lbs. during 1957. There are about 9,000 charkhas which are working mostly on Tassar. In Madhya Pradesh also rearing is done in the forests by tribal and schedule caste people. Production of Tassar silk was reported to be 140,000 lbs. a year during 1953 to 1956 and 150,000 lbs. in 1957. Reeling is done on crude charkhas. In Orissa production of Tassar silk has been well over 30,000 lbs. and was 34,700 lbs. in 1957. Assam is the largest producer of Eri and Muga silk. Both Eri and Muga silk worm are multivoltine. Reeling of Eri and Muga silk is done on indigenous crude charkhas. Bihar also produced about 28,000 lbs. of Eri silk in 1957. The total production of each variety of non-mulberry silk and silk waste in each of the States from 1953 to 1957 is given in Appendix VII. As the non-mulberry silk industry affects the life of backward and tribal classes, the Central Silk Board has been giving financial and technical assistance to organise the industry on sound and modern lines. Research and seed supply stations, introduction of improved methods of reeling and spinning, training of silk worm rearers in improved methods of rearing are a few of the aspects on which emphasis is laid for promoting growth of this industry. Indian Tassar cloth has a special appeal in foreign countries especially in U.S.A. and the scheme for stimulating export of these fabrics has been referred by the Board to the Government of India for consideration. The Board had sanctioned financial assistance to this industry but it could not be availed of fully owing to lack of technical personnel. The Board has, therefore, assisted the States to get their selected candidates trained in sericulturally advanced States like Mysore and West Bengal.

7.9. *Silk throwing and twisting factories.*—The silk throwing and twisting factories exist in the main sericultural States where raw silk is produced. Silk weaving mills generally have their own throwing and twisting plans. The following table gives the number of such units in the country and their State-wise distribution :—

| Name of State | Number of units | Number of spindles | Remarks |
|-----------------------------|-----------------|--------------------|--------------------------------------------------|
| Mysore | 54 | 70,000 | .. |
| West Bengal | 1 | 240 | .. |
| Jammu and Kashmir | 1 | 5,600 | Attached to Government Weaving Factory, Rajbagh. |
| Bihar | 4 | N.A. | .. |
| Madras | 26 | N.A. | Engaged in art-silk yarn also. |
| U.P. | 6 | N.A. | Throwing units for organzine silk. |
| | 92 | 75,840 | |

7. 10. *Silk weaving industry :*

7.10.1. According to the information furnished by the State Governments there are at present 8,306 powerlooms and 106,146 handlooms in the country engaged exclusively or mostly on weaving of silk fabrics. Their total production of silk fabrics is estimated to be 23.4 million yards per annum. The following table shows the State-wise distribution of looms :—

| Name of State | Number of power-looms | Number of hand-looms | Estimated annual production in lakh yards | | | Remarks |
|---------------------------|-----------------------|----------------------|-------------------------------------------|------------|-------|------------------------------------------------------------------------------------------------------------------------|
| | | | Power-looms | Hand-looms | Total | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Mysore | 8,000 | 7,634 | 36 | 40 | 76 | These looms are engaged in art-silk also. |
| West Bengal | Nil | 4,000 | Nil | 22.80 | 22.80 | .. |
| Jammu & Kashmir | 150 | 912 | 4.0 | 11.50 | 15.50 | .. |
| Assam | Nil | 34,000 (approx.) | Nil | 16.00 | 16.00 | .. |
| Bihar | 25 | 1,000 | 1.44 | 6.84 | 8.28 | .. |
| Madras | Nil | 25,784 | Nil | 21.90 | 21.90 | .. |
| Bombay | 109 | N.A. | 4.30 | N.A. | 4.30 | Information as furnished by the Surat Chamber of Commerce, Surat and the Silk and Art Silk Mills' Association, Bombay. |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------------|-------|---------|-------|--------|--------|-----------------------------|
| U. P. | 22 | 25,000 | 1.00 | 46.00 | 47.00 | .. |
| Orissa | Nil | 4,000 | Nil | 5.28 | 5.28 | .. |
| Andhra Pradesh | Nil | 2,500 | Nil | 7.57 | 7.57 | Few of the looms use power. |
| Madhya Pradesh | Nil | 1,316 | Nil | 9.85 | 9.85 | Weave Tassar silk fabrics. |
| | 8,306 | 106,146 | 46.74 | 187.74 | 234.48 | |

7.10.2. Regarding marketing of handloom silk fabrics in Mysore State the handloom silk industry is reported to be experiencing difficulties in marketing its product. The State Government propose to establish two Inter State Marketing Depots and one Central Marketing Depot. In West Bengal there is an organisation named Resham Silpi Sangha which has organised Reelers' Societies and Weavers' Societies. Similar organisations under the Khadi and Village Industries' Commission and Abhaya Ashram also market the handloom silk fabrics produced in the State. In Assam sales are arranged partly through Emporia and Marketing Organisation Centres numbering 32 run by the State Government and partly by Silk Co-operative Societies and local dealers. Eri silk fabrics are exported to Tibet and Sikkim. In Bihar a scheme for the organisation of silk weavers into co-operative societies has recently been launched. A number of societies have been organised and they are selling their products through Handloom Weavers' Co-operative Marketing Union. In Orissa, sales are organised through Weavers' Co-operative Societies. In Madras, the All India Handloom Fabrics Marketing Society and the Madras State Handloom Weavers' Co-operative Society handle the trade of silk fabrics produced by co-operative societies. The Punjab Government have stated that they are making efforts to bring handloom weavers under the co-operative fold. In Andhra Pradesh also there are co-operative societies of weavers which arrange the marketing of silk fabrics produced by their members. In Uttar Pradesh and Madhya Pradesh the sale of handloom silk fabrics is handled by the trade.

8.1. In our last Report (1953) we had estimated the demand for raw silk, spun silk yarn and silk fabrics at 3.5 million lbs., 1.5 lakh lbs. and 1.5 million lbs. respectively. In connection with the present inquiry, the Central

Domestic demand Silk Board has placed the current annual demand for raw silk at 3 million lbs. This estimate is based on the total availability of raw silk to the silk weaving industry in India during each of the years from 1955 to 1957. The demand for raw silk being elastic the consumption in the country depends primarily on the price factor. The Board is of the view that development schemes so far undertaken by the States are likely to reduce the present high cost of production when mulberry cultivation improves and new rational methods are introduced in rearing, seed production and silk reeling with consequent increase in the domestic demand for raw silk. We have received various estimates of

current demand for raw silk from State Governments, producers, importers and consumers of raw silk. These range between 3 and 4 million lbs. per annum. Most of them do not expect the demand to increase in the next 3 years because of the rising trend in prices of raw silk and competition from art silk and synthetic fabrics. The Government of Mysore have estimated the current annual demand at 3 million lbs. and expect it to remain stationary at that level because people have taken to greater use of cheaper synthetic fabrics. Among producers the Mysore Silk Association, Bangalore estimates the current demand at 3 million lbs. but expects it to rise to 3·5 million lbs., if the price of raw silk was lower as a result of reduction in the cost of production. Among the importers, the Raw Silk Merchants' Association, Bombay, estimates the current demand at 3·2 million lbs. and future demand at 3·5 million lbs. after taking into account (a) domestic production, (b) overall imports for the last few years, and (c) prevailing prices of raw silk. Among consumers, Bombay Silk Mills Ltd., Bombay, estimates the current demand at 3 million lbs. and expects it to rise to 4 million lbs. if the price of raw silk was brought down to Rs. 30 per lb. The Silk and Art Silk Mills' Association, Bombay, estimates the current and future demand at 4 million lbs. These various estimates for current and future demand of raw silk relate only to mulberry silk. The actual quantity of raw silk available for domestic consumption during the last 3 years was as under :—

| Years | (in lakh lbs.) | | | |
|----------------|------------------------------------------|----------------------------------------------|--------------------|---------------|
| | Production in India Mulberry raw silk | Production in India Non-mulberry raw silk | Import of raw silk | Total (2+3+4) |
| 1 | 2 | 3 | 4 | 5 |
| 1955 | 24.24 | 5.89 | 4.63 | 34.76 |
| 1956 | 23.11 | 6.07 | 1.12 | 30.30 |
| 1957 | 24.76 | 6.62 | 3.44 | 34.82 |

According to these figures the average annual consumption of raw silk of mulberry type amounted to 2·7 million lbs. per year and adding the output of non-mulberry silk the average consumption of raw silk of all types amounted to about 3·3 million lbs. In the discussion at the public inquiry, it was pointed out that imports of raw silk during the last three years have been considerably reduced as a result of which shortage of raw silk has developed in the country. This was indicative of an unfulfilled demand which has persisted in spite of the upward

trend in prices of raw silk. It was, therefore, argued that the domestic demand for silk was not fully satisfied by the available supplies from indigenous production and imported silk. In arriving at the total demand for raw silk in the country, it is useful to analyse the pattern of demand for various types of raw silk, viz., filature silk, charkha silk and imported silk. During the discussion at the public inquiry, we were informed that the demand for filature silk which is mainly of mulberry type in the country is limited to about 3 to 3.5 lakh lbs. per year. A large portion of the raw silk produced in Jammu and Kashmir filatures is consumed by the Government Silk Weaving Factory, other powerloom factories and handlooms in the State and only the balance is sold outside. A part of the Mysore filature silk is sold for consumption by Silk Weaving Factories and handlooms in the State and the balance is sold for weaving in other centres. Since filatures in India are not turning out silk of the quality comparable with that of imported silk, the weavers generally prefer imported silk, and handloom weavers in centres like Surat and Varanasi who produce superior fabrics like brocade and Jari invariably demand imported silk. Representations have been made to us that the indigenous filature silk is not suitable for warp and gives an uneven appearance on weft. Weavers are, therefore, prepared to pay even slightly higher prices for imported silk because fabrics produced from this variety are of superior quality and command a higher price. The balance of the demand is comprised of silk produced on charkha and improved domestic basin. The demand for charkha silk has shown remarkable persistence primarily because a large part of this silk is consumed in the producing regions and the neighbouring areas. The demand for Mysore charkha silk is the largest from handloom weavers in the South who specialise in producing sarees with traditional designs. Similarly, the demand for Bengal silk is pronounced in West Bengal and Bihar weaving centres. There is a country-wide market for these fabrics because they are attractive for their traditional designs, are more durable and cheaped. It seems that the consumption of charkha silk has gone up during the past four years as almost the entire increase in the raw silk output has been absorbed by this sector. It is remarkable that in spite of the phenomenal growth in the consumption of rayon and synthetic yarn and mixed fabrics, the demand for charkha silk has gone up during the past 3 years. Taking all these factors into account, we estimate that the current demand for raw silk of all types is about four million lbs. per annum. So long as the price of raw silk remains high at the prevailing level, we do not expect the domestic demand for raw silk to exceed this figure in the next 3 or 4 years. If, however, developmental schemes so far undertaken by the States tend to reduce the present high cost of production and bring about a distinct improvement in the quality of filature raw silk, there is a likelihood of the domestic demand for raw silk going up.

8.2. As regards spun silk yarn, the Central Silk Board has estimated the current demand at 1 lakh lbs. a year. Mysore Spun Silk Mills Ltd., which is the only producer in the country has stated that the present demand in the country is not even equal to the capacity of the

mill, as conditions have changed since 1953 in that imports of spun silk are being replaced by spun rayon yarn. The following table indicates the consumption of spun silk yarn during the last 3 years :—

(In lbs.)

| Years | | | | | | Production | Imports | Total |
|-------|---|---|---|---|---|------------|---------|----------|
| 1955 | . | . | . | . | . | 53,666 | 32,437 | 86,103 |
| 1956 | . | . | . | . | . | 62,802 | 51,445 | 1,14,247 |
| 1957 | . | . | . | . | . | 64,981 | 2,205 | 67,186 |
| TOTAL | | | | | | 1,81,449 | 86,087 | 2,67,536 |

The average annual consumption of spun silk yarn during the 3 years amounted to 89,000 lbs. per year. Imports of spun silk yarn has been subjected to considerable restriction and imports in 1957 amounted to only 2,205 lbs. At the public inquiry, we found that there was considerable demand for spun silk yarn which was in short supply and was quoted at a fairly high premium. It was, therefore, generally agreed that the annual demand for spun silk yarn may be placed at 2 lakh lbs. We have, therefore, adopted this figure for our estimates of future demand.

8.3. We have no evidence to enable us to frame even a rough estimate of demand for silk fabrics. We have, therefore, not attempted to make an estimate of either current or future demand in this regard.

9.1. At the last inquiry, it was found that no perceptible improvement in the quality of filature silk had taken place and that there was considerable scope for further improvement.

Quality

In connection with the present inquiry the producers of charkha silk have claimed that there has been improvement in the quality of their raw silk through improvement in cooking system, grading of cocoons and installation of improved domestic basins. The filature silk producers have also claimed improvement in the quality of filature silk through improvement in cooking and use of improved reeling machinery. The Government of Mysore have reported (a) that there has been little improvement in the quality of cocoons as the steps necessary for conducting research for improving the quality of cocoons have not yet been completed, (b) that the average quality of Mysore raw silk has shown some improvement because of modernisation of filatures on multi-end basins and modern cooking machinery and introduction of improved domestic basins, and (c) that as the multi-voltine cocoons produced in the South are inferior in "neatness" which happens to be one of the main characteristics in determining the grade of silk it is not possible to say to which particular international grade

Mysore silk belongs. The Government of West Bengal have also stated that the silk produced in that State cannot be graded on international standards. They have taken steps to improve the quality of raw silk by production of F-1 cocoons with high yield and better quality of raw silk, introduction of improved reeling machines etc. The Government of Jammu and Kashmir have informed us that the plant and machinery of filatures in Jammu and Kashmir have been in service for over 25 years and need replacement. There is a scheme for modernisation of filatures by installation of Japanese reeling machinery for producing 'A' grade raw silk. Owing to difficult foreign exchange position, however, the scheme could not be implemented and the State Government are trying to import the plant on deferred payment basis. As no regular grading of silk is done at present it is difficult to say to which international grade the raw silk produced in Jammu and Kashmir corresponds. Among the traders, the Raw Silk Merchants' Association, Bombay, has stated that the bulk of production in Mysore State is of inferior quality as it continues to be reeled on old charkha and that it has not noticed any improvement in the quality of filature raw silk except in cleanliness. As regards Kashmir silk it has found that it does not answer to 'F' grade according to the international standard. Among consumers of raw silk the Mysore Government Silk Weaving Factory, Mysore, has stated that the average quality of the bulk of the locally produced raw silk is inferior particularly in its evenness when compared to the quality of imported silk. The Silk and Art Silk Mills' Association Ltd., Bombay, had expressed the view that the quality of the filature silk cannot be compared even to the 'D' grade of imported raw silk. Filature silk cannot be used for warp and has to be used for weft only; it contains slabs and is uneven in thickness and fluffy, resulting in production of defective fabrics in more than one way. Dr. Y. Tazima, who recently visited India stated that the greatest defects in Indian silk are found in its quality. From the evidence received by us it appears that consumers prefer imported silk even at a premium ranging from Rs. 2.80 to Rs. 10 per lb. of raw silk.

9.2. There are at present two conditioning and testing houses, viz., the Silk Conditioning and Testing House, Bangalore and Government Silk Conditioning House, Calcutta. In addition, the Silk and Art Silk Mills Research Association, Bombay, have facilities for testing silk fabrics. We are informed that the Government of Jammu and Kashmir will, with the assistance of the Central Silk Board, acquire the silk testing and conditioning equipment in the near future. The Government of Mysore have stated that filatures are advised to market their raw silk only after obtaining the necessary certificates from the Silk Conditioning and Testing House, Bangalore. At the public inquiry, it was pointed out that it was not the usual practice with the filature owners in Mysore State to send raw silk for testing purposes in lots of 10 bales each as is the case in China and Japan and that usually only a few skins are taken out and sent for test. We understand that compulsory testing and grading of raw silk is under the consideration of the Central Silk Board.

9.3. The Indian Standards Institution has published 21 standards on grading and classification of raw silk. It has, however, informed us that according to the best of its information the sericulture industry in India has not found it possible to use these standards though the industry is slowly equipping itself for the purpose. The Central Silk Board has explained the reasons why the industry is unable to adopt the standards. The bulk of production of raw silk comes from charkha establishments which are of diverse nature and there is no room for application of the standards formulated by the I.S.I. Until production techniques are standardised and the denierage of silk is uniform, it would not be possible to enforce the standards—Category I and Category II prescribed by the I.S.S. Further, it would be necessary also to formulate standards suited to the production methods now in vogue among the several charkha reeling establishments. So far as Charkha silk is concerned, it is understandable that the I.S.I. standards cannot be applied. But we do not see sufficient justification why filature silk producers should not follow the standards laid down by the Indian Standards Institution. The Director of Sericulture, Mysore has forwarded to us an analysis of the results of tests conducted on 565 samples of 20/22 denier raw silk during 1957-58 at the Government Silk Testing and Conditioning House, Bangalore. This shows improvement in the qualities of evenness and cleanness but in respect of neatness, it is stated that the silk produced in Mysore remains almost sub-standard. It is stated that 87.6 per cent. of the total number of samples examined in 1957-58 indicated size deviations within the permissible limits; and there has been some improvement in cohesion. We are of the view that filature silk should be duly tested before marketing and test certificates should be issued to accompany suitable lots of bales as is done in other countries. We, therefore, recommend that the Governments of Mysore and Jammu and Kashmir should consider the feasibility of enforcing compulsory testing of filature silk produced in their States and take appropriate steps for this purpose as early as possible.

10.1. Scientific research into the problems of various sections of the sericulture industry is essential for improving the quality of raw silk and reducing the cost of production. The major problem at present is to improve the silk worm breeds so that the yield and quality of cocoons, which are the basic raw material, show marked improvement and the renditta is considerably reduced. Along with this, the existing methods of rearing and cultivation of mulberry plants and reeling techniques will need to be improved. In our last Report on the sericulture industry (1953) we had recommended the setting up of regional research stations and also a central research station to co-ordinate the activities of the regional stations.

10.2. There are at present three research stations whose activities are briefly recounted below :—

- (i) Central Sericultural Research Station, Berhampore which is under the direct administrative control of the Central Government has four sections—Entomological, Biochemical,

Botanical and Pathological. It has a sub-station at Kalimpong. Until recently the Deputy Director of Sericulture of West Bengal Government was a part-time officer-in-charge of this Station. Since June, 1957, a full-time Director has been appointed. The main activity of this station has so far been to prepare and supply disease free layings to the sericulturists in West Bengal, though some experiments in manurial study of different types of soils in the States, cultivation of mulberry and evolution of high yielding races of silk worms, etc., have also been conducted. A Special Committee under the Chairmanship of the Chairman of the Central Silk Board, was appointed by the Central Government in 1957 to review the activities of the institute. The Committee has submitted its report which we understand is under Government's consideration.

- (ii) The Sericulture Research Institute, Channapatna, Mysore, conducts research into Sericultural and Botanical Sections. At present research is carried on into the preparation of mulberry root grafts, rearing of Japanese univoltine race and evolving a suitable high yielding hybrid race, acclimatisation of new foreign races etc. This Institute is to expand into a full-fledged Research Institute for which construction of laboratory buildings and residential quarters is in progress. The Central Silk Board has given substantial financial assistance for the construction of buildings and equipment for the Institute.
- (iii) The Sericulture Institute, Titabar (Assam), which was established in 1953, is fully equipped to conduct research into various aspects of the industry. Experiments conducted so far related to the growth and yield of mulberry, segregation of silk worm races and study of diseases in all the three varieties of silk worms. There are also two small research Stations at Chaibassa and Ranchi in Bihar.

10.3. The Central Silk Board constituted an expert committee to go into the question of establishment of sericultural research stations and one of the important recommendations of this Committee was to set up regional research stations in Mysore, Madras, West Bengal and Assam. The following grants were sanctioned for the States towards the establishment of regional research stations :—

| | 1952/53/ to 1955/56 | 1956/57 | 1957/58 |
|-----------------------|------------------------|----------|---------|
| | Rs. | Rs. | Rs. |
| Mysore | 7,34,790 | 1,77,100 | 15,000 |
| West Bengal | 46,875 | .. | .. |
| Madras | 1,45,000 | .. | .. |

| | 1952/53/to 1955/56 | 1956/57 | 1957/58 |
|---------------------------|-----------------------|-----------------|-----------------|
| Jammu & Kashmir | .. | 2,34,070 | .. |
| Assam | 73,000 | 37,515 | 86,772 |
| Bihar | .. | .. | 48,000 |
| Orissa | .. | .. | 7,054 |
| TOTAL | 9,99,665 | 4,48,685 | 1,56,826 |

In the Second Five Year Plan Government has set apart Rs. 39.27 lakhs for research into the various aspects of sericulture.

10.4. The problem of organising research for the improvement and development of the sericulture industry in India has engaged the attention of (a) the Silk Industry Stabilization Committee of the Central Silk Board, (b) the Reviewing Committee appointed to evaluate the work done by the Central Sericultural Research Station at Berhampore and (c) Dr. Y Tazima, the Japanese expert who visited the various sericultural centres in the country and has made a detailed report embodying his observations and recommendations for the improvement of the industry. From the reports of the above two Committees and Dr. Tazima, it is clear that the existing organisation and the facilities it provides for conducting research is inadequate for our present requirements. There is considerable information on sericultural research in other countries but since our climatic conditions are different, foreign techniques will require modification to suit local conditions in various parts of the country. Further, in a developmental plan, it is necessary to ensure balanced growth in all sections of the industry. There is, therefore, imperative need for independent research in the country relating to cultivation of mulberry plants and trees, methods of rearing of improved races of silk worms and reeling methods suitable to different types of cocoons.

10.5. Of the various recommendations made in the three reports mentioned above the following two which are common among them are important—(1) there should be (a) one Central Sericultural Research Station with sub-stations if necessary to conduct basic research into the problems affecting the industry as a whole and (b) regional research stations with sub-stations to apply the results of the Central Research Station and conduct research in regional problems and (2) there should be adequate co-ordination between the Central and Regional Research Stations. These matters were discussed at the public inquiry. The Chairman of the Central Silk Board stated that the Government of India and his Board have been giving considerable attention to the research side and have given liberal assistance from central funds. He mentioned that in addition to action already taken for the establishment of the two service institutions, namely, the All India Sericultural Training Institute in Mysore and Central Foreign Race Seed Station in Kashmir.

the Central Silk Board has under consideration proposals to ensure that research is carried on at five centres, namely, three for mulberry and two for non-mulberry areas as stated below :—

| | |
|------------------------|----------------------------------------------------------------------------|
| Mulberry | Kashmir area (including Punjab and Uttar Pradesh) Bengal Area, Mysore Area |
| Non-mulberry | Tassar---Bihar and Orissa, } Muga and Eri } Assam |

He expressed the view that co-ordination between these regional stations can be arranged in one or two ways. The regional stations may be taken over by the Central Government and run under its direct supervision or some kind of co-ordinating agency like the Governing Body or Advisory Council may be constituted for the purpose. These research stations if they are to be run properly should be given adequate financial assistance. He added that further steps necessary will be taken to see that research is conducted in these five centres and that it is adequately financed and properly co-ordinated. As the proposals regarding the establishment of the research centres at the above five places to serve the mulberry and non-mulberry sericultural areas are under consideration of Government we do not wish to make any specific recommendation in this regard. There are, however, one or two points on which we would like to offer comments. In the present stage of our industry scientific research is of decisive importance and can make a contribution of lasting benefit for its development along sound lines. Preliminary arrangements for setting up research stations, namely, construction of buildings, acquisition of equipment and recruitment of trained personnel, take time before they can commence work of a fruitful nature. We, therefore, recommend that Government and the Central Silk Board should give the highest priority for the establishment of research stations at the proposed five centres and take necessary steps to enable them to start work as early as possible.

10.6. Among the recommendations stated above, emphasis is laid on having one central research station engaged in research of a basic character which would embrace the industry as a whole and regional research stations in other centres that would deal with problems of local importance, apply the results of basic research with modifications to suit local conditions and disseminate them among different sections of the industry. We consider that this is an important aspect which deserves careful consideration. Without anticipating Government's decision in this respect, we suggest that one of the research stations in mulberry area should be adequately equipped and staffed with qualified personnel to conduct research of basic type so that overlapping of work at mulberry silk research stations may be avoided.

10.7. Of equal importance with research is the application and dissemination of its results among farmer rearers. Much of the success of research would ultimately depend upon the reaction of the sericulturist who is as conservative and cautious as any other agriculturist.

The human factor in all sections of this industry is very important. It would, therefore, be necessary for the State Governments to set up adequate extension organisation having trained personnel with almost missionary zeal to disseminate the information of scientific research and carry on patient propaganda for putting it to practical use. We, therefore, suggest that State Governments concerned should take early steps to set up adequate extension organisation in their Departments of sericulture to propagate the results of research and educate the farmers and reelers to adopt improved techniques in mulberry cultivation, rearing of silk worms and reeling of raw silk.

10.8. For purposes of co-ordination of research in different centres there should be continuous exchange of information between the research stations and for this purpose the technical personnel of these stations should meet in an annual conference for discussing various problems affecting the sericulture industry. We further suggest that the Central Silk Board should undertake a technical review and evaluate the progress of research at the end of three years, *i.e.*, by 1961.

10.9. As the Central Silk Board has been sponsoring many schemes and giving financial assistance for the development of the industry, we consider it essential that the Board should have a nucleus of trained and qualified technical personnel to carry out periodical supervision of the progress of the various schemes and also provide technical advice and guidance to the sericultural states, whenever required.

11.1. *Imports.*—A statement showing the country-wise imports of raw silk, silk yarns and silk fabrics during the years 1953 to 1957 and the first four months of 1958 as recorded in the published statistics of the Foreign Trade of India is given in Appendix VIII. Japan and China are the principal exporters of raw silk and China the largest exporter of spun silk yarn to this country. The total imports of (i) raw silk and cocoons, (ii) silk waste and noils, (iii) silk yarns, (iv) silk sewing thread, and (v) silk fabrics during the last five years, were as given on page 46.

Imports and import control policy.

Statement showing total imports of raw silk, silk yarns and silk fabrics

| Year | Raw silk and Cocoons | | Silk waste and noils | | Silk yarns | | Silk sewing thread | | Silk fabrics | |
|--------------------|----------------------|------------------|----------------------|------------------|----------------------|------------------|----------------------|------------------|------------------------|------------------|
| | Quantity (lakh lbs.) | Value (lakh Rs.) | Quantity (lakh lbs.) | Value (lakh Rs.) | Quantity (lakh lbs.) | Value (lakh Rs.) | Quantity (lakh lbs.) | Value (lakh Rs.) | Quantity (lakh Yards.) | Value (lakh Rs.) |
| 1953 | . | 54.71 | .. | .. | 0.19 | 2.03 | .. | .. | 3.65 | 9.85 |
| 1954 | . | 75.00 | .. | .. | 0.49 | 7.14 | .. | .. | 5.06 | 12.89 |
| 1955 | . | 91.86 | 0.0035 | 0.005 | 0.32 | 4.25 | 0.017 | 0.128 | 0.69 | 1.79 |
| 1956 | . | 19.34 | .. | .. | 0.57 | 8.29 | Negligible | Negligible | 1.55 | 3.04 |
| 1957 | . | 75.29 | 0.011 | 0.078 | 0.92 | 9.37 | 0.025 | 0.204 | 5.06 | 16.10 |
| 1958 (Jan.- April) | . | 2.85 | 0.032 | 0.374 | 0.05 | 0.92 | .. | .. | 0.27- | 1.24 |

11.2. *Import control policy.*—Raw silk, silk yarns and silk fabrics fall under serial Nos. 172, 173, 175, 184 and 189 of Part IV of the Import Trade Control Schedule. The import licensing policy for each of the above items since 1st January, 1954 was as follows :—

(a) *Raw silk and silk cocoons.*—During each of the two licensing periods of 1954, imports of raw silk and silk cocoons were allowed to established importers to the extent of 10 per cent of one half of their best year's imports. Actual users' applications were considered *ad hoc* by the Joint Chief Controller of Imports, Bombay, in consultation with the Textile Commissioner, Bombay. From 1st January, 1955 to 30th June, 1956 imports were canalised through the Central Silk Board according to the estimated requirements of the weaving industry taking into account the domestic production, need for superior quality of raw silk by specialised weavers like gold thread and brocade industry, and need to maintain the level of exports of silk fabrics etc. Since the licensing period July-December, 1956, imports are arranged through State Trading Corporation of India (Private) Ltd., and distribution continues to be made by the Central Silk Board. Further since January, 1958 under the Export Promotion Scheme exporters of silk fabrics are entitled to obtain from the Central Silk Board imported raw silk to the extent of $66 \frac{2}{3}$ per cent of f. o. b. value of fabrics exported by them at concessional rates, namely, c. i. f. price plus import duty plus incidental charges.

(b) *Yarn spun from silk waste.*—During January-June, 1954 established importers were allowed a quota of 25 per cent of one-half of their best year's imports. The quota was increased to 40 per cent for each of the next five successive licensing periods. Actual users' applications were also considered. The quota was again reduced to 20 per cent during January-June, 1957. Since 1st July 1957 imports have been banned except that during the quarter July-September, 1957 actual users' applications were considered.

(c) *Silk waste and noils, silk yarns other than yarn spun from silk waste, and silk sewing thread.*—Imports were banned.

(d) *Silk fabrics.*—Imports of fabrics, not otherwise specified, containing more than 90 per cent of silk including such fabrics embroidered with artificial silk (item 184 of Part IV of I.T.C.) were completely banned. But imports of fabrics, not otherwise specified, containing more than 10 per cent and not more than 90 per cent silk (item 189 of Part IV of I.T.C.) were allowed to established importers up to 10 per cent of one-half of best year's imports during the licensing periods January-June, 1954 and July-December, 1954. The quota was increased to 20 per cent during the subsequent four licensing periods from 1st January, 1955 to 31st December, 1956. Since 1st January, 1957 imports have been banned.

11.3. *Distribution of imported raw silk.*—As the object of canalisation of imports of raw silk was to enable the consumer to obtain it at reasonable prices and to impart an element of stability in the

prices of indigenous silk, the Central Silk Board continues to distribute it through the State Governments, co-operative associations recognised by State Governments or direct to the actual consumers. In the States of Bombay and Uttar Pradesh distribution is effected through the State Industrial Co-operative Association Ltd., Bombay and U.P. Industrial Co-operative Association Ltd., Kanpur, respectively, who are the nominees of the State Government. Up to October, 1955 distribution of imported raw silk was made on the conditions that the allotted Silk should not be resold and that the allottees should render accounts of consumption whenever called for; but subsequently imported raw silk was allotted to only those consumers who produced adequate proof of having purchased an equal quantity of indigenous filature silk. This condition was, however, not insisted on in the case of certain specialised consumers like handloom weavers of Varanasi, Cambay, Chanderi and the gold thread industry of Surat. In view of the acute foreign exchange situation the distribution policy was revised in January, 1957. Imported raw silk is now allotted only to those consumers who manufacture fabrics primarily intended for export and to the specialise sectors of silk weaving industry which require imported raw silk mainly to maintain the standard of their silk fabrics and to prevent unemployment. Under the Export Promotion Scheme, imported raw silk is also allotted to exporters against exports of fabrics effected by them after 1st January, 1958.

12.1. Exports of silk fabrics are allowed freely to all permissible destinations. In the case of silk waste only surplus waste is exported after safeguarding the interests of Mysore Spun Silk Mills Ltd. The Central Silk Board has been making recommendations to Government for every licensing period as to the surplus quantity of silk waste that could be released for export. As the stock of silk waste of Madras and Mysore origin had accumulated in the States, it was recently announced that the export of waste would be licensed freely without any quantitative restrictions up to the end of December, 1958. The total exports of silk waste and silk fabrics during the years 1953 to 1957 and the first four months of 1958 were as follows:—

| | Silk waste | | Silk fabrics | |
|--------------------------------|----------------------------|------------------------|----------------------------|------------------------|
| | Quantity (lakh lbs.) | Value (lakh Rs.) | Quantity (lakh Yds.) | Value (lakh Rs.) |
| 1953 | 12.30 | 31.94 | 2.61 | 17.26 |
| 1954 | 5.07 | 11.07 | 0.90 | 9.48 |
| 1955 | 8.68 | 21.63 | 1.98 | 24.00 |
| 1956 | 14.06 | 56.08 | 2.19 | 25.80 |
| 1957 | 7.25 | 32.71 | 2.54 | 18.67 |
| 1958 (January-April) | 1.56 | 6.86 | 0.90 | 7.79 |

12.2. The Silk and Rayon Textiles Export Promotion Council has been assisting the silk weaving industry in the matter of exports of silk fabrics. Further, since January 1958 under the Export Promotion Scheme, actual exporters of fabrics are entitled to obtain imported raw silk to the extent of 66 2/3 per cent. of the f. o. b. value of fabrics exported by them, at a rate equal to c. i. f. of raw silk *plus* import duty *plus* incidental charges. Recently Government of India announced a revised scheme of supply of imported raw silk to exporters for promoting export of silk fabrics. Under this scheme, the Central Silk Board will estimate for each quarter the quantity of raw silk required for allotment to exporters. The Board will establish agencies in the principal centres of silk production to inspect the fabrics to be exported and estimate the silk content of fabrics. On the basis of the estimated silk content of the fabrics exported in the previous quarter, the quantities of raw silk to which exporters will be entitled will be stocked by the Board and made available to the exporters. Further, Government of India have entered into an agreement with the Government of U.S.A. for export of Indian tassar silk fabrics to U.S.A. A certification procedure has been initiated for this purpose with the joint endeavours of the Central Silk Board, the Silk and Rayon Textiles Export Promotion Council and the Silk and Art Silk Mills' Research Association. The Research Association's Laboratory has undertaken to issue test certificates to exporters of fabrics on behalf of the Export Promotion Council. The States of West Bengal, Bihar and Orissa have taken steps to start certification centres in all important tassar weaving areas of the States. Similar steps are expected to be taken by Madhya Pradesh also.

12.3. In paragraph 7.6. 12.2. we have stated that in Malda about 5,000 displaced persons are engaged in spinning yarn from silk waste on ordinary charkha. To ensure sufficient supply of silk waste to them we suggest that at the time of formulating the export policy for silk waste of West Bengal origin the requirements of the local spinners should be kept in view.

13. Raw silk, silk yarns and silk fabrics are assessed to duty under items 46, 46(1), 47, 47(1) and 48 of the First Schedule to the Indian Tariff Act, 1934. The relevant extracts from that Schedule showing the current rates of protective duty on the above items are given in the statement on pages 50-51.

Existing rates of protective duty.

Statement showing the existing rates of Duty

| Item No. | Name of article | Nature of duty | Standard rate of duty | Preferential rate of duty if the article is the produce or manufacture of | | | Duration of rates of duty |
|----------|-----------------------------------------------------------------------------------------------------------|----------------|------------------------------------------|---------------------------------------------------------------------------|------------------|--------------------|---------------------------|
| | | | | The U.K. | A British Colony | Burma | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 46 | Silk, raw (excluding silk waste and noils) and cocoons. | Protective | 35% <i>ad val.</i> plus Rs. 4/- per lb. | .. | .. | 10% <i>ad val.</i> | December 31st, 1958 |
| 46 (1) | Silk, waste and noils | do. | 35% <i>ad val.</i> | .. | .. | 10% <i>ad val.</i> | do. |
| 47 | Silk yarn including thrown silk warps and yarn spun from silk waste or noils but excluding sewing thread. | .. | .. | .. | .. | 10% <i>ad val.</i> | .. |
| (a) | Silk yarn including thrown silk warps but excluding sewing thread. | do. | 35% <i>ad val.</i> plus Rs. 4/- per lb. | .. | .. | .. | do. |
| (b) | Yarn spun from silk waste excluding sewing thread. | do. | 35% <i>ad val.</i> plus Rs. 5.25 per lb. | .. | .. | .. | do. |
| (c) | Yarn spun from noils excluding sewing thread | do. | 35% <i>ad val.</i> | .. | .. | .. | do. |
| 47 (1) | Silk sewing thread | do. | 35% <i>ad val.</i> | .. | .. | 10% <i>ad val.</i> | do. |

†48 Fabrics, not otherwise specified, containing more than 90% of silk, including such fabrics embroidered with artificial silk

| | | | | | |
|----------------------------------------------------|-----|-------------------------------------------|----|--------------------|-----|
| (a) Pongee | .. | .. | .. | 20% <i>ad val.</i> | .. |
| (b) Fuji, Boseki and corded (excluding white cord) | do. | 120% <i>ad val.</i> plus Rs. 8.50 per lb. | .. | .. | do. |
| (c) Other sorts | do. | do. | .. | .. | do. |
| | do. | 120% <i>ad val.</i> plus Rs. 6.25 per lb. | .. | .. | do. |

Note:—*47 Under Government of India, Finance Department (Central Revenues), Notification No. 33 dated the 22nd June, 1925 as subsequently amended by Ministry of Finance (Department of Revenue), Notification No. 67 Customs, dated the 16th May, 1957, noil yarn is exempt from payment of so much of the Customs duty leviable thereon as is in excess of 30% *ad valorem*.

†48(c) Under Government of India, Finance Department (Central Revenues), Notification No. 33, dated the 22nd June, 1925 as subsequently amended by Ministry of Finance (Department of Revenue), Notification No. 67-Customs, dated the 16th May 1957, (1) Chinese silk piecegoods, the following namely, Chat-pote plain and flower, and Gauze, plain and flower are liable to duty at 80% *ad valorem* plus Rs. 1.60 per lb. and (2) Pa), all sorts, are exempt from the payment of so much of the Customs duty leviable thereon as is in excess of 120% *ad valorem*.

14. The information regarding c. i. f. prices and landed costs of raw silk and spun silk yarn furnished to us by the Collectors of Customs, importers and the Central Silk Board is given in Appendix IX. It was agreed at the public inquiry that the following c.i.f. quotations in March 1958 viz., Rs. 19·56 for 20/22 Denier.

A grade Chinese raw silk, Rs. 18·24 for Chinese red blossom 210/2 spun silk yarn and Rs. 16·57 for Chinese red blossom 140/2 spun silk yarn could be considered as the representative c. i. f. prices for purposes of comparison with the fair ex-works prices of indigenous products. The corresponding landed costs are as follows :—

| APPENDIX I | | | | (Rs. per lb.) |
|----------------------------------|------------------------------------------------|------------------------------------------------|---------------------------------------------------|---------------|
| | 20/22 Denier A grade Chinese raw silk | Chinese red blossom 210/2 spun silk yarn | Chinese red blossom 140/2 spun silk yarn | |
| (i) C.i.f. price | 19.56 | 18.24 | 16.57 | |
| (ii) Customs duty | 10.84 | 11.64 | 11.04 | |
| (iii) Clearing charges | 0.25 | 0.25 | 0.25 | |
| (iv) Landed cost | 30.65 | 30.13 | 27.86 | |

15.1. *Scope and method of costing.*—The Commission's Cost Accounts Officer investigated the cost of production of mulberry leaf, mulberry cocoons and filature raw silk in Mysore State and the cost of production of mulberry leaf and cocoons in the State of West Bengal. As there are no filature units in West Bengal, the cost of production of filature raw silk in that State could not be worked out. The cost of production of spun silk yarn was investigated in the Mysore Spun Silk Mills Ltd. The cost of production of plain silk fabrics was investigated in a weaving establishment at Bangalore; but the figures of cost of production of fabrics cannot be utilised as Indian silk fabrics are not comparable to imported ones. The report of the Cost Accounts Officer is forwarded to Government as a confidential enclosure to this Report.

15.2. *Cost of cultivation of mulberry leaf.*—There has been practically no change in the method of cultivation since the last inquiry. The cost of production of mulberry leaf as determined by the Commission's

Cost Accounts Officer and after making adjustments for efficiency was as under :—

| Area/Type of irrigation | Cost per lb. of leaf |
|-----------------------------------|----------------------|
| <i>Mysore</i> | nP. |
| Rain-fed : Kollegal | 4.7 |
| Irrigated : Sidlaghatta | 6.5 |
| <i>West Bengal</i> | |
| Rain-fed : Saktipur | 4.0 |

The average cost per lb. of mulberry leaf in the Mysore area worked out to 5.6 nP. as against 8.67 pies or 4.5 nP. per lb. estimated at the last inquiry. For the State of West Bengal no comparable figure can be given as the cost of production of mulberry leaf was not investigated at the last inquiry.

15.3. *Cost of production of cocoons.*—At the last inquiry the Commission estimated the average cost of cocoons at Rs. 1-6-0 per lb. The cost of production of cocoons at Kollegal and Sidlaghatta in the State of Mysore and at Saktipur in the State of West Bengal, has been worked out by our Cost Accounts Officer. The cost of production after making adjustments for possible economies and efficiency worked out to as under :—

| | Cost per lb. of cocoons |
|----------------------------------|-------------------------|
| | Rs. |
| Kollegal (Mysore) | 1.50 |
| Sidlaghatta (Mysore) | 1.57 |
| Saktipur (West Bengal) | 1.38 |

The cost of production takes account of all expenses including services rendered by family personnel of rearers but does not include return on investment in land, equipment, etc. We consider that a margin of 12 nP. per lb. would be reasonable for this purpose. After making an allowance for this remuneration, the fair economic price to the rearers works out to an average of Rs. 1.66 for Mysore and Rs. 1.50 for West Bengal. The actual cost of cocoons at the average rate of purchases made by the two firms whose costs were investigated worked out to Rs. 1.80 per lb. in the case of Kisan Silk Industries and Rs. 1.53 per lb. in the case of Government Silk Filatures, T. Narsipur. Taking the simple average of the cost of production of raw silk of these two units for purposes of comparison with the imported silk, the cost of cocoons works out to Rs. 1.67 per lb. The difference between the fair economic price to the rearers and the above rate is practically negligible (namely, 1 nP.). We have, therefore, adopted the average rate of purchases of cocoons by the two filatures for the purpose of estimating the fair ex-works price of raw silk.

15.4. *Cost of reeling and fair ex-works price of raw silk.*—Our Cost Accounts Officer investigated the cost of reeling filature silk 20/22 denier at Kisan Silk Industries (Private) Ltd., Mellur, and at Government Silk Filature, T. Narsipur, in the State of Mysore. The table given below summarises the cost data pertaining to production of raw silk in the respective filatures :—

| | Kisan Silk Industries | Mysore Government Filature |
|---------------------------------------------------------------------------|-----------------------|----------------------------|
| No. of basins | 48 | 200 |
| Renditta (lbs. of cocoons per lb. of silk) | 14 | 16 |
| | Rs. | Rs. |
| Rate per lb. of cocoons | 1.80 | 1.53 |
| Cost of cocoons per lb. of raw silk including transport charges | 26.03 | 24.48 |
| Net reeling charges including packing | 5.66 | 5.22 |
| Cost per lb. of raw silk | 31.69 | 29.70 |

The actual renditta obtained on these filatures was 14 in the case of Kisan Silk Industries and 18 in the case of Mysore Government Filature T. Narsipur. But we have adopted 16 in the case of Mysore Government Filatures because in the preceding year the Mysore District had inadequate rainfall which adversely affected the quality of cocoons and consequently raised the figure of renditta to 18. It was, however, found that in recent months and in the case of some lots, Mysore Government Filature was able to obtain a renditta of 16. To the cost of production shown above a return of 10 per cent. on capital employed as assessed by us has been added. The fair ex-works price of filature raw silk of 20/22 denier is worked out as under :—

| | Kisan Silk Industries | Mysore Government Filature |
|---------------------------------------------|-----------------------|----------------------------|
| | Rs. per lb. | Rs. per lb. |
| Cost of production | 31.69 | 29.70 |
| Profit at 10% on capital employed | 1.53 | 1.41 |
| Fair ex-works price | 33.22 | 31.11 |

15.5. At the time of the last inquiry an allowance of Rs. 2 per lb. for contingencies in the fair ex-works price of indigenous raw silk was made by us for the purpose of assessing the quantum of protection. Since imports are canalised and distributed through the Central Silk Board, and the various schemes for the improvement of the sericulture industry which are in progress should result in effective reduction in the cost of production of raw silk in the country, we do not

consider it necessary to add the element of contingency allowance to the fair ex-works price of raw silk which has already registered a rise over the estimate of Rs. 29.12 made by us in the previous inquiry.

15.6. *Yarn spun from silk waste.*—Our Cost Accounts Officer examined the actual cost of production of spun silk yarn of metric counts 2/210s and 2/140s for the year ended 31st March, 1958 at Mysore Spun Silk Mills Ltd., Channapatna. The estimates for future were discussed with the representatives of the Mysore Spun Silk Mills Ltd. The fair ex-works price for future for 2/210s was assessed at Rs. 23.52 per lb. and for 2/140s at Rs. 19.48 per lb. In working out the future estimated cost, the latest rates of purchase of silk waste were adopted. It was assumed that the proportion of silk waste to be consumed in future would be as under :—

| | |
|------------------------|--------------|
| Filature waste | 20 per cent. |
| Improved charkha waste | 50 per cent. |
| Charkha waste | 30 per cent. |

The average rate amounts to Rs. 2.07 per lb. During the last inquiry the price of silk waste was assumed at 12½ per cent. of that of the fair ex-works price of raw silk. The rate of Rs. 2.07 adopted in our present estimate works out to nearly 1/15 of the average cost of raw silk produced in the State of Mysore.

16.1. *Raw silk [Tariff Item 46].*—The c.i.f. prices ascertained by us and referred to in paragraph 14 are in respect of 20/22 denier white A grade, but the filature silk produced in the country does not correspond to this grade. None of the producers have claimed that their raw silk compares to even 'D' grade of the International Standards. We, however, feel that for purposes of comparison indigenous raw silk should be equated to International Grade D, as was done at the last inquiry, as this would provide sufficient incentive for improvement in quality. Further, we have assumed an amount of 2.06 cents as the price differential for each grade inferior to International A Grade. On this basis the c.i.f. price of D Grade is estimated at Rs. 19.27 per lb. The following table gives the comparison between the fair ex-works price of indigenous raw silk and the estimated landed cost of imported raw silk of 20/22 denier 'D' Grade :—

| | Rs. per lb |
|---------------------------------------------------------------------------------------------------------|------------|
| C.i.f. price of White 'A' Grade raw silk | 19.56 |
| Less Grade differential at 2.06 cents for equating imported A Grade to corresponding indigenous D grade | 0.29 |
| | 19.27 |
| Customs duty at 35% <i>ad valorem</i> plus specific duty of Rs. 4/- per lb. | 10.74 |
| Clearing charges | 0.25 |
| Landed cost with duty | 30.26 |

| | Rs. per lb. |
|---------------------------------------------------------------------------------------------------------------------------------|-------------|
| Landed cost without duty | 19.52 |
| Fair ex-works price (average fair ex-works price of Kisan Silk Industries and Government Silk Filatures, T. Narsipur) | 32.17 |
| Difference between landed cost without duty and fair ex-works price | 12.65 |
| Difference as a percentage of c.i.f. | 65.65 |
| Say, 66 per cent. | |

16.2. *Tariff item 46(1)—Silk waste and oils.*—There have been no imports of silk waste in the recent past and it was, therefore, not possible to make a comparison between the fair ex-works price of the indigenous product and the imported article.

16.3. *Tariff item 47(a)—Silk yarn including thrown silk warp but excluding sewing thread.*—The cost of production of thrown silk was not separately examined by our Cost Accounts Officer, as no unit exclusively devoted to throwing of silk was selected by the Commission during the present inquiry. In fact, there have been no imports of thrown silk recently and a comparison between the landed cost and fair ex-works price of indigenous product could not, therefore, be made.

16.4. *Tariff item 47(b)—Yarn spun from silk waste excluding sewing thread.*—The c.i.f. prices available to us are for the International A Grade of 2/210s and 2/140s but the spun silk produced by Mysore Spun Silk Mills Ltd. does not correspond to this grade. We have, therefore, decided, as in the case of raw silk, to assume it to be of International D Grade. The c.i.f. price was accordingly adjusted after making due allowance for price differential at 2.06 cents per each grade inferior to International 'A' grade. The table appended below gives a comparison of fair ex-works price per lb. of indigenous spun silk yarn of 2/210s and 2/140s with the landed cost of the corresponding imported yarn:—

| | 2/120s | 2/80s |
|--------------------------------------------------------------------------------------------------|-------------|-------------|
| Counts (cotton) | | |
| Counts (metric) | 2/210 | 2/140 |
| | Rs. per lb. | Rs. per lb. |
| C.i.f. price of 'A' grade | 18.24 | 16.57 |
| Less for grade differential at 2.06 cents per grade for equating the c.i.f. to D grade | 0.29 | 0.29 |
| | 17.95 | 16.28 |
| Duty 35% <i>ad valorem</i> plus specific duty of Rs. 5.25 per lb. | 11.53 | 10.95 |
| Clearing charges | 0.25 | 0.25 |
| Total landed cost | 29.73 | 27.48 |

| | Rs. per lb. | Rs. per lb. |
|-------------------------------------------------------------------------------|-------------|-------------|
| Landed cost without duty | 18.20 | 16.53 |
| Fair ex-works price | 23.52 | 19.48 |
| Difference between landed cost without duty and fair ex-works price | 5.32 | 2.95 |
| Difference as percentage on c.i.f. | 29.64 | 18.12 |
| Say, 30 per cent. 18 per cent | | |

The comparison would indicate a duty of 30 per cent. and 18 per cent. respectively for 2/210s and 2/140s. The protective duty required would be the higher of the two rates, namely, 30 per cent. *ad valorem*.

16.5. *Tariff item 47(c)—Yarn spun from silk noils excluding sewing thread.*—There was no imports falling under this item in the recent past and no comparison could, therefore, be made between the landed costs of the imported article and fair ex-works price of indigenous products.

16.6. *Tariff item 47(1)—Silk sewing thread.*—It was found that there were no imports coming under this head in the recent past and the remarks against item 47 (c) apply equally to this item.

16.7. *Tariff item 48—Fabrics not otherwise specified containing more than 90% of silk including such fabrics embroidered with artificial silk.*—The quantum of protection required for silk fabrics is only of a compensatory nature and consequently c.i.f. prices of different fabrics have been estimated on the basis of the raw silk/spun silk content in each type of fabric.

16.7.1. *Tariff item 48(a)—Pongee.*—A reference to paragraph 14 will show that the c.i.f. price of A Grade of imported raw silk is Rs. 19.56. The duty required to be levied on raw silk is Rs. 12.65 per lb. It is estimated that a quantity of $1\frac{1}{3}$ lb. of raw silk is required to produce 1 lb. of this type of cloth and the corresponding compensatory duty would, therefore, work out to Rs. 16.87 ($1\frac{1}{3} \times$ Rs. 12.65). Further it is estimated that the content of raw silk in this fabric is about 70% of the total cost of fabric. On this basis the c.i.f. price per lb. of this fabric and the duty required works out as under :—

| | Rs. per lb. |
|-----------------------------------------------------------------------------------------------------------------------------|-------------|
| C.i.f. price of A Grade raw silk | 19.56 |
| C.i.f. price of silk content in 1 lb. of fabric at $1\frac{1}{3}$ lb. of raw silk ($1\frac{1}{3}$ of 19.56) | 26.08 |
| C.i.f. price of Pongee estimated on the basis that the value of silk in Pongee is 70% (Rs 26.08 \times 10/7) | 37.26 |
| Compensatory duty of Rs. 16.87 as a percentage of estimated c.i.f. price of Pongee. | 45.28 |
| Say, 45 per cent. | |

It will be seen, therefore, that the compensatory duty indicated for this fabric is about 45 per cent.

16.7.2. *Tariff item 48(b)—Fuji, Boseki and Corded (excluding white cord).*—It is understood that these types of fabrics are made from spun silk yarn. As in the case of Pongee, it is stated that 70% of the total cost of fabrics is the value of silk content. It is also understood that a quantity of $1 \frac{1}{10}$ lb. of spun silk is required to produce 1 lb. of these fabrics. Since they are generally manufactured from 2/210s counts yarn, the compensatory duty required for them will be Rs. 5.85 ($1 \frac{1}{10} \times$ Rs. 5.32). The c.i.f. price of fabric and the compensatory duty needed works out as under :—

| | Rs. per lb. |
|-----------------------------------------------------------------------------------------------------------------|-------------|
| Estimated c.i.f. price of D Grade spun silk yarn (2/210s) | 17.95 |
| C.i.f. price of spun silk yarn contained in 1 lb. of fabric ($1 \frac{1}{10} \times 17.95$) | 19.75 |
| C.i.f. price of fabric on the basis that the fabric contains 70% silk yarn ($10/7 \times$ Rs. 19.75) | 28.21 |
| Compensatory duty of Rs. 5.85 as a percentage of estimated c.i.f. price | 20.75 |
| Say, 21 per cent. | |

16.7.3. *Tariff item 48(c)—Silk fabrics, other sorts.*—These comprise of finer varieties such as georgettes, crepe, etc. in which case also it has been estimated that the value of raw silk content would be about 70% of the total cost. The quantity of raw silk required for this type of fabric would be similar to fabrics covered under tariff item 48 (a). The compensatory duty required for this item would, therefore, be the same as that indicated for tariff item 48(a), namely, 45 per cent.

17.1. From the figures given in the foregoing paragraph, it will be seen that the measure of protection required by the indigenous sericulture industry against foreign competition for the various products is as indicated in column 2 of the following statement. The present rates of duty are given in column 3 of the statement.

| Item | Rate of duty indicated | Present rate of protective duty |
|------------------------------------------------------------|----------------------------------|---------------------------------------------------|
| 1 | 2 | 3 |
| Silk (Raw and cocoons) [Item 46 I. C. T.] | 66 per cent. <i>ad valorem</i> . | 35 per cent. <i>ad valorem</i> plus Rs. 4 per lb. |
| Silk waste and noils [Item 46(1) I. C. T.] | Not ascertained | 35 per cent. <i>ad valorem</i> . |
| Silk yarn including thrown silk warp [Item 47(a) I. C. T.] | Not ascertained | 35 per cent. <i>ad valorem</i> plus Rs. 4 per lb. |

| 1 | 2 | 3 |
|------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------|
| Yarn spun from silk waste [Item 47(b) I. C. T.] | 30 per cent. <i>ad valorem</i> . | 35 per cent. <i>ad valorem</i> plus Rs. 5.25 per lb. |
| Yarn spun from silk noils [Item 47(c) I. C. T.] | Not ascertained | 35 per cent. <i>ad valorem</i> . |
| Silk sewing thread [Item 47 (1) I. C. T.] | Not ascertained | 35 per cent. <i>ad valorem</i> . |
| Silk fabrics (Pongee) [Item 48 (a) I. C. T.] | 45 per cent <i>ad valorem</i> | 120 per cent <i>ad valorem</i> plus Rs. 8.50 per lb. |
| Silk fabrics (Fuji, Boseki and corded excluding white cord) [Item 48(b) I. C. T.], | 21 per cent. <i>ad valorem</i> . | Do. |
| Silk fabrics (other sorts) [Item 48(c) I. C. T.] | 45 per cent. <i>ad valorem</i> . | 120 per cent. <i>ad valorem</i> plus Rs. 6.25 per lb. |

17.2. Protection to the sericulture industry has been accorded for over 25 years with the main object of enabling the industry to withstand competition from raw silk imported from foreign countries by improving its quality to international grade and reducing its cost of production. From the evidence available to us, we have found that though production has increased since the last inquiry, the quality of Indian raw silk has not yet attained the grade of international standards nor has the cost of production been brought down to the level at which foreign silk is imported in the country. So long as the main objectives of protection are not accomplished, there is a *prima facie* case for continuance of protection. Sericulture is not a single industry functioning under one roof; it is an integrated industry comprising of separate enterprises which are worked by different classes of people in rural and urban areas. It is essentially based on agriculture, namely, mulberry cultivation which, like any other agricultural crop, is subject to vicissitudes due to rainfall and vagaries of weather. Further, the quality of the basic raw material, namely, the silk worm seed has to be preserved and continuously improved by scientific research. In the present stage of our sericulture industry, therefore, a double operation has to be continuously carried on: on the one hand the industry must be protected against the adverse effects of weather and ravages of disease and on the other developmental effort should be concentrated on a wide front so that all sections of the industry show simultaneous improvement. For this purpose it has been recognised, and the Tariff Board/Commission has repeatedly stressed, that Governmental aid should be given in a large measure for conducting scientific research into the various problems facing the industry and for improving the technique and quality of mulberry cultivation, seed production, rearing of silk worms and reeling of raw silk. For the duration of the Second Plan period an amount of Rs. 5 crores has been allocated for the development of sericulture industry and the Central Silk Board is now functioning as a co-ordinating authority, sponsoring various schemes

either under its control and management direct or through the agency of State Governments concerned. During the past two years, namely, 1956-58, it is estimated that Rs. 2 crores (Rs. 1.40 crores by way of grants and Rs. 0.60 crores by way of loans) have been spent for implementing the various schemes and it is estimated that Rs. 2.83 crores are to be spent in the subsequent three years. It will take some time before the results of these various schemes when completed are reflected in perceptible improvement in different sections of the industry. Looking to the progress which other countries like Japan and China have achieved in the past, there is no reason why the sericulture industry in India should not succeed in its efforts to increase its output and thereby reduce the cost of production and improve the quality of its product when the necessary financial and technical assistance is being made available in such large measure. The foreign experts who recently visited the sericultural centres in the country have expressed the view that India can give the same level of development of sericulture as other sericultural countries if the necessary steps are taken. The issues are now fairly clear, the lines of development have been indicated and financial resources and the Central Silk Board's activities are being concentrated on various schemes to achieve this objective. Given the necessary extension services through the Department of Sericulture in the major sericultural States, we have no doubt that substantial results can be achieved by the end of the Second Plan period. In the existing conditions, therefore, more than tariff protection, it is the various developmental schemes and financial and technical assistance that would provide a powerful stimulus for bringing about substantial improvement in the position of the industry. It is true that in view of the quantitative regulation of imports and their controlled distribution which have diminished the incidence of competition from imported raw silk, tariff protection loses its significance. But it should be remembered that tariff protection has in the past provided an assurance that Government is prepared not only to protect the industry against foreign competition but to render it such assistance as is necessary for its further development. We feel that its withdrawal at this juncture would cause a set-back especially when various schemes for its development are in progress. We are, therefore, of the view that protection should be continued so long as these measures are under implementation and their results are reflected in the achievement of targets set forth in the Second Five Year Plan for its improvement and expansion.

17.3. The duty required to protect raw silk against foreign competition is 66.0 per cent. *ad valorem*. The current rate of protective duty is 35 per cent. *ad valorem* plus a specific duty of Rs. 4 per lb., the total of which is equivalent to an *ad valorem* rate of about 56 per cent. We do not recommend increase in the rate of protective duty on raw silk as the indigenous industry is in receipt of additional protection through quantitative restriction of imports and by the centralised distribution of imported silk. Further, the development schemes on hand should enable the industry to achieve necessary economies in the cost

of production. A suggestion was made to us at the public inquiry that instead of a high rate of protective duty, some scheme of cash subsidy might be given to domestic producers of filature raw silk. We have examined this suggestion carefully and come to the conclusion that the question of subsidy is not feasible from administrative and other points of view. As regards yarn spun from silk waste, the measure of protection required is 30 per cent. *ad valorem* as against the current rate of 35 per cent. *ad valorem* plus Rs. 5·25 per lb. (total duty working out to about 67 per cent. *ad valorem*). It is true that the indigenous producer is unable to cope with the domestic demand and as a result prices of indigenous spun silk yarn would perhaps have a tendency to go up to the level of the prices of imported yarn. But import of spun silk yarn is at present banned and in the present foreign exchange situation, whatever imports may be allowed, would in all probability be for actual users. The price of imported yarn to actual users is not, therefore, likely to affect the level of prices of indigenous spun silk yarn to any appreciable extent. We, therefore, recommend that the existing rate of duty on spun silk yarn should be continued. The rate of compensatory duty required for silk yarn including thrown silk warp but excluding sewing thread is assumed to be more or less the same as that required for raw silk. As regards the rates of duty required for silk fabrics, although the rates indicated are much less than the current rates, we do not recommend any alteration in the rates for the reasons (a) that the duty on fabrics is only compensatory consequential to that on raw silk and spun silk yarn in which cases we have not recommended any modification in the present rates of duty, (b) that silk fabrics being articles of luxury there is no harm in having higher rates of duty and (c) that in the present context of ban on imports the question of rate of duty has little significance.

17.4. We, therefore, recommend that the protection to the sericulture industry should be continued for a further period of five years *i.e.*, up to 31st December, 1963 at the existing rates of protective duty on tariff items Nos. 46, 46(1), 47(a), 47(b), 47(c), 47(l), 48(a), 48(b) and 48(c).

18.1. *Mysore Spun Silk Mills Ltd.*—We have dealt with the question of raw materials required for Mysore Spun Silk Mills, Channapatna, in paragraph 7.6.12. The mill experienced difficulties in obtaining silk waste in 1956-57 when prices of raw material ruled very high.

Other matters

Subsequently, prices have come down and the mill was able to obtain its requirements and in fact achieved the highest output at 64,981 lbs. in 1957. For the past 5 years the mill has been experiencing difficulties because its working has not proved economical. It has shown small profit in three years but sustained heavy losses in 1952, 1955 and 1957 which have resulted in wiping out the reserves and depleting its working capital resources. It carries a very heavy burden of indebtedness which has increased its financial difficulties. At the request of the Central Silk Board and at the instance of the Ministry of Commerce and Industry an "on the spot survey" was carried out

by the Survey Party of the Textile Commissioner's office with a view to making a study of the working of the Mills from the technical and financial points of view. The Survey Party has submitted its report and made recommendations which deserve careful attention. There are three points which in our opinion require immediate consideration : (1) finance for working capital, (2) improvement in the productive efficiency, and (3) reorganisation of management. Mysore Spun Silk Mills Ltd. has no working capital funds with the result that it has to depend so much on short-term credit that it is not in a position to formulate its purchase and sales policy on economic considerations. It has to depend entirely on some suppliers of raw materials who can extend credit facilities to the mill. Further, it is completely dependent upon its sole selling agent for whatever further working capital that it requires. For increasing the productive efficiency it requires the services of a technical man with experience in the textile line as well as improvement in labour efficiency. Besides, some of the machinery which is old requires rehabilitation. This unit is managed by a Board of Directors, with a Chairman nominated by the Government of Mysore. The mill, however, needs a high level and experienced business manager who can attend to day-to-day operations and is acquainted with silk production. We understand that the Government of Mysore has considerable interest in the running of the mills because they have contributed to its share capital and its economical working is of considerable benefit to the sericulturists in the State. This is the only unit of its kind in the country and we believe that its working should be so efficient and economical as would set a standard for other States who wish to establish a spun silk mill in their areas. We, therefore, recommend that Mysore Spun Silk Mills Ltd. should reorganise its affairs including its selling system in a satisfactory manner as early as possible and report the action taken in this behalf to Government by 30th June, 1959.

18.2. *Non-mulberry silk*.—The production of non-mulberry silk in the country constitutes at present about 20 per cent of the total output of raw silk. Of this nearly 50 per cent. is contributed by Tassar silk whose output amounted to 3.15 lakh lbs. in 1957. The production of non-mulberry silk is not so well organised as that of mulberry silk because Tassar and Muga are carried on by Adivasi families and the worms are not domesticated as in case of mulberry and Eri silk. The Central Silk Board has been giving financial and technical assistance to non-mulberry silk areas and we understand that a sizeable sum is allocated for improving the conditions of this sector of sericulture under the Second Five Year Plan. During 1957-58 the Government of India sanctioned grants amounting to Rs. 11.09 lakhs to the five non-mulberry States of Assam, Bihar, Orissa, Madhya Pradesh and Manipur. It is of interest, however, to note that whereas mulberry silk has to be protected against the competition from imported raw silk, Tassar silk has considerable export potential in the overseas markets. We, therefore, recommend that the Central Silk Board should take positive measures to accelerate the pace of development of Tassar silk industry and render such financial and technical assistance as is necessary for this purpose.

19. Our conclusions and recommendations are summarised below :—
Summary of conclusions and recommendations.

(i) All sericultural States should give high priority to the setting up of necessary organisation for production and distribution of disease free layings through Government and aided grainages to meet the full requirements of silk worm seeds in their areas.

[Paragraph 7.5.9]

(ii) The Central Silk Board should give the highest priority to its scheme for the organisation for silk worm seed production and take appropriate steps for establishing the Central Foreign Race Seed Station as early as possible. The Board should also see that the State Governments establish matching organisations in their respective areas for the evolution of suitable cross-breed races and take appropriate steps for their rearing on a commercial scale.

[Paragraph 7.5.10]

(iii) The present concession of duty-free imports of silk worm seed should be continued.

[Paragraph 7.5.11]

(iv) The suggestions of the Japanese Experts, Dr. Y. Tazima and Mr. S. Karasawa, with regard to rearing of silk worms with a view to producing cocoons of better quality should be carefully considered by the Central Silk Board and the State Governments concerned and implemented as far as possible, having regard to the local conditions of each sericultural region.

[Paragraph 7.5.13]

(v) The State Governments should take positive steps to encourage formation of rearers' co-operative societies for chowki rearing and for marketing of cocoons.

[Paragraph 7.5.14.2]

(vi) Filature units should immediately introduce the system of grading of cocoons and produce raw silk of different grades. When new hybrid races are being produced, it is essential to standardise the cocoons by restricting industrial rearing to one or two races during one season so that silk of uniform quality can be produced. Unless these preparatory processes are brought up to a high standard of efficiency along with the modernisation of reeling equipment, our efforts for the improvement of quality of raw silk may not achieve the anticipated measure of success.

[Paragraph 7.6.8]

(vii) So long as the present installed capacity of silk filatures in the States of Mysore and Jammu and Kashmir is not fully utilised, no new capacity should be licensed in those areas.

[Paragraph 7.6.9]

(viii) The current demand for raw silk of all types is estimated at about four million lbs. per annum. So long as the price of raw silk remains high at the prevailing level, the domestic demand for raw silk

is not expected to increase over this figure in the next 3 or 4 years. If, however, the developmental schemes so far undertaken by the States tend to reduce the present high cost of production and bring about a distinct improvement in the quality of filature raw silk, there is a likelihood of the domestic demand for raw silk going up.

[Paragraph 8.1]

(ix) The future demand for spun silk yarn is estimated at 2 lakh lbs. per annum.

[Paragraph 8.2]

(x) The Governments of Mysore and Jammu and Kashmir should consider the feasibility of enforcing compulsory testing of filature silk produced in their States and take appropriate steps for the purpose as early as possible.

[Paragraph 9.3]

(xi) Government and the Central Silk Board should give the highest priority for the establishment of the research stations at the five centres proposed by the Board and take necessary steps to enable them to start work as early as possible.

[Paragraph 10.5]

(xii) Protection to the sericulture industry should be continued for a further period of five years, *i.e.*, up to 31st December, 1963 at the existing rates of protective duty on tariff items Nos. 46, 46(1), 47(a), 47(b), 47(c), 47(l), 48(a), 48(b) and 48(c).

[Paragraph 17.4]

(xiii) Mysore Spun Silk Mills Ltd. should reorganise its affairs including its selling system in a satisfactory manner as early as possible and report the action taken in this behalf to Government by 30th June, 1959.

[Paragraph 18.1]

(xiv) The Central Silk Board should take positive measures to accelerate the pace of development of Tassar silk industry and render such financial and technical assistance as is necessary for this purpose.

[Paragraph 18.2]

20. We have to acknowledge the help we have received from the various associations and individuals who furnished us with information **Acknowledgments** and gave evidence before us. Our thanks are due to State Governments for their co-operation in carrying out this investigation.

C. RAMASUBBAN,
Chairman.

J. N. DUTTA,
Member.

R. S. BHATT,
Member.

RAMA VARMA,
Secretary.

Bombay, the 18th September, 1958.

APPENDIX I

[Vide Paragraph 3.1]

List of firms/bodies/associations to whom the Commission's questionnaires or letters were issued and those who replied

*Those who have replied to the questionnaires or letters or submitted memoranda.

†Those who stated that they are not interested.

(A) PRODUCERS

(i) *Producers of Silk Worm Eggs & Silk Worm Rearers.*

1. Shri K. Subba Rao, B.A., LL.B., President, Aided Graineurs Association, Ramanagaram (Mysore State).
- †2. Shri H. S. Jaya Rao, Graineur, Member, Central Silk Board, Ramanagaram (Mysore State).
- *3. Shri U.M. Madappa, M.L.A., Graineur, President, Aided Graineurs Association, Chamarajanagar (Mysore State).
- *4. Shri N. Nagaraja Rao, Graineur, Market Road, Kollegal (Mysore State).
- *5. Shri B. Rache Gowda, Graineur, Surapuram (Kollegal Taluk).
- *6. Shri G. Ahmadulla Khan, Aided Graineur, Chikkamudavadi (Kankanahalli Taluk).
7. Shri K. M. Mondal, Aided Graineur, Milki (Malda District).
- *8. Shri Rustom Ali Biswas, Aided Graineur, Kaliachok, (Malda District).
- *9. Shri M. N. Nanjundiah, Sericulturist & Aided Graineur, Muger (T. Narsipur Taluk).
- *10. Shri Sivamalla Devaru, Sericulturist, Thimmarajapuram (Kollegal Taluk).
11. Shri A. N. Mune Gowda, L.A.G., Sericulturist & Aided Graineur, Anur (Sidlaghatta Taluk).
12. Shri S. V. Subramania Iyer, Sericulturist, Tagarapuram (Kollegal Taluk).
13. Shri R. Dasappa, Sericulturist & Landlord, Reddihalli (Devanahalli Taluk).
14. Shri L. Venkataramanappa, Sericulturist, Iraswadi, Yelandur P.O.
- *15. Shri Mazhar Hossain, Village Fatekhani, Fatekhani, P.O. (Malda).
16. Shri Haji Md. Jamiruddin, Sericulturist, Village Fatekhani, Malda District (West Bengal).
17. Shri Anil Chandra Dutta, P.O. Sujapur (Malda).
18. Shri K. K. Mondal, Village Gowripur, P. O. Sakatipur (Murshidabad).
19. Bijoy Kumar Dasgupta, C/o. B. K. Sanyal, B.L., Mukdamapur (Malda).
20. Shri Taleb Ali, Sericulturist, Member, Provincial, Silk Committee, Malda.
- *21. Shri Desai N. Venkatkrishnan, Secretary, Salem District, Sericulturist Association, Hosur.

22. Deputy Director of Industries (Sericulture), Government of West Bengal, Government Grainage, Berhampur, (West Bengal).
23. Shri Muniswamiah, Mellur P.O., Sidlaghatta Taluk (Kolar District).
- *24. Shri R. Ranga Rao, Aided Graineur, Chikaballapur.
25. Aided Graineurs Association, Sidlaghatta (Kolar District).
26. Aided Graineurs Association, Mugur Division (T. Narsipur).
27. Aided Graineurs Association, Channapatna Division, Kankapura (Bangalore District).

(ii) Reelers and Reeling Establishments

(a) Filatures:

- *1. General Manager, Government Silk Filatures, Mysore.
2. Managing Director, The Mysore Silk Filatures Private Ltd., Sidlaghatta (Mysore State).
- *3. Chairman, Sarvamanya Silk Filatures, Mysore.
- *4. Shri K. M. Nanjundappa, M.L.C., Chairman, Kisan Silk Industries, Mallur, Sidlaghatta Taluk.
5. Managing Agents, Karnataka Silk Filatures, Veswesarapuram, Bangalore-2.
- *6. The Mysore Spun Silk Mills Ltd., Channapatana (Mysore State).
7. Desi Textiles, Mysore Road, Bangalore-2.
- *8. Government Silk Factory, Srinagar.
9. Government Silk Factory, Jammu (Tawi).
- *10. Filatures—Doon Valley, Sericultural Co-operative Society, Dehradun.
- *11. Shri Shanmugha Twisting Factory, Prop: M/s. Badra Shetty & Sons, Hosur, (Salem District).
12. Kanchipur Silk Twisting Factory, Kanchipuram.
- †13. Shri Lakshmi Silk Twisting Factory, Arni.
- †14. M/s. Mangalambalga Silk Twisting Factory, Kumbakonam.

(b) Domestic Basin Units:

1. Kanaka Silk Industries, Kanakapura (Mysore State).
- *2. Shri Mahadewa Silk Industries, Mudigundam (Kollegal Taluk).
3. Mispa Silk Filatures, Kanakerai (Kollegal Taluk).
- *4. Shri C. L. Ramachandra Rao, Domestic Basin Owner, Ikkadahalli (Kollegal Taluk).
5. Swastic Silk Industries, Kanakapura (Mysore State).

(c) Charka Reelers:

1. Shri Syed Husain Sahib, Reelers, Sidlaghatt (Mysore State).
- *2. Shri Ali Rachegowda, Surapuram (Kollegal Taluk).

- *3. Shri M. Madiah Alias Gogiah, Mamballi (Yelundar Taluk).
- 4. Shri Abdul Rahim Alias Baji Saheb, Charka Reeler, Mamballi (Yelundar Taluk).
- 5. Shri Hayath Khan Sahib, Charka Reeler, President, Reelers' Association, Mamballi (Yelundar Taluk).
- *6. Shri Mantayya, Charka Reeler, Mamballi (Yelundar Taluk).
- *7. Shri Haji Rafiuddin Munshi, Atagama, District Malda.
- *8. Shri S. K. Multan, P.O. Dakshin Lakshmpur, Village Imamjagir (District Malda).
- 9. Shri Nasiruddin Biswas, Village & P.O. Sujapur, Malda.
- 10. Shri Bijan Kumar Chattarji, P.O. & Village Kumarpur (Murshidabad District).
- 11. Shri Haji Amin Munshi Filature, Kaichaka (Malda).
- *12. Shri Satheswar Huzra, Barisa, P.O. Bagnasar (Midnapure District).
- 13. Shri Badu Mondal, Village Ray Gram, P.O. Amriti (District Malda).
- *14. Shri Tamisuddin Sheikh, P. O. Beldanga, Murshidabad District.
- 15. Shri Umesh S. K., Village Madhyampur, P.O. Kumarpur (Murshidabad District).

(B) IMPORTERS

- *1. The Silk Merchants' Association, Kalbadevi Road, Dahanukar Building, Bombay-2.
- †2. The Bombay Yarn Merchants' Association & Exchange Ltd., 111, Chawala Building, Tambakanta, Bombay-3.
- *3. M/s. Nagindas Foolchand Chinai, 79, Musjid Bunder Road, Bombay-3.
- 4. M/s. Gandhi Parekh Investment Corporation, Alice Building, Hornby Rd., Bombay-1.
- *5. The Raw Silk Merchants' Association, Chinai Building, 79, Musjid Bunder Road, Bombay-3.
- *6. The Mysore Silk Cloth Merchants' Association (Wholesale), Avenue Road, Bangalore City.
- †7. Gurukur M. Madappa, Silk Merchant, Mudigundam (Kollegal).
- *8. G. S. Veerappa, Silk Merchant, Mudigundam (Kollegal).
- 9. Mahaliram Bajaj & Co., 174, Harrison Road, Calcutta.
- *10. M. C. Subhappa, Silk Merchants, Mudigundam (Kollegal).
- †11. M/s. Karanjia Bros. Ltd., Opp. Kalbadevi P.O., Bombay-2.
- †12. M/s. Kishinchand Chellaram (India) Ltd., Opp. Kalbadevi P.O., Bombay-2.
- *13. Mr. Bhimamal Amarnath, Tambakanta, Bombay-3.
- 14. M/s. P. Parbulai & Co. Ltd., Dadabhai Nawroji Road, Fort, Bombay.
- 15. Moghraj Kangalal, 113, Manohardas Katra, Calcutta.
- 16. Chunillal Maganmull, 22, Raja Woodmount Street, Calcutta.
- 17. Babna More & Co., 39-2nd Bhoiwada, Bombay.

- *18. C. Bulakhidas & Co., 89, Tambakanta, Bombay-3.
- *19. State Trading Corporation of India (Private) Ltd., Post Box No. 79, New Delhi-1.
- *20. Vasantlal Balubhai Reshamdalal, Masidiasheri Haripura, Surat.

(C) CONSUMERS

(PRODUCERS OF SILK FABRICS)

(i) Handloom Section:

1. Shri D. Hanumanthappa, Vice President, Mysore Provincial Silk Handloom Weavers Co-operative Society, Jumma Masjid Road, Bangalore-2.
2. M/s. Janardhana Silk House, Jumma Masjid Road, Bangalore-2.
3. Ghanta Hutchanna, 13th Cross Road, Near Nandi Motor Service, Cubbonpet Bangalore City.
4. Shri R. K. Thippanna, Thimuniah Garden, Tankbund Road, Bangalore-2.
5. Shri Karegundi Chikkanappa, Basettipet, Bangalore-2.
6. Shri Budal Mudrangappa & Sons, Kavadi Revanna Steecypet, Bangalore-2.
7. Silk Handloom Weavers' Co-operative Society, Kanchepuram.
8. Shri Murgappa Mudaliar, Silk Cloth Manufacturers, Kanchepuram.
9. M/s. Srinivasa & Co., Silk Cloth Manufacturers & Dealers, 131 Thirucachi-Nambi Street, Kanchepuram.
10. Shri Sowdambic Devanga, Weavers' Co-operative Production and Sale Society Coimbatore.
11. M/s. P. S. S. Bhammanna Chettiar & Sons, Silk Handloom Cloth Manufacturers, Gugai, Salem (Salem District).
- †12. M/s. Thammanna Chettiar & Sons, Bhoomi Street, Gugai, Salem, (Salem District).
- †13. M/s. Kunjilal & Co., Lakhichotra, Banaras.
14. The Banaras District Kargha Co-operative Society, Banaras.
15. Silk Manufacturing Sahakari Samathi Ltd., Madnapore, Banaras.
16. Silk Manufacturing Federation, Lakhi Chantra, Banaras.
17. Prakash Brothers, Banaras.
18. India Handicrafts, Banaras.
- †19. Shri P. C. Patnaik, Poor Cottage Industries, Cuttack, Orissa.

(ii) Powerloom Section:

- *1. M/s. Bangalore Woollen, Cotton & Silk Mills Ltd., Agraharam Road, Bangalore-2.
- *2. M/s. Government Silk Weaving Society, Manathody Road, Mysore.
- *3. M/s. Seethalakshmi Textiles, Nagarthapet, Bangalore-2.
- *4. M/s. Srinivasa Textiles, Narashimharaja Road, Bangalore-2.
- 5. M/s. Chamundi Textiles, Ramanagaram (Mysore State).

6. M/s. V. T. Surappa & Sons, G-39, Honnurappa Lane, Cubbonpet, Bangalore-2.
7. M/s. Pravati Textile Mills Ltd., P.O. Panihatti, 24, Parganas, Calcutta.
8. M/s. S. S. Bagchi & Co., P.O. Berhampore (West Bengal).
9. M/s. Indian Textiles Ltd., Great Eastern Hotel, Calcutta.
10. Government Silk Weaving Factory, Rajbagh, Srinagar.
11. Artex Mills, Srinagar.
12. M/s. Kapoor & Co., Srinagar.
13. Shri Rup Narain Thakur, Garaya Tola, Champanagar, Bhagalpur.
- *14. Government Silk Institute, Nathnagar, Bhagalpur.
15. Rambansi Silk Mills, Bhagalpur.
16. M/s. Kasetty Rangaih & Sons, Dharamavaram.
17. Soalkuchi Rasham Sambaya Ltd., Soalkuchi P.O., District Kamrup.
- *18. Assam Co-operative Silk House Ltd., Panbazar, Gauhati.
- *19. Resham Silpi Sangha, 12/18 & 14, Hare Street, Calcutta-1.
- *20. M/s. Sree Silk Mills, Maldahiya, Banaras.
- †21. M/s. Mehra Silk Mills, Banaras.
- *22. Training-cum-Production Centre Textiles, Chanderi (M.P.).
23. M/s. Dhanmal Silk Mills, Manohar Mansion, Dhobi Talao, Bombay.
- *24. M/s. Bombay Silk Mills, Industrial Estate, Lalbagh, Bombay.
- †25. M/s. Bipin Silk Mills, No. 12, Dadar Road, Bombay.
- †26. M/s. Modern Textiles, Opp. B.D.D. Chawl, Worli, Bombay.
27. M/s. Ichharam Ramchand, Navpura, Golwadi, Surat.

(D) ASSOCIATION

- *1. The Silk and Art Silk Mills' Association, Resham Bhavan, Vir Nariman Road, Bombay-1.
- *2. The Bengal Silk & Art Silk Mills Owners' Association, 4, Ganesh Chandra Avenue, Calcutta.
3. The Mysore Silk Handloom Weavers' Association, 13, Jumma Masjid Road, Bangalore-2.
4. The Bihar Chamber of Commerce, Patna.
5. The Bhagalpur Silk Mills Owners' Association, Bhagalpur (Bihar).
6. The Hindpur Silk Reelers' Association, Hindpur (Madras).
7. The Mysore Chamber of Commerce, Bangalore.
- *8. The Mysore Silk Association, Harding Road, Chamaraipet, Bangalore-2.

- *9. The Mysore Raw Silk Merchants' Association, Bangalore City-9.
- 10. The Mysore Silk Throwsters' Association, Bangalore-2.
- *11. The Secretary, Weavers Co-operative Producers' Society Ltd., Ilkal.
- *12. The Surat Chamber of Commerce, Safe Deposit Chambers, Surat.
- 13. Murshidabad Silk Association, Murshidabad.
- 14. Jangipore Silk Association, Jangipore, Murshidabad.
- 15. Jalapur Silk Rearsers' Organisation, Sujapur, Malda (W.B.).
- 16. Fatchami Silkworm Reellers' Organisation, Sujapur, Malda (W.B.)
- 17. Kolar Division Charka Silk Reellers' Association, Sidlaghatta, (Mysore State).
- 18. Banaras Industrial & Trade Association, Chowk, Varanasi.

(E) GOVERNMENT DEPARTMENTS

- *1. The Director of Sericulture & Weaving, Government of Assam, Shillong.
- *2. Secretary to the Govt. of Madras, Department of Industries, Labour & Cooperation, Fort St. George, Madras.
- *3. The Secretary to the Government of Punjab, Industries Department, Simla-2.
- *4. The Joint Registrar (Handlooms), Cooperative Societies, Orissa, Bhubaneshwar.
- *5. The Director of Industries, Government of West Bengal, New Secretariat Building, 1, Hastings Street, Calcutta.
- *6. The Secretary to the Government of Madhya Pradesh, Agriculture Department, M.P. Civil Secretariat, Bhopal.
- *7. The Secretary to the Government of Andhra, Industries Department, Hyderabad.
- *8. The Secretary to the Government of Kerala, Industries (B) Department, Trivandrum.
- †9. Director of Industries & Labour, No. Rajpur Road, Delhi.
- 10. Secretary to the Government of Bombay, Industries & Cooperation Department, Old Secretariat Building, Fort, Bombay.
- †11. Assistant Secretary to the Government of Rajasthan, Industries & Mines Department, Jaipur.
- *12. The Director of Industries, Government of Bihar, Patna.
- *13. The Director of Industries, Uttar Pradesh, Kanpur.
- *14. The Secretary to the Government of Mysore, Commerce & Industries Department Bangalore.
- *15. The Secretary to the Government of Himachal Pradesh, Industries & Supplies Department, Simla.
- *16. The Secretary to the Government of Jammu & Kashmir, Ministry of Industries Commerce, Srinagar.
- *17. Sericulture Development Officer, Kudige-Farm, Kushalnagar, Hubli, North Coorg.
- †18. The Deputy Secretary, Tripura Administration, Department of Industries, Agartala,

- *19. Central Silk Board, Meghdoot, 95-B, Marine Drive, Bombay-2.
- *20. Collector of Customs, New Customs House, Bombay.
- *21. Collector of Customs, Calcutta.
- *22. Collector of Customs, Madras.
- 23. Collector of Customs, Cochin.
- *24. Central Sericultural Research Station, Berhampore.
- *25. Director, Indian Standards Institution, 'Manak Bhavan', Mathura Road, New Delhi.

(F) OTHERS

- *1. Silk Marketing Co-operative Society, Avenue Road, Bangalore-2.
- 2. U. P. Industrial Co-operative Association Ltd., Chunnigunj, Kanpur.
- *3. State Industrial Co-operative Association, 9, Bake House Lane, Bombay.
- *4. Silk & Art Silk Mills' Reserach Association, Resham Bhavan, Bombay-1.
- 5. The Chief Executive Officer, Khadi & Village Industries, Commission, Mistry Bhavan, Bombay-1.
- *6. Secretary, Silk & Rayon Textiles Export Promotion Council, Resham Bhavan, Churchgate, Bombay-1.
- *7. Darshnimal Tandon & Co., Victoria Building, 27, Parsec Bazar Street, Fort, Bombay-1.



APPENDIX II

[Vide Paragraph 3.3]

List of mulberry gardens, silkworm rearing units, filature units and silk yarn and fabrics manufacturing units visited by the Commission's Cost Accounts Officer

I. MYSORE STATE

A. KOLLEGAL

| | |
|-------------------------------------------------------------------------|-------------------------------------------|
| Silk Worm Seed Production | Government Central Grainage, Kollegal. |
| Silk Worm rearing (Production of Mulberry Leaves and Mulberry Cocoons). | Shri Sivamalla Devaru, Thimmarajapuram. |
| Filature | Government Silk Filatures, T. Narasimpur. |

B. BANGALORE

| | |
|---------------------------|-------------------------------------------------------------|
| Silk Worm Seed Production | Shri Ranga Rao, Aided Graineur, Chikkaballapur. |
| Silk Worm Rearing | Shri A. M. Muncgowda. L. Ag., Anur (Sidlaghatta Taluka). |
| Filatures | Kisan Silk Industries, Mellur (Sidlaghatta Taluka). |
| Spun Silk Yarn | The Mysore Spun Silk Mills Ltd. Channarayana, Mysore State. |
| Silk Fabrics | M/s. Seethalakshmi Textiles, Nagarathpet, Bangalore-2. |

II. WEST BENGAL STATE

| | |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Silk Worm Seed Production | Government Grainage under the control of Dy. Director of Industries, Berhampore. |
| Silk Worm Rearing (Production of Mulberry Leaves and Mulberry Cocoons). | Shri K. K. Mandal, Village Gouripur, P.O. Saktipur, Dist. Murshidabad. |

APPENDIX III

[Vide Paragraph 3.4]

*List of persons who attended the Commission's Public Inquiry
on 22nd and 23rd July, 1958*

I. PRODUCERS:

- | | |
|----------------------------|--------------------------------------------------------------------|
| 1. Shri A. Sambamoorthy | Representing Government Silk Filature, Mysore. |
| 2. Shri H. G. Anantharaman | „ Kisan Silk Industries, Mellur (Mysore State). |
| 3. Shri Jeenabhai Devidoss | „ Mysore Spun Silk Mills Ltd., Channapatna (Mysore State). |
| 4. Shri Ramniklal M. Shah | |
| 5. Shri K. Shamsuddin Khan | „ Mysore Silk Association, Harding Road, Chamarajpet, Bangalore-2. |

II. IMPORTERS & DISTRIBUTORS OF RAW SILK:

- | | |
|---------------------------------|----------------------------------------------------------------------------------------------|
| 6. Shri Punjalal N. Shah | } „ Raw Silk Merchants Association Chinai Building, 79, Masjid Bunder Road, Bombay-3. |
| 7. Shri Balkrishna B. Shah | |
| 8. Shri Wishwanath P. Khurseeja | |
| 9. Shri Vasantlal Babubhai | |
| 10. Shri Babubhai M. Chinai | } „ M/s. Nagindas Foolchand, 79, Masjid Bunder Road, Bombay-3. |
| 11. Shri B. M. Chinai | |
| 12. Shri S. L. Hemmady | |
| 13. Shri R. N. Samarth | „ State Trading Corporation of India (Private) Ltd., Post Box No. 79 New Delhi. |
| 14. Shri G. R. Shanmukhappa | „ Silk Marketing Co-operative Society, No. 89, Kamadhenu Building, Avenue Road, Bangalore-2. |
| 15. Shri D. N. Tandon | „ State Industrial Co-operative Society Ltd., 9, Bake House Lane, Fort, Bombay. |

III. CONSUMERS :

- | | |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| 16. Shri Hiralal T. Jariwala | } „ Surat Jari Merchants Association, Safe Deposit Chambers, Surat. |
| 17. Shri Jayantilal B. Jariwala | |
| 18. Shri Amratlal M. Asarawala | |
| 19. Shri R. G. Majumdar | |
| 20. Shri J. G. Vakharia | } „ Surat Chamber of Commerce, Safe Deposit Chambers, Surat. |
| 21. Shri D. B. Patel | |
| 22. Shri Damodar Dass | „ The Banaras Industrial and Trade Association, Chowk, Banaras City. |
| 23. Shri K. V. Shivabhadraiah | „ The Mysore Provincial Silk Handloom Weavers' Co-operative Society Ltd., Jumma Masjid Road, Bangalore-2. |
| 24. Shri Bahadur Singh | „ Bangalore Woollen, Cotton and Silk Mills Ltd., Agraharam Road, Bangalore. |
| 25. Shri S. R. Sen | „ Resham Shilpi Sangh, 12/18 & 14, Hare Street, Calcutta; AND Khadi & Village Industries Commission, Mistry Bhavan, Bombay. |

- | | | |
|--------------------------------------------------------|--------------|-------------------------------------------------------------------------|
| 26. Shri D. N. Shroff | Representing | Silk & Art Silk Mills' Association, Resham Bhavan, Bombay-1; |
| | | Silk & Art Silk Mills' Research Association, Resham Bhavan, Bombay; |
| | | AND |
| | | Silk and Rayon Textile Export Promotion Council, Resham Bhavan, Bombay, |
| 27. Shri M. S. Kapadia | „ | Silk & Art Silk Mills Association, Resham Bhavan, Bombay; |
| | | AND |
| | | Silk Merchants Association, Dhanukar Building, Kalbadevi Road, Bombay. |
| 28. Kumari Zarine Bharucha } 29. Shri D. A. Joshi } | „ | Silk & Art Silk Mills Association Resham Bhavan, Bombay. |
| 30. Shri Lalbhai P. Shah | „ | Silk Merchants' Association, Dhanukar Building, Kalbadevi Road, Bombay. |

IV. GOVERNMENT DEPARTMENTS:

- | | | | |
|------------------------------------------------------------------|---|------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| 31. Shri D. S. Joshi, I.C.S., Chairman | } | „ | Central Silk Board, Meghdoot, 95-B, Marine Drive, Bombay-2. |
| 32. Shri Morarji J. Vaidya, Vice-Chairman | | | |
| 33. Shri A. T. Janakiraman, Secretary | | | |
| 34. Shri A. R. Takyar, Assistant Secretary. | | | |
| 35. Shri T. K. Krishnamurthy, Director of Sericulture. | „ | Government of Mysore, Bangalore. | |
| 36. Shri B. B. Roy, Technical Development Officer (Sericulture). | „ | Office of the Dy. Director of Industries (Sericulture), Government of West Bengal, Berhampore. | |
| 37. Shri K. Subramaniam, Sericultural Expert. | „ | Department of Industries Labour and Co-operation, Fort St. George, Madras. | |
| 38. Dr. D. P. Raichoudhury, Director of Research. | „ | Central Sericultural Research Station, Berhampore. | |
| 39. Shri S. R. Ramakrishnan, Assistant Director. | „ | All India Handloom Board, Witter Road, Ballard Estate, Bombay. | |
| 40. Shri M. L. Gajagos, Principal Appraiser. | „ | Collector of Customs, New Customs House, Bombay. | |
| 41. Shri A. B. Rao, Assistant Director | „ | Indian Standards Institution, 'Manak Bhawan', Mathura Road, New Delhi. | |

V. OTHERS :

- | | | |
|-----------------------|---|----------------------------------------------------------------------------------|
| 42. Shri D. R. Tandon | „ | M/s. Darshinimal Tandon, Victoria Building, 27, Parsee Bazar Street, 4 Bombay-1. |
|-----------------------|---|----------------------------------------------------------------------------------|

43. Shri N. Khanna

Representing M/s. Charan Dass & Son, Victoria Building, 27, Parsee Bazar Road, Bombay-1.

44. Shri I. P. Parikh }
45. Shri J. G. Parikh }

„ Silk & Art Silk Mills' Research Association, Resham Bhavan, Bombay.

The representative of the Government of Jammu & Kashmir Shri G. H. Beg, met the Commission on 5th August, 1958.



[Vide Paragraph 7.5.8.]

Statement showing the requirements of seed production of examined seed and the number of Government and Government aided grainages in various States

| Sl. No. | State | Government Grainages | | | | Aided Grainages | | | | |
|---------|-------|-------------------------------------------|-------------------------------|------------------------------|--------|-----------------|-------------------------------------------------|--------|------------|-------------------------------------------------|
| | | Estimated annual requirements of D.F. Ls. | Actual production of D.F. Ls. | Percentage of seeds examined | Number | Production | Percentage of production to actual requirements | Number | Production | Percentage of production to actual requirements |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
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|---------------------|---------------|-------------------------------------------------------|------|--------------------------------------------------|-----------------------|------|
| 8 Assam | 10 Lakhs | 9 Lakhs | 90 | 11 (Sericultural Farms which serve as grainages) | 9 Lakhs | 90 |
| 9 Bihar | 1100 Ozs. | 100 Ozs. | 9.09 | 1 (Mulberry-cum-grainage Form) | 100 Ozs. | 9.09 |
| 10 Himachal Pradesh | 350 Ozs. | 350 Ozs. | 100 | 1 | 350 Ozs. | 100 |
| 11 Madhya Pradesh | 0.15 Lakh | The entire requirement is obtained from Mysore State. | | | | |
| II. Tassar | | | | | | |
| 1 Bihar | 1,44,000 Ozs. | 2520 Ozs. | 1.75 | 6 (Seed Supply Stations) 17 (Sub-Stations) | 2520 | 1.75 |
| 2 Madhya Pradesh | N.A. | | | 1 (Under construction) | | |
| 3 Orissa | 4 Lakhs | One station is being organised at Bangiriposhi. | | | | |
| III. Muga | | | | | | |
| Assam | 63 Lakhs | 6.3 Lakhs (Approximately) | 10 | 3 | 63 (Approximately) | 10 |
| IV. Eri | | | | | | |
| 1 Assam | 25 Lakhs | Negligible proportion | | 8 | Negligible proportion | |
| 2 Bihar | 17,000 Ozs. | 550 Ozs. | 3.24 | 2 | 550 | 3.24 |

APPENDIX V

[Vide Paragraphs 7.5.14.1 and 7.7.1]

Statement showing the prices of silk cocoons and raw silk in the Bangalore market from January 1954 to June, 1958[In Rs. As. Ps. per lb.
or Rs. nP. per lb.]

(Source: Central Silk Board)

| Year | January | February | March | April | May | June | July | August | September | October | November | December |
|-----------------------------------|-------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1.--Reeling Cocoons--1st Quality. | | | | | | | | | | | | |
| 1954 | 1 8 0 to | 1 9 0 to | 1 14 0 to | 2 0 0 to | 1 14 0 to | 1 12 0 to | 1 3 0 to | 1 2 0 to | 1 6 0 to | 1 6 0 to | 1 8 0 to | 1 9 0 to |
| | 1 14 0 | 2 4 0 | 2 6 0 | 2 6 0 | 2 4 0 | 2 0 0 | 1 13 0 | 2 0 0 | 2 2 0 | 2 2 0 | 2 1 0 | 2 0 0 |
| 1955 | 1 6 0 to | 1 11 0 to | 1 4 0 to | 1 6 0 to | 1 3 0 to | 1 3 0 to | 0 15 6 to | 0 12 0 to | 1 2 0 to | 1 1 0 to | .. | .. |
| | 1 15 6 | 2 0 0 | 1 14 0 | 1 10 0 | 1 10 0 | 1 10 0 | 1 6 0 | 1 6 0 | 1 4 0 | 1 2 6 | .. | .. |
| 1956 | 1 1 0 to | 1 3 0 to | 1 3 0 to | 1 5 0 to | 1 5 0 to | 1 5 0 | 1 4 0 to | 1 2 0 to | 1 5 0 to | 1 2 0 to | 1 4 0 to | 1 4 0 |
| | 1 6 0 | 1 7 0 | 1 7 0 | 1 8 0 | 1 8 0 | 1 11 0 | 1 11 0 | 1 10 0 | 1 9 0 | 1 7 0 | 1 6 0 | 2 2 0 |
| 1957 | 1 56 to | 1 50 to | 1 37 to | 1 44 to | 1 28 to | 1 44 to | 1 75 to | 1 84 to | 2 00 to | 1 94 to | 1 94 to | 2 12 to |
| | 1 87 | 1 94 | 1 87 | 1 62 | 1 87 | 1 75 | 1 87 | 1 97 | 2 12 | 2 12 | 2 06 | 2 37 |
| 1958 | 1 94 to | 2 00 to | 2 00 to | 1 87 to | 1 14 to | 1 25 to | .. | .. | .. | .. | .. | .. |
| | 2 37 | 2 31 | 2 44 | 2 37 | 2 31 | 2 35 | .. | .. | .. | .. | .. | .. |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|--------------------------------|------------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|------------------------|------------------------|
| 1958 Kollegal | 36.50 to 38.50 | 38.00 to 38.50 | 38.50 to 40.00 | 39.00 to 40.50 | 38.00 to 40.00 | 36.75 to 39.50 | | | | | | |
| T. Narasipur | 37.00 to 39.50 | 37.00 to 38.50 | 38.50 to 38.50 | 38.50 to 38.50 | 37.50 to 38.50 | 35.50 to 39.75 | | | | | | |
| Canakapura | 38.39 | 37.50 to 40.00 | 39.50 to 41.00 | 39.00 to 40.00 | 38.50 to 39.50 | 37.00 to 37.50 | | | | | | |
| Channapatna | 38.39 | 38.00 to 39.50 | 39.00 to 41.00 | 39.00 to 39.50 | 37.00 to 39.00 | 37.00 to 37.50 | | | | | | |
| Kisan | 36.50 to 38.50 | 38.00 to 39.00 | 39.00 to 40.00 | 39.00 to 40.00 | 37.50 to 38.50 | 36.50 to 38.50 | | | | | | |
| IV—Indigenous Raw Silk—Charka. | | | | | | | | | | | | |
| 1954 | 19 8 0 to 30 0 0 | 19 8 0 to 33 8 0 | 22 0 0 to 33 8 0 | 22 8 0 to 33 0 0 | 23 0 0 to 32 8 0 | 22 0 0 to 29 8 0 | 22 0 0 to 29 0 0 | 22 0 0 to 29 4 0 | 22 12 0 to 31 0 0 | 22 8 0 to 30 8 0 | 21 8 0 to 29 0 0 | 20 0 0 to 28 0 0 |
| 1955 | 20 0 0 to 29 8 0 | 20 8 0 to 28 8 0 | 17 8 0 to 30 8 0 | 15 8 0 to 28 0 0 | 16 8 0 to 28 0 0 | 14 0 0 to 26 8 0 | 14 0 0 to 25 8 0 | 13 4 0 to 23 4 0 | 13 4 0 to 23 4 0 | 13 0 0 to 22 8 0 | | |
| 1956 (Super- fine) | 20 0 0 to 23 0 0 | 21 0 0 to 23 0 0 | 21 8 0 to 24 0 0 | 21 4 0 to 24 0 0 | 21 4 0 to 24 8 0 | 22 8 0 to 26 0 0 | 23 8 0 to 25 8 0 | 23 0 0 to 25 4 0 | 22 8 0 to 24 8 0 | 22 0 0 to 26 0 0 | 24 0 0 to 26 0 0 | 24 0 0 to 30 8 0 |
| (1st Quality) | 17 0 0 to 30 0 0 | 17 8 0 to 19 0 0 | 18 0 0 to 21 8 0 | 18 12 0 to 22 8 0 | 18 12 0 to 21 8 0 | 20 0 0 to 22 8 0 | 21 0 0 to 23 0 0 | 21 0 0 to 22 12 0 | 21 12 0 to 22 0 0 | 20 0 0 to 23 0 0 | 21 0 0 to 23 0 0 | 21 0 0 to 28 0 0 |

| | | | | | | | | | | | | |
|------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| 1957 (Super- fine) | 28.50 to 30.50 | 28.00 to 30.00 | 25.00 to 30.50 | 23.00 | 24.50 to 26.50 | 26.00 to 28.00 | 25.00 to 26.50 | 26.50 to 28.00 | 30.00 to 32.00 | 29.00 to 30.00 | 28.00 to 29.00 | 30.00 to 32.00 |
| (1st Quality) | 25.50 to 28.50 | 24.00 to 27.00 | 21.00 to 26.75 | 22.00 | 22.50 to 25.00 | 24.00 to 25.00 | 24.00 to 25.50 | 26.00 to 27.00 | 27.00 to 28.00 | 26.00 to 27.00 | 25.00 to 26.00 | 27.00 to 28.00 |
| 1958 (Super- fine). | 32.00 to 33.50 | 32.00 to 33.50 | 33.50 to 35.50 | 30.00 to 34.00 | 27.00 to 33.00 | 28.00 to 31.00 | 28.00 | .. | .. | .. | .. | .. |
| (1st Quality) | 28.00 to 29.50 | 29.00 to 30.00 | 29.50 to 31.00 | 28.00 to 30.00 | 24.50 to 30.00 | 25.00 to 28.00 | .. | .. | .. | .. | .. | .. |
| (2nd Quality). | 25.00 | 25.00 to 28.00 | 25.50 to 28.00 | 24.00 to 28.00 | 22.00 to 28.00 | 23.00 to 26.00 | .. | .. | .. | .. | .. | .. |
| (3rd Quality) | 21.00 to 23.50 | 21.00 to 24.00 | 22.00 to 24.00 | 21.00 to 24.00 | 18.00 to 24.00 | 19.00 to 26.00 | .. | .. | .. | .. | .. | .. |

APPEN
(Vide Para

Statement showing production of charkha and filature raw silk

| Sl. No. | State | 1953 | | | 1954 | | |
|-------------|-----------------------|-----------------|-----------|-----------|----------|-----------|-----------|
| | | Filature | Charkha | Total | Filature | Charkha | Total |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Mysore . . . | 84,330 | 1,205,617 | 1,289,947 | 91,225 | 1,587,398 | 1,678,623 |
| 2 | Madras . . . | 51,514 | 116,300 | 167,814 | 51,601 | 120,700 | 172,301 |
| 3 | Jammu & Kash- mir | 149,420 | .. | 149,420 | 168,140 | .. | 168,140 |
| 4 | West Bengal . . | .. | 312,000 | 312,000 | .. | 333,332 | 333,332 |
| 5 | Punjab . . . | .. | 18,083 | 18,083 | .. | 15,878 | 15,878 |
| 6 | Assam . . . | .. | 22,944 | 22,944 | .. | 23,620 | 23,620 |
| 7 | Bihar . . . | .. | 2,500 | 2,500 | .. | 2,480 | 2,480 |
| 8 | Uttar Pradesh . . | .. | 75 | 75 | 1,140 | 32 | 1,172 |
| 9 | Andhra Pradesh . . | .. | .. | .. | .. | 65 | 65 |
| 10 | Himachal Pra- desh | .. | 171 | 171 | .. | 45 | 45 |
| 11 | Bombay . . . | .. | 86 | 86 | .. | 169 | 169 |
| 12 | Madhya Pradesh . . | .. | .. | .. | .. | .. | .. |
| 13 | Hyderabad . . . | } Old States | 4,500 | 4,500 | .. | 425 | 425 |
| 14 | Madhya Bharat . . | | 53 | 53 | .. | 23 | 23 |
| 15 | PEPSU . . . | | 843 | 843 | .. | .. | .. |
| TOTAL . . . | | 285,264 | 1,683,172 | 1,968,436 | 312,106 | 2,084,167 | 2,396,273 |

*Includes 114,400 lbs. of improved charkha

DIX VI

graph 7. 6. 10)

of mulb erry type since 1953 in the various silk producing States

(In lbs.

| 1955 | | | 1956 | | | 1957 | | |
|----------|-----------|-----------|----------|-----------|-----------|----------|------------|-----------|
| Filature | Charkha | Total | Filature | Charkha | Total | Filature | Charkha | Total |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 89,758 | 1,579,587 | 1,669,345 | 103,446 | 1,469,146 | 1,572,592 | 150,000 | 1,715,000* | 1,865,000 |
| 59,358 | 116,355 | 175,713 | 36,282 | 86,134 | 122,416 | .. | .. | .. |
| 159,778 | .. | 159,778 | 177,137 | .. | 177,137 | 143,485 | .. | 143,485 |
| .. | 361,811 | 361,811 | .. | 387,371 | 387,371 | .. | 412,000 | 412,000 |
| .. | 20,443 | 20,443 | .. | 13,239 | 13,239 | .. | 21,400 | 21,400 |
| .. | 26,120 | 26,120 | .. | 27,619 | 27,619 | .. | 28,001 | 28,001 |
| .. | 2,550 | 2,550 | .. | 2,550 | 2,550 | .. | 2,200 | 2,200 |
| 3,000 | .. | 3,000 | 3,000 | .. | 3,000 | 2,270 | .. | 2,270 |
| .. | 56 | 56 | .. | 253 | 253 | .. | 1,600 | 1,600 |
| .. | 100 | 100 | .. | 332 | 332 | .. | 225 | 225 |
| .. | 214 | 214 | .. | 154 | 154 | .. | .. | .. |
| .. | .. | .. | .. | .. | .. | .. | 99 | 99 |
| .. | 4,400 | 4,400 | .. | 4,000 | 4,000 | .. | .. | .. |
| .. | 41 | 41 | .. | 50 | 50 | .. | .. | .. |
| .. | .. | .. | .. | .. | .. | .. | .. | .. |

311,894 2,111,677 2,423,571 319,865 1,990,848 2,310,713 295,755 2,180,525* 2,476,280

silk and 76,600 lbs. of Dupion silk.

APPEN

(Vide Para

Statement showing production of each variety of non-mulberry

| Sl. No. | State | 1953 | | | | 1954 | | | |
|------------------|---------------------------------|--------|-------|-------|-------|--------|-------|-------|-------|
| | | Tassar | Eri | Muga | Total | Tassar | Eri | Muga | Total |
| I. Non-mulberry | | | | | | | | | |
| 1 | Assam | .. | 95.7 | 130.5 | 226.2 | .. | 98.8 | 121.0 | 219.8 |
| 2 | Bihar | 104.0 | 15.0 | .. | 119.0 | 104.0 | 15.0 | .. | 119.0 |
| 3 | Orissa | 9.6 | 0.8 | .. | 10.4 | 13.8 | 0.2 | .. | 14.0 |
| 4 | West Bengal | 8.0 | 1.4 | .. | 9.4 | 17.0 | 1.1 | .. | 18.1 |
| 5 | Madhya Pradesh | 140.0 | .. | .. | 140.0 | 140.0 | .. | .. | 140.0 |
| 6 | Andhra Pradesh | .. | .. | .. | .. | 0.1 | .. | .. | 0.1 |
| 7 | Hyderabad (Old State) | 14.2 | .. | .. | 14.2 | 1.3 | .. | .. | 1.3 |
| TOTAL | | 275.8 | 112.9 | 130.5 | 519.2 | 276.2 | 115.1 | 121.0 | 512.3 |
| II. Non-mulberry | | | | | | | | | |
| 1 | Assam | .. | 255.4 | 44.0 | 299.4 | .. | 263.4 | 48.6 | 312.0 |
| 2 | West Bengal | .. | .. | .. | .. | 2.4 | .. | .. | 2.4 |
| 3 | Bihar | 60.0 | .. | .. | 60.0 | 60.0 | .. | .. | 60.0 |
| 4 | Orissa | 3.5 | .. | .. | 3.5 | 5.7 | .. | .. | 5.7 |
| 5 | Madhya Pradesh | 130.0 | .. | .. | 130.0 | 130.0 | .. | .. | 130.0 |
| TOTAL | | 193.5 | 255.4 | 44.0 | 492.9 | 198.1 | 263.4 | 48.6 | 150.1 |

*Production less

DIX VII

graph 7. 8)

silk and silk waste in the various States from 1953 to 1957.

(In '000 lbs.)

| 1955 | | | | 1956 | | | | 1957 | | | |
|-------------------|-------|-------|-------|--------|-------|-------|-------|--------|-------|-------|-------|
| Tassar | Eri | Muga | Total | Tassar | Eri | Muga | Total | Tassar | Eri | Muga | Total |
| <i>silk.</i> | | | | | | | | | | | |
| .. | 119.4 | 157.7 | 277.1 | .. | 120.5 | 184.7 | 305.2 | .. | 125.0 | 190.0 | 315.0 |
| 104.0 | 15.0 | .. | 119.0 | 104.0 | 15.0 | .. | 119.0 | 120.0 | 28.0 | .. | 148.0 |
| 35.0 | 1.3 | .. | 36.3 | 30.0 | 0.8 | .. | 30.8 | 34.7 | 1.6 | .. | 36.3 |
| 15.0 | 1.5 | .. | 16.5 | 10.0 | 2.0 | .. | 12.0 | 10.0 | 2.5 | .. | 12.5 |
| 140.0 | .. | .. | 140.0 | 140.0 | .. | .. | 140.0 | 150.0 | .. | .. | 150.0 |
| .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 294.0 | 137.2 | 157.7 | 588.9 | 284.0 | 138.3 | 184.7 | 607.0 | 314.7 | 157.1 | 190.0 | 661.8 |
| <i>silk waste</i> | | | | | | | | | | | |
| .. | 318.5 | 65.2 | 383.7 | .. | 321.4 | 73.9 | 395.3 | .. | 333.3 | 76.2 | 409.5 |
| 3.9 | .. | .. | 3.9 | 0.5 | .. | .. | 0.5 | 1.5 | .. | .. | 1.5 |
| 60.0 | .. | .. | 60.0 | 60.0 | .. | .. | 60.0 | 93.0 | .. | .. | 93.0 |
| 13.1 | .. | .. | 13.1 | 11.2 | .. | .. | 11.2 | 13.0 | 0.1 | .. | 13.1 |
| 130.0 | .. | .. | 130.0 | 130.0 | .. | .. | 130.0 | 50.0 | .. | .. | 50.0 |
| 207.0 | 318.5 | 65.2 | 590.7 | 201.7 | 321.4 | 73.9 | 597.0 | 157.5 | 333.4 | 76.2 | 567.1 |

than 50 lbs.

APPENDIX VII

[Vide Paragraph 11. 1]

Statement showing country-wise imports of raw silk, silk, yarns, and silk fabrics during the years 1953 to 1956 (January-April).

(A) Imports for the years 1953 to 1956

| Sl. No. | Item | 1953 | | 1954 | | 1955 | | 1956 | |
|---------|-------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|
| | | Quantity | | Value | | Quantity | | Value | |
| | | Lbs. | Rs. | Quantity | Rs. | Lbs. | Rs. | Quantity | Rs. |
| | Raw Silk and Cocoons: | | | | | | | | |
| | Imported from Japan | 158,845 | 38,98,702 | 146,053 | 32,30,454 | 155,972 | 33,46,643 | 33,840 | 6,76,499 |
| | Imported from China | .. | .. | .. | .. | 298,236 | 56,92,051 | 77,900 | 12,57,660 |
| | Imported from Other Countries | 75,882 | 15,72,083 | 218,164 | 42,69,384 | 8,787 | 1,47,577 | 30 | 30 |
| | Total | 234,727 | 54,70,785 | 364,217 | 74,99,838 | 462,995 | 91,86,271 | 111,741 | 19,34,179 |
| 2 | Silk waste and noils | .. | .. | .. | .. | 350 | 500 | .. | .. |
| 3 | Silk Yarns | 19,263 | 2,02,750 | 49,351 | 7,19,612 | 32,437 | 4,25,184 | 56,939 | 8,29,343 |
| 4 | Silk Sewing thread | .. | .. | .. | .. | 1,673 | 12,781 | 3 | 249 |

5 Silk Fabrics :

| | Yds. | Rs. | Yds. | Rs. | Yds. | Rs. | Yds. | Rs. |
|-------------------------------------|----------------|-----------------|----------------|------------------|---------------|-----------------|----------------|-----------------|
| Pongee | 513 | 1,988 | 1,358 | 3,106 | 7,041 | 13,319 | .. | .. |
| Fuji, Boscki and corded (spun silk) | 2,523 | 5,134 | 33,297 | 83,995 | 850 | 3,282 | 10,320 | 31,792 |
| Crepes and Georgettes | 144,930 | 3,50,499 | 301,444 | 6,60,247 | 41,797 | 1,06,974 | 94,300 | 1,53,053 |
| Satin and tafettas | 2,824 | 5,987 | 1,600 | 3,632 | .. | .. | 2,272 | 10,196 |
| Others | 214,657 | 6,21,798 | 168,505 | 5,38,213 | 18,907 | 55,454 | 48,245 | 1,08,763 |
| SILK FABRICS— TOTAL | 365,447 | 9,85,406 | 506,204 | 12,89,193 | 68,595 | 1,79,029 | 155,137 | 3,03,804 |

APPENDIX VIII.—*contd.*

(B) Imports for the years 1957 and 1958 (Jan-April)

| Name of the article | Origin of imports | 1957 | | 1958 (January-April) | |
|-------------------------------------------------------------------------------|-------------------|----------|-----------|----------------------|----------|
| | | Quantity | Value | Quantity | Value |
| 1 | 2 | 3 | 4 | 5 | 6 |
| <i>Silkworm cocoons</i> | | Lbs. | Rs. | Lbs. | Rs. |
| (a) Mulberry silk cocoons | Japan | 300 | 8,602 | .. | .. |
| | China | 60 | 2,415 | .. | .. |
| | TOTAL | 560 | 11,017 | .. | .. |
| (b) Unreelable cocoons & cocoon wastes Frisons silk thread waste & silk noils | | | | | |
| (i) Silk Yarn waste | China | 330 | 5,406 | 2,220 | 37,362 |
| (ii) Other sorts | U.S.A. | 785 | 2,442 | .. | .. |
| | TOTAL | 1,115 | 7,848 | 2,220 | 37,362 |
| | GRAND TOTAL | 1,675 | 18,865 | 2,220 | 37,362 |
| <i>11. Raw silk not thrown in hanks or in skeins</i> | | | | | |
| Hand Reeled | Japan | 13,833 | 2,99,437 | .. | .. |
| | China | 132 | 2,361 | .. | .. |
| | TOTAL | 13,965 | 3,01,798 | .. | .. |
| Other sorts | Japan | 2,66,868 | 56,57,642 | 7,210 | 1,49,463 |
| | China | 77,125 | 15,54,423 | 6,583 | 1,35,958 |
| | TOTAL | 3,43,993 | 72,12,065 | 13,793 | 2,85,421 |
| | GRAND TOTAL | 3,57,958 | 75,13,863 | 13,793 | 2,85,421 |

| 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------------------------------|--------------------|----------------|-----------------|--------------|---------------|
| III. Silk Yarn and Thread | | Lbs. | Rs. | Lbs. | Rs. |
| (a) Silk sewing thread | Italy | 2,470 | 20,423 | .. | .. |
| (b) Silk yarn all sorts excluding sewing thread | U.K. | 4,671 | 16,137 | .. | .. |
| | Germany, W. | 5,060 | 16,358 | 279 | 2,562 |
| | Belgium | 238 | 884 | 166 | 345 |
| | France | 1,845 | 4,429 | .. | .. |
| | Italy | 5,685 | 14,234 | .. | .. |
| | China | 22,582 | 3,91,633 | 4,833 | 89,449 |
| | TOTAL | 40,081 | 4,43,675 | 5,278 | 92,356 |
| (c) Silk waste yarn mixed with art-silk etc. | Germany, W. | 6 | 18 | .. | .. |
| | Japan | 1,350 | 6,015 | .. | .. |
| | China | 20,481 | 3,49,912 | .. | .. |
| | TOTAL | 21,837 | 3,55,945 | .. | .. |
| (d) Others | U.K. | 5,116 | 24,252 | .. | .. |
| | Germany, W. | 882 | 8,272 | .. | .. |
| | Italy | 584 | 2,009 | .. | .. |
| | Hong Kong | 11 | 160 | .. | .. |
| | China | 2,205 | 38,922 | .. | .. |
| | U.S.A. | 21,712 | 63,898 | .. | .. |
| | TOTAL | 30,510 | 1,37,513 | .. | .. |
| | GRAND TOTAL | 94,898 | 9,57,556 | 5,278 | 92,356 |
| | | Yds. | Rs. | Yds. | Rs. |
| IV. Silk Fabrics | | | | | |
| (a) Crepe and Georgettes | Switzerland | 260 | 5,109 | .. | .. |
| | Japan | 160,337 | 4,30,696 | 5,900 | 10,853 |
| | TOTAL | 160,597 | 4,35,805 | 5,900 | 10,853 |

| 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------------------------------|-------------|---------|----------|--------|--------|
| | | Yds. | Rs. | Yds. | Rs. |
| (b) Chinese Silk Gauze Plain and Flower | China . | 15,138 | 21,823 | .. | .. |
| (c) Fuji Boseki Corded excluding white cord. | Japan . | 66 | 1,051 | .. | .. |
| (d) Silk fabrics containing over 90% silk | U.K. . | 40 | 121 | .. | .. |
| | Germany, W. | 310 | 1,386 | .. | .. |
| | France . | 13,609 | 41,229 | 12,434 | 38,422 |
| | Italy . | .. | 20 | .. | .. |
| | Japan . | 7,972 | 23,615 | .. | .. |
| | China . | 21,625 | 49,719 | .. | .. |
| | U.S.A. | 40 | 204 | .. | .. |
| | Iraq . | .. | .. | 106 | 318 |
| | TOTAL . | 43,596 | 1,16,294 | 12,540 | 38,740 |
| (e) Fabrics over 50% Silk or art silk | U.K. . | | 1,707 | .. | .. |
| | Germany, W. | 5,892 | 22,279 | .. | .. |
| | Switzerland | 12,870 | 18,897 | | |
| | Hong Kong . | 486 | 2,422 | .. | .. |
| | Japan . | 96,223 | 2,98,082 | 1,121 | 2,482 |
| | China . | 16,897 | 53,965 | .. | .. |
| | Italy . | .. | .. | 3,322 | 5,580 |
| | TOTAL . | 132,368 | 3,97,352 | 4,443 | 8,062 |
| (f) Fabrics less 50% silk 10% Rayon | Singapore . | 6,830 | 15,309 | .. | .. |
| | Japan . | 21,444 | 52,605 | .. | .. |
| | China . | 44,549 | 85,209 | .. | .. |
| | TOTAL . | 72,823 | 1,53,123 | .. | .. |
| (g) Fabrics less 50% silk less 10% Rayon | Hong Kong . | 2,372 | 11,948 | .. | .. |
| | Japan . | 1,500 | 4,826 | .. | .. |
| | China . | 28,871 | 37,948 | .. | .. |
| | TOTAL . | 32,743 | 54,722 | .. | .. |

| 1 | 2 | 3 | 4 | 5 | 6 |
|---------------------------------------|------------------|-----------------|------------------|---------------|-----------------|
| (h) Satin & Taffeta . . | China . . | 1,427 | 3,939 | .. | .. |
| (i) Fent silk and mixed up to 2½ Yds. | U.S.A. . . | 1,623 | 1,000 | .. | .. |
| (j) Silk sarees . . . | Ceylon | 4 | 15 | .. | .. |
| | Singapore . . | 65 | 375 | .. | .. |
| | China . . | 36 | 133 | .. | .. |
| | France . . | .. | .. | 20 | 350 |
| | Hong Kong . . | .. | .. | 60 | 900 |
| | TOTAL . . | 105 | 523 | 80 | 1,250 |
| (k) Bolting cloth . . . | U.K. . . | 141 | 3,096 | 33 | 659 |
| | Germany, W. . . | 110 | 4,473 | .. | .. |
| | France . . | 1,802 | 30,275 | 39 | 1,336 |
| | Switzerland . . | 10,396 | 2,38,620 | 1,947 | 41,857 |
| | Italy . . | 2,876 | 47,935 | 1,300 | 17,098 |
| | Japan . . | 1,242 | 10,812 | 350 | 4,536 |
| | TOTAL . . | 16,567 | 3,35,211 | 3,669 | 65,484 |
| (l) Other silk Fabrics . . | U.K. . . | 20 | 107 | .. | .. |
| | Germany, W. . . | 74 | 264 | 3 | 25 |
| | Belgium . . | 500 | 1,623 | .. | .. |
| | France . . | 922 | 2,939 | .. | .. |
| | Syria . . | .. | 1,000 | .. | .. |
| | Japan . . | 10,531 | 16,444 | .. | .. |
| | China . . | 10,959 | 14,412 | .. | .. |
| | U.S.A. . . | 5,525 | 47,362 | .. | .. |
| | Australia . . | 900 | 4,511 | .. | .. |
| | TOTAL . . | 29,431 | 88,662 | 3 | 25 |
| GRAND TOTAL | | 5,06,484 | 16,09,505 | 26,635 | 1,24,414 |

APPENDIX IX

[Vide Paragraph 14]

Statement showing the breakdown of landed cost into c. i. f., price customs duty and clearing charges of imported raw silk and spun silk yarn

| Source of information | Type and specification | Origin of import | Date of import | C.I.F. (per lb.) | Customs duty charges (per lb.) | Clearing charges (per lb.) | Landed cost (per lb.) |
|--------------------------------------------|-----------------------------------------------------------|------------------|----------------|------------------|--------------------------------|----------------------------|-----------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| A. Raw Silk [I.C.T. 46] | | | | | | | |
| 1. Collector of Customs, Madras | Raw silk re-reeled white filature 20/22 denier 'A' grade. | Japan | 18-1-38 | Rs. nP. 20.72 | Rs. nP. 11.28 | Rs. nP. 0.02 | Rs. nP. 32.02 |
| 2. Collector of Customs, Bombay | 20/22 denier | Japan | Jan., 1958 | 20.70 | 11.21 | 0.20 | 32.11 |
| 3. Raw silk Merchants' Association, Bombay | Shanghai Steam filature white 20/22. | China | 3-3-58 | 19.56 | 10.84 | 0.25 | 30.65 |
| Ditto. | Japan Steam filature white 20/22 'A' Grade. | Japan | 11-2-58 | 20.31 | 11.10 | 0.25 | 31.66 |
| 4. Nagindas Foolchand Chinai, Bombay | Ditto. | Do. | 16-11-54 | 20.31 | 11.97 | 0.25 | 32.53 |
| 5. Central Silk Board | 20/22 Denier 'A' Grade | China | Feb., 1958 | 20.50 | 11.24 | 0.05 | 31.79 |
| Ditto. | Ditto. | Japan | Dec., 1957 | 20.80 | 11.35 | 0.05 | 32.20 |
| Ditto. | 13/15 Denier 'A' Grade | Do. | Do. | 21.96 | 11.75 | 0.05 | 33.76 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | |
|---------------------------------------|-----------------------------------------------------|-------------------|-------------------|---|---------------------|--------|-------|-------|-------|-------|
| B. Spun Silk Yarn [I. C. T. 47 (a)] | | | | | | | | | | |
| 1. | Collector of Customs, Bombay | . | Red Blossom | . | China, Jan., 1938 | 17.89 | 11.50 | 0.09 | 29.48 | |
| 2. | Raw Silk Merchants' Association, Bombay | 210/2 Red Blossom | . | . | Ditto. | 3-3-58 | 18.24 | 11.64 | 0.25 | 30.13 |
| | Ditto. | . | 140/2 Red Blossom | . | Ditto. | Ditto. | 16.57 | 11.04 | 0.25 | 27.86 |
| 3. | Ramanlal Amarnath, C/o. Bhimanlal Amarnath, Bombay. | 210/2 Red Blossom | . | . | Ditto. | 9-8-57 | 18.00 | 11.55 | 0.25 | 29.80 |
| 4. | Nagindas Foolchand Chinai, Bombay | Ditto. | . | . | Ditto. | Ditto. | 18.00 | 11.55 | 0.25 | 29.80 |
| | Ditto. | . | 140/2 Red Blossom | . | Ditto. | 6-7-57 | 16.35 | 10.97 | 0.26 | 27.58 |
| 5. | Central Silk Board | . | 2/210 | . | Japan, April, 1957. | 22.07 | 12.72 | 0.05 | 34.84 | |