## STANDING COMMITTEE ON LABOUR, TEXTILES AND SKILL DEVELOPMENT

(2023-24)

(SEVENTEENTH LOK SABHA)

#### MINISTRY OF TEXTILES

### SCHEMES/PROGRAMMES OF CENTRAL SILK BOARD FOR DEVELOPMENT AND PROMOTION OF SILK INDUSTRY

#### FIFTY-FOURTH REPORT



### LOK SABHA SECRETARIAT

**NEW DELHI** 

February, 2024/ Magha, 1945 (Saka)

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Presented to Lok Sabha on 07.02.2024

Laid in Rajya Sabha on 07.02.2024



# LOK SABHA SECRETARIAT NEW DELHI

February, 2024/ Magha, 1945 (Saka)

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Appendix- II\* Minutes of the Eighth Sitting of the Committee (2023-24) held on 5th February, 2024.

Not appended with this cyclostyled copy.

### COMPOSITION OF THE STANDING COMMITTEE ON LABOUR, TEXTILES AND SKILL DEVELOPMENT

#### (2022-23)

#### Shri Bhartruhari Mahtab - Chairperson

#### MEMBERS LOK SABHA

| 2.<br>3. | Shri Subhash Chandra Baheria<br>Kunwar Pushpendra Singh Chandel |
|----------|---|
| 4.       | Shri Pallab Lochan Das  |
| 5.       | Shri Feroze Varun Gandhi  |
| 6.       | Shri Satish Kumar Gautam  |
| 7.       | Shri Bache Gowda B.N.   |
| 8.       | Dr. Umesh G. Jadhav   |
| 9.       | Shri Dharmendra Kumar Kashyap                                   |
| 10.      | Adv. Dean Kuriakose   |
| 11.      | Shri Pakauri Lal  |
| 12.      | Prof. Sanjay Sadashivrao Mandlik                                |
| 13.      | Shri Dayakar Pasunoori  |
| 14.      | Shri Khalilur Rahaman   |
| 15.      | Dr. D. Ravikumar  |
| 16.      | Shri Naba (Hira) Kumar Sarania                                  |
| 17.      | Shri Bhola Singh  |
| 18.      | Shri Ganesh Singh   |
| 19.      | Shri Nayab Singh  |
| 20.      | Shri K. Subbarayan  |
| 21.      | Shri Giridhari Yadav  |

#### **RAJYA SABHA**

| 22.   | Shri Naresh Bansal         |
|-------|----------------------------|
| 23.   | Shri Neeraj Dangi          |
| 24.   | Shri R. Dharmar            |
| 25.   | Prof. Manoj Kumar Jha      |
| 26.   | Shri Elamaram Kareem       |
| 27. * | Ms. Dola Sen               |
| 28.   | Shri M. Shanmugam          |
| 29.   | Shri Shibu Soren           |
| 30.   | Shri Vijay Pal Singh Toma: |
| 31.   | Shri Binoy Viswam          |
|       |                            |

<sup>\*</sup> Re-nominated w.e.f. 23.08.2023.

### COMPOSITION OF THE STANDING COMMITTEE ON LABOUR, TEXTILES AND SKILL DEVELOPMENT

(2023-24)

#### Shri Bhartruhari Mahtab - Chairperson

#### MEMBERS LOK SABHA

| 2.  | Shri Subhash Chandra Baheria     |
|-----|----------------------------------|
| 3.  | Kunwar Pushpendra Singh Chandel  |
| 4.  | Shri Pallab Lochan Das           |
| 5.  | Shri Feroze Varun Gandhi         |
| 6.  | Shri Satish Kumar Gautam         |
| 7.  | Shri Bache Gowda B.N.            |
| 8.  | Dr. Umesh G. Jadhav              |
| 9.  | Shri Dharmendra Kumar Kashyap    |
| 10. | Adv. Dean Kuriakose              |
| 11. | Shri Pakauri Lal                 |
| 12. | Prof. Sanjay Sadashivrao Mandlik |
| 13. | Shri Dayakar Pasunoori           |
| 14. | Shri Khalilur Rahaman            |
| 15. | Dr. D. Ravikumar                 |
| 16. | Shri Naba (Hira) Kumar Sarania   |
| 17. | Shri Bhola Singh                 |
| 18. | Shri Ganesh Singh                |
| 19. | Shri Nayab Singh                 |
| 20. | Shri K. Subbarayan               |
| 21. | Shri Giridhari Yadav             |

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| 22. | Shri Naresh Bansal         |
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| 28. | Shri M. Shanmugam          |
| 29. | Shri Shibu Soren           |
| 30. | Shri Vijay Pal Singh Tomar |
| 31. | Shri Binoy Viswam          |

#### **SECRETARIAT**

Shri Jadumani Baisakh
 Smt. Shilpa Kant
 Joint Secretary
 Committee Officer

#### INTRODUCTION

I, the Chairperson, Standing Committee on Labour, Textiles and Skill Development (2023-24) having been authorized by the Committee do present on their behalf this Fifty-Fourth Report on 'Schemes/Programmes of Central Silk Board for

Development and Promotion of Silk Industry' relating to the Ministry of Textiles.

2. The Committee (2022-23) took oral evidence of the representatives of the

Ministry of Textiles on 20th June 2023. The Committee (2023-24) considered and

adopted this Report at the sitting held on 5th February, 2024.

3. The Committee wish to express their thanks to the representatives of the

Ministry of Textiles for tendering evidence and placing before the Committee all the

requisite information sought for in connection with the examination of the subject.

4. For ease of reference and convenience, the Observations/ Recommendations of

the Committee have been printed in thick type in the body of the Report.

New Delhi; <u>05 February, 2024</u> 16Magha, 1945(Saka) BHARTRUHARI MAHTAB CHAIRPERSON, STANDING COMMITTEE ON LABOUR, TEXTILES AND SKILL DEVELOPMENT

### REPORT PART-I

#### I. INTRODUCTORY

Silk is the most elegant textile in the world with unparalleled grandeur, natural sheen, inherent affinity for dyes, high absorbance, light weight, soft touch and high in durability. Because of these unique features silk is known as the "Queen of Textiles" the world over. On the other hand, it stands for livelihood opportunity for millions, owing to its high employment potential, low capital requirement and remunerative nature of its production. The very nature of this industry with its rural based on-farm and off-farm activities and enormous employment generation potential has attracted the attention of the planners and policy makers to recognize the industry among one of the most appropriate avenues for socio-economic development of a largely agrarian economy of India.

- 1.2 Silk has been intermingled with the life and culture of the Indians. India has a rich and complex history in silk production and its silk trade which dates back to 15th century. Sericulture industry provides employment to approximately 9.2 million persons in rural and semi-urban areas in India. Of these, a sizeable number of workers belong to the economically weaker sections of society, including women.
- 1.3 India is the second largest producer of silk, next to China (46,700 MT). Indian Silk has its strength and uniqueness in production of all four commercially known varieties of silk i.e., Mulberry, Muga, Eri and Tasar. India is the lone producer of appreciable quantities of non-mulberry silk and largest consumer of the silk. Mulberry silk is fully domesticated and contributes about 74% of the total silk production in the country. However, Muga, Eri and Tasar, popularly known as Vanya Silk, are practiced in natural or semi domesticated condition. Muga, which is produced only in India with its golden yellow glitter is a prerogative of India.
- 1.4 Elaborating the Silk scenario in India, one of the representatives of the Ministry deposed during the course of oral evidence, before the Committee as follows:
  - "...More than 60 countries produce silk. China is the leading producer followed by India. China and India jointly account for 95 per cent of the global silk production of 86,311 metric tonnes, out of which India is producing about 36,543 metric tonnes. We are also the largest consumer of silk.

India has a unique distinction of being a country which is producing all the four varieties of silk, namely, Mulberry, Tasar, Eri and Muga. Tasar, Eri and Muga are called as the Vanya silk while the mulberry silk is fully domesticated and it contributes to about 74 per cent of the silk production of our country. Vanya silk is practised in natural or semi-domesticated condition. Sericulture is also a source of livelihood opportunity for the country. It is because of its low capital requirement and because of its on-farm and off-farm activities, it provides employment to about 9.2 million persons in rural and urban areas."

#### II. PERFORMANCE OF SERICULTURE SECTOR

2.1 The representative of the Ministry informed the Committee during the course of oral evidence as follows:

"India is showing an increasing trend in raw silk production. However, China is showing a declining trend in silk production. In 2017, China was at about 1,42,000 metric tonnes; and in 2021, it was at 46,700 metric tonnes. Since there is a declining trend, India's role in the sericulture sector assumes a very important place."

- 2.2 When asked by what percentage the rate of silk production in China is declining, the Committee were apprised that "it is more than 50%".
- 2.3 The Committee then asked about the impact of this decline on the Indian silk industry. A representative of the Ministry submitted in the deposition before the Committee during oral evidence as follows:

"Sir, definitely, this is a signal for India because it shows that because of our increasing trend in the raw silk production and declining trend in China, we are at an advantages position to capture this market."

2.4 On being asked about the particulars of the production of all the four varieties of Silk in India, the Ministry forwarded the following Statement:

(In Metric Tonnes)

|                          |                   |                   | 2021-        | 2022-        | 2      | 2023-24                       |  |  |  |
|--------------------------|-------------------|-------------------|--------------|--------------|--------|-------------------------------|--|--|--|
| Particulars              | 2019-20<br>Achiv. | 2020-21<br>Achiv. | 22<br>Achiv. | 23<br>Achiv. | Target | Achiv. (P)<br>Upto July- 2023 |  |  |  |
| Mulberry                 |                   |                   |              |              |        |                               |  |  |  |
| Plantation               | 2.39              | 2.38              | 2.42         | 2.53         | 2.69   | 2.57                          |  |  |  |
| (Lakh ha.)               |                   |                   |              |              |        |                               |  |  |  |
| Raw Silk Production (MT) |                   |                   |              |              |        |                               |  |  |  |
| Mulberry                 | 7009              | 6783              | 7941         | 8904         | 10200  | 2548                          |  |  |  |
| (Bivoltine)              |                   | 0700              | 7511         | 0501         | 10200  | 2010                          |  |  |  |
| Mulberry                 | 10000             | 17110             | 17077        | 10750        | 20550  | F040                          |  |  |  |
| (Cross breed)            | 18230             | 17113             | 17877        | 18750        | 20550  | 5840                          |  |  |  |
| Sub Total                | 25239             | 23896             | 25818        | 27654        | 30750  | 8388                          |  |  |  |
| (Mulberry)               |                   |                   |              |              |        |                               |  |  |  |
| Tasar                    | 3136              | 2689              | 1466         | 1318         | 3200   | 1                             |  |  |  |
| Eri                      | 7204              | 6946              | 7364         | 7349         | 8240   | 2368                          |  |  |  |
| Muga                     | 241               | 239               | 255          | 261          | 310    | 82                            |  |  |  |
| Sub Total<br>(Vanya)     | 10581             | 9874              | 9085         | 8928         | 11750  | 2451                          |  |  |  |
| G. TOTAL                 | 35820             | 33770             | 34903        | 36582        | 42500  | 10839                         |  |  |  |

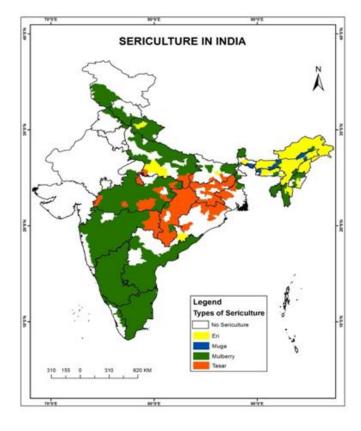
(P) -Provisional

Source: The data received from Departments of Sericulture & compiled at CSB (Central office)

2.5 Elaborating Raw Silk Production in India during 2022-23, the Ministry forwarded the following map of India indicating percentage-wise distribution of raw silk production in the country:

### Raw Silk Production-2022-23

- Mulberry-27630 MT (75%)
- <u>Tasar-</u> 1297 MT (4%)
- <u>Erl –</u> 7356 MT (20%)
- Muga- 260 MT (1%)
- Total 36543 MT



2.6 Following statement was forwarded by the Ministry displaying zonewise raw silk production:

(In Metric Tonnes)

|  | ` _      |       |      |      |       |
|--|----------|-------|------|------|-------|
| Zone   | Mulberry | Tasar | Eri  | Muga | Total |
| Southern (Karnataka, AP,<br>TN, Kerala,<br>Telangana, Maharashtra) | 24798    | 19    | -    | -    | 24817 |
| Central (UP, MP,<br>Chhattishgarh)                                 | 316      | 242   | 54   | -    | 613   |
| Eastern<br>(WB, Bihar, Jharkhand,<br>Odisha)                       | 1949     | 1032  | 23   | 0.03 | 3004  |
| Northern<br>(J&K, Uttarakhand, HP,<br>Punjab, Haryana)             | 158      | 0.33  | 0.19 | -    | 158   |

| North Eastern (Assam, Aru.Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura) | 409   | 4    | 7278 | 260 | 7952  |
|--|-------|------|------|-----|-------|
| Total  | 27630 | 1297 | 7356 | 260 | 36543 |

2.7 When the Committee asked about the State-wise production of raw silk from 2018-19 to 2023-24, the Ministry furnished the statement as follows:

#### State-Wise Raw Silk Production during 2018-19 to 2023-24 (upto July, 2023)

(in MT)

|   | 2019-20           |        | 2020-21    |        | 2021-22 |        | 2022-23    |        | 2023-24 (up to July<br>2023) |        |                   |
|---|-------------------|--------|------------|--------|---------|--------|------------|--------|------------------------------|--------|-------------------|
| # | State             | Target | Achmn<br>t | Target | Achmnt. | Target | Achmn<br>t | Target | Achm<br>nt                   | Target | Achmn<br>t<br>(P) |
| 1 | Karnataka         | 12000  | 11143      | 12600  | 11292   | 12500  | 11191      | 12750  | 11823                        | 13000  | 3834              |
| 2 | Andhra<br>Pradesh | 7946   | 7962       | 8208   | 8422    | 9305   | 8834       | 9530   | 9312                         | 10009  | 3047              |
| 3 | Telangana         | 295    | 297        | 310    | 309     | 337    | 404        | 362    | 462                          | 540    | 62                |
| 4 | Tamil Nadu        | 2300   | 2154       | 2300   | 1834    | 2400   | 2373       | 2600   | 2589                         | 2850   | 768               |
| 5 | Kerala            | 20     | 13         | 17     | 7       | 10     | 9          | 13     | 11                           | 20     | 4                 |
| 6 | Maharashtra       | 630    | 428        | 475    | 428     | 560    | 523        | 620    | 620                          | 660    | 122               |
| 7 | Uttar Pradesh     | 365    | 309        | 354    | 316     | 395    | 355        | 430    | 373                          | 470    | 28                |
| 8 | Madhya<br>Pradesh | 165    | 61         | 80     | 47      | 74     | 33         | 85     | 22                           | 85     | 4                 |
| 9 | Chhattisgarh      | 562    | 480        | 535    | 300     | 561    | 224        | 562    | 223                          | 664    | 1                 |

| 10 | West Bengal         | 2900  | 2295  | 2520  | 872   | 1630  | 1632  | 1776  | 1966  | 2330  | 399   |
|----|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 11 | Bihar               | 86    | 56    | 58    | 64    | 96    | 56    | 105   | 48    | 70    |       |
| 12 | Jharkhand           | 2604  | 2402  | 2904  | 2185  | 2902  | 1052  | 2902  | 874   | 2255  |       |
| 13 | Odisha              | 155   | 137   | 160   | 102   | 185   | 108   | 190   | 130   | 154   |       |
| 14 | Jammu &<br>Kashmir  | 170   | 117   | 142   | 80    | 150   | 99    | 150   | 100   | 165   |       |
| 15 | Himachal<br>Pradesh | 50    | 31    | 45    | 20    | 40    | 28    | 40    | 31    | 60    |       |
| 16 | Uttarakhand         | 42    | 40    | 25    | 25    | 42    | 42    | 46    | 41    | 53    |       |
| 17 | Haryana             | 2     | 1     | 1     | 1     | 1     | 0.75  | 2     | 0.3   | 2     |       |
| 18 | Punjab              | 5     | 3     | 4.5   | 1     | 2     | 3.5   | 7     | 4     | 7     |       |
| 19 | Assam               | 5395  | 5316  | 5519  | 5462  | 5855  | 5700  | 6063  | 5721  | 6245  | 2011  |
| 20 | Ar. Pradesh         | 75    | 64    | 67    | 43    | 59    | 53    | 60    | 61    | 75    |       |
| 21 | Manipur             | 600   | 504   | 542   | 327   | 530   | 462   | 557   | 454   | 711   | 26    |
| 22 | Meghalaya           | 1220  | 1192  | 1245  | 1213  | 1367  | 1234  | 1372  | 1168  | 1375  |       |
| 23 | Mizoram             | 130   | 104   | 113   | 43    | 59    | 59    | 95    | 84    | 110   | 330   |
| 24 | Nagaland            | 682   | 600   | 649   | 264   | 311   | 315   | 341   | 350   | 422   | 38    |
| 25 | Sikkim              | 1     | 1     | 2     | 0.08  | 5     | 0.03  | 2     | 0.4   | 2     |       |
| 26 | Tripura             | 130   | 111   | 125   | 112   | 125   | 113   | 140   | 115   | 165   | 41    |
|    | Total               | 38530 | 35820 | 39000 | 33770 | 39500 | 34903 | 40800 | 36582 | 42500 | 10839 |

(P): Provisional

2.8 During the course of evidence, the representative of the Ministry deposed before the Committee elaborating the trends of raw silk production in the country as follows:

"Hon'ble Chairperson asked about the trends of raw silk production of our country, this slide shows an increasing trend expect for the pandemic year in which the silk production suffered. We see that there is an increasing trend in all the varieties except Tasar. It has, definitely, seen a declining trend in the production and largely the reason attribute is the adverse climatic conditions which has led to the dip in the production of Tasar. However, the raw silk production in our country is showing an increasing trend....Sir, Tasar, definitely, in Jharkhand, which is a major producing state, has seen stress of

the adverse climatic changes and since it is in the wild forest that this spread, hence, the changes in the climate has adversely affected the silk production, specially, in Jharkhand....Sir, largely, this is a reason that has been attributed by the Jharkhand Commissionerate of Sericulture that adverse changes of weather conditions and the fluctuations in the weather conditions have led to this situation."

#### III EMPLOYMENT GENERATION:

3.1 The Ministry informed the Committee that sericulture industry has enormous employment generation potential and provides employment to approximately 9.2 million persons in rural and semi-urban areas. The Committee enquired about the database of the beneficiaries and also the steps taken/proposed to be taken to achieve the target of employment generation of 10.97 million persons by 2025-26. The Ministry stated in their reply as under:

"The data of 9.2 million persons engaged in sericulture activities is estimated based on the raw silk production in the country during the particular year taking into consideration the defined norms for mulberry and vanya silk activities viz., mulberry plantation, silkworm rearing, seed production, post cocoon activities up to silk fabric production and ancillary activities and the beneficiaries covered under scheme are entirely different. Hence, the entire estimated employment data 9.2 million persons cannot be considered as beneficiaries.

3.2 The Ministry forwarded the following Statement regarding State-wise estimated employment generation during last five years:

|    | Estimated         | Employme | nt Genera | tion in Seri |         | alch Daraan |
|----|-------------------|----------|-----------|--------------|---------|-------------|
|    | 21.1              | 0040 40  | 0040.00   | 0000 04      |         | akh Persons |
| #  | State             | 2018-19  | 2019-20   | 2020-21      | 2021-22 | 2022-23     |
| _1 | Karnataka         | 19.01    | 18.27     | 18.52        | 18.35   | 19.39       |
| 2  | Andhra Pradesh    | 12.28    | 13.07     | 13.81        | 14.49   | 15.28       |
| 3  | Telangana         | 0.39     | 0.51      | 0.51         | 0.67    | 0.78        |
| 4  | Tamil Nadu        | 3.40     | 3.53      | 3.01         | 3.89    | 4.25        |
| 5  | Kerala            | 0.03     | 0.02      | 0.01         | 0.01    | 0.01        |
| 6  | Maharashtra       | 0.91     | 0.75      | 0.71         | 0.88    | 1.04        |
| 7  | Uttar Pradesh     | 0.65     | 0.66      | 0.73         | 0.80    | 0.85        |
| 8  | Madhya Pradesh    | 0.21     | 0.12      | 0.10         | 0.06    | 0.03        |
| 9  | Chhattisgarh      | 1.41     | 1.95      | 1.21         | 0.90    | 0.89        |
| 10 | West Bengal       | 4.00     | 3.85      | 1.48         | 2.71    | 3.27        |
| 11 | Bihar             | 0.21     | 0.23      | 0.27         | 0.24    | 0.21        |
| 12 | Jharkhand         | 9.73     | 9.84      | 8.96         | 4.31    | 3.58        |
| 13 | Odisha            | 0.53     | 0.56      | 0.42         | 0.44    | 0.48        |
| 14 | Jammu & Kashmir   | 0.19     | 0.19      | 0.13         | 0.16    | 0.16        |
| 15 | Himachal Pradesh  | 0.06     | 0.05      | 0.03         | 0.05    | 0.05        |
| 16 | Uttarakhand       | 0.06     | 0.07      | 0.04         | 0.07    | 0.04        |
| 17 | Haryana           | 0.00     | 0.00      | 0.00         | 0.00    | 0.00        |
| 18 | Punjab            | 0.01     | 0.01      | 0.00         | 0.01    | 0.01        |
| 19 | Assam & BTC       | 24.35    | 25.76     | 26.65        | 27.79   | 27.89       |
| 20 | Arunachal Pradesh | 0.28     | 0.30      | 0.21         | 0.26    | 0.29        |
| 21 | Manipur           | 1.82     | 1.98      | 1.24         | 1.82    | 1.79        |
| 22 | Meghalaya         | 5.65     | 5.65      | 5.75         | 5.85    | 5.50        |
| 23 | Mizoram           | 0.18     | 0.20      | 0.09         | 0.13    | 0.18        |
| 24 | Nagaland          | 3.00     | 2.90      | 1.27         | 1.53    | 1.70        |
| 25 | Sikkim            | 0.00     | 0.00      | 0.00         | 0.00    | 0.00        |
| 26 | Tripura           | 0.38     | 0.18      | 0.18         | 0.19    | 0.19        |
|    | Import            | 3.06     | 3.65      | 1.98         | 2.18    | 4.26        |
|    | Total             | 91.78    | 94.30     | 87.33        | 87.78   | 92.13       |

- 3.3 Further, it was stated by the Ministry that following measures had been taken to achieve the set employment generation target by 2025-26.
  - a) Need based training programmes are organized by CSB Institutes with focus on skill up-gradation in silk sector so as to create employment opportunities (mostly self-employment) for the new entrants and also to increase in income level of the existing entrepreneurs by adapting improved package of practices. Capacity building & Training under Samarth scheme to develop skill to the youth for gainful and sustainable employment in the silk sector
  - b) Support is provided under beneficiary oriented components in the form of bundle of packages starting from plantation to cocoon harvesting and marketing.
  - c) Under self-empowerment, support is also provided to set up CRCs, Private Seed production, Automatic Reeling Machines(ARMs), Multi-end Reeling units, Twisting machines, Improved Vanya reeling/spinning machines and post yarn related machineries.
  - d) Promotion of SHGs /Farmers Producers Organization/SPVs to encourage youth as industry partner in profit sharing.

Incubation facility to CSB R&D Institutes with linkages to start ups for commercialization and field application of technologies."

3.4 The Committee further enquired the Ministry about the database of farmers and reelers presently working in sericulture industry. The Ministry forwarded the following information:

"As on 2021-22, 10,94,031 farmers and 32,138 reelers were engaged in sericulture, out of which, information in respect of 7,89,017 farmers and 15,538 reelers have been uploaded by the respective State Sericulture Departments in the Farmers Reelers Database (FRDB).

The Ministry furnished the following statement displaying State-wise details of records of farmers and reelers uploaded in FRDB database:

Annexure 4 State-wise details of farmers and reelers uploaded in FRDB

| #  | State             | Farmers | Reelers |
|----|-------------------|---------|---------|
| 1  | Andhra Pradesh    | 59604   | 400     |
| 2  | Arunachal Pradesh | 735     | 12      |
| 3  | Assam             | 193113  | 3112    |
| 4  | Bihar             | 6101    | 353     |
| 5  | BTC, Bodoland     | 43969   | 243     |
| 6  | Chhattisgarh      | 8145    | 2924    |
| 7  | Haryana           | 34      | 0       |
| 8  | Himachal Pradesh  | 6562    | 2       |
| 9  | Jammu & Kashmir   | 24816   | 73      |
| 10 | Jharkhand         | 128188  | 32      |
| 11 | Karnataka         | 128051  | 4754    |
| 12 | Kerala            | 247     | 0       |
| 13 | Madhya Pradesh    | 3391    | 176     |
| 14 | Maharashtra       | 7001    | 15      |
| 15 | Manipur           | 11410   | 1800    |
| 16 | Meghalaya         | 10708   | 399     |
| 17 | Mizoram           | 4960    | 13      |
| 18 | Nagaland          | 13490   | 424     |
| 19 | Odisha            | 14708   | 167     |
| 20 | Punjab            | 649     | 0       |
| 21 | Sikkim            | 776     | 1       |
| 22 | Tamil Nadu        | 27192   | 166     |
| 23 | Telangana         | 4140    | 3       |
| 24 | Tripura           | 14500   | 293     |
| 25 | Uttar Pradesh     | 21843   | 46      |
| 26 | Uttarakhand       | 6938    | 75      |
| 27 | West Bengal       | 47746   | 55      |
|    | Total             | 789017  | 15538   |

#### IV ROLE OF PRIVATE PLAYERS

4.1 The Committee asked the Ministry whether the private players are also involved in the silk sector in areas including production and marketing and whether it is proposed to involve Seri-Business Entrepreneurs/corporate sericulture/Industry participation to scale up the import substitute Bivoltine silk production. The Ministry submitted in their reply as under:

"In silk sector, State /Central Govt. act as a policy makers/regulators and facilitators for the development of sericulture industry. There are different activities carried out by different personal in silk chain starting from farming to trading of silk. The cocoon production and medium scale reeling /weaving /trading activities are mainly carried out by farmers / individuals /cooperatives depending on their availability of resources. Whereas, large scale activities like Chawki rearing centres in mulberry sericulture, Commercial silkworm seed production, Automatic Silk Reeling through ARMs in post cocoon sector are being taken up by private entrepreneurs/enterprises as it requires huge investment. Besides, silk trading business is also mostly run by private enterprise/Entrepreneurs.

In order to encourage/increase investment by private sector /enterprises in sericulture sector, various initiatives have been taken under the Silk Saamgra-2 scheme like support to Seri business Enterprise /Entrepreneurs / Farmer Producer Organizations(FPOs) for large scale farming and post cocoon activities including setting of mega ARM units, support to entrepreneurs for bivoltine seed production & distribution, Involvement of FPOs/ Community Resource Persons(CRPs) for extension etc.

In mulberry sector, 14 private registered producers have been roped in by CSB for production of bivoltine hybrid seed. In Tasar and Muga sectors, the number of private seed producers available are 154 and 25, respectively. Further 108 ARM units established and functioning in the country are run by private parties."

- 4.2 During the course of evidence, the Committee enquired the Ministry about the possibility of inclusion of private enterprises in silk production and marketing. A representative of the Ministry submitted as follows:
  - '...Hence, the maintenance, multiplication, and supply of quality silkworm seed are very important activities of CSB. Here, we facilitate the State units and private silkworm seed producers to enhance their capacity for quality silkworm seed production. CSB plays a leadership role in seed production and support the adopted seed reelers to upscale seed production. We also promote private participation in seed production...'
- 4.3 When the Committee inquired about the impact of Covid-19 pandemic on Silk Sector in general and on production of Tasar in particular and the reasons for gradual decrease in production of Tasar Silk and also the steps taken/ proposed to be taken to increase overall production, the Ministry stated in their reply as under:

"The production and logistics activities were severely affected during the lock down imposed by the Central and State Government to curb the outbreak of the Covid-19. There was a decline in production and thereby monetary loss at every stage of the value chain. The industry has faced various problems like loss in production, crash in cocoon and raw silk prices, transportation problem, non-availability of skilled workers, problems in selling raw silk and silk products, working capital and cash flow problems, non-availability of raw materials, reduction in demand for silk fabric, cancellation of export/import orders besides export and import restrictions.

The Covid-19 outbreak has also adversely affected the demand for silk commodities in the domestic and international markets. As the marriages and other social functions were not celebrated in a grand manner, the demand for silk reduced drastically.

The Tasar silk production declined during the last two years on account of heavy unseasonal rainfalls and severe disease incidences leading to adverse conditions in the major tasar silk producing states."

#### V. EXPORT AND IMPORT OF SILK

5.1 During the course of evidence, one of the representatives of the Ministry deposed before the Committee clarifying the reasons behind the surge in the imports in 2022-23 as below:

"India is, actually, the largest silk consuming market and, therefore, it does not generate an adequate surplus. But it primarily exports finished goods, that is, fabrics, made-ups and readymade garments which accounts for 82 per cent of the total export earnings. US, UAE and EU are the major destinations of the silk exports. Exports are also showing an increasing trend except in the pandemic years. On the import front, the raw silk remains a major item of import. It accounts for about 70 per cent of the total value of the silk imports. In the pandemic time, the imports have shown a dip but now there is a surge in the imports and this is attributed to the release of the pent-up demand and increased economic activity and hence we find a surge of imports in 2022-23."

#### Raw Silk Import:

5.2 The Ministry forwarded the following statement regarding quantity and value of raw silk imported during 2018-19 to 2023-24 (up to July, 2023):

| Year    | Quantity (MT) | Value (Rs. in Crores) |
|---------|---------------|-----------------------|
| 2018-19 | 2785          | 1041.35               |
| 2019-20 | 3315          | 1149.32               |
| 2020-21 | 1804          | 570.56                |

| 2021-22                       | 1978   | 819.68  |
|-------------------------------|--------|---------|
| 2022-23                       | 3874   | 1713.68 |
| 2023-24(P) Upto July-<br>2023 | 466.08 | 56.7    |

Source: DGCIS, Kolkata

#### P: Provisional

The raw silk import increased during 2022-23 compared to previous year due to increase in demand for silk products in domestic market attributed by increased economic activities during post covid period."

#### **Export of Silk:**

5.3 Similarly, export values of silk goods during 2018-19 to 2023-24 (up to July, 2023) are furnished by the Ministry as under:

(Rs. in Crores)

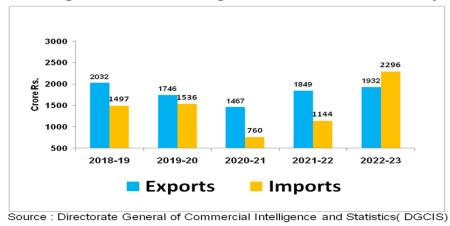
| Items                        | 2018-<br>19 | 2019-<br>20 | 2020-<br>21 | 2021-<br>22 | 2022-<br>23 | 2023-<br>24(P)<br>Upto July-<br>23 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|------------------------------------|
| Natural Silk<br>Yarn         | 24.72       | 16.77       | 29.37       | 52.62       | 38.74       | 15.87                              |
| Silk Fabrics and<br>made-ups | 1022.43     | 982.91      | 729.50      | 837.41      | 973.49      | 188.75                             |
| Readymade<br>Garments        | 742.27      | 504.23      | 449.56      | 671.13      | 489.61      | 267.76                             |
| Silk Carpet                  | 113.08      | 143.43      | 107.56      | 79.12       | 92.34       | 129.08                             |
| Silk Waste                   | 129.38      | 98.31       | 150.61      | 208.67      | 179.19      | 90.13                              |
| Total                        | 2031.88     | 1745.65     | 1466.60     | 1848.96     | 1773.38     | 691.59                             |

Source: Compiled from the statistics of DGCIS, Kolkata;

#### P: Provisional

The reduction in export of Silk Fabrics and made-ups during 2022-23 compared to previous year is due to economic recession in Europe & USA, which are major export market for Indian silk.

5.4 The import and export of the raw silk in india is depicted through the following Bar diagram furnished by the Ministry:



5.5 To bring more clarity on this topic, the Committee enquired the Ministry about the steps being taken to reduce dependence on imports and also whether the upsurge of imports since 2020-21 attributed to relaxation in import duty, the Ministry submitted as under:

"The sudden upsurge in import of raw silk is mainly due to increase in economic activities in post covid period. In the post-covid period, marriages, festivals and rituals were celebrated in a grand way leading to increase in purchase of silk products. Despite there was an increase in silk production from 34,903 MT in 2021-22 to 36,453 MT in 2022-23, the domestic silk production was not able to cater the surge in industry requirements. Therefore, the imports of raw silk doubled during 2022-23 compared to 2021-22.

Various measures such as area expansion under bivoltine silk, installation of indigenous automatic reeling machines (IARMs), increase in productivity, etc. have been taken to increase the import substitute bivoltine silk production in the country. As a result of these measures, the bivoltine silk production has increased from 5,874 MT in 2017-18 to 8,881 MT in 2022-23 in the country.

There was no reduction of import duty since 2015-16. On the other hand, the basic customs duty was increased from 10% to 15% in 2021. The raw silk imports were 3,315 MT in 2019-20, which reduced to 1,978 in 2021-22. However, there was an increase in raw silk imports to 3,874 MT in 2022-23, which was mainly due to sudden increase in demand for raw silk in the country."

5.6 The Committee further asked the Ministry to explain the two fold increase in the value of raw silk imports from Rs.819.68 crore in 2020-21 to over Rs.1,713.68 crore in 2022-23. In their reply the Ministry submitted as under:

"The demand for silk increased in 2022-23 due to increase in economic activities in post-covid period. In the post-covid period, marriages, festivals and rituals were celebrated in a grand way leading to increase in purchase of

silk. Despite there was an increase in silk production from 34,903 MT in 2021-22 to 36,453 MT in 2022-23, the domestic silk production was not able to cater the surge in industry requirements. Therefore, the imports of raw silk doubled during 2022-23 compared to 2021-22.

However, the production of import substitute bivoltine raw silk is increasing consistently in the country. The Govt. of India has been taking measures such as area expansion for bivoltine silk production, installation of more indigenous automatic reeling machines (IARMs), R& D efforts to increase productivity, developing skilled work force etc., which will lead to faster growth in production of import substitute bivoltine raw silk. Further, the Government is taking measures to implement Quality Control Order (QCO) for raw silk in consultation with stakeholders to arrest the imports of low quality raw silk into the country. These measures would help to reverse the trend of increase in raw silk import and achieve the objectives of the Scheme."

5.7 When the Committee asked what were the reasons for decline in silk exports from Rs.2032 crore in 2018-19 to Rs. 1932 crore in 2022-23 and what steps have been taken/proposed to be taken to increase exports, the Ministry stated in their reply as under:

"The UAE, the USA and the European Union are the major markets for Indian silk goods. The silk purchases in the western countries are directly related to the income level of the consumers. The economic recession created in the western countries due to Covid pandemic followed by the Russo-Ukrainian war resulted in decline in silk exports from India. Overall, there is decline in global trade in silk during the recent years, in which India's trade was also affected.

Following measures have been taken to increase the silk export;

- a) Buyers-Sellers Meet & Reverse-Buyers-Sellers-Meet RBSM
- b) Active participation of Indian exporters in the international expos and International Silk expos organized in India (both B2B and B2C) would give boost to the sector.
- c) The Indian silk export promotion Council (ISEPC), A body created to support & improve the silk export business is also taking initiatives & organizing the participation of Indian silk exporters availing the benefits of Market Access Initiative (MAI) & Market Development Assistance (MDA) schemes promoted by the Ministry of Commerce in boosting the silk exports internationally
- d) Thrust provided on product development & diversification with focus on silk blends & popularizing Vanya silk products in the export business.
- e) Government of India provided duty scrip covering silk exports under Merchandise Export from India Scheme (MEIS) implemented by Ministry of Commerce.
- f) Rebate of State & Central Taxes and Levies (RoSCTL) Scheme is being implemented in place of MEIS with an export incentive provided in the form

- of transferable and sellable duty credit scrips offered on the basis of the FOB value of the silk readymade garments and other finished goods.
- g) Indian Silk" is being promoted as a brand in the global market through generic promotion & with the "Silk Mark Tag" to create a Brand image of Indian Silk."

#### VI THE CENTRAL SILK BOARD (CSB):

- 6.1 The Committee were further informed that with a larger vision to become Atmanirbhar in quality silk production of international grade and emerge as a global leader, Central Silk Board was established.
- 6.2 The Central Silk Board (CSB) is a Statutory Body, established during 1948, by an Act of Parliament (Act No.LXI of 1948) for the development of sericulture industry in the country. It functions under the administrative control of the Ministry of Textiles, Government of India, having head quarter at Bangalore. The Board comprises 39 members appointed for a period of 3 years. The Chairperson of the Board is appointed by the Central Government and two officials are nominated by the Central Government, one of whom shall be the head of the Silk Division in the Ministry of Textiles as the Vice-Chairperson and one shall be the Secretary of the Board, both being the officers not below the rank of Joint Secretary to the Government.
- 6.3 The mandated activities of CSB are Research and Development, maintenance of four tier silkworm seed production network, leadership role in commercial silkworm seed production, standardizing and instilling quality parameters in the various production processes and advising the Government on all matters concerning sericulture and silk industry. There are 159 units functioning in total.
- 6.4 The Committee desired to know about the sanctioned strength of the staff in CSB, any shortage of manpower reported and the unit-wise details of vacancies in all 159 Units of CSB. The Ministry submitted the following information:

"In compliance to cabinet decision while approving the Silk Samagra-2, 395 posts in various cadre have been abolished and the existing sanctioned strength, filled and vacant posts as on 01.07.2023 is as under.

| Group | Sanctioned<br>Strength | working<br>strength | Vacancy |
|-------|------------------------|---------------------|---------|
| A     | 576                    | 346                 | 230     |
| В     | 1009                   | 632                 | 377     |
| С     | 524                    | 553                 | 120     |
| Total | 2109                   | 1531                | 727     |

Out of 727 vacant posts, recruitment for 216 posts is under process and remaining post would be filled in phased manner as per prevailing rules of the Board. As per the direction of Ministry, the posts of Multi Tasking Staff(MTS) and manpower for activities like security, Housekeeping, Maintenance, Drivers, etc. are not being filled and their services are being outsourced.

CSB is facing shortage of experienced Officers and Officials due to large number of retirements. Some of the promotional posts have not been filled due to non availability of eligible officials in the feeder cadre. The draft Recruitment Rules of amendment for filling the Technical Cadre Posts and Scientific posts of CSB by deputation or by direct recruitment has already been submitted to the Ministry which is under consideration. Around 193 vacant posts in the cadre of Senior Technical Assistant shall be filled by direct recruitment, on approval of Recruitment Rules.

To overcome the shortage of experienced Group A officers, filling of Group A posts on deputation basis is under process.

The resultant vacancies/posts in various cadres arose on retirements shall be filled through promotion through DPC and Direct recruitment .

The Unit-wise details of vacancies of CSB is not available as there is no defined staff strength for each CSB unit . Based on the workload/requirement in respective CSB units, the staff are being deployed.

6.5 On a pointed query on whether the Ministry/CSB resort to contractual appointments/outsourcing mode also to fill up the vacancies, the Ministry informed the Committee as under:

"To meet the deficit manpower, as per the requirement / urgency, CSB has made contractual appointments by engaging Retired central government employees by following the GFR provisions / CVC guidelines."

#### SCHEMES/PROGRAMMES OF THE CENTRAL SILK BOARD

#### VII CENTRAL SECTOR SCHEME - SILK SAMAGRA 2

- 7.1 According to the Ministry, 159 units of Central Silk Board located in different States carry out the mandated activities through this Scheme. A Central Sector Scheme, Silk Samagra 2 is an umbrella scheme for comprehensive development of silk industry, approved by the Union Cabinet. "Silk Samagra-2" is the improved version of earlier Silk Samagra Scheme at a total outlay of Rs. 4679.86 crore for implementation during 2021-22 to 2025-26.
- 7.2 The main objectives of the Scheme are (i) to make India Atma-Nirbhar in production of import substitute international grade Bivoltine silk and (ii) focus on inclusive development of small and marginal farmers including women and tribal/SCs. The scheme also facilitates improvement in labour productivity right from 'Farm to Fibre' in every stage of silk production chain through

various R&D innovations, robust silkworm feed & breed, continued skilling & empowerment of the stakeholders and providing user friendly technologies.

7.3 During the course of oral evidence, one of the representatives of the Ministry informed about the previous schemes and the legacy behind the Silk Samagra 2 scheme in her deposition before the Committee as follows:

"It all began with the Ninth Plan where we had the Central Sector Schemes, the Catalytic Development Programme, which has shown increase in the silk production. It was followed in 2015 by the integrated scheme for the development of silk industry, followed by Silk Samagra–1. We had the NERTPS, that is, the North East Region Textile Promotion Scheme which has now been subsumed under Silk Samagra–2."

- 7.4 The Silk Samagra 2 Scheme consists of 4 major components viz.
  - 1) Research & Development, Training, Transfer of Technology and IT Initiatives,
  - 2) Seed Organization,
  - 3) Coordination and Market Development, and
  - 4) Quality Certification Systems & Brand Promotion & Technology Upgradation.
- 7.5 All the above four major Components of Silk Samagra Scheme are interlinked with each other and aimed towards comprehensive and sustained development of Silk industry. The R&D units develop technology packages, impart training on improved technology programmes to Stakeholders, and transfer technology to the field through front line demonstration. The Seed production units produce Basic & Commercial Seed of the improved Silkworm breeds developed by the Research Institute. The units under the Coordination & Market Development monitor the implementation of central sector schemes, coordinate with State Governments, ensure fair market and remunerative price to tribal Vanya silk cocoon producers. The units under the Quality Certification System support to maintain and certify the quality standards set by the R&D units for Silkworm Seed, Cocoon, Raw Silk and Silk end products covering the entire Silk value chain.
- 7.6 In addition to the core activities directly implemented by CSB, certain beneficiary oriented critical interventions required in the field for the promotion of sericulture are also implemented for transfer and adoption of improved technology packages developed by the Research Institutes of CSB. The beneficiary-oriented components are implemented through State Sericulture Departments/other Line Departments with the fund support from Central Silk Board.

- 7.7 The beneficiary-oriented interventions cover the major areas in pre and post-cocoon sector viz., development and expansion of host plantation, support for silkworm rearing, strengthening and creation of silkworm seed production infrastructure, development of farm. Also to increase post-cocoon capacities, up-gradation of reeling and processing technologies in silk, and capacity building through skill development and skill upgradation. The sharing pattern for these components is varied from 50:25:25 to 90:10:00 between Government of India, State and Beneficiary.
- 7.8 The Committee were further apprised of the details of Silk Samagra 2 scheme sub-components being implemented by CSB as follows:

### A. Research & Development, Training, Transfer of Technology & I.T. Initiatives

- The Research and Training Institutes of CSB provide scientific and 7.9 technological support for enhancing the production and productivity for sustainable sericulture through innovative approaches. The main institutes at Mysuru (Karnataka), Berhampore (West Bengal) and Pampore (Jammu and Kashmir) deal with Mulberry sericulture, whereas Ranchi (Jharkhand) deals with Tasar culture and Lahdoigarh, Jorhat (Assam) deals with Muga, Eri and Oak Tasar culture. Regional Sericulture Research Stations have been functioning for the development of region specific technology package and dissemination of research findings as per regional needs. Besides, a network of Research Extension Centres (RECs) and their sub units are also functioning to provide extension support to sericulturists. In order to provide Research and Development support in post cocoon sector, the Board has established Central Silk Technological Research Institute at Bengaluru. In addition, the CSB has also set up Silkworm Seed Technology Laboratory and Seri Biotech Research Laboratory at Bengaluru (Karnataka) and Central Sericultural Germplasm Resource Centre at Hosur (Tamil Nadu).
- **7.10 Pre-cocoon Sector:** Undertake Research and Development (R&D) activities to enhance the productivity and quality of Indian Silk through developing improved host plants, silkworm breeds, standardization of silkworm seed production techniques, improved package of practices for host plant cultivation and silkworm rearing, disease control. The technologies so developed through R&D are transferred to the field through various beneficiaries oriented scheme components. The beneficiaries/stakeholders in pre cocoon sector are trained through R&D Institutes and its nested field units for capacity building, better adoption of technology. Besides, R&D Institutes also undertake trainers training, technology up-gradation programme, Resource Development Programme and beneficiary empowerment through skill seeding.

The CSB Research Institutes have evolved 27 authorised high yielding mulberry varieties, 69 silkworm hybrids suitable for different agro-climatic conditions and technologies for host plant cultivation and silkworm rearing.

**7.11 Post Cocoon sector:** R&D efforts under Post Cocoon sector focus on developing machineries/technologies to increase efficiency in production, productivity and quality of raw silk. It also undertakes field testing and popularization of improved reeling machines including Automatic Silk Reeling Machine. Further, it undertakes activities for innovation to reduce cost of production, drugery machineries for By- product utilization, post yarn & processing technology, non-woven silk products and non-textile use of silk. The major technologies /machineries developed in the Post Cocoon area are as under:

- Production of indigenous Automatic Reeling Machinery packages (ARM)-As on date, installed 5 indigenous ARM units & 3 more under installation. In total 145 ARMs are functioning as on date.
- Developed improved machinery for mulberry (Multi-End Reeling, Twisting etc.) Vanya (Wet-reeling, Sonalika, Solar operated spinning, motorized/pedal operated sinning etc.)
- Developed & Supported Buniyad reeling machine to replace thigh reeling in Tasar sector.

7.12 The Ministry forwarded the following information containing details of new research projects initiated, projects concluded and to be continued, during the years 2021-22 and 2022-23:

| Particulars of R&D Projects                    | 2021-22 | 2022-23 | 2023-24<br>(Upto August- 23) |
|--|---------|---------|------------------------------|
| New projects initiated (Nos.)                  | 35      | 35      | 3                            |
| Projects concluded (Nos.)                      | 38      | 38      | 10                           |
| Projects continued (Nos.)                      | 103     | 100     | 92                           |
| Patents obtained (Nos.)                        | 1       | 6       | 4                            |
| Technologies developed & Commercialized (Nos.) | 9       | 4       | 2                            |

7.13 Elaborating collaborative and externally funded R & D projects, the Ministry furnished the following submission:

"Currently CSB has undertaken 20 research projects in collaboration with reputed National Research institutes. Besides CSB has taken up research activities in collaboration with International Institutes such as Tokyo University of Agri. & Technology-Japan, Yamaguchi University-Japan and Uzbek Research Institute-Uzbekistan and research institutions in Bulgaria, China, and Australia for the exchange of Genetic material to improve hybrid vigor of mulberry silkworm."

7.14 During the course of evidence, the Committee were informed by one of the representatives of the Ministry in her deposition as follows:

"...So, under the R&D and Transfer of Technology component, the main mandate is to develop a new high-yielding host plant varieties and productive silkworm breeds, improved cost-cutting technologies and post cocoon machineries, reduce the cost, and also increase the efficiency. Another important aspect, which has now become a priority aspect, is the climate resilient sericulture. The other aspects are to develop silkworm breeds which are resilient to adverse climate change, mechanisation, automation and drudgery reduction by development of post cocoon machineries, use of IT application as an important tool for effective dissemination of technologies and for monitoring of the development programmes, and also to focus on various byproducts which can be utilised for other applications like nutraceuticals, pharmaceuticals, and even for non-textile applications to increase net-income of the farmers."

7.15 Elaborating the R&D outcomes under the Silk Samagra 2 Scheme, the Committee were further informed during the evidence by a representative of the Ministry as under:

"...One is the development and authorisation of 27 high-yielding mulberry varieties and 69 silkworm hybrids suitable for different agroclimatic conditions. Then, production of indigenous automatic reeling machines. For the first time, we have now developed indigenous automatic reeling machines. We have installed five of them and three are under installation. Earlier, we were depending a lot on China for getting these machines. But this is a new development, and this will definitely bring a lot of upscaling in this sector. So, at present, 145 ARMs are functioning but five of them are indigenously developed.

There are other R&D outcomes in terms of improved machinery like multi-end reeling for mulberry and wet-reeling for Vanya. We have also developed the Buniyad reeling machine which has restored the dignity of tribal women as it has replaced thigh reeling in Tasar sector. We have also developed machineries for silk dyeing, digital printing and weaving. About 167 innovations/technologies have been developed out of which 76 have been commercialised, and 60 patents have been obtained."

#### Transfer of Technology (TOT)

7.16 Under transfer of technology, the Ministry forwarded the following information:

"The technologies emanated out of the concluded projects are being effectively transferred to the field through various Extension Communication Programmes (ECP) viz, Krishi Melas, Group Discussions, Enlightenment programmes, Field Days, Farmers' Meet, Audio Visual programmes, Technology demonstrations

etc. Extension Communication Programmes (ECPs) organized for sericulture sector by CSB institutes are shown below.

| Particulars               | 2021-22 | 2022-23 | 2023-24 |
|---------------------------|---------|---------|---------|
| No. of ECP                | 900     | 748     | 32      |
| No. Beneficiaries covered | 46538   | 46359   | 2482    |

#### Impact of Research & Development

7.17 On a pointed query of the Committee regarding impact of the research and development carried out by the CSB, the Ministry apprised the Committee as under:

"The technologies developed and popularized by the CSB have significantly contributed for growth of the silk industry. The significant improvement in production and productivity of silk due to R & D contributions are listed below;

- Total raw silk production in the country enhanced from 26,480 MT in 2013-14 to 36,582 MT in 2022-23.
- International Grade Bivoltine silk production increased from 2,559 MT (2013-14) to 8,904 MT (2022-23).
- Cocoon productivity increased from 54 Kg/100 dfls (2013-14) to 65 Kg/100 dfls (2022-23).
- Productivity of mulberry silk improved from 95.00 kg silk/ha in 2013-14 to 108.00 kg/ha during 2022-23.
- Improved silk content of cocoon with Renditta (kg of mulberry BV cocoon required to produce 1 kg of raw silk) from 7.00(2013-14) to 6.50 (2022-23)."

#### Training / Skill Enhancement:

7.18 The Ministry further informed that the R&D institutions of CSB spread across the country are intensively involved in training, skill seeding and skill enhancement on a sustainable basis, covering all activities of the silk value-chain pertaining to all the four silk sub-sectors. Trained/skilled 29,683 persons by the Research & Training Institutes of CSB during the years 2021-2, 2022-23 and 2023-24 (upto August) on various sericulture & silk industry related activities.

Besides, under the Samarth scheme, CSB has been nominated as one of the physical Verification Agencies and in this capacity and CSB has inspected a total of 1158 Training Centres allotted to CSB, to ascertain suitability for undertaking skill development programmes under Samarth. 305 batches of SAMARTH training has been completed with 6944 stake holders.

7.19 On a pointed query put forth by the Committee regarding the steps taken or proposed to be taken for improvement in labour productivity from Farm to Fabric in every stage of silk production chain, the Ministry submitted in their reply as under:

"The Central Silk Board is imparting training for skill development and enhancement to the stakeholders in the silk value chain through its R&D Institutes covering various pre-cocoon(farm activities), silkworm seed production and post cocoon related activities for the improvement of labour productivity. In addition, training for silk sector stakeholders is also being carried out under SAMARTH scheme for post cocoon related activities. Further, robust silkworm feed, breed, and continued skilling & empowerment of the stakeholders as well as providing user friendly technologies through R & D activities of CSB, lead to enhancement of production of silk in the country thereby improving the labour productivity."

#### IT Initiatives:

- 7.20 According to the Ministry, the following major IT initiatives are in place:
  - a. mKisan: CSB has widened the outreach of scientists and experts to disseminate information to provide scientific advisories to farmers through their mobile phones using mKisan Web Portal.
  - b. SILKS Portal: Sericulture Information Linkages and Knowledge System portal has been developed in association with North Eastern Space Application Centre, Dept. of Space by capturing geographical images through satellite and used for analysis and selection of potential areas for promoting Sericulture activities in those areas. Multi lingual, multi district data is being updated regularly.
  - c. Farmers and Reelers database (FRDB) has been designed and developed to help policy makers by providing appropriate information for effective decision making.
  - d. Developed web based app for Online registration (new/renewal) process to facilitate the Silkworm Seed Producers, Chawki Silkworm Rearers and the Silkworm Seed Cocoon Producers
  - e. Developed "e-Cocoon" mobile application for real-time monitoring and onsite/online reporting of the inspection of Registered Seed Producers and Chawkie Rearers.
  - f. Geo-tagging app for verification of assets created at beneficiary level.

#### Research & Training Activities by Central Silk Board

7.21 The Committee when inquired the Ministry which National Research Institutes have undertaken research projects and what is the criterion for their selection, the Ministry submitted in their reply as under:

"National Research Institutes that have undertaken research projects with CSB R&D institutes are:

- 1. Indian Institute of Science (IISc) -Bengaluru.
- 2. North Eastern Space Applications Centre(NESAC)-Shillong.
- 3. Indian Council of Agricultural Research(ICAR)- Central Inland Fisheries Research Institute(CIFRI), Kolkata.
- 4. ICAR National Bureau of Agricultural Insect Resources (NBAIR), Bengaluru.
- 5. ICAR Indian Institute of Horticultural Research (IIHR), Bengaluru.
- 6. ICAR -Krishi Vigyan Kendra -KVK Kalimpong.
- 7. Council of Scientific and Industrial Research (CSIR)- Central Food Technological Research Institute, Mysore (CFTRI), Mysuru.
- 8. CSIR North East Institute of Science and Technology(NEIST), Jorhat.
- 9. Sher-e-Kashmir University of Agricultural Sciences and Technology (SKUAST) Kashmir.
- 10. University of North Bengal West Bengal.
- 11. Central University Manipur.
- 12. Vel Tech University Chennai.
- 13. Adichunchanagiri University Mandya.
- 14. Bhat Biotech-Bengaluru.

Details of the number of projects undertaken by each Research Institute:

| # | R&D institute        | Total No. of projects | Of which<br>Collaborative<br>projects |
|---|----------------------|-----------------------|---------------------------------------|
| 1 | CSRTI-Mysuru         | 19                    | 5                                     |
| 2 | CSRTI-<br>Berhampore | 16                    | 2                                     |
| 3 | CSRTI-Pampore        | 9                     | 1                                     |
| 4 | CTRTI-Ranchi         | 17                    | 5                                     |
| 5 | CMERTI-              | 10                    | 2                                     |

|    | Lahdoigarh      |     |    |
|----|-----------------|-----|----|
| 6  | CSGRC-Hosur     | 4   | -  |
| 7  | CSTRI-Bengaluru | 13  | 2  |
| 8  | SBRL-Kodathi    | 7   | 3  |
| 9  | SSTL-Kodathi    | 3   | -  |
| 10 | CO-Bengaluru    | 2   | -  |
|    | Total           | 100 | 20 |

Criteria for selection of national institutions for collaboration is mainly based on :

- Specialised national level reputed R&D institute with expertise faculty available with the institute
- Equipments and other research related infrastructure facilities available with the institute
- Funding of the project from the external agencies.

7.22 The Committee further asked the Ministry how has research activities undertaken in collaboration with international institutes helped the silk industry. In their reply the Ministry stated as under:

"Research activities undertaken in collaboration with international institutes, directly and indirectly helped the improvement of silk and silk industry. These collaborative projects have helped in ;

- Development disease and pest forewarning and forecasting system
- Development of silkworm breeds / host plant varieties for tolerant to biotic (disease & pest) and abiotic (drought and salinity) stress.
- Whole genome sequencing / identification of novel genes in mulberry and non-mulberry silkworm and its host plants which facilitate molecular breeding
- Development of by-product for commercial utilization and improving farmers income etc"

7.23 The Committee were given to understand that 27,335 persons were trained/skilled by the Research & Training Institutes of CSB during the years 2021-22 & 2022-23 on various sericulture & silk industry related activities. When the Committee asked the Ministry about State/UT-wise details of persons trained/skilled; duration of their training and the feedback received

from them and how did the training improve productivity and trade, the Ministry submitted in their reply as under:

"Capacity Building and Training is being carried out by the research institutes and Seed organization of Central Silk Board across the country. For each batch of the training programmes, feed back from the participants are being obtained and based on the feed back /inputs, the efficiency of training programmes is improved further.

The duration of these training programmes ranges from 5 days to 15 months. The Post Graduate Diploma in Sericulture for mulberry and vanya is for 15 months, while the other training programmes are of 35 days duration like intensive sericulture, Resources Development Programmes, Entrepreneurship development programme for youth. The short duration programme of 3to 10 days are also conducted like farmers skill training, skill development programme for the silk industry stakeholders like reelers, weavers and wet processors. The year-wise details of persons trained under various training programmes of CSB for the years 2021-22 and 2022-23 is given below.

|      | Training courses  | No. of persons Trained |         |       |
|------|---|------------------------|---------|-------|
| #    |   | 2021-22                | 2022-23 | Total |
| 1    | Structured Courses (PGDS,<br>Mulberry & Non-Mulb. Courses &<br>Intensive sericulture training)                                    | 75                     | 99      | 174   |
| 2    | Farmers Skill Training, Technology Orientation Programmes, Capsule & Adhoc Courses and Exposure Visit and training in seed sector | 6196                   | 7827    | 14023 |
| 3    | Other Training Programmes   | 1740                   | 3267    | 5007  |
| 4    | STEP  | 953                    | 1003    | 1956  |
| 5    | Training under SRC  | 3199                   | 2976    | 6175  |
| Tota | l under Silk Samagra  | 12163                  | 15172   | 27335 |

|      |   | Annexure -5 |  |  |  |
|------|---|-------------|--|--|--|
| STAT | STATE/UT WISE DETAILS OF PERSONS TRAINED DURING 2021-22 & 2022-23 |             |  |  |  |
| 1    | BY CSB  |             |  |  |  |
| #    | STATE   | NOS.        |  |  |  |
| 1    | Andhra Pradesh  | 714         |  |  |  |
| 2    | Arunachal Pradesh   | -           |  |  |  |
| 3    | Assam   | 4042        |  |  |  |
| 4    | Bihar   | 206         |  |  |  |
| 5    | Chhattisgarh  | 2537        |  |  |  |
| 6    | Goa   | -           |  |  |  |
| 7    | Gujarat   | 80          |  |  |  |
| 8    | Haryana   | 35          |  |  |  |
| 9    | Himachal Pradesh  | 150         |  |  |  |
| 10   | Jharkhand   | 1931        |  |  |  |
| 11   | Karnataka   | 3853        |  |  |  |
| 12   | Kashmir   | 2593        |  |  |  |
| 13   | Kerala  | 17          |  |  |  |
| 14   | Madhya Pradesh  | 206         |  |  |  |
| 15   | Maharashtra   | 1714        |  |  |  |
| 16   | Manipur   | 5           |  |  |  |
| 17   | Meghalaya   | 70          |  |  |  |
| 18   | Mizoram   | 20          |  |  |  |
| 19   | Nagaland  | 300         |  |  |  |
| 20   | Odisha  | 721         |  |  |  |
| 21   | Punjab  | 25          |  |  |  |
| 22   | Rajasthan   | -           |  |  |  |
| 23   | Sikkim  | -           |  |  |  |
| 24   | Tamil Nadu  | 1926        |  |  |  |
| 25   | Telangana   | 1524        |  |  |  |
| 26   | Tripura   | 200         |  |  |  |
| 27   | Uttrar Khand  | 125         |  |  |  |
| 28   | Uttar Pradesh   | 524         |  |  |  |
| 29   | West Bengal   | 3817        |  |  |  |
|      | TOTAL   | 27335       |  |  |  |

7.24 The Committee further inquired the Ministry about the outcome of inspection undertaken by CSB in respect of 1006 Training Centres allotted to it to ascertain suitability for undertaking skill development programmes under SAMARTH, it was stated by the Ministry as under:

"Based on verification /inspection report of CSB, The SAMARTH cell at Ministry of Textiles has allocated the targets for different implementing partners to conduct training under Samarth scheme."

#### B. SEED ORGANISATION

7.25 The second component of Silk Samagra-2 Scheme is Seed Organisation. The Ministry further informed the Committee that CSB has a chain of Basic Seed Farms supplying basic seeds to the States. Its commercial seed

production centres augment the efforts of the States in supplying commercial silkworm seeds to farmers.

The Table below indicates the total quantity of seed production during the year 2020-21 to 2023-24(upto August, 2023).

Unit: Lakh Disease-Free Layings (dfls) i.e. eggs

| Particulars | 2020-21 | 2021-22 | 2022-23 | 2023-24<br>(Upto<br>August- 23) |
|-------------|---------|---------|---------|---------------------------------|
| Mulberry    | 356.18  | 329.74  | 360.16  | 150.23                          |
| Tasar       | 47.37   | 47.46   | 35.95   | 11.87                           |
| Oak Tasar   | 0.50    | 0.053   | 0.035   | 0.029                           |
| Muga        | 5.72    | 6.20    | 6.51    | 3.15                            |
| Eri         | 6.48    | 6.45    | 6.79    | 2.70                            |
| Total       | 416.25  | 389.903 | 409.445 | 167.979                         |

7.26 In this context, the Committee asked the Ministry, what is the target for 2023-24 and what steps have been taken or proposed to be taken, to increase seed production, the Ministry submitted in their reply as under:

"Central Silk Board is mandated basically to cater to the needs of State Sericulture Departments and Private Entrepreneurs in respect of nucleus and basic silkworm seed. The responsibility of production of commercial (hybrid) silkworm seed rests with State Sericulture Departments and Private Entrepreneurs.But, in the case of commercial Bivoltine mulberry silkworm seed, the contribution from State Sericulture departments and registered private producers has been low. The Central Silk Board has been extending handholding to these two entities to scale up the production of hybrid Bivoltine silkworm seed. Until these two entities gain confidence for capacity utilization, Central Silk Board would continue the production of Bivoltine hybrid silkworm seed with an aim to taper off, and finally concentrate on the production of high quality nucleus and basic seed alone. Hence, Central Silk Board may not see incremental production of commercial silkworm seed on YoY basis. A dip in production of silkworm seed by Central Silk Board in the year 2021-22 is seen in comparison with that in 2020-21, since the contribution from the State Sericulture departments and private registered producers has increased significantly.

The target for production of silkworm seed for the year 2023-24 is 408.10 lakh dfls."

7.27 The Committee further inquired about the reasons for the shortfall in achieving the targets, both in terms of production and acreage under mulberry plantation, the Ministry stated in their reply as under:

"The achievement of mulberry plantation was 2.53 lakh ha in 2022-23 against the target of 2.60 lakh ha. The achievement is 97% of the targeted mulberry plantation. Similarly, 96% of the target was achieved in the mulberry silk production during 2022-23 (27,630 MT against the target of 28,760 MT).

The mulberry silk production reduced significantly in 2020-21 and 2021-22 due to the lockdowns and other restrictions imposed related to covid-19 pandemic. However, in order to reach the Silk Samagra 2 scheme target(2025-26), a stiff target of 28,760 MT was set for 2022-23 against the actual production of 25,818 MT in 2021-22, which necessitated 11% increase in silk production during 2022-23 to reach the target. An all-time record mulberry production of 27,630 MT was achieved in 2022-23, yet the production was short by 4% against the target.

All the major mulberry silk-producing states namely Karnataka, Andhra Pradesh, Tamil Nadu, West Bengal, Maharashtra and Telangana achieved more than 90% of the targeted silk production during 2022-23.

As a positive trend has been observed during last five years both in mulberry raw silk production and plantation, it is expected to achieve 100% of the target during the coming years for the same."

7.28 On being asked whether all the States had been able to achieve the targets of raw silk production during 2022-23, the Ministry forwarded the following information:

"The states like Tamil Nadu, Telangana, Maharashtra, West Bengal, Arunachal Pradesh and Nagaland have reached the target. Karnataka, Andhra Pradesh, Assam & BTC have achieved more than 90% of the target. The main reason for shortfall in achievement of targets during 2022-23 is reduction in tasar silk production due to heavy unseasonal rainfall and severe disease incidences on account of adverse climatic conditions. The state-wise target & achievement in respect of raw silk production during 2022-23 is as follows:

Annexure-2

Zone-wise Target and Achivement of Raw Silk Production during 2022-23

(Units in MT)

| #                          | State                                | Target (2022-23) |      |          |       |       |       |         | Achivement (2022-23) |       |              |      |       |       | % achv         |      |      |       |         |        |
|----------------------------|--------------------------------------|------------------|------|----------|-------|-------|-------|---------|----------------------|-------|--------------|------|-------|-------|----------------|------|------|-------|---------|--------|
|                            |                                      | Mul Area         | Mul  | berry (N | MT)   | 1     | /anya | Silk (M | Γ)                   | Grand | Mul Mulberry |      |       |       | Vanya Silk(MT) |      |      | Grand | against |        |
|                            |                                      | (ha)             | BV   | CB       | Total | Tasar | Eri   | Muga    | Total                | Total | Area(ha)     | BV   | CB    | Total | Tasar          | Eri  | Muga | Total | Total   | Target |
| Zone - I (Southern Region) |                                      |                  |      |          |       |       |       |         |                      |       |              |      |       |       |                |      |      |       |         |        |
| _                          | Kamataka                             | 114500           | 2900 | 9850     | 12750 |       |       |         |                      | 12750 | 112658       | 2678 | 9145  | 11823 |                |      |      |       | 11823   | 92.7   |
| 2                          | Andhra Pradesh                       | 52000            | 1970 | 7555     |       | 5     |       |         | 5                    | _     | 54971        | 1930 | 7382  | 9312  | 1              |      |      | 1     | 9313    | 97.7   |
| 3                          | Telangana                            | 5700             | 350  |          | 350   | 12    |       |         | 12                   |       | 6272         | 455  |       | 455   | 7              |      |      | 7     | 462     | 127.7  |
| 4                          | Tamil Nadu                           | 23000            | 2500 | 100      | 2600  |       |       |         |                      | 2600  | 22677        | 2525 | 64    | 2589  |                |      |      |       | 2589    | 99.6   |
| 5                          | Kerala                               | 180              | 13   |          | 13    |       |       |         |                      | 13    | 90           | 9    |       | 9     |                |      |      |       | 9       | 68.7   |
| 6                          | Maharashtra                          | 7000             | 600  |          | 600   | 20    |       |         | 20                   | 620   | 5549         | 610  |       | 610   | 11             |      |      | 11    | 620     | 100.1  |
| Tota                       | I for Zone - I                       | 202380           | 8333 | 17505    | 25838 | 37    |       |         | 37                   | 25875 | 202217       | 8207 | 16591 | 24798 | 19             | 0    | 0    | 19    | 24817   | 95.9   |
| Zon                        | Zone - II (Central & Western Region) |                  |      |          |       |       |       |         |                      |       |              |      |       |       |                |      |      |       |         |        |
| 7                          | Uttar Pradesh                        | 3700             | 220  | 120      | 340   | 30    | 60    |         | 90                   | 430   | 3600         | 187  | 106   | 293   | 26             | 54   |      | 80    | 373     | 86.8   |
| 8                          | Madhya Pradesh                       | 1420             | 55   | 10       |       | 20    |       |         | 20                   | 85    | 1396         | 12   | 4     | 16    | 1              |      |      | 1     | 17      | 20.1   |
| 9                          | Chhattisgarh                         | 300              | 3    | 9        | 12    | 550   |       |         | 550                  | 562   | 243          | 0.23 | 6     | 7     | 216            |      |      | 216   | 222     | 39.5   |
| Tota                       | al for Zone - II                     | 5420             | 278  | 139      | 417   | 600   | 60    |         | 660                  | 1077  | 5239         | 199  | 117   | 316   | 242            | 54   |      | 296   | 613     | 56.9   |
|                            | e - III (Eastern Region              | i)               |      |          |       |       |       |         |                      |       |              |      |       |       |                |      |      |       |         |        |
|                            | West Bengal                          | 18500            | 30   | 1700     |       | 40    | 5     | 1       | 46                   |       | 16728        | 32   | 1914  | 1946  | 16             | 3    |      |       | 1965    | 110.7  |
| 11                         | Bihar                                | 550              |      | 5        | 5     | 85    | 15    |         | 100                  | 105   | 425          |      | 2     | 2     | 36             | 12   |      | 47    | 49      | 46.8   |
|                            | Jharkhand                            | 580              |      | 2        | _     | 2900  |       |         | 2900                 | 2902  | 464          |      | 0.5   | 0.5   |                |      |      | 873   | 873     | 30.1   |
|                            | Odisha                               | 500              | 5    |          | 5     | 178   | 7     |         | 185                  | 190   | 138          | 0.46 | 0.01  | 0.47  | 107            | 8    |      | 116   | 116     | 61.2   |
|                            | al for Zone - III                    | 20130            | 35   | 1707     | 1742  | 3203  | 27    | 1       | 3231                 | 4972  | 17754        | 33   | 1916  | 1949  | 1032           | 23   | 0.03 | 1055  | 3004    | 60.4   |
|                            | Zone - IV (North Western Region)     |                  |      |          |       |       |       |         |                      |       |              |      |       |       |                |      |      |       |         |        |
| 14                         | Jammu & Kashmir                      | 8800             | 150  |          | 150   |       |       |         |                      | 150   | 6535         | 100  |       | 100   |                |      |      |       | 100     | 66.7   |
|                            | Himachal Pradesh                     | 3500             | 40   |          | 40    |       |       |         |                      | 40    | 3463         | 31   |       | 31    |                |      |      |       | 31      | 76.8   |
|                            | Uttarakhand                          | 3700             | 43   |          | 43    | 1     | 2     |         | 3                    | 46    | 3678         | 23   |       | 23    | 0.3            |      |      | 0.3   | 23      | 51.0   |
| 17                         | Haryana                              | 240              | 2    |          | 2     |       |       |         |                      | 2     | 238          | 0.3  |       | 0.3   |                |      |      |       | 0.3     | 16.5   |
|                            | Punjab                               | 1200             | 7    |          | 7     |       |       |         |                      | 7     | 1184         | 4    |       | 4     |                | 0.19 |      | 0.2   | 4       | 53.3   |
| Tota                       | nl for Zone - IV                     | 17440            | 242  |          | 242   | 1     | 2     |         | 3                    | 245   | 15099        | 158  |       | 158   | 0              | 0.19 |      | 0.5   | 158     | 64.6   |
|                            | e - V (North Eastern S               | States)          |      |          |       |       |       |         |                      |       | ·            | ·    |       |       |                |      |      |       |         |        |
|                            | Assam                                | 2500             | 30   |          | 30    |       | 4230  | 183     | 4413                 | 4443  | 1938         | 18   |       | 18    | 0.009          | 4046 | 173  |       | 4237    | 95.4   |
| 20                         | BTC,Bodoland                         | 450              | 20   |          | 20    |       | 1550  | 50      | 1600                 | 1620  | 423          | 4    |       | 4     |                | 1442 | 38   |       | 1484    | 91.6   |
|                            | Total                                | 2950             | 50   |          | 50    |       | 5780  | 233     | 6013                 |       | 2361         | 22   | 0     | 22    | 0.009          | 5487 | 211  | 5698  | 5720    | 94.3   |
|                            | Arunachal Pradesh                    | 250              |      | 2        |       |       | 55    | 3       | 58                   | 60    | 180          |      | 2     | 2     |                | 56   | 3    | 59    | 61      | 101.3  |
|                            | Manipur                              | 3400             | 140  | 20       |       | 8     | 385   | 3       | 397                  | 557   | 2469         | 120  | 12    | 132   | 4              | 317  | 1    | 322   | 454     | 81.5   |
|                            | Meghalaya                            | 3500             | 70   | 7        | 77    |       | 1250  | 45      | 1295                 |       | 3185         | 58   | 6     | 64    |                | 1063 | 41   | 1104  | 1168    | 85.1   |
|                            | Mizoram                              | 1750             | 60   | 20       |       | 0.2   | 11    | 4       | 15                   |       | 1090         | 54   | 16    | 70    |                | 11   | 3    | 14    | 84      | 88.3   |
|                            | Nagaland                             | 600              | 10   |          | 10    | 0.3   | 330   | 1       | 331                  | 341   | 414          | 4    | 1     | 5     | 0.04           | 345  | 0.43 | 345   | 350     | 102.6  |
|                            | Sikkim                               | 200              | 2    |          | 2     |       |       |         |                      | 2     | 179          | 0.2  |       | 0.21  |                |      |      |       | 0.21    | 10.5   |
|                            | Tripura                              | 1980             | 30   | 110      |       |       |       |         |                      | 140   | 1864         | 25   | 89    | 115   |                |      |      |       | 115     | 81.9   |
| -                          | nl for Zone - V                      | 14630            | 362  | 159      | 521   | 9     | 7811  | 289     | 8109                 |       | 11741        | 284  | 125   | 409   | 4              | 7278 | 260  |       | 7952    | 92.1   |
| Tota                       | al for all Zones                     | 260000           | 9250 | 19510    | 28760 | 3850  | 7900  | 290     | 12040                | 40800 | 252050       | 8881 | 18749 | 27630 | 1297           | 7356 | 260  | 8913  | 36543   | 89.6   |

Source: DOS of States

7.29 When the Committee enquired the Ministry about the procedure to facilitate the private silkworm seed producers to enhance their capacity for quality silkworm seed production along with the producers in existence at present and their production during the last three years, the Ministry submitted in their reply as under:

"Since the onus of producing the major share of commercial silkworm seed lie on Private silkworm seed producers, Central Silk Board has been extending various kind of supports to make them self-reliant. These include, constant technical guidance, up-skilling, generation and supply of high quality seed cocoons for production of hybrid seed on cost basis, space in the state-of theart- cold storage plants owned by CSB for mandatory preservation of bivoltine seed for period ranging from 4 and 6 months. Schemes are also in place under Silk Samagra -2, for construction of building for production of bivoltine silkworm seed with attached cold storage plant. Central Silk Board also promotes production of high quality silkworm seed by releasing new and improved productive silkworm hybrids and improved silkworm rearing technologies including new methods of disinfection and disease control. In mulberry sector, 14 private registered producers have been roped in by CSB for production of bivoltine hybrid seed, out of which 10 are active as of now. In Tasar and Muga sectors, the number of private seed producers available are 154 and 25, respectively. Following are the details of their production during the last three years.

|         | DFLs produced (in lakhs) |        |        |       |        |      |  |  |  |  |  |  |
|---------|--------------------------|--------|--------|-------|--------|------|--|--|--|--|--|--|
| Voor    | Mult                     | perry  | Tas    | ar    | Muga   |      |  |  |  |  |  |  |
| Year    | No. of                   | DFLs   | No. of | DFLs  | No. of | DFLs |  |  |  |  |  |  |
|         | RSP                      |        | RSP    |       | RSP    |      |  |  |  |  |  |  |
| 2020-21 | 10                       | 86.43  | 382    | 20.81 | 25     | 2.02 |  |  |  |  |  |  |
| 2021-22 | 9                        | 92.61  | 327    | 16.87 | 25     | 2.34 |  |  |  |  |  |  |
| 2022-23 | 10                       | 150.99 | 154    | 10.11 | 25     | 2.42 |  |  |  |  |  |  |

#### C. COORDINATION AND MARKET DEVELOPMENT

7.30 The third component of Silk Samagra-2 is Coordination & Market Development. The Board Secretariat of CSB monitors the implementation of various schemes and coordinates with Ministry and States in implementation of various projects in sericulture sector. Besides, Board secretariat undertakes activity to mobilize additional funds through convergence with the programmes/schemes of various Ministries of Govt. of India. The Raw Material Banks operate floor price to stabilize the market price of cocoons to ensure remunerative price to primary producers.

The activities under Product Design, Development and Diversification (P3D) are to give special focus on fabric engineering, silk blends, designing new fabric structures, design and development of new products in silk and silk blends, product development in the clusters, commercialization of developed products,

assisting the commercializing partners in providing backward linkage, technical know-how and assisting/coordinating in sample development.

# 7.31 Following is the list of the products developed:

- Muga Satin fabric on power loom and Garments
- Eri silk denim fabrics for Blazer and garments, Eri and Mulberry knits, Eri silk blanket and carpet & Eri silk thermal wear.
- Tasar silk fabric on power looms for bridal dress.
- Pure silk sarees and Fabrics in Chanderi cluster.
- Kanchipuram sarees with Muga silk is designed for replacement of Zari.
- Stain guard and Aroma treated sarees.
- Wrinkle free silk fabrics.
- Silk life style products Ladies purse, bags, socks, glouse, accessories.
- Silk sarees /fabrics printed in Bagh (MP) cluster.
- Products with traditional Lambani art work.
- Mulberry x Eri sarees with Bomkai Design.
- Mulberry saree with Nagaland tribal motif and Silk /linen, silk / cotton, silk / modal fabrics.

# D. QUALITY CERTIFICATION SYSTEM, EXPORT BRAND PROMOTION & TECHNOLOGY UPGRADATION

7.32 The fourth component of the Silk Samagra-2 scheme is - Quality Certification System, Export Brand Promotion & Technology Upgradation. One of the main objectives of the Quality Certification System is to initiate suitable measures towards strengthening quality assurance, quality assessment and quality certification. Under the scheme, two components viz. "Cocoon and Raw Silk Testing Units" and "Promotion of Silk Mark" are being implemented.

Besides, Central Silk Board is popularising "Silk Mark" for purity of silk products through the Silk Mark Organisation of India (SMOI). "Silk Mark", an assurance label, protects the interest of the consumers from the traders selling artificial silk products in the name of pure silk.

The progress achieved under the Silk Mark Scheme during 2020-21 to 2023-24 (upto August, 2023) is given below:

|  | 20:    | 20-21   | 202    | 21-22   | 202    | 22-23   | 202    | 23-24                              |
|--|--------|---------|--------|---------|--------|---------|--------|------------------------------------|
| Particulars                                | Target | Achmnt. | Target | Achmnt. | Target | Achmnt. | Target | Achmnt.<br>(Upto<br>August-<br>23) |
| Total No. of<br>new<br>Members<br>enrolled | 130    | 261     | 200    | 360     | 275    | 399     | 350    | 180                                |
| Total No. of<br>Silk Mark                  | 15     | 24.86   | 20     | 30.42   | 27     | 40.27   | 34.00  | 14.50                              |

| Labels sold<br>(Lakh nos.)                                    |     |     |     |     |     |     |     |     |
|---|-----|-----|-----|-----|-----|-----|-----|-----|
| Awareness Programmes/ Exhibition/ Fairs/ Workshop/ Road shows | 240 | 324 | 300 | 497 | 600 | 808 | 700 | 344 |

As on August 2023 a total of 5380 "Silk Mark" Authorized users have been registered and organized 7094 awareness programmes/ exhibitions.

7.33 In order to ensure that Silk Mark gains further credibility & popularity, organized 4 Silk Mark Expos at Guwahati, Patna, Bengaluru and New Delhi exclusively for Silk Mark Authorized Users across the country and participated in 7 National/ International Exhibitions/Fairs/Expos organized by others during 2022-23.

# SILK MARK ORGANISATION OF INDIA (SMOI)

7.34 The Committee further inquired the Ministry about the role, functions and status of Silk Mark Organisation of India (SMOI), the Ministry in their reply have stated as under:

"Central Silk Board is popularising "Silk Mark", for purity of silk products through the Silk Mark Organisation of India (SMOI). "Silk Mark", an assurance label, protects the interest of the consumers from the traders selling artificial silk products in the name of pure silk.

# Functions of SMOI

- i) Register silk weavers, artisans, designers, retailers, etc. as new Members
- ii) Conducting training programs to New / existing Silk Mark members and their salespersons.
- iii) Conducting awareness programs to general public by organising and also participating in the other expos, schools/ colleges, road shows, etc.,
- iv) Creating awareness through social media / road shows
- v) Conducting Silk Mark Expos

At present more than 5000 members registered with Silk mark. 4.17 cr labelled pure silk products reached the market. 6650 programmes conducted. 29250 salespersons trained till date.

List of Authorised Users registered with SMOI is available in the SMOI website. Also during the regional festivals, such lists are published in the print media at local level to give awareness to the consumers about Silk Mark and Authorised Users."

7.35 The Committee further asked whether any instances of use of fake Silk Mark labels have been brought to the notice of the Ministry and what action has been taken to prevent recurrence of such instances, the Ministry submitted in their reply as under:

"No instances of fake Silk mark labels have been reported. However if any Authorised Users fix Silk Mark labels on non-silk products and sell to the consumers, SMOI redress such issues up to the satisfaction of consumers. In case of repeated offenders – registration of such erring AUs are cancelled and debarred for using Silk mark labels. Approx. 20 AUs have so far been debarred. For the redressal of any such complaints by the general public, contact details of all the 10 SMOI offices has been provided in the web site of SMOI and also the help line number is published in various advertisements across the country

Many security features like hidden UV text, QR code mapped with individual Authorised User (AU), hologram strip specially designed for Silk Mark with special invisible text have been added which makes it difficult and uneconomical to manufacture to fake the Silk mark label.

QR code upon scanning prompts the name of AUs, so in case of fake labels, it would indicate "invalid label". For which consumers are made aware through social / print and electronic media.

SMOI officials undertake surveillance visits to the member's premises to check the usage of the silk mark labels and also third party agency is engaged periodically to conduct surveillance visits to keep a check on this."

7.36 On being asked about the criteria for enrolment of members under Silk Mark Scheme, the Ministry stated as under:

"Any weaver/ manufacturer/ Master weaver/ society, designer dealing in 100% pure silk products is eligible for Silk Mark registration. However following criteria are considered for enrolment:

- Manufacturing facility
- Quality control system adopted by the applicant
- Observe & analyse house keeping
- Personal interview with the applicant
- Drawing and testing of samples for authenticity
- Finally advise and train the party to be an Authorised User of Silk Mark

All the silk items exported may not have Silk Mark Labels because this is a voluntary scheme and weavers, retailers and other stakeholders affix the Silk Mark Labels to satiate their customers accordingly even SMOI exporter members invariably do so for export items."

#### VIII. PHYSICAL AND FINANCIAL PROGRESS OF CENTRAL SILK BOARD

8.1 Regarding physical progress of the scheme of Silk Samagra -2 under Central Silk Board, the Ministry have forwarded the following Statement showing achievements and target till 2025-26:

| Performance Indicators  | 2020-21<br>Achvmnt.<br>(Baseline) | 2021-22<br>Achvmnt. | 2022-23<br>Achvmnt. | 2025-26<br>Target |
|---|-----------------------------------|---------------------|---------------------|-------------------|
| Mulberry Plantation (Lakh Ha.)  | 2.38                              | 2.42                | 2.52                | 2.88              |
| Total Raw Silk Production (MT)  | 33770                             | 34903               | 36543               | 46500             |
| Mulberry Bivoltine silk production (MT)                                   | 6783                              | 7941                | 8881                | 12250             |
| Vanya Silk Production   | 9874                              | 9085                | 8913                | 13250             |
| Silk Production NE states   | 7465                              | 7936                | 7952                | 8965              |
| Productivity improvement (Kg. of raw silk per Ha. of mulberry Plantation) | 108                               | 108                 | 108                 | 115.5             |
| Renditta (Kg. of cocoon required to produce 1 kg of raw silk)             | 6.6                               | 6.5                 | 6.5                 | 6.1               |
| Employment Generation<br>(Cumulative) - Lakh Persons.                     | 87.3                              | 87.8                | 92                  | 109.7             |

8.2 The table below indicates year-wise financial performance of the Central Silk Board during the years 2020-21 to 2023-24 (Upto August, 2023):

(Rs. in crores)

| BUDGET                        | 2020-      | 21     | 2021-22    |        | 2022-23    |        | 2023-24    |        |
|-------------------------------|------------|--------|------------|--------|------------|--------|------------|--------|
| HEADS                         | Allocation | Expnd. | Allocation | Expnd. | Allocation | Expnd. | Allocation | Expnd. |
| Administrative<br>Expenditure | 447.88     | 447.88 | 500.44     | 488.52 | 492.68     | 492.68 | 563.00     | 233.37 |
| Scheme<br>Outlay              | 202.13     | 202.13 | 374.56     | 365.55 | 382.32     | 382.32 | 354.77     | 45.45  |
| Total                         | 650.00     | 650.00 | 875.00     | 854.07 | 875.00     | 875.00 | 917.77     | 278.82 |

Out of the total scheme expenditure, a support of Rs. 147.46 crore, Rs. 295.02 crore, Rs. 299.14 crores and Rs. 15.74 crores (upto August, 2023) were provided to States towards implementation of beneficiary oriented components during the years 2020-21, 2021-22 and 2022-23 respectively.

8.3 The Committee enquired about the reasons attributed for not achieving the targets fixed for raw silk production during the last five years, the Ministry submitted in their reply as under:

"The achievement of silk production against the targets was more than 90% during 2018-19&2019-20. Whereas, during 2020-21 & 2021-22, the targets could not be achieved due to covid pandemic related issues.

During 2022-23, heavy unseasonal rainfall and severe disease incidences due to adverse change in climatic conditions in the major tasar silk producing states (Jharkhand and Chhattisgarh) resulted in drastic reduction in tasar silk production, even though the total raw silk production has increased to 36543 MT during 2022-23, from 31906 MT during 2017-18.

To achieve the set raw silk production target, various measures such as horizontal expansion of host plantation, providing support to beneficiaries /stake holders for various critical interventions, supporting seri-business enterprise for large scale farming and establishment of mega reeling units, R & D efforts to increase productivity, support to Adopted seed rearers and entrepreneurs for Bivoltine seed production, convergence of schemes from line ministries etc., are taken."

8.4 On being enquired about the details of funds released to the States during the years 2020-21 to 2023-24(up to August, 2023), the Ministry forwarded the following statement:

# State-wise release of funds during 2020-21 to 2023-24 (upto August, 2023)

Rs. In crore 2023-24 # State 2020-21 2021-22 2022-23 (up to August) 1 Karnataka 57.56 101.40 15.38 2 24.96 Andhra Pradesh 22.51 0.00 3 13.92 5.68 34.22 Telangana 4 Tamil Nadu 14.33 19.68 33.35 5 Maharashtra 0.00 1.07 2.85 6 Kerala 0.00 0.00 0.00 7 3.57 Uttar Pradesh 25.30 0.00 8 Madhya Pradesh 0.08 0.00 2.93 9 0.85 14.78 28.96 Chhattisgarh 10 West Bengal 0.06 7.210.00 11 Bihar 3.65 11.77 10.31 12 Jharkhand 2.74 0.54 0.00 13 2.27 0.773.56 Orissa 14 Jammu & Kashmir 0.00 5.47 0.00 7.73 15 Himachal Pradesh 0.00 0.00

|    | Total for States  | 147.46 | 295.02 | 299.14 | 15.74 |
|----|-------------------|--------|--------|--------|-------|
| 27 | Tripura           | 0.00   | 0.00   | 1.52   |       |
| 26 | Sikkim            | 0.00   | 0.00   | 6.30   |       |
| 25 | Nagaland          | 2.37   | 21.06  | 15.21  | 15.74 |
| 24 | Mizoram           | 4.70   | 8.60   | 20.07  |       |
| 23 | Meghalaya         | 0.62   | 8.40   | 6.32   |       |
| 22 | Manipur           | 0.00   | 0.00   | 32.49  |       |
| 21 | Arunachal Pradesh | 0.00   | 21.67  | 26.19  |       |
| 20 | BTC               | 7.59   | 7.74   | 19.36  |       |
| 19 | Assam             | 0.98   | 6.72   | 21.50  |       |
| 18 | Punjab            | 1.18   | 2.42   | 0.82   |       |
| 17 | Haryana           | 0.27   | 2.41   | 0.00   |       |
| 16 | Uttarakhand       | 2.70   | 5.12   | 7.84   |       |

8.5 On a pointed query of the Committee regarding criteria for release of funds to states/UTs, the Ministry submitted as under:

"The CSB supports for implementation of certain field level beneficiary oriented interventions through State Sericulture Departments. The funds are released to States in compliance to scheme guidelines, based on the proposals submitted by the States in particular year considering the requirement of interventions in the State for the development of sericulture industry and utilization of Central (CSB) funds by states released during previous years. The mechanism/ guidelines for Release of funds to states & its utilization are as under:

- State Sericulture Department shall submit the proposal to CSB with due approval of the State's Project monitoring Committee (PMC) chaired by the Director / Commissioner of the Sericulture Department of the state.
- Funds shall be released to the State Sericulture Departments (implementing agencies) by CSB as per available budget, after evaluation & approval of state proposal by Apex Approval & Monitoring Committee (AAMC) at CSB HQ chaired by Member Secretary, CSB.
- The above said two committees i.e. AAMC & PMC shall review/ monitor the progress of implementation and fund utilization by the states.
- The states shall utilise the funds within 12 months from the release of the same and submit the Utilization Certificate in prescribed

format as per GFR-12C, supported by Progress report & Beneficiary list (in compliance to DBT prescribed format).

The inconsistency in release of funds among states and reflecting zero for few states, which is due to either the particular state has not submitted proposal in that particular year or having pending to submit utilization certificates against the funds released in previous years. However, CSB is continuously pursuing the issue with the respective State Departments for submission of pending UCs.

8.6 The Ministry furnished the following information regarding Statewise details on funds released and utilized during the period 2020-21 to 2022-23:

State-wise funds released and Utilisation Certificates (UC) received under CSS Silk Samagra during 2020-21 to 2021-22

|    |                   | (Rs. In Lakhs)    |                       |         |                   |                |          |                   |                |         |
|----|-------------------|-------------------|-----------------------|---------|-------------------|----------------|----------|-------------------|----------------|---------|
|    |                   |                   | 2020-21               |         |                   | 2021-22        |          | 20                | 022-23 (#)     |         |
| #  | State             | Funds<br>released | UC<br>Received        | Balance | Funds<br>released | UC<br>Received | Balance  | Funds<br>released | UC<br>Received | Balance |
| 1  | Karnataka         | 5756.07           | 5279.94               | 476.13  | 10140.19          | 8678.54        | 1461.66  | 1538.38           | 0.00           | 0.00    |
| 2  | Andhra Pradesh    | 2251.10           | 0.00                  | 2251.10 | 2496.27           | 0.00           | 2496.27  | -                 | -              | -       |
| 3  | Telangana         | 1391.71           | 1388.95               | 2.75    | 567.79            | 0.00           | 567.79   | 3421.71           | 0.00           | 0.00    |
| 4  | Tamilnadu         | 1432.52           | 788.273               | 644.24  | 1968.09           | 1558.19        | 409.90   | 3335.46           | 0.00           | 0.00    |
| 5  | Maharashtra       | -                 | -                     | -       | 106.68            | 0.00           | 106.68   | 284.94            | 0.00           | 0.00    |
| 6  | Uttar pradesh     | 357.00            | 357.00                | 0.00    | 2529.74           | 2132.75        | 396.99   | -                 | -              | -       |
| 7  | Madhya Pradesh    | 8.26              | 0.00                  | 8.26    | -                 | -              | -        | 293.18            | 0.00           | 0.00    |
| 8  | Chattisgarh       | 84.75             | 0.00                  | 84.75   | 1478.19           | 0.00           | 1478.19  | 2895.83           | 0.00           | 0.00    |
| 9  | West Bengal       | 5.51              | 5.51                  | 0.00    | -                 | -              | -        | 721.12            | 0.00           | 0.00    |
| 10 | Bihar             | 364.63            | 310.28                | 54.35   | 1177.44           | 0.00           | 1177.44  | 1031.48           | 0.00           | 0.00    |
| 11 | Jharkhand         | 54.24             | 0.00                  | 54.24   | 0.00              | 0.00           | 0.00     | 273.94            | 0.00           | 0.00    |
| 12 | Orissa            | 226.97            | 1 <mark>49</mark> .93 | 77.04   | 76.63             | 0.00           | 76.63    | 355.92            | 0.00           | 0.00    |
| 13 | Jammu & Kashmir   | -                 |                       | 1       | 546.65            | 0.00           | 546.65   | -                 | -              | -       |
| 14 | Himachal Pradesh  | 772.86            | 0.00                  | 772.86  | -                 | -              | •        | -                 | -              | -       |
| 15 | Uttarakhand       | 269.74            | 135.16                | 134.58  | 511.82            | 0.00           | 511.82   | 784.09            | 0.00           | 0.00    |
| 16 | Haryana           | 26.56             | 0.00                  | 26.56   | 241.24            | 0.00           | 241.24   | -                 | -              | -       |
| 17 | Punjab            | 117.72            | 117.72                | 0.00    | 241.73            | 196.65         | 45.07    | 81.76             | 0.00           | 0.00    |
| 18 | Assam             | 97.68             | 46.33                 | 51.35   | 672.42            | 0.00           | 672.42   | 2150.14           | 0.00           | 0.00    |
| 19 | втс               | 758.50            | 733.16                | 25.34   | 774.13            | 0.00           | 774.13   | 1936.03           | 0.00           | 0.00    |
| 20 | Arunachal Pradesh | -                 | -                     | -       | 2167.26           | 42.00          | 2125.26  | 2619.15           | 0.00           | 0.00    |
| 21 | Manipur           | -                 | -                     | -       | -                 | -              | •        | 3248.96           | 0.00           | 0.00    |
| 22 | Meghalaya         | 62.46             | 0.00                  | 62.46   | 840.11            | 0.00           | 840.11   | 632.08            | 0.00           | 0.00    |
| 23 | Mizoram           | 470.13            | 470.13                | 0.00    | 859.63            | 739.72         | 119.90   | 2006.90           | 0.00           | 0.00    |
| 24 | Nagaland          | 237.35            | 237.35                | 0.00    | 2105.94           | 652.85         | 1453.09  | 1521.04           | 0.00           | 0.00    |
| 25 | Sikkim            | -                 | -                     | -       | -                 | -              | -        | 629.57            | 0.00           | 0.00    |
| 26 | Tripura           | -                 | -                     | -       | -                 | -              | -        | 152.00            | 0.00           | 0.00    |
|    | Total             | 14745.75          | 10019.74              | 4726.01 | 29501.96          | 14000.70       | 15501.27 | 29913.70          | 0.00           | 0.00    |

# IX CONVERGENCE EFFORTS

9.1 When asked about the details of the convergence initiatives taken by the Ministry of Textiles with the other Ministries of Government of India as well as with the State Governments, the Ministry submitted in their reply as under:

"CSB, Ministry of Textiles, GOI has taken up many convergence initiatives with various Ministries of Govt. of India by availing the financial support from other schemes/Programmes like MGNREGS, RKVY, NAP, TDF and State plan schemes

to support sericulture activities from plantation to marketing including infrastructure for both pre & post cocoon sector & extension. During the year 2021-22, states have received sanction for 120 projects worth Rs.927.50 crores and funds amounting to Rs.685.05 crores were released for the sericulture development. Similarly, during the year 2022-23, states have submitted 169 project proposals and received sanction for 145projects amounting to Rs. 823.27 crores and received funds of Rs.465.43 crores. During the current year 2023-24(upto August), states have submitted 14 project proposals and received sanction for 4 projects amounting to Rs. 36.58 crores and received funds of Rs.13.62 crores.

Further, convergence programme for development of mulberry plantation on sides of carriageways of National Highways in Uttarakhand and Jammu Kashmir was taken up & MoU signed between CSB and NHAI. It is targeted to undertake mulberry plantation in total stretch of 119.25 Km (J& K – 54.20 km – NH44 – Srinagar, and 65.05 Km in Uttarakhand (NHs-58, 73, 74, 87 & 125)."

- 9.2 The Committee were given to understand that through convergence with other Ministries, CSB was able to mobilize Rs. 1,116.29 crores during 2021-22 and 2022-23. When the Ministry was enquired about the coordination mechanism and the number of Ministries involved in this exercise, following information was submitted by the Ministry:
  - "The convergence programmes for development of sericulture are implemented mainly through the line ministries/Departments *viz*. "Ministry of Agriculture & Farmer Welfare (RKVY)", "Ministry of Rural Development (MGNREGS)" & "Ministry of Environment Forestry & Climate Change (Exploitation of forest Flora under Forest Act of GOI)".
  - CSB being nodal agency/organization for development of Sericulture, it extends technical support to the silk producing states in Project formulation, project appraisal besides monitoring the progress of convergence programmes.
  - The main role of CSB in convergence with other ministries is to facilitate states in mobilizing resources for the development of sericulture. Accordingly, during 2021-22 and 20223-23, Rs.1,116.29 crore was mobilized through convergence programmes.

Targets under convergence programmes cannot be quantified at CSB level as it depends on the funds to be allocated/sanctioned by the respective funding ministry and proposals from the concerned state sericulture department who are seeking assistance."

9.3 When the Committee enquired the Ministry about the challenges faced by the Ministry/CSB while coordinating with the State Governments in implementation of various projects in Silk Sector, it was submitted by the Ministry as under:

"The main challenges faced while coordination with the States towards implementation of schemes / projects, are; timely utilization of central funds and submission of Utilization Certificate with progress reports, delay in sanction/release of states' matching share, absence of required manpower for extension and monitoring activities of sericulture sector, allocation of sufficient funds specific to sericulture development under state budget etc"

# X. OTHER INITIATIVES

- 10.1 The Committee were further informed about other initiatives of the Ministry as under:
  - "(i) Scheduled Caste Sub-Plan (SCSP): During 2022-23, the entire allocated amount of Rs. 25.00 Crores have been fully utilized and released to the states towards implementation of beneficiary oriented components under Scheduled Caste Sub-Plan (SCSP) of Silk Samagra-2 Scheme. During the current year 2023-24(upto August), 4.63 crore has been released to States under SCSP.
  - (ii) Tribal Sub-Plan (TSP) & North East Tribal (NET) Plan: During 2022-23, entire allocated amount of Rs. 15.00 crores and Rs. 20.00 crores have been released to the states towards implementation of beneficiary oriented components under Tribal Sub-Plan (TSP) and North East Tribal (NET) heads respectively for the benefit ST stakeholders of sericulture industry. In addition to this, funds of Rs.11.61 Crores have also been released to states under Plan-General (PLG) towards beneficiary oriented components for beneficiaries belonging to ST category. During the current year 2023-24(upto August), 3.99 crore has been released to States under TSP."
- 10.2 When the Ministry was enquired about the number of beneficiaries and States/UTs-wise details of funds utilized in SCSP, TSP, NET and PLG categories separately, the Committee were informed as under:

"The State-wise details of beneficiaries covered with SC,ST and PLG categories break-up is given below:

| #  | State                | Category-wise Beneficiaries covered during 2022-23 under S<br>Samagra-2 (Nos.) |            |                       |       |  |
|----|----------------------|--|------------|-----------------------|-------|--|
|    |                      | General (PLG)  | SCSP (SCG) | STG/ NETG<br>(Tribal) | Total |  |
| 1  | Karnataka            | 236  | 271        | -                     | 507   |  |
| 2  | Andhra Pradesh       | -  | -          | -                     | -     |  |
| 3  | Telangana            | 446  | 216        | 95                    | 757   |  |
| 4  | Tamilnadu            | 987  | 42         | 10                    | 1039  |  |
| 5  | Maharashtra          | 31   | 2          | -                     | 33    |  |
| 6  | Madhya Pradesh       | 236  | -          | -                     | 236   |  |
| 7  | Chattisgarh          | 528  | 23         | 316                   | 867   |  |
| 8  | West Bengal          | 2956   | 463        | 1027                  | 4446  |  |
| 9  | Bihar                | 555  | 100        | 500                   | 1155  |  |
| 10 | Jharkhand            | 377  | _          | -                     | 377   |  |
| 11 | Orissa               | 270  | -          | 776                   | 1046  |  |
| 12 | Uttarakhand          | 307  | 103        | -                     | 410   |  |
| 13 | Punjab               | 118  | -          | -                     | 118   |  |
| 14 | Assam                | -  | -          | 654                   | 654   |  |
| 15 | BTC                  | 901  |            | 450                   | 1351  |  |
| 16 | Arunachal<br>Pradesh | 1122   | -          | -                     | 1122  |  |
| 17 | Manipur              | 1162   | -          | -                     | 1162  |  |
| 18 | Meghalaya            | 244  | -          | -                     | 244   |  |
| 19 | Mizoram              | 1002   | -          | -                     | 1002  |  |
| 20 | Nagaland             | 1170   | -          | 530                   | 1700  |  |
| 21 | Sikkim               | -  | -          | 265                   | 265   |  |
|    | Total                | 12648  | 1220       | 4623                  | 18491 |  |

**Note:** In respect NE states most beneficiaries supported under General category of funds also belong to ST

#### **Details of Funds Utilized**

(Rs. In lakhs)

|   |                              | SILK S.              | SILK SAMAGRA 2022-23 |                          |             |  |  |  |
|---|------------------------------|----------------------|----------------------|--------------------------|-------------|--|--|--|
| # | State / Institute/<br>Agency | General -PLG<br>(**) | SCSP                 | TSP/NET<br>(Tribal) (##) | Grand Total |  |  |  |
| 1 | Karnataka                    | 609.82               | 928.56               | 0.00                     | 1538.38     |  |  |  |
| 2 | Telangana                    | 1903.01              | 1068.77              | 449.93                   | 3421.71     |  |  |  |
| 3 | Tamil Nadu                   | 3183.30              | 122.13               | 30.03                    | 3335.46     |  |  |  |
| 4 | Maharashtra                  | 257.38               | 27.56                | -                        | 284.94      |  |  |  |
| 5 | Madhya Pradesh               | 293.18               | -                    | -                        | 293.18      |  |  |  |

|    | Total for all States | 18521.34 | 2500.00 | 3500.00 | 24521.34 |
|----|----------------------|----------|---------|---------|----------|
| 20 | Sikkim               | -        | -       | 629.57  | 629.57   |
| 19 | Nagaland             | 298.11   | -       | 1000.00 | 1298.11  |
| 18 | Mizoram              | 2006.90  | -       | -       | 2006.90  |
| 17 | Meghalaya            | 470.08   | -       | -       | 470.08   |
| 16 | Manipur              | 2424.32  | -       | -       | 2424.32  |
| 15 | Ar. Pradesh          | 820.96   | -       | -       | 820.96   |
| 14 | BTC                  | 767.68   | -       | 370.43  | 1138.11  |
| 13 | Assam                | 715.46   | -       | -       | 715.46   |
| 12 | Punjab               | 81.76    | -       | -       | 81.76    |
| 11 | Uttarakhand          | 649.44   | 134.64  | -       | 784.09   |
| 10 | Odisha               | 71.61    | 0.00    | 284.31  | 355.92   |
| 9  | Jharkhand            | 273.94   | 0.00    | 0.00    | 273.94   |
| 8  | Bihar                | 452.23   | 99.25   | 480.00  | 1031.48  |
| 7  | West Bengal          | 579.93   | 37.20   | 103.99  | 721.12   |
| 6  | Chhattisgarh         | 2662.22  | 81.88   | 151.73  | 2895.83  |

(\*\*)Includes Rs.1161.19 lakhs released to States for beneficiaries belonging to ST category (##) Includes Rs.2000.00 lakhs released under NET

# (iii) Sericuture Development in North-Eastern States (NERTPS):

10.3 The Ministry further informed the Committee that special focus has been given for development of sericulture in North East in view of the discontinuation of NERTPS. The project based sericulture activities including ongoing projects and the left over committed expenditure of the NERTPS has been provisioned under Silk Samagra-2 with a separate budgetary provision for first two years (2021-22 & 2022-23) under NE head. Main objectives are to ensure growth, create employment opportunities and provide market linkages for silk products in domestic and international markets and increasing the income of stake holders.

10.4 The Committee were further informed by the Ministry that under NERTPS-an Umbrella scheme of Ministry of Textiles, 38 Sericulture projects were approved & implemented by the Govt. of India in the identified potential districts of all North Eastern states under four broad categories viz., Integrated

Sericulture Development Project (ISDP), Intensive Bivoltine Sericulture Development Project (IBSDP), Eri Spun Silk Mills and Aspirational Districts with a total cost of Rs.1115.64 crore, of which GoI share is Rs.963.74 crore.

As on March-2023, an amount of Rs. 882.97 crore has been released by Ministry/CSB for the above said projects, brought around 37,326 acres under host plantation of Mulberry, Eri , Muga & Oak Tasar covering 50,826 beneficiaries and produced 5000 MT(provisional) raw silk. During 2021-22, sericulture projects of NERTPS have been subsumed under Silk Samagra-2 Scheme and separate funds have been earmarked for completion of these projects

10.5 The Committee enquired the Ministry whether the committed expenditure has been met and whether allocation has been made exclusively for NE States for 2023-24 onwards, the Ministry stated in their reply as under:

"Yes. The committed expenditure (Rs.62.72 Crore) of NERTPS has been met under Silk Samagra-2 scheme during 2021-22 and 2022-23.

As a separate budget provision has been earmarked under the Silk Samagra-2 scheme exclusively for development of Sericulture in NE Regionduring the period 2021-22 to 2025-26."

10.6 On a pointed query on the sericulture development in Northeastern states of India, a representative of the Ministry candidly admitted before the Committee during the course of oral evidence as under:

"...on the development of sericulture in the Northeast region. We have implemented 38 sericulture projects, which have benefited more than 50,000 beneficiaries since 2014. Support to the Bodoland Territorial Council (BTC), where a large-scale SERI Mission has been taking place in four districts. We have set up silk printing and processing units in Tripura, BTC, and Tripura. We also have two Eri Spun Silk Mills in Assam, and three new state-of-the art Spun Mills have been sanctioned in Assam, BTC, and Manipur. The total contribution of the NE States has increased from 18 to around 22 per cent."

#### XI. MONITORING & EVALUATION

11.1 The Ministry forwarded the following information regarding the system of monitoring and control over the performance and evaluation of the Schemes/Programmes being implemented under silk sector:

"National level Research Coordination Committee (RCC) headed by a reputed Scientist of National Standing, Members from different Scientific organizations, eminent scientists, CSB R&D Units and DoSs review, evaluate and approve the research projects on a continuous basis, monitor the progress of projects as per mile stone, out come and output of the projects,

Each 9 main Research Institutes undertake review of R & D Projects at Institute Level through Research Advisory Committee (RAC) having representatives of Department of Sericulture. Race Authorization Committees consisting of experts, would recommend release of new mulberry varieties and silkworm breeds to the field.

Seed Action Plan Committee Comprising Members from CSB, State and Private Stakeholders to assess, produce and supply the entire seed production requirements of the country. As per the provision made under Seed Act incorporated in CSB Act, Central Silkworm Seed Committee and Registration Committee review the seed production and seed quality by the Registered Seed Producers (RSP) as per the quality standard norms laid down in the Act.

Silk Mark Organization of India (SMOI) has its own governing body - Committee of Administration (CoA) comprising representatives of Central Silk Board, ISEPC, State/Central Govt. Apex Societies, Ministry of Textiles and industry stakeholders review the activities and provide necessary guidelines on policy related issues and regulatory framework so as to ensure smooth implementation of the components on quality assurance.

The Beneficiary oriented components are monitored and reviewed both at CSB level (Apex Approval & Monitoring Committee AAMC) and State Level (State Level Project Monitoring Committee –SLPMC and State Level Sericulture Coordination Committee –SLSCC) verification & monitoring of beneficiary support / infrastructure created under the scheme is done through government agencies or external agency. Infrastructures oriented assets at beneficiary level monitored through geo-tagging.

The Ministry undertakes evaluation of the performance of the Schemes/Programs in the following manner:

- Annual Joint Verification, evaluation and Social audit on implementation of the programme at field level by CSB involving field officers of the state.
- The Mid-Term evaluation of the scheme / components by an external agency at the end of 2023-24 to suggest mid-course correction / modification in the scheme implementation.
- The final evaluation study on the overall performance of Silk Samagra-2 scheme and recommendation for further continuation of the scheme at the end of 2025-26 by an external agency."
- 11.2 When the Committee asked whether any deficiencies had been noticed after the evaluation study carried out by an external agency, the Ministry stated in their reply as under:

"As per the 3rd party evaluation study recommendations on the implementation of preceding scheme 'Silk Samagra', the 'Silk Samagra-2' scheme is being implemented during the years 2021-22 to 2025-26. As envisaged under the 'Silk Samagra-2' scheme guidelines, the mid-term review/evaluation by third party is proposed to be taken up during the end of 2023-24 for mid course corrections found, if any."

11.3 It was further corroborated by a representative of the Ministry while deposing before the Committee during the course of oral evidence as under:

"We do third party evaluation after two and a half years. Now, we are proposing a third-party evaluation so we can take it up as a part of it."

- 11.4 The Committee then asked whether annual joint verification, evaluation and social audit for the period 2021-22 and 2022-23 by CSB and field officers of States have been undertaken, the Ministry submitted that joint verification and evaluation by CSB and State departments at field level in respect of beneficiary components of Silk Samagra-2 scheme is under process.
- 11.5 When the Committee further enquired about the criteria for selection of external agency for mid-term evaluation and when do the Ministry propose to initiate the selection process, it was submitted as under:

"The following criteria shall be followed for selection of external agency for mid-term evaluation during the end of 2023-24.

- Expression of Interest inviting Request for Proposal(RFP) with well defined terms of reference, methodology and work plan, is published in national news papers besides placing e-tender inCentral Public Procurement Portal (CPPP portal) of Govt. of India and CSB website for wide publication.
- A pre-bid meeting shall be arranged to discuss and clarify all the doubts before submitting the tender documents by agencies.
- Quality of consultancy is of prime concern for the third party evaluation study and after following the Rule-192 of GFR, Quality and Cost Based Selection (QCBS) method is adopted for selecting the agency by fixing the criteria of giving 70% weightage to Technical parameters such as turnover, year, relevance of related experience, understanding methodology and presentation of the proposal and 30% weightage to the financial parameters.
- On scrutiny for eligibility, the eligible agencies shall be called for making presentation on methodology and understanding the concept.
- The tender evaluation committee(constituted at CSB level) evaluates technical and financial bids of the eligible agencies and selects the eligible agency L1 for undertaking the evaluation study."
- 11.6 On being asked about the details of percentage increase in farmers' income since 2021-22 indicating inclusive development of small and marginal farmers including women and SCs/Tribals, the Ministry furnished the following statement:

"The estimated sector-wise/state-wise percentage of increase in farmers' income during 2022-23 over 2020-21 is given below.

| Soctor   | States  | Reven   | Revenue (Rs./ha/year) |               |  |
|----------|---|---------|-----------------------|---------------|--|
| Sector   | States  | 2020-21 | 2022-23               | %<br>increase |  |
| Mulberry | Karnataka, Andhra Pradesh,<br>Telangana, West Bengal, Tamil Nadu, | 688500  | 1237500               | 80            |  |

|       | Maharashtra, Uttar Pradesh, Jammu   |        |        |    |
|-------|---|--------|--------|----|
|       | & Kashmir, Assam, Manipur   |        |        |    |
| Tasar | Jharkhand, Chattisgarh, Orissa,<br>Maharashtra, Telangana, West<br>Bengal, Bihar, Andhra Pradesh,<br>Manipur, Himachal Pradesh, Uttar<br>Pradesh, Assam, Meghalaya and<br>Jammu & Kashmir | 66300  | 81760  | 23 |
| Eri   | All North-eastern states and Bihar,<br>West Bengal, Uttar Pradesh&Orissa.   | 360000 | 408000 | 13 |
| Muga  | Assam, BTC, Arunachal Pradesh,<br>Meghalaya, Mizoram, Nagaland,<br>Manipur, West Bengal   | 345600 | 417750 | 21 |

Sources: CSR&TI, Mysuru & CTR&TI, Ranchi & CMER&TI, Jorhat"

#### XII AWARENESS CAMPAIGNS

12.1 When the Ministry was asked about the steps being taken to spread awareness amongst the farmers and attract them towards sericulture farming, the Committee were informed as under:

"The farmers / stakeholders are sensitized through awareness campaigns / Extension communication programmes like Krishi Melas, Group Discussions, Enlightenment programmes, Field Days, Farmers' Meet, Audio Visual programmes, Technology demonstrations etc.In last three years(2020-21 to 2022-23), a total of 88,877 farmers were sensitized to improved sericulture practices

In order to establish synergy between State and Central Sector programmes for sericulture development to maximize the efforts for growth and employment through sericulture and also for improving income & livelihood creation for small and marginal farmers, a National Level Workshop on Silk Samagara-2 scheme was organized on 06.05.2022 at Bengaluru involving Directors of State Sericulture Departments, sericulture stakeholders in pre & post cocoon sectors, sericulture industry partners', Silk exporters , Authorized users of SILK MARK etc. Besides, the respective State Sericulture Departments have also organized the workshops at state level involving various sericulture stake holders, CSB/State Officers to elucidate the details of the scheme.

Under the schemes of CSB, assistance is being provided through states for new beneficiaries / farmers to take up mulberry bivoltine sericulture thereby increasing the production base. In addition, the state governments are also implementing their own schemes besides converging schemes of other line ministries for development sericulture to increase the production of bivoltine silk to encourage and attract more new stakeholder participation in sericulture activities."

12.2 The Committee further enquired about the marketing strategy adopted and the mechanism involved to update farmers and other stakeholders of the

industry about day-to-day market rates of Silk and Cocoon, the Ministry furnished the following reply:

"Day-to-day information on market prices of silk and cocoon are provided to the registered farmers and other stakeholders to their mobile phones via SMS. Further, the Central Silk Board and State Sericulture Departments of Karnataka, Andhra Pradesh and Tamil Nadu update the daily cocoon and raw silk market prices in their websites. Central Silk Board also sends a daily publication entitled "Silk Bulletin" that contains cocoon and raw silk prices of major markets to the subscribers through email.

The prices of cocoon are announced on All India Radio and also published in local news papers. State Sericulture Department Officers have created WhatsApp groups for dissemination of daily cocoon prices and exchange information about sericulture."

12.3 On a pointed query regarding number of advisories issued to the farmers through their mobile using mKisan web portal during 2021-22 and 2022-23 and the language used in these advisories, the Ministry informed the Committee as under:

"Advisories and Messages Sent

| YEAR    | ADVISORIES | SMS MESSAGE |
|---------|------------|-------------|
| 2021-22 | 51         | 4,57,235    |
| 2022-23 | 32         | 1,23,823    |

Messages are sent in Hindi, English and regional languages. Further, the advisories are sent in regional languages, also."

#### XIII. OCCUPATIONAL HAZARDS AND SOCIAL SECURITY MEASURES

13.1 The Committee wanted to know the the nature of diseases generally reported by the workers belonging to Silk Industry and the preventive measures taken to save the workers from them as well as other occupational hazards, the Ministry furnished the following reply:

"There are no specific diseases associated with Silk Industry especially silkworm seed production / rearing units, except scales of moth disperse in air at the place of working. For overcoming inhalation of such dust particles, all the workers and officials who involve in the work use protective mask, which is in regular practice. However, research on mechanisation of filtration in the production units is in progress.

The focus of CSB is mainly to carry out R & D work related to silk sector. However, the CSB had implemented the scheme – "Comprehensive Health Insurance Programme for Sericulture Farmers and Workers" under the Centrally Sponsored Scheme "Catalytic Development Programme" during XII Plan. The Health Insurance Scheme had offered medical facilities for a certain

class of identified diseases and ailments, including the pre-existing ones through a network of hospitals by way of reimbursement of medical expenditure as well as cash-less facilities. Based on the recommendations of the 14th Finance Commission, the Government of India has discontinued implementation of Catalytic Development Programme with effect from the year 2015-16.

In respect of CSB Casual/Time Scale Farm Workers/Skilled Farm Workers engaged at various Units of CSB, the benefits like medical allowance, reimbursement of medical expenses, GSLIS/LIC etc. are being provided as per the clauses mentioned in the Labour Manual of CSB. Besides, for protecting workers from occupational health hazards, the following measures have been taken.

- Educating farm workers through video film in respect of Seed Production Centres giving all the information about the nature of diseases associated with grainage operations, preventive and curative measures to be taken, etc.
- Installation of cross ventilation/ exhaust fans in the Grainages in order to reduce the concentration of silk-moth scales, dust as also acid/formaldehyde fumes.
- The masks, hand gloves and aprons, adequate drinking water facilities, First-Aid medical kit, Soap/soap solution are provided.

(Note: The masks, hand gloves and aprons etc., are given to CSB Casual / Time Scale Farm Workers / Skilled Farm Workers engaged at various CSB units. The expenditure is being booked under the Silk Samagra – 2 scheme.)

A comprehensive study on occupational hazards in silk sector will be undertaken by CSB."

13.2 The Committee further enquired about the measures taken to provide Social Security measures to the farmers/weavers/workers in Silk Sector, the Ministry in their reply have stated as under:

"The Central Silk Board under its schemes extends assistance to farmers, reelers, weavers and other stakeholders in way of beneficiary oriented interventions (farm to fiber) with support for development/establishment of host plantation, silkworm rearing infrastructure, strengthening and creation of silkworm seed production infrastructure, Improved reeling machineries including Automatic Reeling Machines(ARMs), silk weaving and processing technologies and capacity building through skill development and skill upgradation etc."

# XIV. CHALLENGES AND ISSUES FACED BY THE SERICULTURE INDUSTRY

14.1 During the course of evidence, one of the representatives of the Ministry candidly admitted before the Committee various challenges and issues faced by the Sericulture industry as under:

"We are also on this journey and facing certain challenges and issues, which we would like to highlight in this last slide. As I mentioned, the

challenge is the adverse climatic conditions, which are showing that the erratic changes in the weather have led to a dip in the Tasar, as the hon. Chairperson has pointed out; this has shown a remarkable decline. There is a need for climate-resilient sericulture, and research in this direction has been highlighted.

Also, it is important that we scale up the production of bivoltine and upscale reeling activity, which requires industry participation, so that we can develop large economies of scale to compete globally in quality, price, and capacity to produce large quantities of silk. Hence, large-scale production, large-scale reeling, and industry participation have become a requirement and necessity now.

tapping the potential areas for expansion of sericulture in non-traditional areas. Therefore, we have started with castor-based sericulture in Navsari, Gujarat, and tapioca-based sericulture in Tamil Nadu. So, trying to develop Ericulture out of the traditional North Eastern zone and expand it in other States is also one of the important activities that we are focusing on."

14.2 The Committee were further informed during the course of evidence in the deposition of the representative of the Ministry elaborating other challenges faced by the Sericulture industry as under:

"Apart from conventional research, we are also trying to intensify our research in non-traditional applications and bioproducts like ceresin, which is a protein; pupac is one of the important byproducts that can be used as animal feed; ceresin is already being used in pharmaceuticals, etc. So, byproduct utilization is also a huge market that can be captured. Therefore, with the intensification of these applications and the value addition in byproduct segments in the non-textile applications, it is also an area of focus for CSB.

The third-party evaluation of the Silk Samagra-1 has highlighted the importance of promoting start-ups to develop business models in sericulture and silk industry. So, that is another focus area.

These were the main challenges."

#### PART-II

# **OBSERVATIONS/RECOMMENDATIONS**

- The Committee note that Silk is the most elegant textile in the 1. world with unparalleled grandeur, natural sheen, inherent affinity for dyes, high absorbance, light weight, soft touch and high in durability, characteristics that aptly lend the textile the moniker 'Queen of Textiles' all over the world. India has a rich and complex history in silk production. India is the second largest producer of Silk next to China. All the four commercially known varieties of silk, i.e., Mulberry, Muga, Eri and Tasar are being produced in India amongst which Mulberry silk contributes about 74% of the total silk production in the country. The Sericulture industry provides employment to approximately 9.2 million persons in rural and semi-urban areas in India. The Committee further note that while over 60 countries produce Silk in the world, China and India jointly account for 95 percent of the global silk production of 86,311 metric tonnes(MT), out of which India's share is about 36,543 MT. However, owing to the decline of Silk production in China, India is showing an uptrend in raw silk production. In 2017, China was at about 1,42,000 MT; and in 2021, it was at 46,700 MT. As the Ministry have admitted that due to the declining trend exhibited by China, India's role in the sericulture sector assumes a very important place, the Committee desire that the Ministry should view this as an opportunity to develop state-of-the-art infrastructure for augmenting the quality and quantity of production of all the four varieties of silk in India. This would also enhance the percentage of exports and bring down the imports of raw silk in India.
- 2. The Committee note that the targets set by the Ministry for production of all the four varieties of silk during the year 2023-24 has been 42,500 MT and the achievement till July, 2023 was 10,839 MT, which is only around one fourth of the total target fixed. The Committee believe that since the data is till the onset of second quarter of

FY 2023-24 i.e. July, 2023, the Ministry in collaboration with Central Silk Board(CSB) would make result-oriented endeavours to overcome all the obstacles and achieve the target of 10,839 MT by the end of the FY 2023-24. The Committee would like to be apprised of the current position with regard to achievement of the set target.

3. The Committee further observe that the State-wise targets have also been fixed with respect to annual raw silk production. During 2023-24, the target fixed for Chhattisgarh is 664 MT but till July, 2023, a measly 1 MT was produced there. Similarly, 4 MT were produced in Madhya Pradesh against the target 85 MT; 28 MT were produced in Uttar Pradesh vis-à-vis the target of 470 MT; Andhra Pradesh with the production of 3047 MT against 10,0009 MT; Karnataka with the production of 3,834 MT vis-à-vis 13,000 MT; and so on. When the Committee desired to know the reasons for this, the Ministry attributed it to the adverse climatic conditions which led to the decline in the production of one of the varieties of Silk, i.e., Tasar. The Committee fail to fathom that if only the production of Tasar silk has suffered a blow due to adverse climatic conditions, why the other States where the production of Mulberry, Eri and Muga Silk is carried out are showing a declining trend. The Committee, therefore, advise the Ministry to put in further research to ascertain the reason for this extremely low production of Silk in some States and come up with a corrective action plan to arrest the slump in the production of Silk and achieve the set targets by the end of FY 2023-24. For this, the Committee desire that the Ministry should dovetail their actions with the respective State/UT Governments.

# **Employment Generation**

4. The Committee note that the Sericulture industry provides employment to approximately 9.2 million persons in rural and semi-urban areas. The Committee observe that 27.89 lakh persons are engaged in Sericulture industry in Assam and Bodoland Territorial Council (BTC)

followed by 19.39 lakh in Karnataka and 15.28 lakh in Andhra Pradesh. Rest of the country contributes for around 3 lakh persons who are engaged in Sericulture industry. The Ministry have fixed the target of employment generation of 10.97 million persons by 2025-26. The Committee reckon that as the Ministry have set the enhanced targets for production of raw silk in the country and one of the objectives is to minimize the imports of raw silk into India, it is obvious that the workforce employed in the Sericulture industry also requires to be increased multifold. For this purpose, the Ministry had taken commendable measures such as need-based training programmes with focus on skill upgradation in Silk sector; capacity building and training under Samarth Scheme to develop skill to the youth; support under beneficiary-oriented components starting from plantation to cocoon harvesting and marketing; provision of support to set up Chawki Rearing Centres (CRCs), private seed production, automatic reeling machines, etc.; promotion of Self Help Groups, Farmers Producers Organizations, Special Purpose Vehicle (SPV) etc. In addition to all these measures, the Committee desire that the Ministry should make all concerted efforts with proper coordination with the States/UTs Governments to give positive results to these endeavours for the achievement of set employment generation target by 2025-26.

#### **Role of Private Players**

5. The Committee note that in Silk sector, there are different activities carried out by different personnel in Silk chain starting from farming to marketing/trading of Silk. The cocoon production and medium scale reeling /weaving /trading activities are mainly carried out by farmers / individuals /cooperatives depending on their availability of resources. Whereas, large scale activities like Chawki rearing centres in mulberry sericulture, Commercial silkworm seed production, Automatic Silk Reeling through Automatic Reeling Machines (ARMs) in post cocoon sector are being taken up by private entrepreneurs/enterprises as it

requires huge investment. Besides, silk trading business is also mostly run by private enterprise/Entrepreneurs. The Committee were further apprised that in mulberry sector, 14 private registered producers have been roped in by CSB for production of bivoltine hybrid seed. In Tasar and Muga sectors, the number of private seed producers available are 154 and 25, respectively. Further 108 ARM units established and functioning in the country are run by private parties. Further, seed production sector also displays private participation. The Committee appreciate the efforts taken by the Central Silk Board and hope that the Ministry take all imperative measures for proper monitoring required in this Sector so that this partnership results in realising the very purpose behind establishing CSB and leads to enhanced production of raw silk in the country while generating more employment opportunities.

# **Export and Import of Silk**

6. The Committee observe that the raw silk remains a major item of import which accounts for about 70 percent of the total value of the silk imports. According to the Ministry, the imports of silk are being reported to decline till 2021-22 which ranged from Rs. 1041.35 crore in 2018-19; Rs. 1149.32 crore in 2019-20; Rs. 570.56 crore in 2020-21 and Rs. 819.68 crore in 2021-22. However, the Committee find a sudden surge in import value to Rs. 1713.68 crore in 2022-23. The Ministry have attributed this surge to the increase in demand for silk products in domestic market due to the increased economic activities during post covid period. Albeit the increase in silk production from 34,903 MT in 2021-22 to 36,453 MT in 2022-23, the domestic silk production was not able to cater to the surge in the industry requirements. Therefore, the imports of raw silk doubled from 1978 MT in 2021-22 to 3874 MT in 2022-23. Taking into account that India itself is the largest consumer of the silk domestically produced and the demand of raw silk has been increasing after Covid-19 pandemic period, the Committee urge the Ministry to explore more ways to increase the productivity of all the four varieties of silk in India especially bivoltine raw silk. More research is needed to obtain increased productivity by crossing or hybridization to get superior seeds, i.e. mulberry seeds as well as silkworm hybrids and improvised sericulture development techniques with high productivity. The Committee also desire that a robust mechanism should be put in place by the Ministry without any delay to check and maintain the quality of the raw silk which is being imported into the country. This would further ensure a check in the quantity and value of the future imports of raw silk in the country. The Committee would like to be apprised of the current status of the quantity and value of the raw silk imported in India.

7. The Committee note that there was a decline in the value of silk exports from Rs. 2031.88 in 2018-19 to Rs. 1773.38 in 2022-23. In 2023-24 (upto July, 2023), exports worth Rs. 691.59 crore have been reported by the Ministry. The Committee were apprised by the Ministry that this decline in exports of Silk and Silk goods is due to economic recession in the Western countries followed by Russo-Ukrainian war. Taking this fact into account that the UAE, the USA and the European Union presently are the major markets for Indian silk goods, the Committee recommend the Ministry to explore the markets of other countries too so that opportunities to export silk in those markets can be explored and any dip in the value of exports due to the aforementioned reasons may be gainfully compensated. The Committee would also like to know the value of exports till date in the current financial year.

#### CENTRAL SILK BOARD (CSB)

#### **Shortage of Manpower**

8. The Committee note that the Central Silk Board (CSB) is a Statutory Body, established during 1948, by an Act of Parliament (Act No.LXI of 1948) for the development of sericulture industry in the country. It functions under the administrative control of the Ministry of Textiles, Government of India. The mandated activities of CSB are Research and

Development, maintenance of four tier silkworm seed production network, leadership role in commercial silkworm seed production, standardizing and instilling quality parameters in the various production processes and advising the Government on all matters concerning sericulture and silk industry. The main objective of setting up of CSB is to make India Atmanirbhar in quality of silk production of international grade and catapult itself to the status of a global leader. There are 159 units of CSB functional as on date.

The Committee are, however, constrained to note that in 159 units of CSB, there is a remarkable vacancy at 727 posts in the Group 'A', 'B' and 'C' vis-à-vis total sanctioned strength of 2109 that brings the working strength to 1531. The Committee further note that out of 727 vacant posts, recruitment for 216 posts is under process and remaining post would be filled in phased manner as per prevailing rules of the Board. It was also brought to the notice of the Committee that the posts of Multi Tasking Staff (MTS) and manpower for activities like security, Housekeeping, Maintenance, Drivers, etc. are not being filled and their services are being outsourced. According to the Ministry, CSB is facing shortage of experienced Officers and Officials due to large number of retirements. Further, some of the promotional posts have not been filled due to non availability of eligible officials in the feeder cadre. The Committee learn that the draft Recruitment Rules of amendment for filling the Technical Cadre Posts and Scientific posts of CSB by deputation or by direct recruitment has already been submitted to the Ministry which is under consideration. It is also informed to the Committee that around 193 vacant posts in the cadre of Senior Technical Assistant shall be filled by direct recruitment, on approval of Recruitment Rules. To overcome the shortage of experienced Group A officers, filling of Group A posts on deputation basis is under process. Taking note of the fact that 727 posts have been lying vacant till July, 2023, the Committee feel an urgent need on the part of the Ministry to fulfill them. The

Committee desire that the Ministry should take a serious note of it and chalk out a fool proof action plan to deal with the filling up of vacancies at multi-level. As recruitment of 216 posts of MTS is under process, and the draft recruitment rules for filling the technical cadre and scientific posts of CSB is under consideration, the Committee exhort the Ministry to finalise it without any further delay. The Committee also desire the Ministry to consider and approve the Recruitment Rules at the earliest so that the 193 vacant posts in the cadre of Senior Technical Assistant can be filled at the earliest. Shortage of manpower at the level of officers and senior officials due to large number of retirements should also be taken care of within a definite time limit so that overall performance of CSB is not compromised and the very purpose of establishing CSB is not defeated.

### CENTRAL SECTOR SCHEME – SILK SAMAGRA-2

# Research and Development, Training/Skill Enhancement

9. The Committee note that a Central Sector Scheme Silk Samagra-2 has been initiated for comprehensive development of silk industry at a total outlay of Rs. 4679.86 crore for implementation during 2021-22 to 2025-26. This is an umbrella scheme with main objectives of (i) to make India Atmanirbhar in production of import substitute international grade Bivoltine silk and (ii) focus on inclusive development of small and marginal farmers including women and tribals/SCs. There are four major components of the Scheme, first of which is Research and Development, Training, Transfer of Technology & I.T. initiatives. The Committee find that under Transfer of Technology, the technologies emanated out of the concluded projects are transferred to the field through various Extension Communication Programme (ECP) viz, Krishi Melas, Group Discussions, Enlightenment programmes, etc. The Committee are however concerned to find that in the last three years, the number of ECPs are declining, i.e., in 2021-22, there were 900 ECPs held covering 46,538 beneficiaries; in 2022-23, 748 ECPs were held covering 46,359 beneficiaries but in 2023-24, upto August, 2023, there were only 32 ECPs held covering 2,482 beneficiaries. Taking note of the fact that more than two quarters were yet to be completed, the Committee hope that the Ministry would take appropriate measures to conduct a decent number of ECPs in the current financial year so as to cover a relatively greater number of beneficiaries. The Committee would like to know the number of ECPs conducted in the current financial year till date along with the number of beneficiaries.

#### **Seed Organisation**

Seed organization is the second component of Silk Samagra-2 10. scheme under which there is chain of Basic Seed Farms supplying basic seeds to the States/UTs. The Committee note that Central Silk Board is mandated basically to cater to the needs of State Sericulture Departments and Private Entrepreneurs in respect of nucleus and basic silkworm seed. The Committee observe that there is a shortfall in achieving the target both in terms of production and acreage specifically under Mulberry and Tasar silk varieties. In 2023-24, up to August, 2023 the total quantity of seed production is 167.979 Disease-Free Layings (DFLs) i.e. eggs vis-à-vis 409.445 DFLs during 2022-23. According to the Ministry, the Mulberry silk production reduced significantly in 2020-21 and 2021-22 due to the lockdowns and other restrictions imposed related to Covid-19 pandemic. In 2022-23, an enhanced target of 28,760 MT was set against the actual production of 25,818 MT. Although, all-time record mulberry production of 27,630 MT was achieved in 2022-23 yet the production was short by 4% against the target. For reduction in Tasar silk production during the last two financial years i.e. from 2021-22 onwards, the Ministry have attributed to heavy unseasonal rainfall and severe disease incidences on account of adverse climatic conditions, specifically in Jharkhand. Taking this fact into account that the CSB is mandated to cater to the needs of State Sericulture Departments and Private Entrepreneurs in respect of nucleus and basic silkworm seeds and the responsibility of production of commercial (hybrid) silkworm seed rests with State Sericulture Departments and Private Entrepreneurs, the Committee exhort the Ministry to develop special module for research and development of climate resistant and high-yielding varieties of seed which can resist unseasonal rainfall and severe disease incidences so that the annual and final targets fixed for States/UTs raw silk production are achieved without any obstacles. The Committee also desire that CSB should conduct periodic meetings with the State Sericulture Departments and Private Entrepreneurs involved in seed production so that their problems could be addressed within reasonable time without any adverse effect on the process of seed production.

11. The Committee note that there are 14 private registered producers roped in by CSB for production of bivoltine hybrid seed,out of which 10 are active as of now and the production during 2022-23 was 150.99 DFLs. Similarly, for Tasar, 154 private producers were registered responsible for producing 10.11 DFLs and 25 are registered for Muga silk producing 2.42 DFLs. Taking cognizance of the fact that only 10 out of 14 producers are involved in producing Muga silk which amounts only to 2.42 DFLs and the onus of producing the major share of commercial silkworm seeds lie on private silkworm seed producers only. The Committee desire that the CSB should take this matter seriously and take extra measures to deal with the problems of private seed producers as the support presently provided by the CSB is not sufficient as is evident by the data provided by the Ministry.

# Silk Mark Organisation of India (SMOI)

12. The Committee note that Silk Mark Organisation of India (SMOI) is responsible for providing assurance of purity of silk products through "Silk Mark". The Ministry have stated that all the Silk items which are being exported may not have Silk Mark labels as this is a voluntary

scheme and weavers, retailers and other stakeholders are not bound to affix the Silk Mark labels on their products. The Committee, therefore, recommend the Ministry to make the affixation of Silk Mark labels mandatory by the weavers, retailers and other stakeholders involved in the marketing chain to evolve it as an effective quality control mechanism acting as a seal of assurance from the Government of India in the interest of the consumers and arrest the sale of counterfeit silk.

#### Physical and Financial Progress of Central Silk Board

13. The Committee note that during 2023-24, the amount earmarked for the Administrative Expenditure is Rs. 563.00 crore vis-à-vis expenditure of Rs. 233.37 crore and the allocated amount for Scheme Outlay is Rs. 354.77 crore against expenditure of 45.45 crore. The Committee appreciate the Ministry for utilizing all the allocated amount of Rs. 875.00 crore in the year 2022-23 cumulatively under both the above mentioned heads and expect that in the current financial year, i.e., 2023-24 too, the Ministry would be able to utilize the entire amount earmarked to the Ministry of Textiles for development of Sericulture industry.

#### **Convergence Efforts**

14. The Committee note that during the year 2022-23, States have submitted 169 project proposals to support Sericulture activities from plantation to marketing including infrastructure for both pre and post cocoon sectors and their extension. and received sanction for 145 projects amounting to Rs. 823.27 crore and received funds of Rs. 465.43 crore. During the current year 2023-24 (upto August), States have submitted 14 project proposals and received sanction for 4 projects amounting to Rs. 36.58 crore and Rs. 13.62 crore could only be disbursed. The reasons behind this low disbursal are manifold including non-submission of Utilization Certificates due to non-utilization of Central funds within the time limit; delay in sanction/release of States' matching

share, absence of required manpower for extension and monitoring activities of Sericulture sector, allocation of sufficient funds specific to Sericulture development under State budget etc. As proper and effective coordination between the State/UT Governments and the Ministry is the prime requirement to deal with these issues, the Committee desire that the Ministry should evolve a robust coordination mechanism under which periodic interventions should be made with the State Sericulture Departments and pursue them to timely utilize the funds allocated by the Centre and submit Utilization Certificates at least by the end of the 3<sup>rd</sup> quarter of the financial year so that all the earmarked funds are utilized and the purpose of the Scheme could be met.

# **Monitoring and Evaluation**

The Committee note that the 3rd party Evaluation Study **15.** 'recommendations' on the implementation of preceding scheme 'Silk Samagra', the 'Silk Samagra-2' scheme is to be implemented during the years 2021-22 to 2025-26. According to the Ministry, the mid-term review/evaluation by third party is proposed to be taken up during the end of 2023-24 for mid-course corrections. The Committee are given to understand that this 3rd party evaluation is taken up after two and a half years and the next third party evaluation is under proposal stage. The Committee are glad to find that the Ministry in collaboration with the CSB has been taken appropriate steps so that mid-course correction or modification in the Scheme can be carried out. The Committee desire that the Ministry should speed up the process of finalizing the proposal of this 3<sup>rd</sup> party evaluation as it is an imperative measure to review the outcome/implementation of the Scheme of Silk Samagra-2 which would not only help in enhanced production of international grade Bivoltine silk but also contribute for socio-economic development of small and marginal farmers involved in Sericulture industry.

# **Occupational Hazards**

The Committee learn that there are several occupational hazards **16**. attached with the Sericulture industry especially prevailing in the process of silkworm seed production/rearing. These hazards are a cause of severe diseases and ailments posing threat to the health and life of the workers/farmers involved in Sericulture industry. The Committee note that although protective masks are provided to the Sericulture farmers and workers by the CSB, they are not enough considering the magnitude of the problem. Since the research on mechanization of filteration in the production units is still in its nascent stage, the Committee wonder when this research will be finalized and bear conclusive results for the benefit of farmers/workers. The Committee, therefore, urge the Ministry to finalise it at the earliest so that the ill-effects involved in the process could be unearthed and the remedial measures could be accordingly taken without any further delay. The Committee also desire that since the masks, hand gloves and aprons etc are provided to the workers and made available in the CSB units, the Ministry should conduct periodic inspections to ensure that these protective accessories are provided to the Casual/Time Scale Farm Workers/Skilled Farm Workers positively.

New Delhi; <u>05 February, 2024</u> 16Magha, 1945(Saka) BHARTRUHARI MAHTAB CHAIRPERSON, STANDING COMMITTEE ON LABOUR, TEXTILES AND SKILL DEVELOPMENT

# APPENDIX I

# STANDING COMMITTEE ON LABOUR, TEXTILES AND SKILL DEVELOPMENT (2022-23)

# Minutes of the Twenty Second Sitting of the Committee

The Committee sat on Tuesday, the 20<sup>th</sup> June, 2023 from 1100 hrs. to 1230 hrs. in Committee Room 'C', Parliament House Annexe, New Delhi.

#### **PRESENT**

## Shri Bhartruhari Mahtab - Chairperson

#### **MEMBERS**

# **LOK SABHA**

- 2. Shri Satish Kumar Gautam
- 3. Dr. Umesh G. Jadhav
- 4. Shri Bhola Singh
- 5. Shri Giridhari Yadav

#### **RAJYA SABHA**

- 6. Shri Neeraj Dangi
- 7. Shri R. Dharmar
- 8. Prof. Manoj Kumar Jha
- 9. Shri M. Shanmugam
- 10. Shri Vijay Pal Singh Tomar

#### **SECRETARIAT**

Shri T.G. Chandrasekhar
 Shri Sreekanth S.
 Shri K. G. Sidhartha
 Additional Secretary
 Deputy Secretary
 Deputy Secretary

Witnesses

# REPRESENTATIVES OF THE MINISTRY OF TEXTILES AND CENTRAL SILK BOARD

| Sl. No. | Name                     | Designation  |
|---------|--------------------------|--|
| 1.      | Smt. Rachna Shah         | Secretary  |
| 2.      | Shri Shashi Ranjan Kumar | AS & FA  |
| 3.      | Shri Rajeev Saxena       | Joint Secretary                                    |
| 4.      | Ms. Prajakta L. Verma    | Joint Secretary                                    |
| 5.      | Shri Ajay Gupta          | Joint Secretary                                    |
| 6.      | Smt Amrit Raj            | DC (Handlooms & Handicrafts)                       |
| 7.      | Dr. (Ms.) C. Meenakshi   | Director (Fin.) & Member Secretary (CSB)-in-charge |

2. At the outset, the Chairperson welcomed the Members of the Committee and the representatives of the Ministry of Textiles to the sitting of the Committee convened to have a briefing of the representatives of the Ministry on the Subject 'Schemes/Programmes of Central Silk Board for Development and Promotion of Silk Industry'. Drawing the attention of the witnesses to Direction 58 of the 'Directions by the Speaker' regarding confidentiality of the proceedings of the Committee, the Chairperson asked them to apprise the Committee of the role of Silk Sector in employment generation and socio-economic development in the country; its performance in the last three years inclusive of imports and exports; objectives, components, achievements, financial progress of Silk Samagra 2, challenges faced in its implementation and steps taken for improvement; functioning of Central Silk Board (CSB) and its role in development and promotion of sericulture industry through research and development activities; monitoring and coordination mechanism available, etc.

- 3. The Secretary, Ministry of Textiles briefed the Committee and, thereafter, Joint Secretary made a Power Point Presentation which *inter-alia* included overview on silk industry in India; activities of CSB; components of Silk Samagra-2 and its physical and financial progress; development of sericulture in Northeast Region; targets set for mulberry plantations, raw/Bivoltine/Vanya silk production, revenue and employment generation, etc.
- 4. The Members then raised various queries which *inter-alia* included criteria for release of funds to States/UTs and inconsistency in the amount released to various States; reasons for (i) not achieving the targets fixed for raw silk production, (ii) increase in imports, (iii) decline in exports and (iv) increase in silk price in the country; steps taken/ proposed to increase seed production and improvement in labour productivity from farm to fabric; database of beneficiaries provided employment; challenges faced while coordinating with the State Governments in implementation of various projects; study on occupational diseases amongst farmers/workers and social security measures for them; mechanism available for identification of bonded labour in silk sector, etc. The representatives of the Ministry responded to some of the queries/points raised by the Members.
- 5. As some points required detailed and statistical data, the Chairperson asked the representatives to furnish written replies thereon within two weeks. They assured to comply.
- 6. The Chairperson thanked the representatives of the Ministry for appearing before the Committee and responding to the queries of the Members.

# The witnesses then withdrew)

[A copy of the verbatim record of proceedings was kept on record]

#### The Committee then adjourned.