

Terms of Reference (ToR) for Consultancy for Evaluation of Central Silk Board, Ministry of Textiles

1. Background

India is the second largest silk producing country in the world¹. India produced about 35,820 MT of raw silk in 2019-20, an increase of 1 percent from the previous year.² The compounded annual growth rate (CAGR) of raw silk production from 2000-01 to 2019-20 is around 4%. The year-wise production volumes are shown in figure 1. The Indian silk industry employed roughly 9.4 million people in 2019-20.³ India's silk export earnings amounted to Rs. 1745.65 crores in 2019-20. According to the Ministry of Textiles, sericulture has huge potential in generating livelihood in India due to its low capital requirement and remunerative nature.⁴

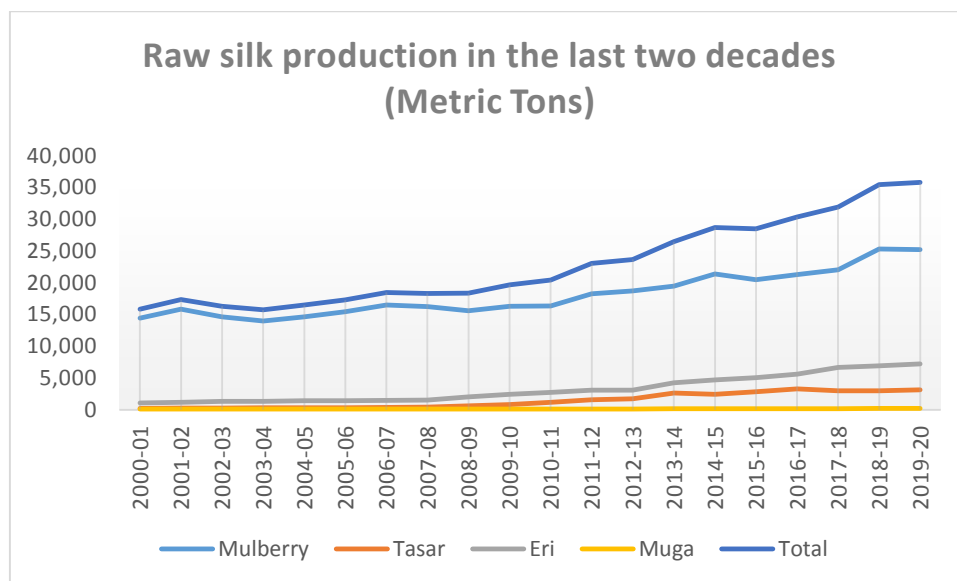


Figure 1: Raw Silk Production in India from 2000 to 2020, Source: Central Silk Board

The Central Silk Board (CSB) is a Statutory Body, which was established in 1948, by an Act of Parliament. It is administered by the Ministry of Textiles, Government of India. The Board comprises of 39 members and is headquartered in Bengaluru, Karnataka.⁵ CSB envisions to make India the world leader in the silk market. CSB undertakes the following mandated activities through 160 units spread across the country:⁶

- i. Research and Development, maintenance of four tier silkworm seed production network
- ii. To create greater opportunities for gainful employment and improved levels of income in sericulture through spread of scientific sericulture practices

¹ Seri-States of India 2019 – A Profile, Ministry of Textiles

² http://texmin.nic.in/sites/default/files/Note_on_Seri_CSJ_jan_2021_English.pdf

³ Footnote 2

⁴ Footnote 2

⁵ Footnote 2

⁶ <http://csb.gov.in/about-us/mandate/>

- iii. Leadership role in commercial silkworm seed production
- iv. Standardizing and instilling quality parameters in the various production processes
- v. Advising the Government on all matters concerning sericulture and silk industry
- vi. Improvement of raw silk marketing and brand promotion.
- vii. Collection of sericulture statistics
- viii. Preparation of reports related to silk industry for Ministry of Textiles, Govt. of India.

Since CSB is the apex body responsible for promoting the development of Indian Silk industry through its various initiatives, it is crucial to assess its performance in catalysing the growth and development of the sector.

Major activities of the CSB are implemented in collaboration with the State Governments through the central sector scheme called **Silk Samagra**, which is an Integrated Scheme for Development of Silk Industry (ISDSI). The scheme is implemented in all the silk producing states. The scheme is being implemented since 2017 with an aim to enhance silk production by improving the quality and productivity and to empower low income and backward population through various sericulture activities.⁷ Scheme's activities are divided into **four major components** as follows:⁸

- i. Research & Development, Training, Transfer of Technology and I.T. initiatives
- ii. Seed Organization
- iii. Coordination and Market Development.
- iv. Quality Certification Systems, Export, Brand Promotion & Technology up-gradation.

The scheme also focuses on various **beneficiary-oriented interventions** under R&D and seed organisations. Under the beneficiary interventions, support is provided in various forms such as plantation development, raising kisan nurseries, irrigation, chawki rearing centres with incubation facility, prophylactic measures, door to door service agents / seri polyclinics, Mobile Disinfection Unit and so on. The Central Silk Board is the nodal agency for the program implementation and is responsible for supporting the respective State Governments for implementation of beneficiary-oriented components. Component-wise target and achievements made under beneficiary components of Silk Samagra for the last three years is given in detail in Appendix I.

The following table summarises the component-wise objectives of the scheme:⁹

Research & Development, Transfer of Technology, Training & IT Initiatives	<ul style="list-style-type: none"> • Research and development to improve technology for local needs and front line demonstration of technologies in the field • Undertake R&D activities through developing improved food plants, breeds, standardization of seed production techniques, improved rearing • Developing post cocoon technologies
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⁷ <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1706034>

⁸ <http://ministryoftextiles.gov.in/sites/default/files/Silk-SAMAGRA-160419-English.pdf>

⁹ <http://csb.gov.in/wp-content/uploads/2018/12/ISDSI-Implementation-Guidelines-silk-samagra.pdf>

	<ul style="list-style-type: none"> • Technology dissemination to identified clusters through Cluster Promotion Programme (CPP), Institute Village Linked Programme (IVLP) • Conduction of Beneficiary Empowerment Programme (BEP) and other training programmes • Conduction of training for CSB's in-house Human Resources as well as organizing Entrepreneurship Development Programme (EDP), Bankers Sensitization Programme (BSP) • Trainers training, technology up-gradation Programme, Resource Development Programme, Beneficiary Empowerment, Capsule Training for farmers / reelers, Krishi Mela, etc • Information dissemination through SILKS (Sericulture Information Linked Knowledge System) portal, Farmers Reelers Data Base (FRDB), price details through SMS.
Seed Organization	<ul style="list-style-type: none"> • Maintain the four tier seed Multiplication network, supply of nucleus and basic seeds • Leadership role in Bivoltine commercial seed production and private participation for enhanced seed production • Promotion of private graineurs in Vanya Silks • Technical support to the State seed production units, Private Graineurs • Quality certification to various units • Holistic implementation of Silkworm Seed Act for instilling quality parameters
Co-ordination & Market Development	<ul style="list-style-type: none"> • Conceiving, implementing and monitoring Plan Programmes through CSB HQ and Regional Offices • Forging effective synergies in dovetailing assistance from schemes of other Ministries • Statistical analysis of Silk production, import and export • Publicity, accounts management, internal audit, Official language implementation • Coordination with Ministry and State Sericulture Departments. • Price Stabilization of Tasar and Muga cocoons through Raw Material Banks
Quality Certification System and Export / Brand Promotion & Technology Upgradation	<ul style="list-style-type: none"> • Institution and promotion of quality in Silkworm Seed, cocoon and Raw Silk

	<ul style="list-style-type: none"> • Ensuring quality and purity of Silk in the traded products by promoting pure Silk products through Silk Mark • Cocoon Testing Centres to promote quality based pricing to fetch better price for the primary producers • Raw Silk Testing Centres to promote value based product to benefit reelers/ twisters/weavers in producing quality products
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Source: CSB, 2019-20 Annual Report

Some of the other major initiatives that are coordinated by CSB for the development of sericulture are:

- i. **Bivoltine Sericulture Programme** was extended beyond XII Plan, for the years 2017-20. The efforts of CSB and Department of Sericulture (DoS) are reflected in the expansion of the production of the bivoltine raw silk in the country.
- ii. **North East Region Textile Promotion Scheme (NERTPS):** Through this scheme, government intends to focus on the expansion of sericulture in the North eastern state with interventions ranging from host plant development to finished production, focussing on value addition at each stage of production. NERTPS is an Umbrella scheme under Ministry of Textiles, which has approved implementation of 38 sericulture projects in all North Eastern States under four broad categories namely **Integrated Sericulture Development Project (ISDP), Intensive Bivoltine Sericulture Development Project (IBSDP), Eri Spun silk Mills (ESSM) and Aspirational Districts.**¹⁰ An area of 35,411 acres has been allocated to the host plantation of Mulberry, Eri, Muga and Oak tasar and 47,956 beneficiaries (mostly Schedules Tribes) have been covered till December 2020. Production of raw silk amounted to 3,967 MT during the project period (2014-15 to 2020- 21 up to Dec).¹¹
- iii. **Scheduled Caste Sub Plan (SCSP):** CSB also implements its beneficiary oriented components under Scheduled Caste Sub Plan (SCSP) in coordination with State Sericulture Departments. The scheme aims to uplift SC families through income and employment generation in a sustainable manner. The scheme intended to cover over 1900 beneficiaries in the states of Karnataka, Andhra Pradesh, Telangana, Tamil Nadu, Himachal Pradesh and Haryana for the year 2019-20.¹²
- iv. **Tribal Sub-Plan (TSP):** Another beneficiary component of the CSB is implemented through Tribal Sub-Plan, which aims to uplift the ST communities through sericulture activities. The project aimed to cover 3438 ST beneficiaries in the states of Karnataka, Andhra Pradesh, Telangana, Tamil Nadu, Chhattisgarh, Jharkhand, Odisha, Himachal Pradesh, Uttar Pradesh and Uttarakhand.¹³

¹⁰ Footnote 2

¹¹ http://164.100.47.193/lsscommittee/Labour/17_Labour_18.pdf

¹² CSB annual report 2019-20

¹³ Footnote 12

- v. **Mahila Kisan Sashaktikaran Pariyojana (MKSP):** Multi-state tasar projects under this project are coordinated by CSB. The project intends to create over 36,000 sustainable livelihoods with a focus on women in 23 districts, in the states of Jharkhand, Odisha, West Bengal, Chhattisgarh, Maharashtra, Andhra Pradesh and Bihar.¹⁴

Before 2017, the mandated activities of CSB were carried out in different states by implementing multiple Central Sector schemes, each focusing on a different component. For instance, during XII plan, CSB was carrying out its activities through four Central Sector Schemes: i) *Research & Development, Training & IT initiatives*, ii) *Seed Organization/ Coordination & Market Development* iii) *Quality Certification Systems*. (iv) *Export/Brand Promotion and technology up-gradation*.¹⁵ However, all the Central Sector Schemes are interlinked into one scheme i.e. Silk Samagra.¹⁶ The rationale behind this was that all the schemes were interlinked and together aimed to increase the quality and productivity of silk to enhance the income of the beneficiaries.¹⁷

Various performance reviews and impact evaluation of these central sector schemes have been undertaken in the past. The National Productivity Council undertook the evaluation of the following Central Sector Schemes implemented by CSB during XI plan:

- i. R&D, Transfer of Technology/Training/IT initiatives
- ii. Seed Organization & Human Resource Management (HRD)
- iii. Quality Certification System (QCS)

The evaluation study by the National Productivity Council acknowledged the efforts of R&D Institutes in developing new technologies, providing options to derive benefits in the form of reduction in per unit cost, bringing advancement in post cocoon technologies and value addition.¹⁸ Other key issues and recommendations mentioned in the report were:

- The colour fastness of silk fabrics needed to be improved by standardizing machines, dyestuff, process parameters, chemicals, etc.
- Dimensional stability was a major concern for any silk fabrics. Finishing processes were recommended to be developed to solve the instability problem.
- An urgent to augment the manpower and strengthen the infrastructure of R&D centres was stressed for sustenance of the sector and increase its competitiveness at the global level.

Similarly with respect to the Seed Organisation component, the evaluation study by NPC highlighted the success of the scheme in developing well organised and systematic Seed Organizations separately for Mulberry, Tasar, Muga and Eri, and improving the production and productivity for quality cocoon yield during XI Five Year Plan. The report recommended integration of incentives and socio economic benefits in the scheme for seed rearers and seed producers to attract and retain youth from rural areas in the sericulture activities. The report also recommended increasing the financial support to the seed sector.

¹⁴ Footnote 2

¹⁵ <https://csb.gov.in/wp-content/uploads/2018/04/Central-Sector-Scheme-Highlights.pdf>

¹⁶ Footnote 8

¹⁷ <https://csb.gov.in/schemes/central-sector/>

¹⁸ <http://csb.gov.in/wp-content/uploads/2018/04/Final-Report-RD.pdf>

Ministry of Textile also publishes notes reviewing the functioning of CSB and performance of Indian Silk Industry. However, these notes are not evaluative in nature and their scope remains limited to providing a snapshot of performance of the schemes in achieving their outputs.

There appears to be a dearth of studies conducted to evaluate the performance of CSB in implementing activities within its mandate and the impact of these activities in increasing the competitiveness of silk industry and improving livelihoods of various stakeholders. There is a need to conduct an in-depth evaluation of the CSB, especially after the integration of the various central sector schemes into one scheme .i.e. Silk Samagra. Evaluation of the CSB will help to provide strategic input to unlock growth potential of the silk sector while integrating different programmes and holistically approach sericulture development agenda.

The proposed evaluation study will intend to capture broader canvas of effectiveness, efficiency, employment generation, livelihood creation, technological innovations, scope of skills development, technology transfer to the beneficiaries, value additions, market access, export promotion, opportunities to bring innovation and sustainability to assess the overall impact of the board's activities. The evaluation period will be 2014-15 to 2020-21.

Geographical coverage

There are 26 major silk producing states specialising in mulberry, eri, muga and tasar or their combinations.¹⁹ These states are *Chhattisgarh, Madhya Pradesh, Maharashtra, Bihar, Jharkhand, Orissa, West Bengal, Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Haryana, Uttar Pradesh, Punjab, Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, and Telangana.*

¹⁹ Footnote 1

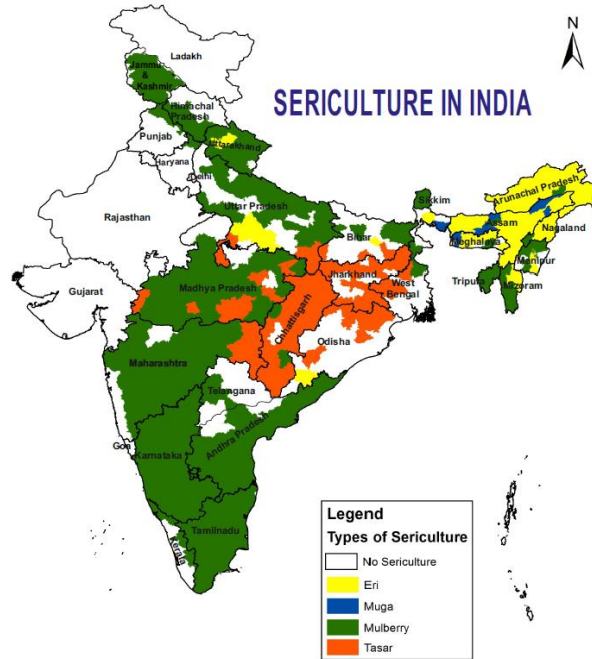


Figure 2: Geographical Spread of Sericulture in India²⁰

2. Objectives of the Evaluation Study

a) Organisational Assessment of the Board

The objectives of evaluating the organisational set-up of the Central Silk Board (CSB) include the following:

- i. To study the organizational (including administrative) structure of the Board and to assess whether the organizational structure is conducive to carry out various functions of the Board;
- ii. To study the organisational policies of the Board;
- iii. To examine the funding and expenditure for different activities and operations (including administrative expenses) of the Board and assess activity and operation wise fund utilization and efficiency
- iv. To assess the adequacy, quality and utilization of the infrastructure, other physical assets and related facilities of the CSB offices and institutional units;
- v. To assess the adequacy, qualification, capacities and salaries of the CSB staff (management, technical and administrative) and the processes employed to monitor and evaluate their performance;
- vi. To evaluate the synergies among various departments and institutional units of the Board;
- vii. To study different financial aspects of the Board including budgetary outlay, expenditure, assets and liabilities, etc.;

²⁰ Central Silk Board, retrieved from <http://csb.gov.in/wp-content/uploads/2020/03/Sericulture-map-in-India-44x44-inch.pdf>

- viii. To recommend interventions to improve the organizational structure and operations of the Board including formulating an administrative restructuring plan and new organization structure (if required), optimum manning levels, capacity building & training requirements, fund utilization efficiency, governance structure, monitoring and evaluation systems, IT systems, etc.

b) Assess Relevance, Coherence, Effectiveness, Efficiency, Sustainability, Impact and Equity of the Schemes and Activities of the Board

Based on the Evaluation Cooperation Group's (ECG's) Good Practice Standards for evaluation of public sector operations and OECD's Better Criteria for Better Evaluation,²¹ the assessment of the Board should be conducted along the principles of Relevance, Coherence, Efficiency, Effectiveness and Sustainability, Impact and Equity. Herein, relevance would assess the extent to which the intervention objectives and design respond to beneficiaries, global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change. The coherence would assess the compatibility/ synergies of the schemes with other related programmes/ schemes of Central and State Governments and other agencies. The effectiveness assessment looks at the extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups. The efficiency of a scheme is a measure of how the intervention delivers, or is likely to deliver, results in an economic and timely way. The sustainability assessment focuses on the extent to which the net benefits of the intervention continue, or are likely to continue. This should cover all the three dimensions of sustainability i.e. economic, environmental and social. And, impact assesses the extent to which the intervention has generated or is expected to generate significant positive or negative, intended or unintended, higher-level effects. Additionally, given the largely beneficiary oriented nature of scheme, it is important to add the principle of Equity, to assess if inclusion across dimensions is being ensured as a part of scheme coverage.

The indicative objectives of the evaluation study based on the RCEESI+E framework is given below.

RCEESI+E	Proposed Sub-Objectives of the Evaluation Study
Relevance	<ul style="list-style-type: none"> • To assess the relevance and rationale of schemes and programmes of the Central Silk Board, and the mechanisms/ modalities in place in the Board, in realizing its objectives. • To assess the conformity of the Board and its programmes/ schemes with the best practices in vogue to address its objectives. • To assess how the silk board is contributing to the Vision 2024-25 of the Ministry of Textiles.²² • To assess the relevance of the implementation mechanisms/ modalities in place to identify leakages

²¹ Evaluation Cooperation Group: *Big Book on Evaluation Good Practice Standards, 2012* (<https://www.ecgnet.org/document/ecg-big-book-good-practice-standards>), Better Criteria for Better Evaluation, Revised Evaluation Criteria Definitions and Principles for Use OECD/DAC Network on Development Evaluation, 2019 (<https://www.oecd.org/dac/evaluation/revised-evaluation-criteria-dec-2019.pdf>)

²²<http://texmin.nic.in/sites/default/files/Vision%20Strategy%20Action%20Plan%20for%20Indian%20Textile%20Sector-July15.pdf>

Coherence	<ul style="list-style-type: none"> • To assess the compatibility/ synergies of the Board and its Schemes with other related programmes/ schemes of Central and State Governments and other agencies (including private sector, CSR, Civil society efforts, multilaterals, etc). This includes complementarity, harmonisation and co-ordination with others, and the extent to which the Board and its schemes are adding value while avoiding duplication of effort. (For example, if workers welfare related components are inter-linked with other social protection and subsidies programmes of other ministries/departments, etc.) • To assess if there are any conflict/ trade-offs with other programmes/ schemes • To assess whether the scheme components of the Board are synergetic with each other, thus, adequately addressing inter-linkages within the Board’s activities. • To examine the co-ordination and synergies between the States and the Board in implementing various components of the Board’s schemes. For example, examine how adept the states are at implementing the adoption of technologies developed by the Board
Effectiveness	<ul style="list-style-type: none"> • To assess the outputs achieved against the targets and inputs, and to identify scheme processes leading to successes and failures. • To identify the gaps and challenges in achieving the targets and implementation of the schemes • To analyse successes and challenges of the Board in planning, implementation, monitoring, review, etc. • To examine the use of technology, monitoring and evaluation, and transparency and accountability measures to avoid leakages in the implementation of schemes. • To assess the performance and effectiveness of the Board’s R&D initiatives including <i>developing technologies, conducting training on improved technology and transferring the technology to the field, etc.</i> and identify challenges leading to sub-optimal performance and outcomes, if any • To review the effectiveness of the knowledge enhancement activities of the board • To analyse the effectiveness of silk seed organisations in improving production, productivity and quality of the cocoon yield. • To assess the effectiveness of the market development and quality improvement activities undertaken by the Board • To document scalable and replicable practices and innovative processes built by the Board • To assess the effectiveness of branding initiatives undertaken by the board to increase the visibility and sales of Indian silk in international markets

	<ul style="list-style-type: none"> To conduct a trend analysis and assess the performance of India's earnings from silk export and examine the effectiveness of Board's activities in optimally tapping the export potential of Indian silk
Efficiency	<ul style="list-style-type: none"> To assess the efficiency of the different components and processes involved in the schemes of the Board (including institutional and human resource capacity, monitoring mechanism, degree of adoption of outcome-output framework, political economy constraints and program design constraints/provisions, adoption of technology, etc.) including gaps and failures To assess whether the use of technology has enhanced efficiency of delivery including reduction in leakages. To assess the funding efficiency and fund utilisation of the Board and its schemes
Sustainability	<ul style="list-style-type: none"> To assess the financial, economic, social and environmental sustainability/ viability of various schemes that are implemented by the Board. To assess whether the assessed impacts of the scheme are sustainable even without the intervention/ after the scheme period. To study the sustainability of the monitoring and accountability mechanisms created at the grassroots level. To examine the viability of the delivery mechanism (governance, transfer of subsidy, procurement, IEC activities, etc.) built under the scheme. To assess the level of adoption of climate resilient practices, and other sustainable production practices. To examine the need for maintenance and related services of the machinery provided under the schemes of the Board (if any)
Impact	<ul style="list-style-type: none"> To study the impact of schemes and programmes of the Board against its objectives and its role in the development of silk sector in India. To assess outcome achieved against the baseline (if any) and targets To identify if any scheme or other initiatives of the Board resulted in unintended adverse consequences.
Equity	<ul style="list-style-type: none"> To examine the accessibility and availability of the schemes to the poorest households and farmers and the poorest regions in the country To identify reasons for the regional variations in silk productivity To assess the coverage of beneficiaries belonging to vulnerable and disadvantaged sections including women, SC, ST and other disadvantaged groups and the impact on them.

c. Value Chain Analysis

This component of the evaluation study requires a detailed assessment of the Silk Value Chain to understand the different stages of the value chain, the stakeholders involved, activities and value addition at each stage, the gaps and challenges at each stage of the value chain and the contribution of the Board in addressing these challenges along the Value Chain. The objectives of the Value Chain assessment are listed below:

- i. Study of complete ecosystem of the Silk Value Chain in India
- ii. Identification of key players in the different stages of the value chain
- iii. Value Chain mapping as per key players, commodity flow, information flow and movement of value to identify the roles and powers of key players in the value chain
- iv. Analysis of dynamics of processing and value creation, reward distribution, value chain governance and power relation structures, knowledge transfer and degree of integration among different players
- v. Assessment of existing market infrastructure, market situations, economies of risk and
a. value creation at each level
- vi. Assessment of support from Government available at each level in terms of institutions, technology, services, inputs, policies, and other production conditions.
- vii. Identification of gaps/ challenges at each stage of the value chain
- viii. Assessment of whether the schemes/ activities of the Board are addressing the gaps/ challenges at each stage of the value chain and evaluate the extent to which they are addressing these gaps/ challenges
- ix. To provide recommendations to maximize the impacts of the schemes/ activities of the Board to address the gaps/ challenges across the value chain.

The value chain analysis would be based on secondary analysis and field visits conducted in the major silk producing states (the states have been identified in the Sampling section of the SOW). The states to be covered are Assam, Karnataka, Andhra Pradesh, Jharkhand, West Bengal and Tamil Nadu.

d. Rationalization/ Need for Re-structuring

Based on the above, analyse the need to continue the Board's programmes/ schemes in their existing forms, modify, scale-up, or scale-down. In case if they need to be modified, suggest revisions in the Board and its programmes/ schemes design for the effective implementation in future.

3. Scope of Services

- a. **Reference period of the study:** The study will be for the period from 2014-15 to 2020-21.
- b. **Secondary Research:** The data and methods will involve review of
 - i. National and International development goals and sector documents;
 - ii. Financial data on allocation and expenditures of the schemes;
 - iii. Annual reports of the ministries for output and outcome assessment;
 - iv. Available evaluation reports for output and outcomes assessment;
 - v. Annual progress reports and implementation documents to assess the institutional arrangements;
 - vi. Available evaluation reports done at the district and state level, for the states/districts covered under field study, if applicable;

- vii. JRM reports, Standing Committee reports, PAB Minutes
 - viii. Evaluations done by non-government agencies.
- c. The field study would also include the following:
- i. Finalization of the questionnaires/ discussion guides for focus group discussions and interview guides for in-depth interviews. The drafts of the survey instruments (Questionnaires and discussion guides) would be provided by DMEO.
 - ii. Preparation of the analysis plan
 - iii. Pre-testing and finalising the required tools in partnership with DMEO team
 - iv. Establishment of a managerial structure for field operations
 - v. Recruitment of investigators and training/capacity building of the field investigators
 - vi. Putting in place appropriate IT hardware and application software for data collection and management.
 - vii. Collecting and compiling the quality data from selected areas.
 - viii. High quality data management and adherence to quality assurance mechanisms as per agreed protocols, plans and schedules.
 - ix. Data verification
 - x. Collation and data cleaning
 - xi. Running data analysis and submitting cross-tabulations/summarizations
 - xii. Preparation of draft report and conducting stakeholder consultations
 - xiii. Submission of final report and dissemination of the key findings
 - xiv. Incorporating concurrent feedback into the workflow

4. Primary Data Collection Methodology

- a. A quantitative and qualitative study backed with extensive meta-analysis will be conducted to provide an assessment of the board. The study will consist of following components:
- i. Key Informant Interviews & Focus Group Discussions - Herein, it is proposed that key informant interviews with ministry/department personnel at national level, state-level implementing bodies, district and block level officials, other stakeholders supporting implementation or indirectly involved in enabling scheme's success and opinion makers at village level. Additionally, focus group discussions will be conducted, mostly at block and village level with diverse groups involving implementing stakeholders, opinion makers as well as selected beneficiaries. National level key informants should also include national level think tanks, institutions, prominent non-profit organizations, government officials.
 - ii. Additionally, the key information areas to be covered in the discussion guides/questionnaires for key informant interviews and FGDs should have data points including but not limited to NITI Aayog's Output-Outcome Monitoring Framework for corresponding scheme as given in Appendix-I.
- b. **Sampling-** The sample for the Key Informant Interviews (KIIs) and Focused Group Discussions (FGDs) must be designed in such a way that the sample is spread over geographic sub-areas and population sub-groups properly. The size of the sample must take account of competing needs so that costs and precision are optimally balanced. Considering the limited time, survey in different identified states should be conducted simultaneously.

A minimum of 150 KIIs and 110 FGDs are proposed to be conducted with the relevant stakeholders for the evaluation of the Central Silk Board. The sampling frame for the KIIs

and FGDs is given below. However, it is important to note that these numbers are indicative and the Consultant may suggest their methodology best suited to meet the objectives of the evaluation. Final methodology will be based on the approval of DMEO.

Sampling Frame

Both KIIs and FGDs will be conducted with the beneficiaries and key informants in the six major silk producing states of **Karnataka, Andhra Pradesh, Assam, Jharkhand, West Bengal and Tamil Nadu**. These states covered 73% of the farmer and reeler population as on March 2019, and accounted for over 88% of the total silk production in 2019-20 in the country. In addition to this, KIIs (virtual/ telephonic) will also be conducted in **Chhattisgarh** and **Maharashtra** along with secondary research. The background data that formed the basis for sampling is presented in Appendix-I.

Around 15-20% percent of the KIIs will be conducted with the respondents at the national level while the rest of the KIIs will be distributed across the six major states in proportion to the farmer/reeler population of the state and quantity of silk produced in the state. Additionally, KIIs (virtual/ telephonic only) will also be conducted in the states of Chhattisgarh and Maharashtra in order to ensure adequate geographical representativeness of the sample and understand the reasons behind regional variations in the per farmer silk production. An indicative state-wise distribution of KIIs has been provided in the table below. Additionally, an indicative list of Key Informants is given in the Appendix I. The list is not exhaustive and the consultant may add more stakeholders to the list based on findings from secondary research and meta-analysis.

Similarly, FGDs in the six major states have also been distributed in proportion to the farmer/reeler population and silk production in the state. The table below gives the distribution of FGDs, along with the indicative no. of districts to be covered in each state for FGDs.

State	KIIs	FGDs	
	Indicative no. of KIIs	Minimum no. of FGDs	Indicative no. of Districts**
Assam	28	28	4
Karnataka	19	19	4
Andhra Pradesh	29	29	3
Jharkhand	13	13	2
West Bengal	11	11	2
Tamil Nadu	10	10	2
Chhattisgarh *	10	NA	NA
Maharashtra *	10	NA	NA
National Level	20	NA	NA
Total	150	110	17
<i>* virtual/ telephonic interviews only and secondary research</i>			
<i>** These numbers are indicative and may be modified based on discussions and approval from DMEO to ensure study sample is representative.</i>			

In each state, selection of districts and villages for FGD in general will be based on higher number of beneficiaries. In case of constraints in obtaining quantitative information on the sub-state level beneficiary numbers, the selection may be based on discussions with relevant state and district authorities to this effect. In each of the identified village, no more than one FGD should be conducted. The respondents should include women, SC, ST, BPL, other disadvantaged groups, Self Help Group members, wherever applicable. The indicative size of a focus group will be around 10-15 participants. Overall, a minimum of 80% of the participants of the FGDs should be beneficiaries of different schemes and activities of the Board. The drafts of the discussion guides for the FGDs would be provided by DMEO which the Consultant has to finalise. Additionally, during the FGDs, the Consultant may have to administer a short data-oriented questionnaire (provided by DMEO) to the participants of the FGD. This short questionnaire needs to be administered through CAPI.

c. Details of the Evaluation Framework & Guidelines are included in **Appendix I** of the SOW.

d. Mechanisms to ensure Data Quality

A multi-pronged robust process for quality control needs to be followed during data collection. The following aspects need to be considered:

- i. The field investigators to be engaged for conducting the key informant interviews and FGDs should have at least 3 years of experience in conducting similar surveys/interviews. A 2-step training (classroom and then on-the-field training) should be conducted for all field investigators.
- ii. It is recommended that pilots should be conducted on at least 2% of the sample size for both Key Informant Interviews as well as FGDs to fine tune the inquiry tools. A brief on the learnings from such a pilot exercise and subsequent improvements in the tools/questionnaires should also be shared with NITI Aayog.
- iii. 100% data collected should be validated using a validation checklist. Missing data points should be recollected.
- iv. In case of FGDs, at least 50% data should also be telephonically verified and if not verified via phone, back checks should be undertaken to ensure at least 50% data verification.
- v. Use of mobile-based, near real-time and geo-tagged data collection and validation tools should be done to ensure efficiency and accuracy in data collection. Access to tools and data should be provided to the Authority.

5. Indicative list of stakeholders to be consulted

An indicative list of stakeholders to be interacted with during the key informant interviews and FGDs is given in Appendix-I. The list is not exhaustive and the consultant may add more stakeholders to the list based on findings from secondary research and meta-analysis.

6. Deliverables & Timelines

- i. Inception report and presentation with final scope, methodology and approach. This should also include findings from the secondary research/ meta-analysis and therefore the areas which will be further explored during field visits.
- ii. Mid-term report and presentation with initial findings of the study.
- iii. Draft evaluation report and presentation for stakeholder consultations.

- iv. Final Evaluation Report and presentation after incorporation of inputs from all the concerned stakeholders.
- v. Presentations/ sub-reports on primary data collection, data quality check, secondary research, best practices compendia, etc. as and when requested by DMEO

All the reports are required to be submitted in hard copy in triplicate and in soft copy. In addition to the reports, for further analysis in future, verifiable raw data in soft copy should also be shared with NITI Aayog. This will include detailed transcriptions of key informant interviews and focus group discussions in MS Excel/CSV format.

Timeline

Timelines for the above deliverables would be two to three months.

7. Payment Schedule

The sanction orders will be issued for all the instalments and the Sanctioned amount shall be released as per the table below:

Instalment	% of release	Stage
1st	40	At the time of sanction. Details in Guidelines for M&E Studies (MESD-2021). ²³
2nd	30	After submission of 1st Draft Report. Details in Guidelines for M&E Studies (MESD-2021).
3rd	30	After acceptance of Project Completion report. Details in Guidelines for M&E Studies (MESD-2021).
TOTAL	100	

Note: The soft copy of draft reports may also be sent via email (to be mentioned in LoA)

8. Indicative Report Structure²⁴

The Final Evaluation Report should cover the following aspects:

- 1) Preface
- 2) Executive Summary
- 3) Sector and Board Overview
 - i. Brief background
 - ii. Key Trends/ drivers in the Sector
 - iii. About the Board
 - iv. Programmes/ Schemes under the Board
 - v. Objectives of the Programmes/ Schemes
 - vi. Implementation mechanisms
 - vii. Intended contribution to sectoral outcomes
 - viii. Nature of evaluation studies and their key findings - Gaps therein
- 4) Study Objectives
- 5) Study Approach & Methodology (Brief discussion in the main report. The details would go in the appendix)
 - a. Overall approach
 - b. Field Study methodology
 - i. Qualitative
 1. Stakeholder & geographical coverage
 2. Tools

²³ Available at https://dmeo.gov.in/sites/default/files/2021-08/MESD_2021_0.pdf

²⁴ This is an indicative report structure. This may change based on requirement and upon approval of DMEO.

- ii. Quantitative
 - 1. Sampling - Geographical coverage & respondent profile
 - 2. Sample size
 - 3. Sample selection
 - 4. Tools
- 6) Observations & Recommendations
 - a) Silk Sector
 - i. Overview of sectoral performance
 - ii. Export Analysis
 - iii. Value Chain Analysis
 - iv. Issues & Challenges and their root causes
 - v. Recommendations
 - b) Board level
 - i. Organisational Assessment of the Board
 - ii. Board and Programme/ Scheme level performance - Outputs & Outcomes
 - iii. Actual contribution of Board and specific programme/ scheme to sectoral performance (contrast, if any, with intended contribution)
 - iv. Key issues/challenges & their root causes
 - v. Key recommendations/Way Forward - These should be based on the 7 pillars of Relevance, Coherence, Effectiveness, Efficiency, Impact, Equity and Sustainability at Board level covering following aspects:
 - a. Governance
 - b. Institutional mechanisms
 - c. Convergence
 - d. Fund Flow efficiency & Utilization
 - e. Capacity Building
 - f. M&E systems
 - g. Any other relevant aspect
 - vi. Need for modifications/deletions/additions to fill-in Sectoral gaps
- 7) Conclusions
 - i. Summary of the findings
 - ii. Way Forward
- 8) References & Appendices
 - a. Appendix 1 - Details of Key Informant Interviews and FGDs
 - i. Appendix 1a - Scheme wise list of stakeholders interviewed

Sr. No.	Concerned Scheme	Date of Interaction	Name & Designation of the key informant interviewed

- ii. Appendix 1b - Geography-wise sample Size covered under FGDs
- b. Appendix 2 - Format for Scheme-level/Activity-level Analysis
 - i. 8.2.1- Background of the scheme/activity
 - ii. 8.2.2- Performance of the scheme/activity
 - iii. 8.2.3- Issues and Challenges
 - iv. 8.2.4- Recommendations and Solutions

c. Appendix 3 - Case Studies

The case studies should be identified using the criteria of effectiveness, efficiency, relevance, ethical soundness, scalability, sustainability and partner & community engagement and political commitment. Kindly refer to the Chapter 1, 2 and 3 of the WHO Guidelines mentioned in the footnote for identifying and documenting best practices.²⁵

9. Key Personnel

The Consultant shall form a multi-disciplinary team (the “**Consultancy Team**”) for undertaking this assignment. The Consultancy Team shall consist of at least the following key personnel (the “**Key Personnel**”) who must fulfil the Conditions of Eligibility specified below

S No	Key Personnel	Minimum Educational Qualifications ²⁶	Length of Relevant Professional Experience
1)	Principal Investigator	Master’s Degree (or equivalent) in Economics/ Statistics/ Management/ Agriculture/ related subject (s)	10 years
2)	Co-Principal Investigator	Master’s Degree (or equivalent) in Economics/ Statistics/ Management/ Agriculture/ related subject (s)	8 years
3.	Silk Sector Specialist	Master’s Degree (or equivalent) in Agriculture or related subject (s)	5 years
4.	Economist	Master’s Degree (or equivalent) in Economics/ Agricultural Economics	5 years
5.	Junior Researcher	Master’s Degree (or equivalent) in Economics/Statistics/ Management/ related subject (s)	1 year

10. Reporting

²⁵ WHO: A Guide to Identifying and Documenting Best Practices in Family Planning Programmes

(https://www.who.int/reproductivehealth/publications/family_planning/best-practices-fp-programs/en/)

²⁶ For degrees obtained from the accredited foreign Boards/universities, the applicant shall furnish a self-declaration on the academic equivalence to the 'Minimum Educational Qualifications' as defined in Clause 2.2.2 (D).

- a. The Consultant will work closely with the Authority. The Authority has established a Working Group (the “WG”) to enable conduct of this assignment. A designated Project Director of the Authority will be responsible for the overall coordination and project development. He will play a coordinating role in dissemination of the Consultant’s outputs, facilitating discussions, and ensuring required reactions and responses to the Consultant.
- b. The Consultant may prepare Issue Papers highlighting issues that could become critical for the timely completion of the Project and that require attention from the Authority.
- c. The Consultant will make a presentation on the inception report, mid-term report and draft evaluation report for discussion with the WG at a meeting. This will be a working document. The Consultant is required to prepare and submit a weekly update that includes and describes, inter alia, general progress to date; data and reports obtained and reviewed, conclusions to date, if any; concerns about availability of, or access to, data, analyses, reports; questions regarding the ToR or any other matters regarding work scope and related issues; and so on. The Consultants’ work on the ToR tasks should continue while the report is under consideration and is being discussed.
- d. Regular communication with the WG and the Project Director is required in addition to all key communications. This may take the form of telephone/ teleconferencing, emails, faxes, and occasional meetings.

1.Meetings

The Authority may review with the Consultant, any or all of the documents and advice forming part of the Consultancy, in meetings and conferences which will be held at the Authority’s office. The expenses towards attending such meetings during the period of Consultancy, including travel costs and per diem, shall be reimbursed in accordance with the Financial Proposal contained in Annexure-3 of the Guidelines for M&E Studies (MESD-2021). The days required to be spent at the office of the Authority shall be computed at the rate of 8 (eight) man hours a day in case of an outstation Consultant. For a Consultant having its office within or near the city where the Authority’s office is situated, the time spent during meetings at the Authority’s office shall be calculated as per actuals. No travel time shall be payable.

12. Miscellaneous

- a. The Consultant shall have/establish an office in Delhi/NCR, for efficient and coordinated performance of its Services. All the Key Personnel shall be deployed at this office during the duration of the project as specified in the Manning Schedule forming part of the Agreement. The authorised officials of the Authority may visit the Consultant’s Project Office or field locations any time during office hours for inspection and interaction with the Consultant’s Personnel. It is not expected of the Consultant to carry out the operations from the Head/Home Office.
- b. The Consultant shall mobilise and demobilise its Professional Personnel and Support Personnel with the concurrence of the Authority and shall maintain the time sheet/ attendance sheet of the working of all Personnel in the Project Office. These time sheets/ attendance sheets shall be made available to the Authority as and when asked for and a copy of such record shall be submitted to the Authority at the end of each calendar month.

- c. All the study outputs including primary data shall be compiled, classified and submitted by the Consultant to the Authority in soft form apart from the reports indicated in the Deliverables (Paragraph 6). The study outputs shall remain the property of the Authority and shall not be used for any purpose other than that intended under these Scope of Work without the permission of the Authority. The Consultancy shall stand completed on acceptance by the Authority of all the Deliverables of the Consultant and execution of the Agreement or 52 (fifty two) weeks from the Effective Date, whichever is earlier. The Authority shall issue a certificate to that effect. The Consultancy shall in any case be deemed to be completed upon expiry of 1 (one) year from the Effective Date, unless extended by mutual consent of the Authority and the Consultant.

13. Responsiveness of Proposal

Prior to evaluation of Proposals, the Authority will determine whether each Proposal is responsive to the requirements of the TOR and Guidelines for M&E Studies (MESD-2021). The Authority may, in its sole discretion, reject any Proposal that is not responsive hereunder. A Proposal shall be considered responsive only if:

- i. The Technical Proposal is received in the form specified at Annexure-II of Guidelines for M&E Studies (MESD-2021);
- ii. It is received by the Proposal Due Date including any extension thereof
- iii. It is signed and numbered
- iv. It contains all the information (complete in all respects) as requested in the TOR and Guidelines for M&E Studies (MESD-2021);
- v. It does not contain any condition or qualification; and
- vi. It is not non-responsive in terms hereof.

APPENDIX-I
REFERENCES

A. Scheme Level Details

A1 Fund Allocation of the Central Silk Board²⁷

Fund Allocation of the Central Silk Board	Fund Allocation (Rs in Cr)			
	2017-18 (RE)	2018-19 (RE)	2019-20 (Approved RE)	2020-21 (Approved RE)
Administrative Expenditure	381.00	481.29	577.70	447.88
Scheme Outlay- for Silk Samagra	161.50	120.00	209.91	202.13
Total	542.50	601.29	787.61	650.00

Note: The Scheme outlay includes towards *administrative / establishment expenditure* like payment of salaries & allowances, wages, pension & retirement benefits etc. for CSB employees and pensioners and balance is towards development of Silk industry. This encompasses funds for releasing to States for implementation of Beneficiary oriented interventions.²⁸

A2 Fund Allocation for the North East Region Textile Promotion Scheme (NERTPS)²⁹

North East Region Textile Promotion Scheme (NERTPS) - an umbrella scheme of Ministry of Textiles	Fund Allocation (Rs in Cr)			
	2017-18 (RE)	2018-19 (RE)	2019-20 (RE)	2020-21 (BE)
	220	90	109.99	135.60

A3 Component-wise target and achievements made under beneficiary components of Silk Samagra³⁰

Component	2017-18		2018-19		2019-20		Total	
	Targ*	Ach**	Targ	Ach	Targ	Ach	Targ	Ach
1 Support for Mulberry Plantation Development - Raising high yielding mulberry varieties (acre)	1500	1658	2000	2184	2300	6072	5800	9914
2 Support for development of Kisan nursery (acre)	133	24	160	87	160	32	453	143
3 Assistance for irrigation and other water	1000	1997	2000	1041	2800	920	5800	3958

²⁷ [Note on Sericulture \(April 2021\), Central Silk Board](#)

²⁸ [Silk Samagra Guidelines](#)

²⁹ http://164.100.47.193/lsscommittee/Labour/17_Labour_6.pdf

³⁰ [CSB Annual Report 2019-20](#)

conservation and usage techniques (acre)								
4 Assistance for construction of Rearing House (No.)	1515	2200	2647	1619	2856	4768	7018	8587
5 Supply of Rearing Appliances (No.)	1750	2710	2773	936	2774	4867	7297	8513
6 Production units for Biological inputs (No.)	20	24	32	8	32	18	84	50
7 Popularization of Chawki Rearing Centre (No.)	35	35	48	11	48	27	131	73
8 Multi End Reeling Machines (No.)	40	33	45	3	45	33	130	69
9 Automatic Reeling Units -400 Ends (Imported) (No.)	3	5	4	1	5	21	12	27
Automatic Reeling Units (200 ends) (No.)	2	1	4		4	6	10	7
10 Automatic Dupion Silk Reeling Units(142 ends)(No.)	1	1	3		3		7	1
11 Assistance for Twisting Units (480 ends) (No.)	5	12	9	8	9	14	23	34
12 Pupae Processing Units (No.)	2	1	3	1	3	3	8	5
13 Vanya Reeling/Spinning Machine (No.)	1292	152	1653	1092	1655	150	4600	1394
14 Buniyaad Reeling Machines(No.)	2500	450	690	3280	700	2682	3890	6412
15 Hot Air Driers(No.)	25	3	28	5	28	2	81	10
16 Loom Up-gradation-different equipment (No.)	630		1415		1445	71	3490	71
17 CFC for silk dyeing & fabric processing and accessories (No.)	11		22		30	1	63	1
18 Support to Adopted Seed Rearers (No.)	200	80	400		200	139	800	219
19 Seed Testing Equipment for Private & State Grainages (No.)	30	1	44		51		125	1
20 Up-gradation or setting up new Industrial Seed Production unit by state & Private RSPs (No.)	1	2	4		6	1	11	3
21 Support to Private Tasar Graineurs (No.)	200	285	330	49	389	47	919	381
22 Strengthening of Tasar Seed Multiplication Centers (No.)	12	54	13		13	1	38	55
*Targ:Target **Ach: Achievement								

A4: Raw Silk Production and Farmer/Reeler Data					
S.no	State/UT	Number of households involved in sericulture as on March-2019 (Farmers and Reelers)	Raw Silk Production in MT (2019-20)	% share sericulture households	% share in silk production
1	Karnataka	145239	11143	11.5	31.1
2	Andhra Pradesh	71652*	8259		23.1
3	Telangana		297	5.7	
4	Assam	370926	5316	29.4	14.8
5	Jharkhand	170250	2402	13.5	6.7
6	West Bengal	136085	2295	10.8	6.4
7	Tamil Nadu	25368	2154	2.0	6.0
8	Meghalaya	56589	1192	4.5	3.3
9	Nagaland	18222	600	1.4	1.7
10	Manipur	21408	504	1.7	1.4
11	Chhattisgarh	58270	480	4.6	1.3
12	Maharashtra	8995	428	0.7	1.2
13	Uttar Pradesh	25179	309	2.0	0.9
14	Odisha	47380	137	3.8	0.4
15	Jammu & Kashmir	27125	117	2.2	0.3
16	Tripura	14580	111	1.2	0.3
17	Mizoram	5054	104	0.4	0.3
18	Arunachal Pradesh	8751	64	0.7	0.2
19	Madhya Pradesh	24782	61	2.0	0.2
20	Bihar	7860	56	0.6	0.2
21	Uttarakhand	6895	40	0.5	0.1
22	Himachal Pradesh	7864	31	0.6	0.1
23	Kerala	256	13	0.0	0.0
24	Punjab	589	3	0.0	0.0
25	Haryana	140	1	0.0	0.0
26	Sikkim	496	1	0.0	0.0
27	Total	1259955	35820	100.0	100.0
*Combined Figure for Andhra Pradesh and Telangana					
Source: Central Silk Board, Ministry of Textiles (PIB)					

B. Table 2: Indicative List of Stakeholders to be covered

	Key Informant Interviews	Focus Group Discussions
National*	Relevant officials of Central Silk Board; Relevant Officials from Ministry of Textiles; Relevant verticals of NITI Aayog;	NA

	<p>National level Research Coordination Committee (RCC); Project Approval and Monitoring Committee (PAMC); Seed Action Plan Committee (SAC); Eminent academicians or researchers from think-tanks, Civil Society representatives; Subject Matter Specialists/Industry Experts; Scientists, Researchers; Export Units/Exporters, Exporter Associations; Relevant government departments/authorities related to silk export, etc.</p>	
State	<p>Relevant officials from state Departments of Sericulture (DOS) (or relevant implementing agency at the state level); Project Monitoring Committee of concerned State; Other relevant implementation agencies, supporting technical assistance; Researchers, scientists; Export Units/Exporters, Exporter Associations; Relevant government departments/authorities related to silk export, etc.</p>	NA
District	<p>Relevant Staff from CSB institutes (R&D institutes, seed organisation institutes, silk mark organisations and regional offices) and District Officials Officers, scientists, technical experts researchers/project Leaders, training schools/staffs, IT Providers; Research Advisory Committee (RAC) associated with R&D institutes; Sericulture Extension officers (SEO), District Sericulture Officer, Sericulture Demonstrator, and other stakeholders in-charge of sericulture activities including department of handloom, agriculture, etc; Human Resource Department of CSB, quality testing centres staff</p>	
Block	<p>Sub Divisional Magistrate/Sub Divisional Officer/Block Development Officer; Sericulture Extension officers</p>	

	(SEO), Sericulture Demonstrator and other stakeholders in-charge of sericulture activities	
Village/Town	CSB Field units, Local Bodies, Gram Sabhas, Village Councils; Silk Farmer cooperatives, Self-Help Groups common facility centre, Traders; Exporters; Community Based Groups (CBOs); Reeler collectives, Head Sericulturist in Sericulture Resource Centres (SRC); Silk Clusters etc.	Silk farmers, Other beneficiaries (reelers, twisters, weavers seed producers, artisans, traders), Community Based Groups (CBOs); SHGs, farmers' groups, collectives etc.

*includes Government, Academia, Think tanks, Multilaterals, NGOs, Experts, etc.

C. Table 3 Scheme level Output-Outcome framework

C.1 Scheme level Output-Outcome framework for Silk Samagra³¹

Outputs 2020-21		Outcome 2020-21	
Output	Indicators	Outcome	Indicators
1. Increasing production of silk and providing skilling	1.1.Number of Research Projects	1. Improvement in productivity and quality, Increase in silk production, and Employment. The main focus is to produce Bivoltine and improved cross breed silk to improve the quality of silk to compete in International Market and to bring the import to bare minimal.	1.1. Productivity Improvement
	1.2.Seed Production (Lakhs Nos.): Mulberry		1.2.Yield per 100 dfls
	1.3.Seed Production (Lakh Nos) Vanya - Tasar, Eri, Muga		1.3.Renditta
	1.4.Production of Raw Silk (MTs)		1.4. Production of Import Substitute Raw Silk (MTs)
	1.5.Production of Import Substitute Raw silk (MTs)		1.5. Employment Generation (Lakh Nos.)
	1.6.Capacity Building: Number of people to be trained		
	1.7 Quality Certification: Silk Mark Labels (Lakhs)		
	1.8 Programmes / Exhibitions / Road Shows (Nos.)		
	1.9.Number of cocoon testing centres		
	1.10 Number of Raw silk Testing Centres		
	1.11 Authorized Users (Nos.)		

C.2 Suggested list of indicators of outcome included under the guidelines for the NER Textile Promotion Scheme by Ministry of Textiles (April 2017- March 2020)³²

Category	Indicator
Production	% increase in production from baseline
	% increase in domestic share
	% increase in export share
Employment in terms of man days	Number of man days
	Direct employment
	Indirect employment

³¹ https://www.indiabudget.gov.in/budget2020-21/doc/OutcomeBudgetE2020_2021.pdf

³² <http://texmin.nic.in/sites/default/files/NERTPS%20guidelines%2011.04.18.pdf>

Income enhancement	% increase in wage (in case of capacity upgradation)
Market penetration	Participation in number of fairs (domestic/international)
	Value of the orders received
	Value of Business enquiry generated
	Value of Sales through e-commerce.

D. Guidelines for Evaluation Methodology

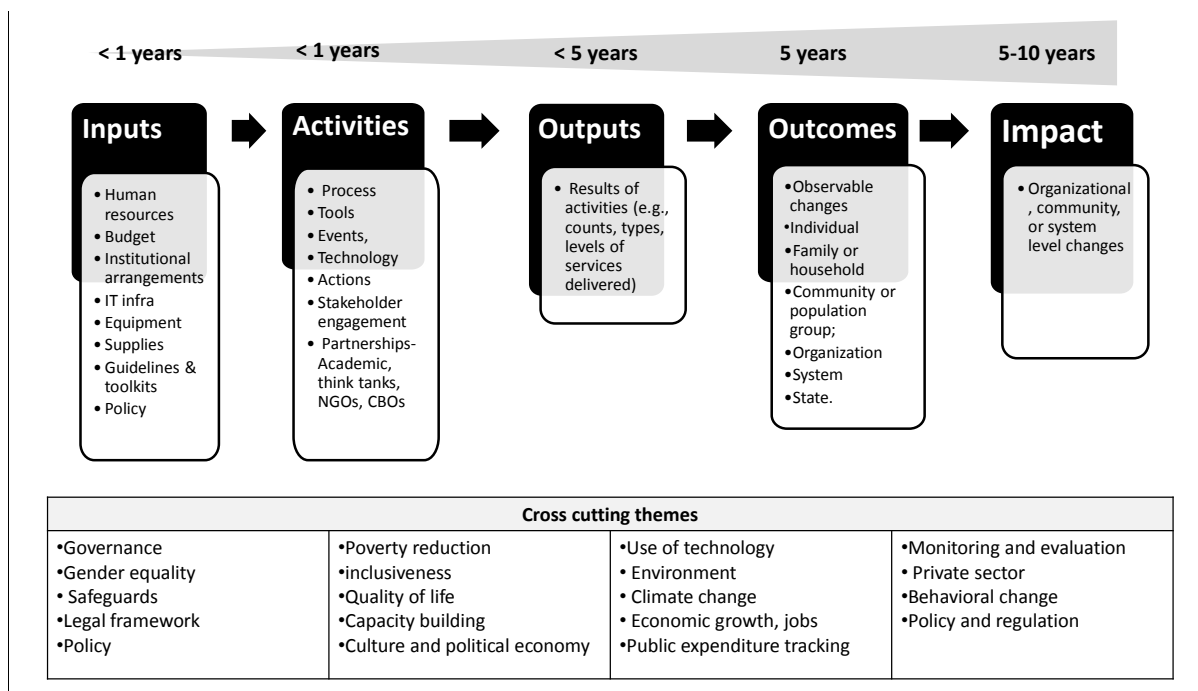
Logical Framework: Inputs, Activities, Outputs, Outcomes, and Impact

The logical framework or *logframe* is an analytical tool used to plan, monitor and evaluate projects. It derives its name from the logical linkages to connect a project's means with its ends. The main components of logical framework are inputs, activities, outputs, outcome and impact, which are described below:

- **Inputs:** The financial, human, material, technological and information resources used for the development intervention.
- **Activity:** Actions taken or work performed through which inputs, such as funds, human resources, and other types of resources are mobilised to produce specific outputs.
- **Outputs:** The products and services which result from the completion of activities within a development intervention.
- **Outcome:** The intended or achieved short-term and medium-term effects of an intervention's outputs. Outcomes represent changes in development conditions which occur between the completion of outputs and the achievement of impact.
- **Impact:** Positive and negative long-term effects on identifiable population groups produced by a development intervention, directly or indirectly, intended or unintended. These effects can be economic, socio-cultural, institutional, environmental, technological or of other types.

The evaluation team will assess all the dimensions of the logical framework. In mature programs whose implementation period is more than 5 years, greater emphasis will be on outcomes and impact, while in more recently launched programs with less than 5 years of implementation period, the evaluation will focus more on activities, outputs and outcomes.

Figure 1: Logical Framework: Inputs, Activities, Outputs, Outcomes and Impact



Cross Sectional Themes

It is important for the evaluation to assess the relevant cross sectional themes, where such a theme is not the main component of the scheme but can indirectly influence scheme performance in terms its relevance, effectiveness, efficiency, equity and sustainability. The specific cross-sectional themes relevant to a sector have been covered in the evaluation study objectives.

Mixed Methods and Triangulation

Given various constraints and complexity of the evaluations, a flexible mixed methodology, relying on triangulation of existing evidence and primary data to be collected by the evaluation study would be required. Mixed methods approaches are used to increase validity of evaluation findings by using a variety of data collection techniques. Using both qualitative and quantitative data collection, along with meta-analysis of previous evaluation studies and monitoring reports produced by the government (central, state, government agencies, etc.) and by non-government agencies (think tanks, academia, international development agencies), the evaluation study will triangulate the findings to evaluate the scheme using the Relevance, Effectiveness, Efficiency, Equity, Sustainability and Impact framework. During the designing of the evaluation tools—qualitative and quantitative—the evaluation consultant will keep in view the relevance, effectiveness, efficiency, sustainability, equity and impact framework, which is described below:

Assessments using the core criteria of relevance, coherence, effectiveness, efficiency, sustainability, impact (RCEESI)^{33, 34} and equity

³³ ECG. 2011. Good Practice Standards for Public Sector Operations. Washington, DC:

<https://www.ecgnet.org/documents/4794/download>

³⁴ Better Criteria for Better Evaluation, Revised Evaluation Criteria Definitions and Principles for Use OECD/DAC Network on Development Evaluation, 2019

<https://www.oecd.org/dac/evaluation/revised-evaluation-criteria-dec-2019.pdf>

Relevance. The relevance assessment addresses the extent to which: (i) the intended outcomes of the scheme were strategically aligned with India’s national priorities (considering both what is included in the scheme and what ought to be included) and did not duplicate other government initiatives; and (ii) the scheme design was appropriate for achieving the intended outcomes, i.e., competent analysis was carried out, lessons were applied, the right financing instrument or modality was chosen, innovation and transformative effects were given attention, and the indicators and targets at various levels were laid down well and lent themselves to measurement.

In assessing for relevance, credit should be given to scheme design elements that are innovative and/or that contribute to transformative effects, in terms of significantly improving the beneficiaries’ well-being, or promoting positive reforms. A scheme’s approach to addressing an identified development constraint should be assessed relative to existing good practice standards.

Coherence. This criterion has been added by OECD DAC Network on Development Evaluation in 2018-19.³⁵ The coherence assessment will focus on the synergy of the scheme with other schemes/ programmes in the country, sector or institution. It will cover aspects such as how other interventions (particularly policies) complement or conflicts with the scheme interventions, and vice versa. Coherence includes internal coherence and external coherence- Internal coherence focuses on the compatibilities and linkages between the scheme and other interventions carried out by the same Ministry/ Department/ Institution. External coherence looks at the synergies of the scheme with other stakeholders’ interventions in the same sector/ context.

Effectiveness. The effectiveness assessment looks at whether the scheme’s intended outcomes were achieved or were expected to be achieved at the time of observation, and whether any unintended outcomes had inadvertently reduced the value of the scheme. The outcomes are evaluated against the baselines and targets listed in the scheme documents at the outcome level. Outcomes must be available to the intended scheme beneficiaries. For a scheme to be assessed as effective, outcomes should have been achieved or be likely to be achieved and output targets should normally also have been substantially achieved. Scheme-level output-outcome monitoring framework indicators provided as part of the Scope of Work will be used for assessment of effectiveness.

Data on outputs and outcomes need to be derived from credible and documented sources. When no data on outcomes are available, it may be possible to review available data on the quality of outputs and capacity of the facilities developed by the scheme, as well as available data on demand conditions, to infer the likely level of usage of the outputs and the attainment of outcomes. Some outputs can serve as leading indicators of outcomes. Lack of any credible evidence can be reason to assume the outcomes were not fully achieved.

Schemes can have unintended adverse effects on people if social and environmental risks are not dealt with. If scheme interventions resulted in environmental degradation or in scheme

³⁵ Better Criteria for Better Evaluation, Revised Evaluation Criteria Definitions and Principles for Use OECD/DAC Network on Development Evaluation, 2019 (<https://www.oecd.org/dac/evaluation/revised-evaluation-criteria-dec-2019.pdf>)

communities or women being negatively affected (in spite of safeguard measures or gender action plans), the effectiveness assessment will be reduced. If well executed safeguard plans have led to net benefits, for instance if they have improved the livelihoods of affected people or improved the environment, this will improve the effectiveness assessment.

Efficiency: The efficiency of a scheme is a measure of how well it used resources to achieve its outcomes. It indicates whether the scheme used resources efficiently for the country and/or on a whole-of-life basis. A quantitative assessment that weighs the scheme's economic benefits against economic costs is generally needed to assess efficiency. Scheme economic performance indicators, such as the EIRR, net present value, and the benefit–cost ratio, are often used to determine whether the net gains from investing in a particular scheme will be enjoyed by society following scheme completion. Applying the traditional EIRR approach may not always be feasible, for instance for some social sector schemes, or for other schemes where benefits are not easy to quantify comprehensively. In such cases, alternative analytical methods may have to be used: least cost analysis, among others.

Unit cost analysis can be used as a proxy for economic efficiency where benefits cannot be quantified with a high degree of confidence, or where data on benefits are not available. Efficiency can sometimes be analyzed for an assumed level of economic benefits, based on an average unit cost analysis based on industry benchmarks, at the time of appraisal and completion. Analysis can be based on unit costs for comparable activities that could achieve the same or similar benefits in order to assess efficiency on a least unit cost basis. If financial data are lacking, estimates can be prepared for indicators such as average financial unit costs for achieving a defined development outcome. Cost per beneficiary estimations can also be used in sectors such as education and health.

A process efficiency assessment should examine aspects such as the scale of delays and cost overruns and their effects on scheme performance, including the factors that resulted or contributed to these overruns.

Sustainability: The sustainability assessment will focus on the likelihood that scheme outcomes and outputs will be maintained over the economic life of the scheme or over a meaningful timeframe. Since evaluation in some schemes is carried out during the first few years of the scheme's operational life, evaluators must make assumptions about the likely sustainability of operational arrangements, many of which are new, and about probable future operations and maintenance arrangements. They must also look into the wider environmental effects of schemes. The major factors to be considered when assessing sustainability are as follows:

- *Sustainability and managing risks.* Assessments of sustainability should consider risks such as political, economic, institutional, technical, social, environmental, and financial events that might limit the extent to which the scheme's achievements continue to be felt. The assessment should also consider the adequacy of risk mitigation measures.
- *Financial sustainability.* This can be assessed on a qualitative or a quantitative basis depending on the feasibility of assessing the scheme's income (revenue) and expenditure flows. Financial viability for revenue-generating schemes is based on the estimated financial internal rate of return (FIRR) of these incremental cash flows. Key aspects of the financial sustainability of both revenue and non-revenue generating schemes are: the financial capacity of the agency involved, prospects for the demand for services or

products, cost recovery mechanisms, and the availability of resources for O&M of the scheme outputs.

- *Institutional sustainability.* The assessment of institutional sustainability needs to consider factors such as the ability to ensure adequate levels of qualified human resources, finance, equipment and other inputs, and the suitability of organizational arrangements and processes, governance structures, and institutional incentives. An institutional assessment may include an analysis of how the ownership, functions, structures, and capacity of scheme-related agencies affected scheme-related inputs and service delivery, including the institution's capacity to assume its identified role or mandate.
- *Environmental and social sustainability.* The scheme's likely medium- to long- term effects on natural resource management, pollution, biodiversity, and greenhouse gas emissions should form part of the sustainability assessment, if applicable. Close attention also needs to be paid to the effects of the scheme on social sustainability, for instance how the scheme is accepted by the local communities and stakeholders.

Impacts: The development impacts assessment is focused on long-term, far-reaching changes to which the scheme has plausibly contributed. It should answer questions such as: Does the scheme contribute to reaching higher-level development objectives (preferably, overall objective/national priorities)? What is the impact or effect of the intervention in proportion to the overall situation of the target group or those affected? Further, the assessment should also consider possible unintended positive and negative development impacts.

Special development impacts: If the scheme aimed to have demonstration effects and/or had innovative features, their impact may be considered. The assessment can also include a discussion of any efforts to scale up and replicate successful features of the scheme that were not previously evident in other schemes in the country or in communities, that have been made during or after scheme implementation. Other elements that would receive positive consideration include successful capacity building activities, and potential for positive institutional or governance impacts.

Attribution to the scheme: Development impacts to which the scheme contributes tend to be outside the scheme's direct control and their achievement is often not solely attributable to the scheme outcomes. Typically, they are dependent on other development efforts. The focus of analysis should be on the contribution of scheme outcomes to the achievement of the impacts.

Equity: In addition to the globally accepted RCEESI framework, it is important to conduct the evaluation through the lens of equity. It assesses the extent to which government services are being made available to and accessed by different social groups. Particularly in schemes designed for universal coverage, the fair inclusion or intended or unintended exclusion of beneficiaries belonging to vulnerable, marginalized, disadvantaged groups and weaker sections of society must be considered. The existence and effectiveness of targeted action for these groups should also be assessed. Further, the schemes should be assessed based on their contribution to the reduction of inequality of opportunity and income.

It should be assessed whether this principle has been integrated into the scheme at the design stage, as well as whether it is playing out in implementation, i.e. whether all sub-groups within the target beneficiary group are getting equitable benefits. This will involve identifying barriers to participation among different groups, and whether these barriers have been sufficiently addressed by the scheme design and implementation. Equity should thus be factored in during

data collection, preparation of findings and conclusions and in the recommendations arising from the evaluation.

Tools for evaluation

Both qualitative and quantitative tools will be utilized by the consultant to assess the relevance, effectiveness, efficiency, sustainability and impact framework. While framing the questionnaires for qualitative and quantitative tools, the audience, questions and information use given at Figure 2 may be considered.

Qualitative tools: The consultant will utilize in-depth interviews and focus group discussion.

In-depth Interview: It is a personal interview that is carried out with one respondent at a time. This is purely a conversational method and invites opportunities to get details in depth from the respondent. One of the advantages of this method provides a great opportunity to gather precise data about what people believe and what their motivations are. These interviews can be performed face-to-face or on phone and usually can last between half an hour to two hours or even more.

- *Guide for Review of Documentation and Interviews with Policymakers, Managers, and Other Key Stakeholders:* From your perspective, what is the program trying to accomplish, and what resources does it have? What results have been produced to date? What results are likely in the next year or two? Why would the program produce those results? What are the program's main problems? How long will it take to solve those problems? What kinds of information do you get on the program's performance and results? What kinds of information do you need? How do you (how would you) use this information? What kinds of program performance information are requested by key stakeholders?
- *Guide for Review of Documentation and Interviews with Operating-Level Managers and Staff:* What are your goals for the project or program? What are the major project activities? Why will those activities achieve those goals? What resources are available to the project? Number of staff? Total budget? Sources of funds? What outputs are being delivered by the project? To whom? What evidence is necessary to determine whether goals are met? What happens if goals are met? What happens if they are not met? How is the project related to local priorities? What data or records are maintained? Costs? Services delivered? Service quality? Outcomes? Something else? How often are these data collected? How is this information used? Does anything change based on these data or records? What major problems are you experiencing? How long will it take to solve those problems? What results have been produced to date? What results are likely in the next two to three years?

Focus Group: A focus group is a group interview of approximately six to twelve people who share similar characteristics or common interests. A facilitator guides the group based on a predetermined set of topics. The facilitator creates an environment that encourages participants to share their perceptions and points of view. Focus groups are a qualitative data collection method, meaning that the data is descriptive and cannot be measured numerically. Focus groups are useful for: gathering feedback on activities, projects and services; generating and evaluating data from different groups that use a service or facility, or that an agency wants to target; generating and evaluating data from different groups within a local community or population; and developing topics, themes and questions for further research activities like questionnaires and more detailed interviews. They are good in use in conjunction with other forms of evaluation as they can help 'triangulate' findings.

Figure 2: Audience, questions, and information use

Audience	Question	Information Use	Audience	Typical Questions
<ul style="list-style-type: none"> For each focus area identified, list the audiences that are most likely to be the most interested in that area 	<ul style="list-style-type: none"> For each focus area and audience identified, list the questions they might have about your program 	<ul style="list-style-type: none"> For each audience and questions identified, list the ways and extent to which you plan to use the evaluation information 	Program Management and Staff	<ul style="list-style-type: none"> Are we reaching our target population? Are our participants satisfied with our program? Is the program being run efficiently? How can we improve our program?
			Beneficiaries	<ul style="list-style-type: none"> Did the program help me and people like me? What would improve the program next time?
			Community Members	<ul style="list-style-type: none"> Is the program suited to our community needs? What is the program really accomplishing?
			Public representatives, NGOs, CBOs	<ul style="list-style-type: none"> Who is the program serving? What difference has the program made? Is the program reaching its target population? What do participants think about the program? Is the program worth the cost?
			Cross cutting: experts, researchers	<ul style="list-style-type: none"> Is what was promised being achieved? Is the program working? Is the program worth the cost?

Quantitative Tools

It is envisaged that there will be limited set of quantitative categorical questions preceding full-fledged discussions during focused group discussions. These responses will help in augmenting, verifying and cementing the indications from the rich qualitative information that the survey will generate.

Generalizability of the findings

The key to quantitative surveys is to find a means to strengthen the generalizability of findings once desired outcome are measured. The key questions to ask to strengthen the generalizability of findings include:

- To what groups or sites will generalization be desired?
- What are the key demographic (or other) groups to be represented in the sample?
- What sample size, with adequate sampling of important subgroups, is needed to make generalizations about the outcomes of the intervention?
- What aspects of the intervention and context in which it was implemented merit careful measurement to enable generalizability or transferability of findings?
