

PROPOSED PLAN FOR THE YEAR 2024-2025

Name of the institute: CSGRC, HOSUR

1. Organizational Set up

Unit	Place
RSRS/ RSTRS	
REC/ STSC	

2. R&D Projects, TOT, ECP, CBT etc:

Item	Target	Remarks
1. CSB coded Research projects		
1.1. With PI from the Institute		
1.1.1. On-going projects during the year 2024 -2025	3	Annex 1.I.1
1.1.2. Projects to be concluded during the year 2024 -2025	1	Annex 1.I.2
1.1.3. New Projects to be initiated during the year 2024 -2025	5	Annex 1.I.3
1.2. With CI from the Institute		
1.2.1. On-going projects during the year 2024 -2025	1	Annex 1.I.4
1.2.2. Projects to be concluded during the year 2024 -2025	-	Annex 1.I.5
1.2.3. New Projects to be initiated during the year 2024 -2025	-	Annex 1.I.6
2. Transfer of Technologies (ToTs)	-	
2.1 On Station Trials (OST)	-	Annex 1.II.1
2.1.1. No. of technologies to be validated	-	
2.1.2. No. of trials/locations to be covered	-	
2.2 On Farm Trials (OFT)	-	Annex 1.II.2
2.2.1. No. of technologies to be demonstrated	-	
2.2.2. No. of locations to be covered	-	
2.2.3. No. of stakeholders to be covered	-	
3. Capacity Building & Training (CBT)		Annex 1.III
3.1. No. of programmes to be conducted	2	
3.2. No. of stakeholders to be covered	10	
4. Extension Communication Programs (No.)	2	Annex 1.IV
4.1. Number of programmes to be conducted	2	
4.2. No of stakeholders to be covered	50	
5. Soil analysis services provided	-	Annex 1.V
5.1. No. of states to be covered	-	
5.2. No. of samples to be analyzed	-	
6. Information, Education & Communication	24	Annex 1.VI
6.1. Periodicals	3	
6.2. Publications	21	
6.3. Extension literature		
6.4. Films / Videos		
6.5. Social media	50	
7. Patents to be filed/ granted, technologies to be commercialized, Software, mobile/android app to be developed etc.		Annex 1.VII
8. Procurement of equipments & other accessories	57.58	Annex 1.VIII
9. Other activities (pl specify)	4.85	Annex 1. IX
10. Revenue to be generated (Rs. in Lakhs)	6.50	Annex 1. X

1. CSB coded Research projects

1.1. With PI from the Institute

Annex- 1.I.1

1.1.1. Ongoing projects during the year 2024-2025

Sl. No.	Code	Title	Start	End	Milestones to be crossed	Progress to be achieved	Budget allocation (Rs. Lakhs)
At main institute							
1	PIE06008S I	Exploration - Collection, conservation, re-establishment and supply of mulberry genetic resources-phase X	Jan., 2023	Dec., 2025	<p>Collection of new germplasm from Namdapha National Park, Arunachal Pradesh.</p> <p>Intercultural operations and green manuring.</p> <p>Transplantation of saplings (145) to FGB.</p> <p>Transplantation of saplings and reestablishment (150/year) to FGB.</p> <p>The uprooting of old mulberry germplasm by JCB or any Agriculture machinery.</p> <p>Intercultural operations and plant protection measures.</p> <p>Gap filling of failed saplings/ Accessions.</p> <p>Intercultural operations.</p> <p>Collection of new mulberry germplasm from Great Nicobar Islands.</p> <p>Land preparation and transplanta-</p>	<p>Raising of nursery for new germplasm collection from unexplored area.</p> <p>Viable saplings will be established in Nursery beds for further <i>Ex-situ</i> transplantation</p> <p>Maintenance of healthy germplasm gene bank.</p> <p>Raising of nursery for new germplasm collected.</p> <p>Viable saplings will be established.</p>	8.40

					tionof saplings (150/Year) to FGB. Intercultural operations.		
2	AIE 06009 SI	Collection, characteriz ation, evaluation, conservatio n and utilization of silkworm genetic resources – X phase	Jan 2023	Dec 2025	<p>Collection of new silkworm breeds/races if any, conducting quarantine rearing.</p> <p>Five multivoltine conservation crop, 3 batch of bivoltine and 2 batch of mutant accessions rearings& Grainage operations.</p> <p>Compilation of evaluation data and updating the SGIS database.</p> <p>Supply of accns. as and when indents are received.</p> <p>Characterization and capturing the images (50 SWGRs)</p> <p>Preparation of description.</p>	<p>New accns. of special / unique nature will be added after evaluation for pre and post cocoon traits and assign the accession numbers.</p> <p>All the accessions will be characterized regularly for morphological characters and the database will be updated for all the important descriptors.</p> <p>Evaluation data on the important economic traits of all the accessions will be available.</p> <p>Accessions will be supplied for academic and research purpose to promote utilization based on indent and MTA.</p> <p>Presenting the recorded data/image and information in suitable format so as to enter in database.</p> <p>Silkworm accessions (50) will be characterized</p>	10.35

						with dimensions and images of different developmental stages with variation will be photographed.	
3	PIG06010S IC	Studies on cytological status of mulberry genetic resources (Phase II)	Feb, 2024	Jan, 2027	Identification of 200 accessions for chromosome study. Mitotic plate preparation for at least 50 accession Evaluation of phenotypic/anatomical data of 125 accessions. Metaphase chromosome study for 25 accessions.	200 unique accessions can be identified for cytology study including stress-specific traits. Chromosome number may count for 50 accessions. Identification of ploidy-associated traits for 125 accessions.	3.93
At nested units							

Annex- 1.I.2

1.1.2. Projects to be concluded during the year 2024-2025

Sl.No.	Code	Title	Start	End	Progress output	Utility of output/ Impact on silk industry	Budget allocation (Rs. Lakhs)
At main institute							
1	AIG-06007MI (Extended up to 31.08.2024)	Molecular characterization and assessment of genetic diversity in silkworm (<i>Bombyx mori</i> L)	Mar, 2021	Feb, 2024 (up to Aug'2025)	Hybrid assembly of four silkworm genome, ddRADseq analysis. Genotyping using selected SSR markers. Compilation of data	Analysis of Assembly data to identify the variants. functional annotation and analysis in four silkworm genome. SNP variation analysis in 350 silkworm germplasm to	33.20

						identify duplicates. Diversity analysis in the silkworm germplasm using selected SSR primers.	
At nested units							

Annex- 1.I.3

1.1.3. New projects to be initiated during the year 2024-2025

Sl.No.	Code	Title	Start	End	Objectives	Expected output	Budget allocation (Rs. Lakhs)
At main institute							
1		Characterization, evaluation and phytochemical investigations of fruit-yielding mulberry accessions.			Establishment of experimental plot at CSGRC, Hosur. Characterization and evaluation of fruit yielding accessions for phytochemical constituents. To identify the potential fruit yielding mulberry accession for large scale evaluation.	Identification of potential mulberry fruit yielding accession.	8.23
2		Unraveling the role of root endophytes from selected mulberry germplasm against root rot pathogens			Isolation and characterization of root endophytes from selected mulberry germplasm. In-vitro evaluation of root endophytes against root rot causing pathogens. Evaluating the	Diversity of endophytic microbial community between the selected mulberry germplasm will be identified. Identification of potential endophytic microbes against root rot causing pathogens of	10.45

					efficacy of potential root endophytes against root rot-causing pathogens in pot culture experiment.	mulberry in in-vitro conditions. Identification of potential endophytic microbes against root rot causing pathogens of mulberry in in-vivo conditions.	
3		Screening of corset mulberry accessions against the incidence of major pests			To identify the potential mulberry accessions resistant to the major pests To identify the natural enemy complex associated with the major pests To evaluate and standardize the non-chemical pest management practices	This study will provide information on mulberry accessions tolerant to different pests Accessions tolerant to the pests can be utilized in future breeding programme to evolve pest tolerant mulberry varieties	10.80
2 concept notes to be submitted							
At nested units							

1.2. With CI from the Institute (Collaborative projects with other CSB institutes)

Annex- 1.I.4

1.2.1. Ongoing projects during the year 2024-2025

Sl. No.	Code	Title	Start	End	Milestones to be crossed	Progress to be achieved	Budget allocation (Rs. Lakhs)
At main institute							
1	MTL01025MI	Life Cycle Assessment of Mulberry Silk: A National	Mar. 2022	Feb. 2025	Recoding of gaseous exchange at leaf surface.	Regular basis morphological data was collected and analysis. Leaf gas exchange data V1, S1, and Goshierami and	5.66

		Assessment				<p>dark adaptation fluorescence measurement were optimized for V1.</p> <p>Monitoring varieties (V1, S-1634, S1, and Goshierami) for proper maintenance as per management practices and inputs. Weeding and watering are done regularly.</p> <p>Plants were pruned on 29.11.2023.</p> <p>New plantation for all selected accessions was initiated on 18.12.2023 for increase replications.</p> <p>The procurement process for rechargeable batteries (2 pairs, Model 6400-03 6400 Battery Pack) for the LI-6400XTF portable photosynthesis instrument has been initiated.</p>	
At nested units							

Annex- 1.I.5

1.2.2. Projects to be concluded during the year 2024-2025

Sl.No.	Code	Title	Start	End	Progress output	Utility of out-put/ Impact on silk industry	Budget allocation (Rs. Lakhs)
At main institute							
At nested units							

Annex- 1.I.6

1.2.3. New projects to be initiated during the year 2024-2025

Sl.No.	Code	Title	Start	End	Objectives	Expected output	Budget allocation (Rs. in Lakhs)
At main institute							
At nested units							

Transfer of Technologies (ToTs) Programme to be taken up during the year 2024 -25

Annex - 1.II.1

2.1.On Station Trials (for validation of technology at CSB institutes/ RSRs/ DoS unit setc.)

Sl. No	Name of the Technology	Unit Cost (Rs.)	At CSB institutes	RSRs	DOS Units	Total	Anticipated impact	Budget allocation (Rs. Lakhs)
1								
2								

Annex- 1.II.2

2.2.On Farm Trials (for demonstration of Technologies at farmers' level)

Sl. No	Name of the Technology	Unit Cost (Rs.)	No. of locations	No. of stakeholders	Anticipated impact	Budget allocation (Rs. Lakhs)
1						
2						
3						

Annex- 1. III

3. Capacity Building & Training programmes to be conducted during 2024-2025

Sl. No.	Title of the training programme	Unit cost (Rs)	Target		
			No of programmes	No of stakeholders	Budget proposed (Rs.in lakhs)
3.1	Structured Training Course*				
3.1.1	PGDS				
3.1.2	Intensive Sericulture Training				
3.2	Farmers Skill Training				
3.3	Exposure visit for technology awareness				
3.4	Technology Orientation Programme				
3.5	Sericulture Resource Centres (SRCs)				
3.6	Training under Post Cocoon Sector**				
3.7	Management Development Programme under STEP				

3.8	Training for Adopted Seed Rearers (ASRs)				
3.9	Training to Registered Seed Producers (RSPs)				
3.10	Training on Seed Act				
3.11	Other Need Based Training prog.	0.10	2	10	0.20
3.12	Non-CBT: Training programme funded by agencies other than CSB*				
3.13	Training under SAMARTH ***				
3.13.1	Pre-cocoon (Silkworm rearing)				
3.13.2	Post cocoon – Silk (Reeling, Spinning, Wet processing)				
3.13.3	Post cocoon – Handloom (Designing & Weaving)				
	Total				0.20

* *Pl specify the details*, ** *Name of training with duration*, *** *only NSQF aligned courses*

Annex- 1. IV

4. Extension Communication Programmes to be conducted during 2024-2025

Sl. No	Programmes	Unit cost (Rs.)	Target		
			No of programmes	No of stakeholders	Budget allocation (Rs. In lakhs)
4.1	Krishi Mela/ Reelers mela cum exhibition				
4.2	Farmers Field day				
4.3	Awareness programme				
4.4	Technology demonstration / Enlightenment programmes				
4.5	Workshop/ Seminars & Conferences	2.00	2	50	2.00
4.6	Other activities				
	Total	2.00	2	50	2.00

Annex-1.V

5. Soil samples to be tested/analyzed during the year 2024-2025

#	State	Target	
		Physical (No)	Budget allocation (Rs in Lakhs)
5.1			
5.2			
5.3			

Annex-1.VI

6. Information, Education and Communication-2024-2025

Sl. No.	Item	Target (No.)	
		Physical (No)	Budget allocation

			(Rs. In lakhs)
6.1	Periodicals	3	0.80
6.2	Publications		
6.2.1	Research papers-National	4	0.10
6.2.2	Research papers-International	4	0.10
6.2.3	Proceedings/ Abstracts	3	
6.2.4	Books/ Book Chapters/ Manuals etc.	1	0.10
6.2.5	Popular Articles	8	
6.2.6	Booklets, Brochures etc.	1	0.25
6.3	Extension literature		
6.4	Films/ Videos		
6.5	Social media		
Total		24	1.35

Annex-1.VII

7. Technology to be filed for Patent /grant of patent, technologies to be Commercialized/ Productsto be Developed during 2024-2025

Sl. No.	Item	Patent No., Date of filing patent by NRDC, Technology commercialised to & Date of licence.	Target	
			Physical (No)	Budget allocation (Rs. In lakhs)
7.1	Patents filed			
7.2	Patents granted			
7.3	Technologies commercialized			
7.4	Android/mobile app, software developed etc.			

Annex-1.VIII

8.Procurement of equipments and other accessories proposed for the year 2024-2025

#	Items/ equipments/ other accessories	Justification	Target	
			Physical (No)	Budget allocation(Rs in Lakhs)
8.1	Farm hand operated Tools (Spade-10 nos., Kolkudhili/ Hand hoe- 10 Nos., Crow Bar-3 nos., and Falcon Scecateurs-10 nos.)	Required for mulberry germplasm/ <i>Ex-situ</i> FGB conservation	33 items	0.20
8.2	Telescopic Long Cutter/ pole pruner for mulberry germplasm plants (Petrol/ Power operated)	Required for mulberry germplasm/ <i>Ex-situ</i> FGB conservation	1	0.20
8.3	RO Water Purifier (farm house-2)	Required for Rearing building(3), grainage building (2)&Farm house-II	6	1.50
8.4	Vermicomposting unit-Extension of Existing Facility (Approx. 5.0MT tank capacity)	For the preparation of vermicomposting	1	1.50
8.5	Drip irrigation system	General leaf supply garden-2 acres	1	1.50
8.6	Drip irrigation system (Fruit yielding project)	For fruit yielding accessions plot-1 acre	1	1.50
8.7	Refrigerator	Mul. Biochem, Tissue Culture and pathology lab	3	1.20

8.8	Almirah (stainless steel)	Mul. Characterization lab, Tissue Culture and pathology lab	3	0.75
8.9	HDPE pipes-500 mtrs	To give irrigation facility to new vacant land and leaf supply garden	1	0.50
8.10	Digital Microscope with tablet (Mulberry division)	For anatomical characterization of mulberry germplasm	1	2.00
8.11	Incubator	For plant growth studies	1	0.80
8.12	Hot plate	For heating solutions	1	0.25
8.13	Green shade net for net house	For the maintenance of temperate mulberry accessions	1	3.00
8.14	Bird net – 50 x 50 ft.	For office building	1	0.50
8.15	Tarpaulin sheet for rainwater harvesting pond (80x50x10 ft)	To minimise water loss from rainwater harvesting pond	1	0.50
8.16	Digital microscope with tablet (AIE06009MI)	For mother moth examination	1	2.00*
8.17	Room heaters (AIE06009MI)	For silkworm rearing	3	0.50*
8.18	Leaf chopping machine (AIE06009MI)	For silkworm rearing	1	1.20*
8.19	Electronic balance for cocoon assessment (0.1mg -100g) (AIE06009MI)	For silkworm performance evaluation	1	1.20*
8.20	Web –Server) (Development of web application and hosting)	For Digitization of database	1	7.25*
8.21	Microwave oven	Office Canteen	1	0.20
8.22	Plastic chairs	For bivoltine rearing house, grainage and guesthouse	25	0.40
8.23	Exhaust fans	For aeration in 3 rearing and 1 grainage buildings	24	3.00
8.24	Desert Air cooler	For maintaining temperature and humidity inside the rearing rooms	6	2.40
8.25	Industrial Circumferential Room heater (For MV section)	For maintaining optimum temperature inside rearing rooms	2	0.40
8.26	Furniture for conference hall (Table + chairs)	For renovation and upgradation of auditorium		6.00
8.27	Brass lamp for conference hall	For conducting events at the centre	1	0.20
8.28	Laboratory revolving stools	For use in the laboratories	6	0.15
8.29	Platform step ladder	For repair and maintenance work in the centre	2	0.30
8.30	Ceiling fan (for Grainage buildings)	For use in two rooms of the Grainage building	4	0.08
8.31	Geysers-25 litre capacity (for guest house)	For use in Guesthouse	2	0.30
8.32	Post Hole Digger (Tractor-mounted)	For maintenance of mulberry Field gene bank	1	0.75
8.33	Borewell (1 no.)	To obtain adequate water for mulberry and silkworm germplasm conservation	1	12.50
8.34	Car	This centre is having only one car which is being used by Director. For general use, one more vehicle is required.	1	15.00
	Total			57.58 (excluding * which are included in Subtotal 1 under ongoing projects)

IT initiative

#	Item	Budget allocated
1	Computer & printer, Internet EPABX, LAN (6 All in One PCs +4 printers+ Firewall for internet security)	8.10
2	Computer aided app. /Mobile app. Development/ etc	
3	Other (Website development/ upgrading/ maintenance/ cloudspace/database & website maintenance charges)	3.00
4	Online UPS (Online UPS-5 KVa)	1.00
5	Antivirus software (20 users)	0.30
6	Storage device (external hard disks)	0.40
7	Replacement of old CCTV camera & DVR with IP cameras for office main building and laboratories	6.00
8	Web camera	1.25
9	Large Interactive display screen (For conference hall)	10.00
10	Accessories for digital camera (Camera flash, Camera stand & bag, Battery pack)	0.46
11	Statistical software package (10 users)	2.00
	Total	32.51

Civil works

#	Item	Budget allocated
1	Construction of New Sewage line for Quarters and other buildings	60.00
2	Water Proofing in Grainage building	9.85
3	Fixing Mosquito mesh for Windows in Main Building, guest house, rearing and grainage building	7.00
4	Digital mapping of CSGRC campus	0.73
5	Construction of compound wall (1.5 kms approx.)	150.00
6	Vinyl flooring of molecular biology lab, Director chamber and Computer room)	3.00
7	Guest House flooring	7.00
8	Conference hall renovation	10.00
	Total	247.58

Capital requirement

Maintenance of Existing infrastructure/ Asset T

#	Item	Justifications	Qty	Budget allocated
1	EB Charges+Maintenance	Statutory payments		23.00
2	Property tax & Water charges	Statutory payments		15.00

3	Security Services	Renewal of existing services		15.00
4	House Keeping Services (2 resources)	Outsourcing services	2	4.20
5	MTS(one)	Outsourcing services	1	1.92
6	Contract labourers (Mulberry Division-5)	Outsourcing services	5	10.00
7	Contract labourers (Silkworm Division-5)	Outsourcing services	5	10.00
8	AMC for Scientific Equipments + Maintenance	For maintenance of scientific equipments		5.00
9	Computer Maintenance	Maintenance & servicing of computers		1.00
10	UPS Maintenance	Maintenance & servicing of UPS		0.30
11	Vehicle maintenance+ Fuel	Maintenance of all existing vehicles		4.00
12	RO water Filter maintenance	Maintenance of 4 existing RO filters	4	0.40
13	Project Assistants	To look after routine activities of the germplasm conservation	2	3.60
14	Driver(outsourcing)	Required for running Tractor in the FGB and Leaf supply garden and general campus maintenance and driving office vehicle	1	2.50
15	Plumber(outsourcing)	To look after the sanitary pipelines maintenance work in the campus	1	2.50
16	Electrician(outsourcing)	To look after the electrical maintenance work in the campus	1	2.50
17	Cook (outsourcing)	To Provide refreshments to employees/meetings/events	1	4.00
18	Gardener (outsourcing)	For maintain the garden area in and around the office building	1	2.50
19	Miscellaneous (Contingent expenditure)			15.00
			Total	122.42

Annex-1.IX

9.Other activities to be carried out during the year 2024-2025

#	Activity	Justification	Budget allocation(Rs in Lakhs)
9.1	Swachh Bharat	As per CSB guidelines	0.50
9.2	Vigilance Awareness Week		0.05

9.3	OLIC meetings, Hindi Workshop, Hindi Day and Hindi Fortnight		0.60
9.4	Other activities as per guidelines		0.20
9.5	Scientific meetings		3.50
		Total	4.85

Annex-1.X

10. Revenue Generation during 2024-2025

Sl. No.	Source of Revenue Generation	Physical (No.)	Revenue to be generated (Rs. in Lakhs)
10.1	Patent (Technology)		
10.1.1	License Fee collected		
10.1.2	Royalty collected		
10.2	Testing & Analytical charges (Sample)		
10.2.1	Testing of Soil/water/FYM/ Leaf etc		
10.2.2	Quality analysis/ testing of products		
10.2.3	Testing of cocoons/silk yarn/fabric etc.		
10.3	Consultancy (Services)		
10.4	Supply/ sale proceeds of cutting / Sapling/ seedling/ chawki worms/ cocoons/ Silk etc.		
10.4.1	Mulberry cutting		0.25
10.4.2	Vanya host plant sapling/ seedling		-
10.4.3	Silkworm chawki worms		-
10.4.4	Silkworm Seed (DFLs)		0.25
10.4.5	Vanya seed (DFLs)		-
10.4.6	Cocoons		1.50
10.4.7	Output from R&D Projects (Silk, fabric etc)		-
10.4.8	Others (pl specify)		
	HRR/Water charges		2.00
	Coconut auction, grass cutting, etc		1.80
	Guest house charges		0.25
	Project fees		0.45
	Total		6.50

Progress targets at a glance for the year 2024-2025

Name of the Institute	Research Projects as PI			Research Projects as CI			On Station Trials		On Farm Trials			Capacity Building & Training		Extension Communication programmes (ECPs)		Soil sample to be analysed	Information, Education and Communication during	No. of patents filed/granted and technologies to be commercialised	Procurement of equipments (Amount spent -Rs in laksh)	Other activities	Revenue generated (Rs. in Lakhs)
	Ongoing projects during the year	Concluded Projects during the year	Newly initiated Projects	Ongoing projects during the year	Concluded Projects during the year	Newly initiated Projects	No. of technologies validated	No. of trials /locations covered	No. of technologies demonstrated	No. of locations covered	No. of stakeholders covered	No. of Programs Conducted	No. of stakeholders trained	No. of Programs Conducted	No. of stakeholders trained						
CSGRC, Hosur	3	1	5	0	1	0	-	-	-	-	-	-	-	2	50	-	1.35	-	57.58	4.85	6.50

