

CSB-CENTRAL MUGA ERI RESEARCH AND TRAINING INSTITUTE, LAHDOIGARH**1. Organizational Set up**

Unit	Place
CMERTI MAIN INSTITUTE	LAHDOIGARH, JORHAT, ASSAM
RSRS/ RSTRS	RSRS Imphal & RSRS Boko
REC/ STSC	REC Lakhimpur, REC Coochbehar, REC Sile, EREC Fatehpur,

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	08	Annex 5.I.1
1.1.2. Projects to be concluded during the year 2024-2025	02	Annex 5.I.2
1.1.3. New Projects to be initiated during the year 2024-2025	09	Annex 5.I.3
1.2. With CI from the Institute		
1.2.1. On-going projects during the year 2024-2025	01	Annex 5.I.4
1.2.2. Projects to be concluded during the year 2024-2025	00	Annex 5.I.5
1.2.3. New Projects to be initiated during the year 2024-2025	01	Annex 5.I.6
2. Transfer of Technologies (ToTs)		
2.1 On Station Trials (OST)		Annex 5.II.1
2.1.1. No. of technologies to be validated	11	
2.1.2. No. of trials/locations to be covered	52	
2.2 On Farm Trials (OFT)		Annex 5.II.2
2.2.1. No. of technologies to be demonstrated	5	
2.2.2. No. of locations to be covered	19	
2.2.3. No. of stakeholders to be covered	750	
3. Capacity Building & Training (CBT)		Annex 5.III
3.1. No. of programmes to be conducted	79	
3.2. No. of stakeholders to be covered	1720	
4. Extension Communication Programs (No.)		Annex 5.IV
4.1. Number of programmes to be conducted	56	

4.2. No of stakeholders to be covered	3000	
5. Soil analysis services provided		Annex 5.V
5.1. No. of states to be covered	4	
5.2. No. of samples to be analyzed	50	
6. Information, Education & Communication		Annex 5.VI
6.1. Periodicals	02	
6.2. Publications	65	
6.3. Extension literature	05	
6.4. Films / Videos	05	
6.5. Social media	100	
7. Patents to be filed/ granted, technologies to be commercialized, Software, mobile/ app to be developed etc.	-	Annex 5.VII
8. Procurement of equipments & other accessories	74	Annex 5.VIII
9. Other activities (pl specify)	7	Annex 5. IX
10. Revenue to be generated (Rs. in Lakhs)	27.00	Annex 5. X

1. CSB coded Research projects

1.1. With PI from the Institute

Annex- 5.I.1

1.1.1. Ongoing projects during the year 2024-2025

(Rs. Lakhs)

Sl. No	Code	Title	Start	End	Milestones to be crossed	Progress to be achieved	Budget allocated
At main institute							
1	ARP 5023 CN	Muga and Eri silkworm disease monitoring and management in northeastern states of India.	Mar 2023	Feb 2028	Visit to seed farms and monitoring diseases and suggestion of remedial measures	Reduce disease incidence due to stringent monitoring in muga and eri ecosystem.	6.00
2	AIT 5024 EF	Advanced level Institutional Biotech Hubs at Central Muga Eri Research and Training Institute, Jorhat, Assam (Phase-II) (DBT Funded Project)	Mar 2023	Feb 2026	Survey and collection of different ecoraces/strains of eri silkworm. Maintenance of collected ecoraces/strains on farm and phenotyping DNA isolation and GBS of initially selected ecoraces/strains. GBS of selected individuals from different ecoraces/strains	Collection of different ecoraces / strains of eri silkworm. Morphometric characteristics of collected eri silkworm strains / ecoraces DNA from different ecoraces and strains of eri silkworm SNP markers, genotype information and other data on eri silkworm races and strains.	0*
3	PIB 5025 SIC	Characterization and evaluation of Soalu (<i>Litsea monopetala</i>) accessions for muga silkworm (<i>Antheraea assamensis</i>) rearing.	Feb 2024	Jan 2027	To evaluate and characterize the Soalu accessions towards varietal development	Evaluation of the existing gene pool will consequently lead to identifying the superior accessions of Soalu	15.45
4	SPR 5026 SIC	Development of suitable Muga and Eri based Integrated Farming System (IFS) for North East India	Feb 2024	July 2026	Survey and identification of muga and eri based existing IFS at farmers' level in different states of North East India. Training programme on IFS will be organized for the selected farmers.	Know the existing muga and eri based IFS model at farmer's level. Generate information about the sustainability of muga culture-based IFS	18.80

					Muga based IFS containing with possible farm enterprises will be developed at the institute		
5	MOE 5027 SIC	Economic analysis of Tapioca based Ericulture in Assam & Nagaland	Feb 2024	July 2025	Farmer Selection. Data Collection and Experimental Design evaluation of the cost-effectiveness of tapioca in comparison to other crops	Data collection of Tapioca, castor, kessaru and borpat on cost benefit analysis and rearing performances	8.90
6	PIT 05029 SNC	Development of clonal propagation methods in Borpat (<i>Ailanthus grandis</i> L.) for its mass multiplication	Mar 2024	Feb 2027	To evolve simple, rapid and inexpensive clonal propagation techniques for mass multiplication of Borpat. Optimization of most suitable technique for mass multiplication of Borpat.	Simple, rapid and inexpensive clonal propagation techniques for mass multiplication of true of important Eri host plant, Borpat. This will support in augmentation of perennial host plant availability for eri silkworm rearing.	12.50
7	MOE 5030 SNC	Evaluation, optimization & Popularization of Ericulture Practices in Castor Growing Areas of Gujarat	Mar 2024	Feb 2027	Development of demo centres and rearing facility creation Onsite training and demonstration to the Kalyan foundation staffs and the lead farmers at one location. Evaluation and optimization of Ericulture technologies and practices. Field experimentation of biocontrol agents or bioformulations for managing castor pests and diseases. Onsite training and demonstration to the farmers. Evaluation, Optimization of Ericulture Practices in the farmer's field.	Creation of Chawki and late-age rearing facility would enable demonstration of technologies on eri silkworm rearing to castor farmers. - Onsite training and demonstration of technologies would strengthen the castor farmers and improve their skills in silkworm rearing. Use of bioformulations or bio-control agents in castor pest and disease management integrated with nonchemical approaches would benefit eri silkworm rearing besides saving the castor yields.	36.20
At nested units							
8	SPR 0502 8SIC	Popularization of Improved Technologies of Muga Culture for Enhancing Cocoon Production in Manipur	Feb. 2024	Jan. 2027	Selection of lead farmers and survey Sensitization & In-depth training of opinion leaders.	Upon Benchmark survey, extension activities will be designed and conducted. SWOT analysis of muga culture before and after the project	8.60

*External funded project

Annex- 5.I.2

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

(Rs. Lakhs)

Sl.	Code	Title	Start	End	Progress output	Utility of out-put/ Impact on silk industry	Budget allocation
At main institute							
1	AIP 5013 SI	Impact of elevated CO ₂ and temp. on muga silkworm and its primary host plant	Mar 2020	Feb 2025	Analysis for biochemical constituents, protein, lipid, carbohydrate, etc. for muga silkworm. Cocoon quality parameters will be analyzed. Assessment of fecundity, hatching % and other related observations, Grainage activity. Pooled analysis of the rearing data and host plant parameters in relation to ambient and elevated levels of CO ₂ and temperature to devise workable mitigation strategy.	Change in biochemical properties of the muga silkworm, cocoon and silk characteristics, seed production affected under treatments. Performance of the need based/ identified resilient/ mitigation measures/ strategies for seed crops.	8.14
At nested units							
2	APS 5021 EF	Studies on population diversity and role of host plant volatiles cues for enhancing egg laying in temperate tasar silk moth (<i>Antheraea proylei</i>) (DBT funded):	Jan 2022	Dec 2024	Evaluation of standardized synthetic oviposition stimulants for enhancing egg laying in Oak tasar silk moths in NER	The synthetic blends standardized will be evaluated for enhancing egg laying in Oak tasar silk moths in NER	0*

*External Funded project

Annex- 5.I.3

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

(Rs. Lakhs)

Sl	Code	Title	Start	End	Objectives	Expected output	Budget allocated
At main institute							
1	To be coded	Characterization of stem borer complex in Som (<i>Persea bombycina</i>) and validation of their mitigation strategies	2024	2027	Collection, Identification and molecular characterization of various stem borers in Som plants Validation of most feasible tactics for managing stem borers	Knowledge on the taxonomic details of stem borer complex Information on the extent of severity Expect the most effective and feasible management strategy	5.0
2	To be coded	Breeding for development of genetically improved som (<i>Persea bombycina</i>) genotype	2024	2027	Collection and characterization of som germplasms (both new and existing germplasm) Development of improved som genotype for higher leaf yield To identify genes linked to pupal hibernation in wild Muga silkworm	Gene pool enrichment of the som host plant for future breeding programs Passport data (NDUS-traits) of all the som germplasm (both new and existing) will be generated Improved som genotype for leaf yield	5.0
3	To be coded	Genome-Wide Association Study of Pupal Hibernation Traits in Wild Muga Silkworm (<i>Antheraea assamensis</i>) Populations	2024	2027	To identify genes linked to pupal hibernation in wild Muga silkworm	Identification and subsequent harnessing of the hibernation trait for commercial rearing might significantly help in improving the seed availability in Muga ecosystem as hibernation skipping rearing during unfavorable months.	5.0
4	To be coded	Exploring the Genetic Landscape: Comparative Analysis of Wild and Cultivated Silkworms	2024	2027	To identify & annotate key genetic markers linked with heterozygous loci in wild & cultivated population. To explore the genetic diversity between wild & cultivated population.	Identification of genes linked to heterozygous loci in muga silkworm. Detailed understanding of the genomic makeup of wild and cultivated muga silkworm.	5.0

5	To be coded	PCR based detection of pathogens of muga silkworm	2024	2026	To develop a multiplex polymerase chain reaction (PCR) assay capable of simultaneously detecting and differentiating Pebrine, Muscardine, Bacterial Flacherie, Viral Flacherie, and Grasserie in silkworms	The establishment of a robust and optimized protocol for a multiplex PCR assay, providing detailed information on primer sequences, concentrations, annealing temperatures, and cycling conditions. Expected to contribute to the improvement of silkworm health management by providing a powerful diagnostic tool for the simultaneous detection of multiple pathogens. Early and accurate identification of diseases in Eri silkworms, ultimately aiding in the development of effective disease control and management strategies in sericulture.	2.0
6	To be coded	Assessment of carbon sequestration potential and Nitrogen Use Efficiency (NUE) of som (<i>Perseae bombycina</i> Kost)	2024	2027	Assessment of carbon sequestration potential of som germplasm accessions. Estimation of NUE for revision of recommended fertilizer doses and minimizing the subsequent losses.	Som is expected to have higher potential for carbon sequestration and thus reduce carbon footprint. Understanding of NUE of som can help in future breeding programmes for host plant improvement.	5.0
7	CSB/CME R/R CN-179 Approved by 40 th RAC & TEC of DBT	Evaluation of role of polyamines; spermidine and spermine in enhancement of fecundity and egg production of muga (<i>Antheraea assamensis</i>) and eri (<i>Samia ricini</i>) silkworms. (DBT Funded in Collaboration with GITAM, AP)	2024	2026	To standardize the effective dose of various polyamines that enhances egg production of muga and eri silkworms. To understand the mechanism by which polyamines enhance fecundity and egg production of muga and eri silkworms. Field trials with selected concentrations of polyamine.	The problem of inadequate seed supply can be addressed if the enhancement of fecundity ratio by polyamines in muga and eri silkworms proved at lab scale and is tested at farm level. The new method developed in the project will be given to seed production centres for testing. Identification of genes involved in testicular development that help in enhancement of fertility. Enhancement of sperm count, sperm maturity, sperm motility, fertilization, number of eggs produced and fertility ratio through application of polyamines. Enhancement of farm level muga and eri egg production	00*

8	To be coded	Validation of ITKs in Eri PCT and exploring opportunities for enhancement (Collaboration with CSTR)	2024	2026	Identification of ITKs involved in Eri PCT in Assam, Meghalaya & Nagaland region. Scientific validation of selected ITKs associated with Eri Post Cocoon technology. Identification of scope for improvisation and integration of selected effective ITKs with modern practises and comparative evaluation.	Documentation and revival of traditional knowledge in Eri PCT (in NER). Scientific evaluation of ITKs for adoption in other regions promotes knowledge practise and sustainable practises eventually leading to economic empowerment of local communities.	5.15
9	Note ID: CNID 00017	Enhancing comfort and hand properties of Muga Silk fabrics through texturing and finishing treatments (Collaboration with CSTR)	2024	2026	To investigate and refine various texturizing techniques for muga silk fabrics and study its suitability in enhancing the resultant fabric's softness, smoothness, drapability and comfort. To standardize finishing of muga silk using chemical and enzymatic finishing process. To assess the improvements in comfort and hand properties of resultant fabrics from both physical & chemical treatments.	Improved muga silk fabrics with enhanced comfort and tactile qualities leading to diversified product offerings suitable for high end fashion, traditional attire and everyday clothing.	4.00
At nested units							

1.2. With CI from the Institute (Collaborative projects with other CSB institutes)**Annex- 5.I.4****1.2.1. Ongoing projects during the year 2024-2025****(Rs. Lakhs)**

Sl.	Code	Title	Start	End	Milestones to be crossed	Progress to be achieved	Budget allocation
At main institute							
1	SRP 8012 MNC	Development of a Rapid Antigen Test Kit for Diagnosis of Cytoplasmic Polyhedrosis in Vanya Silkworms (<i>Antheraea assamensis</i> , <i>A. mylitta</i> and <i>A. proylei</i>)	Feb 2024	Jan 2026	Detection of AaCPV4 with RAT, Testing AaCPV control measures in muga	Validation of RAT kit developed by SBRL	1.50
At nested units							

Annex- 5.I.5**1.2.2. Projects to be concluded during the year 2024-2025****(Rs. Lakhs)**

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

Annex- 5.I.6**1.2.3. New projects to be initiated during the year 2024-2025****(Rs. Lakhs)**

Sl.No.	Code	Title	Start	End	Objectives	Expected output	Budget allocation
At main institute							
1	Approved by TEC of DBT (External Funded Project)	Exploration of pheromones and kairomones for the management of parasitic pests of vanya silkworms	2024	2026	Isolation and characterization of pheromones and kairomones Assessing the electrophysiological and behavioural assay. Assessing the efficacy of the semiochemicals.	Expected outcome would be development of pheromone and kairomone blends to manage the major parasitoids of vanya silkworms by trapping them. Developed formulation can be integrated with existing traps devices and can be effectively utilized for the management of uzifly and ichneumon fly in both tasar and muga culture and it will greatly help to reduce the crop loss due to these pests.	0*
At nested units							

2. Transfer of Technologies (ToTs) Programs to be taken up during the year 2024 -2025**Annex - 5.II.1****2.1.On Station Trials (for validation of technology at CSB institutes/ RSRs/ DoS unitsetc.)****(Rs. Lakhs)**

Sl. No	Name of the Technology	Unit Cost (Rs. Lakh)	At CSB institutes	RSRs	DOS Units	Total	Anticipated impact	Budget allocation
1	Multi-location trials of Eri-breeds/crossbreeds	0.15	01	-	09	10	New eri-breeds/cross breeds as per HAC norms	1.50
2	Rearing management of Muga silkworm in cooler region during summer	0.20	01	05	-	06	Identification of new areas for summer rearing of muga silkworms.	1.20
3	Validation of cold reeling technology	0.10	01	01	08	10	Improved seed availability along with silk yarn extraction.	1.00
4	Validation of a new method for large-scale commercial loose egg production technology in ericulture	1.00	03	-	01	03	To reduce the cost of commercial egg production and to easier the grainage operations	4.00
5	Validation of NaOCl and Nirmool	0.10	02	02	-	04	Reduction in pebrine disease	0.40

	for egg disinfection to reduce pebrine spread.							
6	Validation of Pebrine detection through mobile/web base App.	0.10	02	03	-	05	Quick and reliable pebrine detection.	0.50
7	Honeycomb mountages for Muga	0.10	02	03	03	07	Improved cocoon constructions and ease of handling	0.70
8	Popularization of thermo-tolerant Oak Tasar breed C27-T	0.06	0	02	03	05	Enhanced survivability %age during summer season	0.30
9	Popularization of Eri C2 breed and Borduar eco-race in Manipur	0.08	-	02	03	05	10-15 % increase in ERR as against Manipur local	0.40
Total						55	10.00	

Annex- 5.II.2

(Rs. Lakhs)

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
1	Popularization of Kesseru Eri host plant HF005 and HF008	2,210	04 (Nagaland, Meghalaya, Mizoram and Assam)	200	Popularization of superior host plants of muga and eri silkworms will augment quality leaf production in the field leading to enhanced cocoon production per unit area.	4.42
	Popularization of Borpat Eri host plant					
	Popularization of other muga and eri host plants					
2	Formulation for controlling Bacterial flacherie disease in Muga silkworm	1,000	5 (5 districts)	50	Control in bacterial flacherie will reduce the crop loss.	0.50
3	Formulation for Muga cocoon cooking (Muga Super Cook)	5,000	10	300	Improved cocoon cooking and reeling performance in Muga cocoons.	0.50
4	Trial of formulated volatiles application for enhancing egg laying capacity of Muga silk moth during commercial crop.	10,000	05	05	Enhanced egg laying capacity in Muga	0.50
5	Trial of formulated volatiles application for enhancing egg laying capacity of Eri silk moth during commercial crop.	10,000	05	05	Enhanced egg laying capacity in Eri	0.50
Total			29	560		6.42

Annex- 5. III

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

Sl.	Title of the training programme	Unit cost (Rs)	Target		
			No of programmes	No of stake holders	Budget proposed (Rs.in lakhs)
3.1	Structured Training Course*				
3.1.1	PGDS				
3.1.2	Intensive Sericulture Training (Eri Chawki rearing)	11000	02	20	2.20
3.2	Farmers Skill Training	4500	16	400	18.00
3.3	Exposure visit for technology awareness				
3.4	Technology Orientation Programme	3800	10	250	9.50
3.5	Sericulture Resource Centres (SRCs)	375	45	900	3.375
3.6	Training under Post Cocoon Sector**	3000	6	150	4.50
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 Programme				
3.12	Non-CBT: Training program funded by agencies other than CSB*				
3.13	Training under SAMARTH ***				
	Total		79	1720	37.57

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

Annex- 5. IV**4. Extension Communication Programmes to be conducted during 2024-2025**

Sl. No	Programmes	Unit cost (Rs. Lakh)	Target		
			No of programmes	No of stakeholders	Budget allocation (Rs. In lakhs)
4.1	Krishi Mela/ Reelers mela cum exhibition	3.00 / 1.50	3	800	6.00
4.2	Farmers Field Day	0.15	12	600	1.80
4.3	Awareness programme	0.10	20	1000	2.00
4.4	Technology demonstration / Enlightenment programmes	0.01	20	500	0.20
4.5	Workshop/ Seminars & Conferences	2.00	1	100	2.00
4.6	Other activities (Exhibitions)	--	3	--	--
	Total		59	3000	12.00

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

#	State	Target	
		Physical (No)	Budget allocation (Rs in Lakhs)
5.1	Assam	10	0.24
5.2	Mizoram	20	0.12
5.3	Meghalaya	10	0.12
	Total	40	0.48

Annex-5.VI

6. Information, Education and Communication-2024-2025

Sl. No.	Item	Target (No.)	
		Physical (No)	Budget allocation (Rs. In lakhs)
6.1	Periodicals	02	1.00
6.2	Publications		
6.2.1	Research papers-National	10	0.10
6.2.2	Research papers-International	15	0.15
6.2.3	Proceedings/ Abstracts	10	0.50
6.2.4	Books/ Book Chapters/ Manuals etc.	07	1.00
6.2.5	Popular Articles	05	00
6.2.6	Booklets, Brochures etc.	05	0.50
6.3	Extension literature	10	0.50
6.4	Films/ Videos	05	0.50
6.5	Social and print media	100	0.20
Total		169	4.45

Annex-5.VII

7. Technology to be filed for Patent /grant of patent, technologies to be Commercialized/ Products to be Developed during 2023 -2024 (Rs. In lakhs)

#	Item	Patent No., Date of filing patent by NRDC, Technology commercialised to & Date of licence.	Target	
			Physical (No)	Budget allocation
7.1	Patents filed			
7.1.1	Technology for Pebrine detection through Mobile App	-	01	2.00
7.2	Patents granted	-	0	0
7.3	Technologies commercialized			
7.3.1	Commercialization of Muga super cook	-	01	0
7.4	Android/mobile app, software developed etc.			
Total			02	2.00

Annex-5.VIII

8. Procurement of equipment and other accessories proposed for the year 2024-25

#	Items/ equipment/ other accessories	Justification	Target	
			Physical (No)	Budget allocated (Lakhs)
	Clinometer	Required to measure height of host plant trees (proposed under the project).	01	0.35
	Leaf Spectrometer	for the real time analysis of biochemical parameters of Soalu leaf samples. The analysis will be non-destructive and will help in identifying stress tolerant accessions (proposed under the project).	01	8.50
	Leaf Moisture meter	Required to measure the leaf moisture by non-destructive methods (proposed under the project).	01	3.00
	Mini Tractor Trolley	Required for the mechanization of farm activities at CMER&TI.	01	0.80
	Double Wheel Barrow / Trolley	Required for the mechanization of farm activities for all farms.	05	0.50
	Air Conditioners (1.5 Ton & 2 Ton)	Air conditioners are required for Rest House, Cinnamara, SEEM Division and Pathology laboratory	08	5.50
	Soil Augars (post hole, Tube, Screw)	For soil sample collection.	3	0.20
	Online UPS system (5 KVA)	For power backup of instrument.	1	1.50
	Plant Growth Chamber	This is required for the propagation of superior host plant of muga and eri silkworm under the project.	01	10.0
	Humidifiers (Automizer covering upto 1000 sq. ft area)	For one chawki demo unit and four late age rearing demo houses under the new project entitled "Evaluation, Optimization and Popularization of Ericulture Practices in Castor Growing Areas of Gujarat".	05	2.50
	Heaters (4KW heater module covering upto 500-1000 sq. ft area)		05	2.00
	Air coolers		05	1.00
	Portable Microscope with digital display		01	1.50

Compound microscope	For mother moth examination	01	0.50
Centrifuge	For checking diseases and eri chawki certification under the new project entitled “Evaluation, Optimization and Popularization of Ericulture Practices in Castor Growing Areas of Gujarat”.	01	0.50
Low-cost demo eri chawki rearing centre	Facility creation and for demonstration of eri chawki rearing technology under the new project entitled “Evaluation, Optimization and Popularization of Ericulture Practices in Castor Growing Areas of Gujarat”.	01	2.00
Low-cost demo late age rearing house (Late age Demo Centre- 50 dfls cap.)	Near each SRCs (facility creation and for demonstration) under the new project entitled “Evaluation, Optimization and Popularization of Ericulture Practices in Castor Growing Areas of Gujarat”.	04	8.00
Battery operated powder duster	For uniform dusting of lime on eri chawki and late age worms	06	0.60
Plastic Tray washing machine	For washing of plastic trays used for chawki rearing, late age rearing, grainage etc.	02	0.80
Chawki leaf chopping machine	For demonstration of eri chawki rearing at field level	01	0.40
Unnati Reeling machine	For training & demonstration, and for regular use in the section.	01	0.30
Eri Spinning machine (solar-pedal less)	Solar powered eri spinning machine is not available in the section.	02	0.30
UPS with battery (Power backup 2KW)	There is no power back up in the section and all equipment’s are facing frequent power cuts. This has stalled training programs many times.	01	0.70
Furniture/rearing stands/racks etc and other equipments	For utilization in different laboratories, eri and muga grainages and rearing houses.	-	18.70
Desktop	There is dearth of desktops at Institute as most of the staff is without computers or working on slow obsolete desktops. [In 2021-2022, 20 No. of desktops were declared unserviceable by SVO and were disposed off in 2022].	04	2.50

Laptops	01 for SEEM Division under new project. [In 2021-2022, 08 laptops were declared unserviceable by SVO and were disposed off in 2022].	01	1.0
Printers	05 duplex/colour printers for various divisions/sections.	05	1.5
Pending bills of previous FY 2023-24	previous FY 2023-24		13.91
Total			89.56
RSRS Imphal			
Portable Binocular microscopes (02)	Two binocular microscopes are required for using in hands on training programme of mother moth examination for pebrine detection to produce muga DFLs at farmer's level.	1	1.50
Circumferential Room heater	As of now charcoal heater and some electric heater are used for heat treatment in the grainage during winter which cannot maintain properly, hence Circumferential Room heater is required.	4	1.00
Construction of Borewell for RSRS, Imphal	Required for water supply to buildings and quarters.	01	2.0
Establishment of Museum (Laminated Display materials, racks, table, trunk, Almirah, etc.)	For displaying specimens, charts, records, photographs of different activities of the station.	1	2.00
Total			6.50
RSRS, Boko			
Tractor with standard accessories	As the skilled workers are retiring every, maintenance of 25 acres of land is not possible without tractor	1	10.00
Desktop	Only two desktops are in working condition which are also very old and needs replacement.	2	1.50
LCD Projector	The only projector became very old and needs replacement	1	0.70
Total			12.20
REC, Lakhimpur			
Laptop	For official use and training purpose	1	0.80
Inverter with battery	For power back-up in the office	1	0.50

	Colour printer	For official use	1	0.25
	Compound microscope	For mother moth examination	1	0.30
	Furniture & other office equipments	Sitting Chairs for official staffs and guests	-	1.00
	Construction of bathroom and toilet	Presently, there is no toilet/bathroom at the station	2	2.00
			Total	4.85
EREC, Fatehpur (UP)				
	Desktop	For office purpose	1	0.75
	Power back-up	For office purpose	1	2.00
			Total	2.75
			Sub-total for procurement of equipments and other asset creation	
				115.85
Maintenance of existing Assets at Main Institute				
	Drainage system at GCC, Chenijan	Presently there is no drainage system in place at GCC, Chenijan. The same is needed for drainage of accumulated rain water, waste water from buildings/rearing houses.	-	25.00
	Concreting/Repairing/blacktopping of interior roads of GCC, Chenijan	The interior roads of GCC, Chenijan are not concreted. The roads need to be constructed with black topping.	-	25.0
	Up-gradation of water filtration unit at CMER & TI, Training Division, Farm No.-1, Lahdoigarh.	For improving quality drinking water facility, it is proposed to up-grade water filtration unit at CMER&TI Training complex, Farm No.-1, Lahdoigarh.	01	15.0
	Repairing/painting of Staff Quarters Building of CMER&TI, Quarter Complex	The staff quarters need repairs to fix seepage, leakage and for face lifting.	--	15.0
	Up-gradation of Conference Hall at CMER&TI, Lahdoigarh	For various meetings, seminar and workshop at CMER&TI.	01	10.0
	Up gradation of gate and construction of security hut at main Institute	The upgraded gate is required for security purposes. Presently there is no security hut at the Institute.	01	35.00
			Total	125.00
Maintenance of existing assets at RSRS, Imphal				

	Repairing/black topping of interior roads of RSRS, Imphal	The present roads are built more than 15 years ago and are in dilapidated condition.	-	20.0
	Repairing of staff quarters	36 staff quarters need immediate repairing. The last renovation was carried out more than 15 years ago	-	50.0
			Total	70.0
Maintenance of existing assets at RSRS, Boko				
	Repairing of Administrative Building	The tin shed (Assam Type) Administrative Building was in the year 1987. The building needs major repairing with up gradation of toilets, replacement of tin sheet, construction of ramp etc.	-	30.00
	Repairing of Technical Building	The tin shed (Assam Type) Technical Building was in the year 1987. The building needs major repairing with up gradation of toilets, replacement of tin sheet, construction of ramp etc.	-	30.00
	Construction of Store Room (Assam Type)	To keep farm implement, old files & registers	-	20.00
			Total	80.00
Sub-total under Maintenance of Existing Assets at Main Institute and nested units				275.00
G. Total for Asset creation and maintenance of existing assets				390.85

Annex-5.IX**9.Other activities to be carried out during the year 2024-2025**

#	Activity	Justification	Budget allocation (Lakhs)
9.1	Silkworm/Host plant Germplasm conservation activities	For conservation & preservation of silkworm/host plant germplasm	2.00
9.2	Raising of Muga & Eri Host plants, maintenance of perennial castor etc	To meet demand of improved varieties and for popularization in the field	2.00
9.3	Swatch Bharat activities at Main Institute and nested units	For conducting various activities at the institute under Swatch Bharat Abhiyan	4.00
9.4	Oak Tasar silkworm rearing, DFLs production	To meet the seed supply demand for North east and North west India	1.50

	and supply		
9.5	Raising of seedlings/ saplings of Oak tasar,eri, muga and mulberry host plants at RSRS Imphal	To meet the demand of improved varieties and for popularization in the field.	1.00
9.6	Mobile App for Pebrine Detection under Pilot Project PS-005MTS	For real time detection of Pebrine	4.25
9.7	IT services (software-as a service (Saas) solution.	Deployment of Pebrine detection mobile app for a year as a SaaS solution, including AI/ML models, cloud hosting, and maintenance and support services. This model allows users to access the app over the internet without managing hardware or software, making it convenient and scalable for real-time Pebrine disease detection	10.0
9.8	Maintenance of farms/farm equipments/ campuses/rearing at Main Institute and all its nested units.	Additional mandays are required for general maintenance of farms/rearing of muga and eri silkworms/under various R&D projects and for general upkeep of the campuses at main Institute and all its nested units (Approx. 11000). The deficiency has been worked-out based on CSB norms of 2010.	55.00
9.9	Automatic weather station for CMERTI Campus	For recording weather parameters	8.00
9.10	Vehicle (Bolero)	For official use at REC Lakhimpur, field visit, extension activities etc in the jurisdiction area	10.00
Total			97.75

Annex-5.X

10. Revenue Generation during 2024-2025

Sl. No.	Source of Revenue Generation	Physical (No.)	Revenue to be generated (Lakhs)
10.1	Patent (Technology)		
10.1.1	License Fee to be collected		6.0
10.1.2	Royalty to be collected		
10.2	Testing & Analytical charges (Sample)		
10.2.1	Testing of Soil/water/FYM/ Leaf etc		0.50
10.2.2	Quality analysis/ testing of products		0.0
10.2.3	Testing of cocoons/silk yarn/fabric etc.		0.0
10.3	Consultancy (Services)		0
10.4	Supply/ sale proceeds of cutting / Sapling/ seedling/ chawki worms/ cocoons/ Silk etc.		
10.4.1	Mulberry cutting		0.0
10.4.2	Vanya host plant sapling/ seedling	10000	1.0
10.4.3	Mulberry chawki worms		0.0
10.4.4	Mulberry Seed (DFLs)		0.0
10.4.5	Vanya seed (DFLs)		0.0
10.4.6	Cocoons		2.0
10.4.7	Output from R&D Projects (Silk, fabric etc)		1.0
10.4.8	Others (pl specify)		
	Guest House/Hostel Charge		1.0
	Convenience charge		0.50
	Other Misc. receipt (excess Payment recovery, computer advance recovery, auction proceeds etc.)		6.00
	Course fees		0.50
	Total		18.50