

MINUTES OF THE 49TH RESEARCH ADVISORY COMMITTEE (RAC) MEETING OF CSB-CSR&TI, PAMPORE HELD ON 13TH SEPTEMBER, 2025 IN HYBRID MODE

49th Research Advisory Committee meeting of CSB-CSR&TI Pampore held on 13th of September'2025 in hybrid mode. At the outset Dr. Sardar Singh, Director, CSR&TI, Pampore extended a warm welcome to Prof. (Dr.) Nazeer Ahmed (Former-Vice Chancellor, SKUAST-Kashmir) Chairman & Members of the RAC and other participants to the RAC meeting of the institute.

In his opening remarks RAC Chairman was happy and appreciated the Scientists on efforts made by CSR&TI Pampore from last RAC till date on achieving the targets of projects, Trainings and ECP's to meet R&D needs of North & North West-India for development of sericulture industry.

AGENDA NO. 1: CONFIRMATION OF LAST RAC MEETING MINUTES

As no comments were received, the house confirmed the minutes of 48th RAC.

AGENDA NO. 2: FOLLOW UP ACTION ON THE GENERAL RECOMMENDATIONS/ DECISIONS OF THE LAST RAC MEETING:

Dr Sardar Singh, Director, CSB-CSR&TI, Pampore presented the follow-up actions on the general recommendations/decisions of the Last RAC Meeting in PPT form. House expressed satisfaction over the follow up made by the institute on the general recommendations of RAC members of CSR&TI Pampore.

AGENDA NO. 3: FOLLOW UP ACTION TAKEN ON THE PROJECT SPECIFIC RECOMMENDATIONS/ DECISIONS OF THE LAST RAC MEETING

Dr. Irfan Illahi., Scientist-D, PMCE Division presented the follow up action taken on the project specific recommendations/decisions of the Last RAC Meeting & house expressed satisfaction over the follow-up made by the Institute.

AGENDA NO. 4: REVIEW ON CONCLUDED PROJECTS:

#	Project Code and Title	Decision / suggestion of RAC
	PIE03012SI: Evaluation of mulberry somatic hybrids.	➤ The project outcome has been found satisfactory. SH2 & SH3 have shown promising results during PYT. ➤ The outcome of the project be carried forward and Final Yield Trial be taken up in project mode to confirm the superiority of SH2 & SH3 under temperate climatic conditions. ➤ The concerned scientist (Dr Gulab Khan Sc-D) may be consulted for successful trials. (Action: Dr. Aftab Shabnum, Scientist-D)

AGENDA NO. 5: REVIEW OF THE PROGRESS OF ON-GOING PROJECTS

Institute as PI:

#	Project Code and Title	Decision / suggestion of RAC
1.	AIB03006CI: Indo-Uzbekistan Collaborative Research Project on Improvement of Mulberry and Silkworm Breeding in Temperate Regions of India and Uzbekistan.	➤ House appreciated the efforts made by CSR&TI, Pampore for coordination with SRIS Tashkent Uzbekistan ➤ Reasons for low survivability of temperate mulberry genetic resources collected from Tashkent Uzbekistan

		and transplanted at PEQ facility at Dussu, Pampore may be assessed and necessary corrective measures to be ensured. ➤ In case of poor survivability after 3 months of root grafting the survivability may be reassessed. ➤ Based on the consent letter signed between CSB-CSR&TI, Pampore and SRIS, Tashkent Uzbekistan, Director SRIS, Tashkent Uzbekistan may be requested to resend the material in the month of February-2026 to transplant during Spring season. [Action: Dr. Sardar Singh, PI & Dr Pawan Saini,CI]
2.	PIE03009SI: Evaluation of mulberry genotypes for improvement in productivity and quality under sub-tropical conditions of Jammu.	➤ House suggested that Biochemical analysis of leaf samples may be carried as per the project milestones. ➤ Results obtained from field data and bioassay studies may be compared and 1-2 promising genotypes may be shortlisted for further evaluation under AICEM trials or commercial cultivation in NW India. [Action: Dr. Santosh Kumar Magadam, PI]
3.	PIB03013SI: Development of high yielding quality mulberry (<i>Morus</i> spp.) genotypes under sub-tropical conditions of Northern India.	➤ House suggested that Propagation efficiency and rooting proliferation studies of promising progenies may be carried out during upcoming winter season. ➤ House suggested that Biochemical analysis of leaf samples may be carried as per the project milestones. [Action: Dr. Santosh Kumar Magadam, PI]
4.	PIC03014SI: Evolving superior mulberry varieties for temperate region through <i>in vitro</i> mutagenesis.	➤ House observed that mutagen treated callus derived plantlets of mulberry varieties kept for hardening has dried up ➤ PI of the project may reassess the protocol in consultation with earlier PI of the project to reinitiate the regeneration of the plantlets. ➤ Scientist having subject specialization may be associated with the project. [Action: Dr. Pawan Saini, PI]
5.	PIN03018MIC: - Identification of Zinc and Sulphur solubilizing bacteria : A soil reclamation approach for sustainable sericulture in Kashmir region	➤ The progress of the project is found satisfactory. ➤ The PI is advised to continue the work as per milestones. The isolates should be further characterized to find out the beneficial microbes. [Action: Sh. S. Syam, PI]
6.	PIP03017MIC: “Studies on Carbon Sequestration in Mulberry Cultivation Under Different Climatic Conditions”	➤ House suggested that Dr. Plabani Roy, Scientist-B &PI of the project who has been transferred to CSB-CSR&TI Berhampore shall handover the complete charge of the project to CI of the project immediately. However, she can act as Co-PI of the project from CSB-CSR&TI Berhampore. ➤ The house advised PI to collect biomass input calculations (leaf litter, pruned branches) must be carried out systematically to assess carbon sequestration potential accurately. ➤ House suggested that sample fractionation studies (soil organic matter pools, labile, recalcitrant) should be conducted in a timely manner to avoid delays in data

		generation. ➤ The house advised the need for strict adherence to timelines for laboratory and field analyses, ensuring that climatic variations in mulberry cultivation are properly captured. ➤ A letter may be written to Director CSR&TI, Mysore for speedup of the work for southern Indian Condition as per the project milestones. [Action: Dr. Plabani Roy, PI, Sh. S. Syam, CI & Dr Shivam Bharadwaj, CI]
7.	PIE030016SIC: Primary Yield Trial (PYT) of newly evolved mulberry hybrids under temperate conditions of Kashmir Valley.	➤ Progress of the project found satisfactory as per milestones. [Action: Dr. Pawan Saini, PI]
8.	MOE03019SNC: Development of Mulberry Sericulture in Ladakh	➤ House advised the PI to draw a plan for plantation of mulberry plants at Govt. farms and Farmers field as per the milestones of the project. ➤ House suggested to establish the mulberry reserve of temperate origin in Leh and Kargil areas to start the commercial silkworm rearing. [Action: Sh. Gulzar Khan, PI]
9.	PIE03015SIC: Evaluation of drought tolerant mulberry genotypes through preliminary yield trial for rainfed sericulture in Jammu region	➤ Progress of the project found satisfactory as per milestones. ➤ In addition to the ongoing evaluation of test genotypes at RSRS, Jammu station, The parallel evaluation trial may be conducted in the drought prone Kandi area in association with Sericulture Development Department, J&K. [Action: Dr. Santosh kumar Magadam, PI]
Institute as CI		
10.	MTL01025MI: Life cycle assessment of Mulberry silk	➤ House suggested to complete the targets of soil samples, water samples, farmers survey, reelers survey, drying and weaving survey as per milestones and outcome may be presented in next RAC ➤ House advised the scientist to take the green house gas samples and the same to ICAR-IARI, New Delhi for analysis as per routine. [Action: Dr. Pawan Saini, CI]
11.	MTS13002MI: Impact assessment of mulberry sericulture technologies in India	➤ House suggested to complete the project milestones and present the outcome in next RAC [Action: Dr. Shivam Bharadwaj, CI]
12.	SIB01038M GC: Utilization of Japanese Silkworm genetic resources for the development of productive Bivoltine hybrids	➤ House advised the present CI to submit a future breeding programme based on the progress /outcome of the project [Action: Sh. Kumaresan, CSR&TI, Pampore]
13.	MOEQ2022MIC: Vulnerability of Sericulture to Climate Change-in India.	➤ The progress was found to be in line with the milestones. ➤ House suggested expediting the uploading /compilation of survey data and completing all remaining activities. [Action: Dr. Shivam Bharadwaj, CI]

AGENDA NO.6: NEW RESEARCH PROJECTS INITIATED

After obtaining the project code from RCS, Central Silk Board Bangalore. The projects were presented put before the house for approval/ratifications.

#	Project Code and Title	Decision / suggestion of RAC
01	Development of ideal and affordable silkworm rearing houses - SPR03020MNC	➤ A presentation was made by Director CSR&TI, Pampore; House appreciated the efforts made by CSB-CSR&TI, Pampore in collaboration with IIT, Roorkee. ➤ House suggested the information available with RCS, CSB, Bangalore and the documentation made earlier may be taken into consideration. ➤ House ratified the project. [Dr Sardar Singh, Director CSR&TI, Pampore]

AGENDA NO.7: REVIEW ON THE PROGRESS OF ON-GOING DEVELOPMENTAL PROJECTS

1. Project title: Seri Tourism at P-4, Basic Seed Farm, Manasbal to Gurez Valley (Gilgit Sector)– An Ancient Silk Route of India

- i. House appreciated the efforts and recent intervention of Director CSR&TI & Scientist-D, P-4 Basic Seed Farm, Manasbal for shaping up the project.
- ii. House also appreciated the inauguration of the project by Sectary ministry of Textiles, Govt. of India on 9th September-2025.
- iii. House suggested that the progress of the project should be ensured as per the project milestones and make it a model for Seri-tourism.

[Action: Dr. Rajesh Kumar, Scientist D]

AGENDA NO. 8: EXTENSION (ECP) AND OTHER PROGRAMMES

- Progress of Extension Communication Programmes is found satisfactory till date.
- Impact of ECP programmes may be assessed.
- Target for the year 2025-26 may be completed as per action plan.

(Action: Incharge, SEEM Division CSR&TI, Pampore and RSRS Jammu/Sahaspur)

AGENDA NO. 9: TRAINING (CBT) AND OTHER PROGRAMMES:

- Progress of Training programmes is found satisfactory till date.
- Target for the year 2025-26 may be completed as per action plan.

(Action: Incharge, Training Division CSR&TI, Pampore and RSRS Jammu/Sahaspur)

AGENDA NO. 10: CONCLUDING REMARKS FROM RAC MEMBERS

1. Ms. Prerna Sharma, IAS, Director, DoS UP

- The establishment of RSRS, UP by Central Silk Board may be speeded up to cater the large number of seri-farmers in the state as the operational area of CSB-REC Basti is limited and cannot fulfil the R&D requirements of Uttar Pradesh.
- Trainings and extension communication programmes in UP should cover almost all potential sericulture districts and academic and course material booklets regarding trainings may be provided to DoS UP.

- Since UP state is having large number of Districts, CSB is requested to conduct a thorough survey is required to identify most potential ones so that more focus may be given to those districts having good number of sericulture farmers and sufficient mulberry wealth.
- 2. **Dr. Inayat Faazli , Representative, DoS J& K**
 - Farmers of J&K residing in high altitude areas like Gurez, Tulail are facing problems in rearing of double hybrid which are not suitable for low temperature in the area. Hence, rearing with conventional hybrid is required to be taken up.
- 3. **Dr. Kamlesh Bali, Prof. SKUAST-J**
 - He appreciated the team CSB-Pampore for R&D initiatives for sericulture development in Northern States of India.
 - Technologies towards sericulture in shape of Booklet/Technology descriptor should be published.
- 4. **Dr. Abu Manzar, Prof. SKUAST-J**
 - Suggested to constitute a joint committee of CSB-CSR&TI, Pampore and SKUST-K to study the residual effect of pesticides on silkworm before the next RAC.
- 5. **Dr. B. B. Bindroo Ex Director Central Silk Board**
 - There is a need of drought tolerant mulberry varieties in Jammu region. Hence, mulberry varieties (drought tolerant) must be evaluated in Kandi regions of Jammu region.
 - Temperate mulberry varieties sustainable for cold arid regions of UT of Ladakh must be supplied for plantation at framers level.
 - CSR&TI, Pampore should popularize the multiple cocoon crops in North Western India based on the findings of earlier projects.
 - RCS Bangalore may be requested to provide inputs for collaborative project with IIT Roorkee entitled “Development of ideal and affordable silkworm rearing houses”on the earlier documentation of CSB on the subject.
- 6. **Dr Nazeer Ahmad RCS,CSB, Bangalore**
 - Full project of CSR&TI, Pampore in collaboration with IIT Roorkee entitled “Development of ideal and affordable silkworm rearing houses - SPR03020MNC” may be submitted on priority.
- 7. **Prof. (Dr.) Nazeer Ahmed, Chairman, RAC**
 - Submission of new concept notes of research projects should be a continuous process based on the feedback of DoS/SDD and farmers field so that it can be taken by the institute scientifically.
 - All the DoS’s should attend the RAC meeting regularly with the current issues of their respective regions to address them at Institute level scientifically.
 - Chairman suggested exploring the possibilities of popularization of mulberry sericulture in Nubra Valley of Leh under ongoing project for UT of Ladakh.
 - Chairman appreciated the efforts made by CSB-CSR&TI, Pampore for coordination with SRIS, Tashkent Uzbekistan and suggested that the genetic material being exchanged between two Institutes should be meticulously planned and executed.
 - Reasons for low survivability of temperate mulberry genetic resources collected from Tashkent Uzbekistan and transplanted at PEQ facility Dussu, Pampore may be assessed and necessary corrective measures to be ensured.
 - Crosses developed using Japanese silkworm genetic resources have shown stability & promising results. The PI &CI should formulate the detailed future breeding programme for isolation of stable high yielding specific hybrids for Northern India.

Meeting ended with vote of thanks to the chair and all the distinguished RAC members.

Date: 13.09.2025

Sd/-
Prof. (Dr.) Nazeer Ahmed
Chairman, RAC
CSR&TI, Pampore

Annexure-I

List of participants attended 49th RAC meeting of CSR&TI, Pampore

1. Prof. (Dr.) Nazeer Ahmed, Chairman & Former VC, SKUAST-Kashmir. (Online)
2. Ms Prena Sharma (IAS), Director DoS UP.
3. Dr. Sardar Singh, Director& Member Convenor, CSB-CSR&TI, Pampore
4. Dr Abu Manzar, Prof SKUAT-K (Member RAC)
5. Dr B. B. Bindroo, Ex-Director, CSB(Member RAC) (Online)
6. Sh Nazeer Ahmad Saheb, RCS, CSB, Bengaluru.
7. Dr. Inayat Faazli , Representative, DOS J& K (Online)
8. Dr Kamlesh Bali , Prof. SKUAST-J(Member RAC) (Online)
9. Karamjeet Singh(Online)
10. Dr Irfan Illahi Scientist-D, CSR&TI, Pampore
11. Dr Aftab Shabnum Scientist-D, CSR&TI, Pampore
12. Dr. P Kumaresan, Scientist-D, CSR&TI, Pampore
13. Dr Rajesh Kumar Scientist-D, CSR&TI, Pampore
14. Dr Ram Lakhan Ram, Scientist-D, REC, Basti (Online)
15. Dr. Santosh Kumar Magadum, Scientist-D, RSRS, Jammu (Online)
16. Dr. Pawan Saini, Scientist-D, CSR&TI, Pampore
17. Dr. Gulab Khan Rohela, Scientist-D, CSR&TI, Mysore(Online)
18. Sh Gulzar Ahmad Khan Scientist-D, CSR&TI, Pampore
19. Dr Jitendra Singh Scientist-D, REC, Basti (Online)
20. Shri Chattar Pal, Scientist-C, RSRS, Sahaspur (Online)
21. Smt. Asmat Jan A.D Computer
22. Dr. Rita Singh, Scientist-B, REC, Ghumarwin (Online)
23. Sh S. Syam Scientist-B, CSR&TI, Pampore
24. Sh Jagdish Verma Scientist-B, CSR&TI, Pampore
25. Dr Javid-ur-Rehman Scientist-B, RSRS, Jammu (Online)
26. Dr Sakshi Vaishnav, Scientist-B, RSRS, Sahaspur (Online)
27. Dr Arasakumar, Scientist-B, RSRS, Sahaspur (Online)
28. Dr Plabani Roy, Scientist-B, CSR&TI, Berhampore (Online)
29. Sh Mohd Shafi Mir, STA, CSR&TI, Pampore
30. Smt. Jameela Akther, Field Assistant, CSR&TI, Pampore