



**CSB-CENTRAL TASAR RESEARCH AND TRAINING INSTITUTE
RANCHI - 835 303, JHARKHAND**

**MINUTES OF THE 55th MEETING OF RESEARCH ADVISORY
COMMITTEE (RAC) OF CSB-CTRTRI HELD ON 22nd FEBRUARY,
2025 AT CSB-CTRTRI, RANCHI**

The 55th meeting of Research Advisory Committee (RAC) of CSB-CTRTRI, Ranchi was convened on 22nd February, 2025. At the outset, Dr. N. B. Chowdary, Director & Member Convener of RAC extended a warm welcome to the RAC Chairman, Dr. Subhash Chander, Retd. Director, ICAR-National Research Institute for Integrated Pest Management (NRIIPM), New Delhi; Dr. Amit Pandey, Director, ICFRE-IFP, Ranchi; Dr. M.S. Kundu, Retd. Director (Extension), RPCAU, Bihar; Dr. Selvakumar, Director, CSB-BTSSO, Bilaspur; Dr. C.M. Bajpeyi, Retd Director (CSB); Dr. Kolli Jhansi Lakshmi, Scientist-D, RCS, Central Silk Board, Bengaluru; Dr Jyotirmay Ghosh, Principal Scientist, ICAR-NISA, Ranchi and other RAC members, representatives from DOSs, and Scientists of the Institute and its Nested Unit. The list of participants is appended as *Annexure-1*.

The meeting started with introduction of the members of the committee. All the participants including the RAC members and the scientists of CSB-CTRTRI introduced themselves. Opening remarks were given by the Director, CSB-CTRTRI, Ranchi followed by the RAC members as follows.

Dr. N.B. Chowdary extended a warm welcome to all the members of the Committee with his welcome address followed by the opening remarks of the members. He informed that the Institute is working with the sustainable development goals in the context of 17 sustainable development goals that have been formulated by United Nations with 4Ps. Our entire Tasar team is working hard to achieve 4 Ps *i.e.*, Prosperity & Peace for the Public and Planet.

Dr. Subhash Chander, Retd. Director, ICAR-NRIIPM and Chairman, RAC emphasised on the importance of the RAC meeting in giving the right direction to the new research programmes initiated as well as providing appropriate suggestions to the ongoing research to correct the deficiencies if any. He indicated that in order to realize the goal of India becoming a developed country by 2047, the rural economy should be focused on agriculture and allied sectors. Sericulture, particularly Tasar, has more scope for expansion and contribution to rural economy by creating employment. He said that in order to achieve progress in tasar productivity the following points should be taken into consideration:

- Projecting the productivity and contribution of Indian sericulture to the global market is important.
- Should have a good germplasm collection of host plants
- Develop sustainable production practices
- Reducing the cost of production & protection
- Modern techniques and tools of research should be adopted
- Problem-solving research should be the top priority
- The problems in the production value chain should be identified from time to time and research should be initiated on those lines.
- Tasar sericulture should become more competitive and more farmers must be brought into the sector.
- Principal Investigator of the project should be the part of On Station Trial (OST) and On Farm Trial (OFT) for better evaluation and confirmation of the practice/technology.

Dr. Amit Pandey, Director, ICFRE-IFP, Ranchi expressed appreciation to the institute's infrastructure including the incubation centre for PCT and the Central Instrumentation Facility. He also emphasized on the importance of RAC in shaping the research and hoped for a fruitful discussion. He opined that, collective intelligence is required to put the project on right track as per the demand of the stakeholders. He suggested to address the identified key issues through research.

Dr. M.S. Kundu, Retd. Director (Extension), RPCAU, Bihar opined that extension plays a crucial role in the success of technologies. It is important that the extension scientists work with passion in a professional way to achieve the purpose. He also said that the researchers should directly link with farmers for effective technology dissemination. Efforts on marketing the products and by-products should be focused on as it plays important role in sericulture economy. He also added 3Ps i.e., Passion, Profession and Purpose in extension activities to address the 4Ps.

Dr. C.M. Bajpeyi, Ex-Director (Retd.), CSB, pointed out that CSB-CTRITI holds huge responsibility towards upliftment of the poor rural and tribal farmers relying on tasar sericulture. RAC is important to provide right direction to the research activities and as the current meeting has presentations on all three stages of research projects, concluded, new and ongoing and hoped for an interesting discussion.



Agenda No. 1: Confirmation of minutes of 54th Meeting of Research Advisory Committee (RAC) Of CTRTI Held On 31st August, 2024

As no comments have been received from any of the members, minutes of 54th meeting of RAC held on 31st August 2024 at CSB-CTR&TI, Ranchi, were confirmed.

Agenda No.2: Follow up Action on the General Recommendations/ Decisions of the last RAC Meeting

The follow-up actions on the general recommendations/ decisions of the last RAC meeting were discussed. The committee reviewed the action taken on the decisions made during the last RAC and expressed its satisfaction on the follow-up.

Agenda No.3: Follow up Action Taken on the Project Specific Recommendation/Decisions of the Last RAC Meeting

The follow-up actions on the recommendation/decisions of last RAC with respect to projects were discussed along with the progress & findings of the projects and expressed its satisfaction on the follow-up.

Agenda No.4: Review of Concluded projects

Total 03 research projects (including collaborative) were discussed and RAC recommendations/suggestions are as mentioned below:

A. With PI from Main Institute

1. [AIE 04004 CN] Study on existence of tropical tasar silkworm ecoraces and their subsist places with the help of geospatial technology. (In collaboration with NESAC, Shillong) [PI: Dr. I.G. Prabhu, Scientist- D, CSB-CTRTI, Ranchi]

Committee members appreciated the effort of the scientists and gave the following suggestions.

- The gaps if any leftover in the project should be enlisted.
- The utility of the database, which is the outcome of the project, may be ensured through a smaller project or otherwise to fill the gaps.
- Developed App should be user friendly and it is to be demonstrated in next meeting
- Correlate the eco-race data with weather data and include in the final report
- Proper plan to be prepared to utilize the output of the project

[Action: Dr. I. G. Prabhu, Scientist- D & PI]



2. [PPA 04010 CN] Region and season specific selection of pruning and brushing schedule for Tasar food plants and silkworm protection [PI: Dr. Jitendra Singh, Scientist-D, Scientist- D, CSB-CTRTI Ranchi]

The concluded project report was presented by PI of the project. During detailed discussion held among the members, the following suggestions were given.

- The recommendations from the project outcome should be included in the Package of Practice (POP) of Tasar sericulture for the respective regions.
- The benefit : cost ratio may be calculated for the revised recommendation of the practice and included in the final report
- Submit concluded project report in RMIS 10 within a month.
- It was suggested that the PI of the project is to be a part of the OST studies for better evaluation and assessment of the practice

[Action: Dr. Jitendra Singh, Scientist-D & PI]

3. [ARE 04011 MI] Species diversity, assessment of potential loss and management of predatory wasps in Tasar ecosystem [PI: Dr. H.S. Gadad, Scientist-C]

The concluded project report was presented by PI of the project. The committee accepted the Integrated Pest Management Practices recommendation for the management of wasps and gave the following suggestions.

- Committee suggested that poison baiting may be promoted over Bio-control measures as these are not easy to undertake and feasible until further research is carried out in that line.
- Final IPM module/Integrated module to be prepared and included in the final report

Agenda No. 5: New Project proposal for approval (06 no's)

1) Development of Standard Operating Procedure for tasar host plant gene bank and maintenance of the gene bank using cultural package of practices [PI: Mr. Hargopal Dutta, Scientist – B]

The new project proposal was presented by PI of the project and the committee has given the following suggestions-

- The parameters/ management practices to be standardized should be specified and included in the proposal
- Multiple packages need to be tested for optimization and they should be described in the project proposals
- The descriptors for evaluation and characterization of germplasm should be enlisted

- SOP development should be an outcome from the optimization of the package of practices, and title and objectives should be modified suitably.
- PI is advised to review the SOP for germplasm of other tree species before planning the treatments
- Work plan needs to be revised scientifically

[**Action:** Mr. Hargopal Dutta, Scientist – B & PI]

2) Identification of pathogens associated with Tasar host plant diseases and their integrated management [PI: Dr. Shreenath Y.S., Scientist-B]

The new project proposal was presented by PI of the project and it was appreciated the way it was presented. The committee suggested the following-

- The committee opined that the project is a need of the hour and should be carried out meticulously.
- Economic crop losses of Tasar due to plant foliar diseases should be assessed.
- Botanicals chosen for research should be reviewed and revised based on the economics, feasibility of application and existing literature on efficacy against other plant diseases.
- Include Host plant resistance for evaluation and genetic diversity also needs to be studied.
- Pathogen biology and dynamics need to be included in the proposal.
- Morbidity loss needs to be checked and mention expected crop loss due to pathogens.

[**Action:** Dr. Shreenath Y.S., Scientist-B & PI]

3) Exploration of C sequestration potential of *Terminalia sp.* and ways to increase the soil organic C stock [PI: Dr. Aparna Kopparapu, Scientist-C]

The new project proposal was presented by PI of the project and committee suggested the following-

- Suggested to review the international methods of C capture evaluation to ensure all the information required for C trading is generated through the project.
- Role of the Tasar host tree species in water conservation and water budgeting may be explored.
- SOP for C sequestration in Tasar food plant needs to be prepared at the end of the project.

[**Action:** Dr. Aparna Kopparapu, Scientist-C & PI]



4) Recurrent selection for high fecundity line in Tropical Tasar silkworm [PI: Dr. Nidhi Sukhija, Scientist-B]

The new project proposal was presented by PI of the project and committee suggested the following-

- Expected hatchability (%) to be mentioned.
- Disease incidence also to be documented along with rearing parameters.

[Action: Dr. Nidhi Sukhija, Scientist-B & PI]

5) Evaluating the efficacy of identified formulations for the management of virosis in tasar silkworm [PI: Dr. Sruthy K. S., Scientist – B]

The new project proposal was presented by Co-PI of the project and committee considered the project to be of field relevance and suggested the following-

- Evaluation should be rigorous to find the most effective formulation.
- The list of formulations should be included in the project proposal.
- Standard protocols should be followed with proper statistical analysis.

[Action: Dr. Sruthy K. S., Scientist-B & PI]

6) Study on lab to land gaps of tasar technologies in major tasar growing areas [PI: Dr. Vishal Mittal, Scientist-D]

The new project proposal was presented by PI of the project and committee considered the project to be of field relevance and suggested the following-

- The title should be changed to reflect the objectives of the project.
- Along with adoption, effectiveness of technologies in the field should also be recorded.

Agenda No.6: REVIEW OF THE PROGRESS OF ON-GOING PROJECTS: (18 no's)

Total 17 research projects (16 as PI and 01 as Co-PI) were discussed and RAC recommended /suggested as mentioned below:

1. [PIB04009SI] Evaluation of identified hybrids of *Terminalia arjuna* × *T. tomentosa* and drought tolerant *T. arjuna* for their suitability in different tropical tasar silkworm rearing regions [PI: Dr. Aparna K, Scientist-C]

PI of the project presented the progress of the project. The committee took note of the progress and suggested the following-

- Suggested to explore appropriate methods for leaf analysis including those followed for mulberry leaf assessment.

- Undertake study on all the biological characters simultaneously. [Action: Dr. Aparna K, Scientist-C & PI]

2. [ARP04012SI] Developing ectomycorrhizal bio-inoculants for improving survival and leaf yield of *Terminalia arjuna* and *Terminalia tomentosa* [PI: Dr. Aparna Kopparapu, Scientist-C, CSB-CTR&TI, Ranchi]

PI of the project presented the progress of the project. The committee took note of the progress and suggested the following-

- Suggested to record the nursery mortality percentage.

[Action: Dr. Aparna Kopparapu, Scientist-C& PI]

3. [SIP 04022 SIC] Impact of weather change on tasar food plants and silkworm [PI: Dr. Jitendra Singh, Scientist- D, CSB-CTRTI, Ranchi]

Dr. Jitendra Singh, Scientist-D & PI, presented the progress and committee suggested/recommended the following-

- PI was suggested to explore to install free weather stations provided by IMD
- Farmers advisory system needs to be developed.
- The occurrence of hot waves and cold waves should also be documented and if possible, the recommendations to farmers to manage these situations may be documented.
- Climate change is the major issue in tasar culture, therefore, it is advised to conduct experiments using Open Top Chambers (OTCs) and Free-Air CO₂ Enrichment (FACE) experiments to study the impact of climate change on tasar food plants and silkworms under the ongoing project. The OTCs should be established within the ongoing project rather than initiating a new project for this study. Additionally, efforts should be made to establish a FACE facility to facilitate the growth of seedlings and the rearing of silkworms for climate change research. A revised budget may be considered due to the significance of this study for tasar culture.

[Action: Dr. Jitendra Singh, Scientist- D & PI]

4. [PPA 04023 SIC] Identification of suitable package of practices for establishment of *Lagerstroemia speciosa* (Jarul) for quality leaf production [PI: Ms. Susmita Das, Scientist-D, CSB-CTR&TI, Ranchi]

Co-Investigator of the project presented the progress and the committee took note of the progress as the project has been recently initiated. PI ensured implementation of experimentation as per approved methodology and work plan properly.

[Action: Ms. Susmita Das, Scientist- D & PI]

5. [PPA 04024 SIC] **Effect of different plant spacing and pruning heights on chawki leaf productivity of tasar host plants (*Terminalia arjuna*, *T. Tomentosa* and *Lagerstroemia speciosa*) and chawki silkworm rearing** [PI: Dr. Harendra Yadav, Scientist-C]

The committee took note of the progress and suggested that the PI may verify the statistical design and treatment combinations before conducting the ensuing experiment.

[Action: Dr. Harendra Yadav & PI]

6. [ARP04016MI] **Tasar Silkworm Disease Monitoring and Management in North & Central states of India** [PI: Dr. J.P. Pandey Scientist- D, CSB-CTR&TI, Ranchi]

PI of the project presented the progress of the project and the committee suggested to issue recommendations for disease management based on the monitoring from time to time.

[Action: Dr. J.P. Pandey Scientist-D & PI]

7. [AIB 04017 MI] **Selection of Stable Thermo-tolerant line(s) of Tropical Tasar Silkworm *Antheraea mylitta*** [PI: Dr.I.G.Prabhu, Scientist- D, CSB-CTR&TI, Ranchi]

PI of the project presented the progress and the committee suggested the following-

- To test the lines in hotter tropical tasar zones for appropriate evaluation of tasar insect performance.
- To investigate the adaptation mechanism of tasar insect.

[Action: Dr. I. G. Prabhu, Scientist- D & PI]

8. [AIB 04018 MI] **In situ Conservation of Modal eco-race of Tasar Silkworm in Odisha** [PI: Dr. I. G. Prabhu, Scientist-D, CSB-CTR&TI, Ranchi]

The committee suggested to the PI to hasten the administrative part of the project and initiate the technical part of the project at the earliest.

[Action: Dr. I. G. Prabhu, Scientist- D & PI]

9. [AIB04019MI] **In situ Conservation of Raily eco-race of Tasar Silkworm in Chhattisgarh** [PI: Dr. Hanamant Gadad, Scientist-C, CSB-CTR&TI, Ranchi]

The committee suggested to the PI to hasten the administrative part of the project and initiate the technical part of the project at the earliest. It was advised to complete the MoU part on or before 31st March 2025.

[Action: Dr. Hanamant Gadad, Scientist-C & PI]

10. [AIB 04020 MI] **In-situ Conservation of Sarihan Eco-race of Tasar Silkworm in Jharkhand** [PI: Dr. Shantakar Giri, Scientist-D, RSRS, Dumka]

The committee suggested to the PI to hasten the administrative part of the project and initiate the technical part of the project at the earliest. It was suggested to complete the try party MoU part on or before 31st March 2025.

[Action: Dr. Shantakar Giri, Scientist-D & PI, RSRS, Dumka]



11. [APR04015CN] Documentation and Validation of Indigenous Technical Knowledge (ITKs) in Tropical tasar Zone [PI: Dr. Jagadajyoti B., Scientist-D, CSB-CTR&TI, Ranchi]

PI of the project presented the progress of the project. The committee suggested/recommended the following-

- To explore the mechanism of Bhilawa seed extract, whether it is chemical barrier or repellent.
- To identify the chemical compound of Bhilawa seed extract for scientific evaluation of the ITK.

[**Action:** Dr. Jagadajyoti B., Scientist-D & PI]

12. [CEM 04021 MNC] Evaluation of Technologies and Machines Developed in Tasar Post cocoon Technology [PI: Ashu Kumar, Scientist-B, CSB-CTR&TI, Ranchi]

PI of the project presented the progress of the project and the committee took a note of it and suggested the following-

- Possibilities of establishing common facility centres for pre-cooking processes may be explored.
- Steaming time can be increased to reduce the cooking time since over cooking causes bursting of cocoons.

[**Action:** Sh. Ashu Kumar, Scientist-B & PI]

13. [BPC 04025SNC] Management of type II diabetic (T2D) condition through tasar Sericin [PI: Dr. K. Jena, Scientist-D, CSB-CTRTI, Ranchi]

PI presented the progress of the project and the committee suggested to obtain the animal ethical committee approval with proper justification for timely execution of the project.

[**Action:** Dr. K. Jena, Scientist-D & PI]

14. [BPS04026SNC] Studies on nutra-ceutical properties of silkworm pupae oil and development of a low-cost combination of vanya and mulberry pupae meal based feed for carp broodstock, and cultivable aquatic species [PI: Dr. K. Jena, Scientist-D, CSB-CTRTI, Ranchi]

PI presented the progress of the project and the committee suggested to work out nutritional profile of tasar pupae for preparation of high value feed.

[**Action:** Dr. K. Jena, Scientist-D & PI]



EXTERNAL FUNDED PROJECT (DBT, New Delhi):

15. Development of KASP Based SNP Barcoding System for the Molecular Identification of Tropical Tasar Silkworm Eco-races (August 2024 - July 2026) [PI: Dr. I. G. Prabhu, Scientist-D, CSB-CTR&TI, Ranchi]

The committee recommended a comprehensive analysis of the whole genome sequence data of *Antheraea mylitta* to identify and map short reads corresponding to the selected single nucleotide polymorphisms (SNPs). It was further advised to design Competitive Allele Specific PCR (KASP) primers and probes targeting the flanking regions of these SNPs. Additionally, the committee emphasized the importance of optimizing the designed KASP primers and probes to ensure high specificity and efficiency for accurate SNP detection.

[Action: Dr. I. G. Prabhu, Scientist- D & PI]

16. Inflatable mucoadhesive vaginal tablet coin (VTC) for instant spermicidal action as local vaginal Contraceptive and microbicide (August 2024 –July 2027) [PI: Dr. K. Jena, Scientist-D, CSB-CTR&TI, Ranchi]

Dr. K. Jena, Scientist-D & PI, presented the project and the committee suggested to characterize the outer and inner layer of tasar sericin.

[Action: Dr. K. Jena, Scientist-D & PI]

As CIs:

17. [SRP08012MNC] Development of a Rapid Antigen Test Kit for Diagnosis of Cytoplasmic Polyhedrosis in Vanay Silkworms (*Antheraea assamensis*, *A. mylitta* and *A. proylei*) (February 2024 to January 2026) [CI: Dr. Hanamant Gadad, Scientist-C, CSB-CTR&TI, Ranchi]

CI presented the progress made under the project and status of the kit development, and the committee advised to speed up the work and try to validate it upcoming rearing season

[Action: Dr. Hanamant Gadad, Scientist - C & PI]

Agenda No.7: R&D highlights of the Institute (September 2024 to till date):

1. Commercialized technologies viz., 1. TASAR CHAWKI NYLON NET- with M/s BIOSAFE HYGIENE, Ranchi - Jharkhand and FABRICATION OF TASAR SERICIN PURIFICATION MACHINE with M/s BIOSAFE HYGIENE, Ranchi - Jharkhand and & AGRIGENEX (OPC) PVT.LTD, Bhubaneswar-Odisha
2. Published books with ISBN viz. Souvenir Cum Book of Abstracts International Conference on "Emerging Technologies in SILK SECTOR-SILKTECH 2025" & "Technology Descriptor" on the occasion International conference held on February 17, 2025, at Bharat Mandapam, New Delhi.
3. Signed of MoAs/MoUs with DoS, Jharkhand, DoS, Odisha for conservation of sarihan and Modal Ecorace and M/s BIOSAFE HYGIENE, Ranchi - Jharkhand and &

AGRIGENEX (OPC) PVT.LTD, Bhubaneswar-Odisha for commercialization of technology.

4. Organized Five-Day Hands-on Training on Nanopore-Based Transcriptome Sequencing & Data Analysis, held on February 3 to 7, 2025
5. Two 05-days residential Technology Orientation Training Programmes were organized at the institute for 52 officers/officials of Different DOSs like Odisha, Andhra Pradesh, Uttar Pradesh, Maharashtra, Bihar, Odisha, Tasar Development Foundation and Banwasi Seva Ashram, Govindpur, Sonbhadra, Uttar Pradesh.
6. CSB-CTRTI Ranchi concluded one month SAMARTH training on Tasar silk reeling and spinning for 18 women. Besides, three training programmes under SAMARTH are continuing at CTRTI Santhal Pargana Gramodyog Samiti, Bhagaiya for Silk Handloom Weaver (TC SILK 06)-270 hrs (Category-1), CTRTI-CSB Research Extension Centre Champa for Silk Handloom Weaver (TC SILK 06)-270 hrs (Category-1) and CTRTI-Tassar Reeling Centre Basdei Surajpur Vanya Silk Reeling and Spinning (TC SILK 01)-200 hrs (Category-3).
7. Two MoAs were undertaken with Banwasi Seva Ashram, Govindpur, Sonbhadra and with Nari Bikash Sangha, Jhilimili, Bankura, West Bengal for the Establishment of “Sericulture Resource Centre” under CBT Annual Action Plan 2024-25 of CSB-CTRTI, Ranchi.
8. Two 05 days Farmers Skill Training Programmes; were organized by CSB- CTRTI, Ranchi in tasar cultivation for the farmers of Missionaries of Charity, Leprosy Rehabilitation Centre, Radharani Nagar, Ranchi sponsored by this institute and farmers of Nagari-Ranchi and its surrounding areas.
9. A 03 days training programme for 114 Forest Guards sponsored by State Forest Training Institute, Mahilong Ranchi was started at CSB-CTRTI, Ranchi, in which detailed information was provided about the role of Tasar silk industry in conserving the natural environment and forests conducive to Tasar silk production so that better coordination can be established during the commercial production activities of Tasar silk.
10. A 03-day farmer training/exposure visit programme on tasar cultivation for farmers of Sonbhadra, Mirzapur and Jhansi sponsored by the Government of Uttar Pradesh was organised at CSB-CTRTI Ranchi.
11. Eco-race conservation programme is under progress for major eco-races like Raily (RSRS, Jagdalpur), Modal (RSRS, Baripada), Sarihan (RSRS, Dumka), Baraf (REC, Seoni-Champa), Bhandara local (RSRS, Bhandara) & Andhra local (RSRS, Warangal).

Agenda No.8: Trial of Technologies (OSTs/OFTs):

Total 08 technologies (3 OSTs and 5 OFTs) were discussed during the RAC meeting. The committee took note of the progress and suggested that, absolute values with statistics should be presented along with percentage. Benefit cost ratio should be calculated for the OST trials. The list of OSTs and OFTs are given below.



A) On Station Trials (OSTs):

1. Validation of fertilizer packages for leaf nutrition and fecundity.
2. Evaluation of Fertilizers recommendation chart in tasar food plants.
3. Field evaluation of Botanical based repellents against silkworm pests.

B) On Farm Trials (OFTs):

1. Evaluation of cocoonase variant for cocoon softening/degumming and silk surface modification.
2. Evaluation of IPM for control of gall fly.
3. Evaluation of IPM for control of stem borer in tasar food plants.
4. Establishment and popularization of improved accession 102 & 123 of *Terminalia arjuna* and *Lagerstroemia speciosa*
5. Evaluation of egg washing cum disinfection machine for quality Dfl's production.

Agenda No.9: Extension Communication Programmes (ECP) and other programmes

Progress of the Extension Communication Programmes conducted by the nested units was presented to the Committee. The committee took note of the progress.

Agenda No.10: Training Capacity Building (CBT) and other programmes

Progress of the CBT conducted at the Institute and nested units was presented to the committee. The committee took note of the progress.

Agenda No.11: Any other points for discussion- NIL

Agenda No. 12: Concluding remarks from RAC chairperson and members

All the members appreciated the efforts made by the scientists of CSB-CTRTI and its nested units. The comments and suggestions are as follows:

Mr. Manik Kujur, RAC member & Rearer representative with an experience of 10-12 years stressed that nursery seedlings may be distributed with Govt. subsidy.

Mr. Ramadhar Devagan, RAC Members & Reeler representative opined that, cocoon availability due to low tasar production is the main hindrance for the weavers. Machine reeling is associated with higher loss in silk compared to thigh reeling which needs to be addressed.

Dr. D. Chattopadhyay, Scientist-D, RTRS, Malda Appreciated all the R&D projects with special emphasis on the by-product diversification going on in the institute.. He opined that the main problem in adoption of reeling technologies is that high speed reeling demands good cocoons whereas in thigh reeling even low grade cocoons can be used. This problem needs focus.



Dr. Selvakumar appreciated the progress of the projects. Due to collaboration of CSB-CTRTI with CSB-BTSSO farmers are getting benefited simultaneously during evaluation of the developed technologies. Races resistant to virosis need to be developed to sustain tasar productivity.

Dr. C. M. Bajpeyi, Ex-Director, CSB-CTRTI, Ranchi & RAC member congratulated all the scientists for the progress of the institute. He expressed that all the concluded projects came to a logical end and they need to be taken forward appropriately. While proposing new-projects, self-criticism is important to arrive at the right direction and the need for the project should be ensured. The gaps should be spelled out properly. At CSB-CTRTI a healthy ratio of scientists: projects is being maintained.

Dr. J. Ghosh, Principal Scientist, ICAR-NISA, Ranchi appreciated the progress of the projects. He expressed that the projects should continue to focus on mitigating the gaps in the demand-supply chain. Commercial cultivation should be promoted and practices to increase the benefit: cost ratio should be developed. Integrated farming systems should be introduced to increase the farmers income and awareness of the farmers for the technologies is important.

Dr. Jhansi Lakshmi, Scientist-D, RCS, CSB, Bengaluru opined that, while presenting and also while submitting the quarterly reports, quantified results should be given. For promotion and to obtain NAAS rating for IJS, good papers should be submitted by the scientists. While submitting concepts notes thorough literature survey should be done. More research components should be added to the developmental projects.

Dr. M.S. Kundu, Retd. Director (Extension), RPCAU, Bihar opined that, the scientists should update their knowledge regularly by reading at least one research article every week. Institute can try to get benefit from the funds of tribal sub plan for extension activities. The technologies need to be incubated and churned for refining them for the benefit of the farmers.

Dr. Amit Pandey, Director, ICFRE-IFP, Ranchi, expressed that, the rate of adaptability of insects will be higher than the host plants, so while conducting climate change related and diversity related projects, migration to new areas and new host plants should be taken into account. While designing and implementing R&D projects, societal impact should also be taken into consideration.

Dr. N.B. Chowdary, Director, CSB-CTRTI, Ranchi highlighted the importance of research in upliftment of tasar sericulture. He explained that just as agriculture feeds the world, tasar feeds the rural masses of the tasar sericulture states. He expressed that focus of scientists is distracted due to administrative responsibilities. Scientists need to stick to goals to contribute significantly. He thanked all the members for their valuable suggestions and also admired the cooperation of the respected Chairman.

Dr. Subhash Chander, Chairman, RAC Congratulated the Director and scientists and said that the research projects are going in the right path. Research should be of continuous nature; projects should lead to good recommendations and package of practices. In case of new project proposals, proper methodology and complete basic information should be collected by the PI



and should be presented. Proper literature survey should be done in a broad manner. Reorientation of ongoing projects based on recent knowledge should be done. The research results of both the existing and newly developed projects should reach the farmers and in case of technologies not being adopted by the farmers, the lacunae should be identified and improvements to be made.

The meeting ended with a vote of thanks to the chair by Dr. Vishal Mittal, Scientist-D, CSB-CTR&TI Ranchi.

[Dr. Subhash Chander]
Chairman, RAC



Annexure-1

LIST OF PARTICIPANTS IN THE 55th MEETING OF RAC OF CSB-CTR&TI RANCHI HELD ON 22nd FEBRUARY, 2025

CHAIRMAN:

Dr. Subhash Chander, Retd. Director, ICAR-National Research Centre for Integrated Pest Management, New Delhi

MEMBERS

1. Dr. Amit Pandey, Director, IFP, Ranchi
2. Dr. M.S. Kundu, Retd. Director (Extension), RPCAU, Bihar
3. Dr. Jyotirmay Ghosh, Principal Scientist, NISA, Ranchi
4. DR. C. M. Bajpeyi, Ex Director, CTRTI, Ranchi
5. Dr. N.B. Chowdary Director, CSB-CTR&TI
6. Dr. T. Selvakumar, Director, BTSSO, Bilaspur
7. Dr. K. Jhansi Lakshmi, Scientist-D & RCS, Head, Bengaluru
8. Dr. Debasis Chattopadhyay, Scientist-D & Officer In charge, RSTRS-Malda
9. Mr. Ramadhar Devagan, RAC Members
10. Shri Manik Kujur, RAC Members
11. Shri Alok Kumar, ADI (Seri.), DOS, Jharkhand
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