

**MINUTES OF 65<sup>th</sup> MEETING OF THE RESEARCH COUNCIL (RC) OF CTR&TI RANCHI  
HELD ON 13<sup>th</sup> March 2023**

The 65<sup>th</sup> meeting of Research Council (RC) of Central Tasar Research and Training Institute was held on 13<sup>th</sup> March 2023 at the institute under the Chairmanship of Dr. K. Sathyanarayana, Director CTR&TI, Ranchi to evaluate the new project/pilot study proposals and review the ongoing & concluded projects, TOTs, CBT and ECP programmes. List of the participants is appended as Annexure-1.

At the onset, the Chairman welcomed all the scientists and requested them to be crisp and to the point in their presentations. Later the meeting proceeded as per the agenda.

**Agenda No.1: Confirmation of the previous RC Meeting Minutes**

The Minutes of 64<sup>th</sup> R.C. meeting were circulated to the scientists *vide* Email dated 22.02.2023. Since no comments / suggestions were received from any scientist, the Minutes were confirmed.

**Agenda No. 2: Review of action taken of the recommendation / decisions of the previous RC meeting**

Follow up action taken on the decisions made during the previous RC & RAC meetings were reviewed by Director and following observations were made.

**Concluded Pilot Studies**

While reviewing the progress, the Director expressed his unhappiness on non-submission of the concluded pilot study reports, as the said studies were taken up to decide on the new project proposals and also to address the gaps. All the scientists concerned were advised to submit the report by 10.04.2023, without fail.

1. [CTR&TI/SP/PS-19] Design & Development of Tasar Silkworm Pebrine Identification System using Image processing Technique (Jan - Jun 2022)

PI was suggested to procure the material for early development of conveyer belt.

[PI: Ms. Susmita Das, Scientist-D] (In Collaboration with BIT, Mesra, Ranchi)

2. [CTR&TI/HI/PS-21] Carbon dynamics and Carbon sequestration potential of tasar sericulture systems (Jan- Jun 2022)

[Dr. Aparna Koppurapu, Scientist-C]

3. [CTR&TI/SP/BT-25] Intuitive gene annotation of *Antheraea mylitta de novo* whole genome using functional bioinformatics tools (July - Dec 2022)

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

4. [CTR&TI/SI/BT-26] Reveal Insights into the Biology, Genetics and Evaluation of *Antheraea mylitta* through its Whole Genome Sequence (Jun-Nov 2022)

[Dr. I. G. Prabhu, Scientist – C]

## **Evaluation of New Research Proposals**

### **1. Socio-economic impact assessment of tasar sericulture technologies and skill development in major tasar growing areas [PI: Dr. Vishal Mittal, Scientist-D]**

As per the decision of last two RC meetings regarding collaboration of project with Scientist(s) working on socio-economic area, PI had shared the proposal to experts Dr. Pramila Kumar Panda, Assistant Professor, Research & Planning, Xavier Institute of Social Service, and Dr. M.L. Sharma, Professor & Head, Dept. of Agricultural Extension, IGKV, Raipur-Chhattisgarh. But the experts didn't show any interest to collaborate in the proposed project. PI has requested to drop the project due to unavailability of expert in Socio-economic field. Committee agreed to keep the proposal on hold and ask the PI to contact other scientists working in this area.

[Action: Dr. Vishal Mittal, Scientist-D]

### **Capacity building and Training (CBT)**

Committee suggested to Publish a brief report on CBT, ECP and Research highlights every year.

[Action: Training, SEEM & PMCE Divisions]

### **Extension Communication Programme (ECP)**

Chairman suggested to Scientist-C, SEEM division to include the exhibition data like date, place, award and participation certificate etc. in their report.

[Action: Dr.J. Binkadakatti, Scientist -C]

### **Agenda No. 3: New concept notes for approval**

Total 02 Project proposals were evaluated and following decisions were made during the meeting:

#### **1. Inflatable muco adhesive magic vaginal tablet coin (VTC) for instant spermicidal action as local vaginal contraceptive and microbicide**

Dr. (Mrs) Trishna Bal, Assistant Professor, BIT, Mesra- Ranchi presented the new concept on utilization of silk protein for preparation of vaginal contraceptive and microbicide tablets. Chairman recommended the proposal for sending to suitable funding agency following the set procedure.

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

#### **2. Preparation and characterization of Chitosan sheet/ nanofiber mat**

Dr. K. Jena, Scientist-D presented the proposal and committee recommended the concept note to be taken up as pilot study.

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

#### **Agenda No. 4: Review on concluded projects**

##### **Concluded Project (1)**

##### **1. [BPC 04005 SI] Tasar waste to wealth by Cordyceps. (Mar 2020- Feb 2023)**

Dr. K. Jena, Scientist-D presented the concluded project. Chairman appreciated to PI for timely concluding the project, fund utilization and output of the project. Committee suggested to the PI to submit the concluded project report by 10.04.2023 and also suggested to submit the second phase project proposal by 10.04.2023.

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

#### **Agenda No. 5: Progress of Ongoing projects**

##### **1. [PIB 04009 SI] Evaluation of identified hybrids of *Terminalia arjuna* × *T. tomentosa* and drought tolerant *T. arjuna* for their suitability in different tropical tasar silkworm rearing regions. (Oct 2021 - Sep 2026)**

Dr. S. Gandhi Doss Scientist-D and PI presented the progress of project. Committee suggested to PI to ensure supply of sufficient number of saplings of improved accessions/ drought tolerant accessions/ hybrids to proposed centres.

[Action: Dr. S. Gandhi Doss, Scientist-D & PI]

##### **2. [PPA 04010 CN] Region and season specific selection of pruning and brushing schedule for tasar food plants and silkworm protection. (Feb 2022- Jan 2025)**

Dr. Jitendra Singh, Scientist-C presented the progress of project. PI requested for re-appropriation of budget (travel head to contingency head) allotted to CTRTI, Nested Units and BSM&TCs and Committee recommended the same for achievement of target and fund utilization subject to approval of RAC. In view of the transfer of Co-PI & CI from BTSSO, Bilaspur and BSMTC, Kharsawan, the PI requested for inclusion of Dr. Hasansab Nadaf, Scientist-C from BTSSO, Bilaspur as Co-PI and Dr. C. Selvaraj, Scientist-C, from BSMTC, Madhupur as CI.

[Action: PMCE]

##### **3. [ARP 04012 SI] Developing ectomycorrhizal bio-inoculants for improving survival and leaf yield of *Terminalia arjuna* and *T. tomentosa*. (Feb 2022- Jan 2026)**

P.I. presented the progress online. Committee appreciated the PI for her work and achievement.

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

##### **4. [APS 04003 SI] Studies on the reproductive potential of Tasar silkworm *Antheraea mylitta* D with special reference to nutritional and mechanical indices. (Mar 2020- Feb 2023 extended upto Aug 2023)**

Dr. K. Jena Scientist-D presented the progress and committee took note of the progress. PI requested for re-appropriation of budget and the Chairman approved the same subject to ratification by RAC.

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

5. [AIE 04004 CN] Study on existence of tropical tasar silkworm eco-races and their subsist places with the help of geospatial technology.(Mar 2020- Feb 2023)

Dr.Prabhu, Scientist-C presented the progress. The Chainman suggested the PI to fix a meeting with collaborative Institute (NESAC) in last week of April for review the progress of project.

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

6. [ARE 04006 CN] Management of important pests of tasar silkworm *Antheraea mylitta* (D) through botanical repellents.(Apr 2020- Mar 2023 Extended upto Sep 2023)

Dr. Vishal, Scientist-D and CI of the project presented the progress and the Committee took note of the progress.

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

7. [ARE 04011 MI] Diversity, yield loss and management of predatory wasps attacking *Antheraea mylitta* Drury [Feb 2022- Jan 2025)

Dr. Vishal, Scientist-D project presented the progress and and committee took note of the progress. After retirement of Dr. A. H. Naqvi, Scientist-D, CI of the project from CTRTI, PI requested to include the name of Dr. Vishal, Scientist-D as CI in the ongoing project and Committee approved the same, under intimation to CO.

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

8. [CYR 04013 MI] Studies on storage practices of tropical tasar cocoons for better cooking efficiency, reeling parameters and yarn quality. (Feb 2022- Jan 2024)

Mr. D. Chattopadhyay, Scientist-D presented the progress and committee took note of the progress.

[Action: Mr. D. Chattopadhyay, Scientist-D & PI]

9. [BPC 04008 EF] Mass level extraction of sericin from tasar cocoon cooking waste water for its prospective utilization[PI: Dr. K. Jena] (Mar 2021- Feb 2024) (DBT Funded)

Dr. K. Jena, Scientist-D presented the progress of project and committee took note of the progress.

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

10. [MOE 04007 EF] Establishment of Biotech-KISAN Hub at Professional Assistance for Development Action (PRADAN), Deoghar, Jharkhand for three Aspirational Districts of Jharkhand (Godda, Dumka and Pakur) (Mar 2021- Feb 2023 extended up to Aug 2023) Collaborative Project with PRADAN [Co-PI from CTR&TI, Ranchi:]. (DBT Funded)

Dr. J.P. Pandey Scientist-D presented the progress of projectand Committee took note of the progress. The Chairman suggested the PI to organize a workshop involving the collaborative partners and stockholders.

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

- 11. [MOE 04014 MI]** Evaluation and popularization of improved technologies developed in the field of tasar sector for central and north India (On Station/Farmer Trials of CTRTI) [Feb 2022- Jan 2024)

PI of the project presented the progress of project and Committee took note of the progress.

[Action: Dr. Jagadajyoti Binkadakatti, Scientist-C& PI]

- 12. [APR 04015CN]** Documentation and Validation of Indigenous Technical Knowledge (ITKs) in Tropical tasar Zone (Decr-2022 to Nov-2025)

PI of the project presented the progress of project and and committee took note on the progress. Chairman suggested to speed up the ITK's documentation.

- 13. [ARP04016MI]** **Tasar Silkworm Disease Monitoring and Management** (Mar 2023-Feb 2028) [PI: Dr. J.P. Pandey Scientist-D]

Dr. J.P. Pandey Scientist-D presented the progress of project and committee took note of the progress.

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

- 14. [AIB04017MI]** **Recurrent Selection and Multiplication of Thermo-Tolerant Line(s) of Tropical Tasar Silkworm** (Mar 2023-Feb2026) [PI:Dr. I. G. Prabhu, Scientist-C]

Dr. I. G. Prabhu, Scientist-C presented the progress of project and Committee took note of the progress.

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

- 15. [AIB 04018 MI]:** In situ Conservation of Modal Eco-race of Tasar Silkworm in Odisha(March,2023-Dec,2027) [PI:Dr. I. G. Prabhu, Scientist-C]

Dr. I. G. Prabhu, Scientist-C presented the progress of project and committee took note of the progress.

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

- 16. [AIB 04019 MI]:** In situ Conservation of Raily Ecorace of Tasar Silkworm in Chhattisgarh (Mar 2023-Dec2027)[PI:Dr. I. G. Prabhu, Scientist-C]

Dr. I. G. Prabhu, Scientist-C presented the progress of project and and committee took note of the progress.

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

- 17. [AIB 04020 MI]:** In situ Conservation of Sarihan Ecorace of Tasar Silkworm in Jharkhand (Mar 2023-Dec2027)[PI:Dr. I. G. Prabhu, Scientist-C]

Dr. I. G. Prabhu, Scientist-C presented the progress of project and and committee took note of the progress.

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

**18. [BPS 01013 CN]** Utilization and diversification of silkworm pupae products for human & animal consumption and composting. (Oct 2020 - Sept 2022 extended upto Mar 2023)

Dr. K. Jena Scientist-D presented the progress and committee took note of the progress. PI requested for re-appropriation of budget and Chairman approved the same subject to ratification by RAC.

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

**19. [AIT 08006 EF]** Development of lateral flow assay (LFA) kit for diagnosis of pebrine disease in silkworms. (Mar 2021- Augt 2022 extended upto Jun 2023) [Co-PI: Dr. H. S. Gadad, Scientist-C] [DBT Funded SBRL, Bangalore project]

Dr. Jitendra Singh, Scientist-C PMCE, presented the progress of project and Committee took note of the progress.

[Action: Dr. H. S. Gadad, Scientist-C & Co-PI]

**20. MOE9001MI:** Test verification of seed preservation technology developed for Tasar silkworm (*Antheraea mylitta*, D (Jun 2022-Dec 2023)

Dr. J.P. Pandey Scientist-D presented the progress of project and Committee took note of the progress.

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

#### **AGENDA NO. 6: PROGRESS OF PILOT STUDIES/ PROGRAMME OF WORK**

Respective PIs presented the progress of pilot study and Program of work. Committee took note of the progress.

##### **A. Ongoing Pilot Studies**

1. [CTR&TI/SP/ BT/28] "Designing and Fabrication of automated LED light trap emitting light of all wavelength across UV- vis spectra in a single trap" ((Dec 2022 - May 2023) [PI: Dr. S.M. Mazumdar, Scientist-C, BSM&TC, Kathikund]

The Committee took note of the progress.

2. [CTR&TI/SP/ BT/29] "Evaluation of the role of Ceratopogonids (Diptera) a neglected cluser to Tasar silkworms" (Dec 2022 - May 2023) [PI: Dr. S.M. Mazumdar, Scientist-C, BSM&TC, Kathikund]

The Committee took note of the progress.

##### **B. On-going Programme of Work (of continuous nature)**

Respective PIs presented the progress of Programme of Work.

1. [CTR&TI/HPP/POW-02] Farm Management & Developmental works [PI: Dr. H. Yadav Scientist-C]

2. [CTR&TI/SWPT/POW-09] Laboratory production and supply of LSM [PI: J. P. Pandey, Scientist-D]

**AGENDA NO. 7: TRIAL OF TECHNOLOGIES (OSTs/ OFTs)**

Dr. Jagadajyoti Binkadakatti, Scientist-C presented the progress of TOTs. Committee took note of the progress.

[Action: Dr. Jagadajyoti Binkadakatti, Scientist-C]

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

Dr. Vishal Mittal, Scientist-D presented the progress of ECPs. The Committee took note of the progress.

[Action: Dr. Jagadajyoti Binkadakatti, Scientist-C]

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

Dr. Vishal Mittal, Scientist-D presented the progress of CBT. The Committee took note of the progress.

[Action: Dr. Vishal Mittal, Scientist-D& PI]

**AGENDA NO. 10: DISCUSSION ON GENERAL COMMENTS / SUGGESTIONS OF RC/ RAC**

The Chairman suggested scientists to take note of the observations/ suggestions of RAC and incorporate the action taken in the ensuing RAC agenda and explanatory notes.

**AGENDA NO. 11: ANY OTHER POINT WITH PERMISSION OF THE CHAIR**

The Committee felt that all the publications approved by the Member Secretary in principle during his visit on 28.1.2023 to be completed and printed within 2022-23.

The meeting ended with a vote of thanks to the chair.

Place: Ranchi  
Date: 31.03.2023

  
Dr. K. Sathyanarayana  
DIRECTOR

**Annexure-I**

**LIST OF PARTICIPANTS ATTENDED 65<sup>th</sup> MEETING OF THE RESEARCH COUNCIL (RC)  
OF CTR&TI RANCHI HELD ON 13<sup>th</sup> March 2023**

1. Dr. K. Sathyanarayana, Director, CTR&TI, Ranchi
2. Dr. S. Gandhi Doss, Scientist-D, CTR&TI, Ranchi
3. Mr. Sunil Kumar Misro, Scientist – D, RSRS, Jagdalpur (Online mode)
4. Dr. S. Giri, Scientist – D, RSRS, Dumka (Online mode)
5. Ms. Susmita Das, Scientist-D, CTR&TI, Ranchi
6. Dr. J. P. Pandey, Scientist-D, CTR&TI, Ranchi
7. Dr. Vishal Mittal, Scientist-D, CTR&TI, Ranchi
8. Mr. Debasish Chattopadhyay, Scientist-D, CTR&TI, Ranchi
9. Dr. D.I.G. Prabhu, Scientist-C, CTR&TI, Ranchi
10. Dr. Jitendra Singh, Scientist - C, CTR&TI, Ranchi
11. J. Binkadakatti, Scientist - C, CTR&TI, Ranchi
12. Dr. Harendra Yadav, Scientist-C, CTR&TI, Ranchi
13. Dr. H.S. Gadad, Scientist-C, CTR&TI, Ranchi
14. Dr. Aparna K., Scientist-C, CTR&TI, Ranchi (Online mode)
15. Dr. B. Thirupam Reddy, Scientist-C, BSM&TC, Kharsawan (Online mode)
16. Dr. S. M. Majumdar, Scientist-C, BSM&TC, Kathikund (Online mode)
17. Dr. Bawaskar Datta Madam, Scientist – C, BSMTC, Balghat (Online mode)
18. Dr. C. Selvaraj, Scientist – C, BSMTC, Madhupur (Online mode)