PROCEEDINGS OF THE 56th MEETING OF RESEARCH ADVISORY COMMITTEE OF CSR&TI (CSB), BERHAMPORE HELD DURING 17-18 JANUARY 2023

IN DUAL MODE (PHYSICAL / VIRTUAL)

The 56th meeting of the Research Advisory Committee (RAC) of CSRTI (CSB)-Berhampore was held during 17-18 January 2023 in dual mode (Physical / Virtual) to review the progress of R&D projects/programmes under the Chairmanship of Dr. Chirantan Chattopadhyay, Principal Scientist (Plant Pathology), Central Seed Research Station for Jute & Allied Fibres, ICAR: Central Research Institute for Jute & Allied Fibres, Bud Bud, Purba Bardhaman, West Bengal.

At the outset, Dr. Dipesh Pandit, Scientist-D (PMCE) welcomed the Chairman, Members of the RAC (2021-23), Scientists, DoS representatives and other participants to the 56th meeting. After opening remarks from Members, Chairman welcomed all members and The Director, Scientists of the CSR&TI Berhampore to the meeting. He reminded to integrate Breeding and Biotechnology, use advanced tools and techniques in multi-disciplinary mode to improve quality of research through regular interactions with farmers and by visiting mulberry fields; not to use banned chemical pesticides (vide website of the CIB&RC, GoI). He urged upon the CSR&TI Berhampore to discuss the issues of mandate as per the present and future activities, revise them suitably in coordination with CSR&TI Mysore and CSR&TI Pampore through adequate online discussions as per the recommendations of the RCC (Nov 2022). He requested CSB to kindly post young Scientists including Soil Scientists, Agronomists, etc. at this Institute.

List of participants is appended in Annexure–I.

Subsequently, agenda-wise items were taken up for discussion.

AGENDA NO.1: CONFIRMATION OF THE MINUTES OF 55th MEETING OF RAC HELD DURING 04-05 AUGUST 2022 AT CSRTI BERHAMPORE:

As no comments were received from the members of the RAC, the minutes of the 55th meeting of RAC were confirmed.

AGENDA NO. 2: FOLLOW-UP ACTION ON THE GENERAL RECOMMENDATION/ DECISIONS OF THE 55th RAC MEETING

Action taken report on the recommendations of the 55th meeting of the RAC on different projects and activities was presented by Dr. Dipesh Pandit, Sci-D.

AGENDA NO.3: FOLLOW-UP ACTION TAKEN ON THE PROJECT SPECIFIC RECOMMENDATION/ DECISIONS OF THE 55th MEETING of the RAC

Dr. Nirmal Kumar suggested to test for diapause in 12Y breed during Agrhayani and Falguni crops. Dr. Sashindran Nair, NSSO enquired on the large scale DFL production for 12Y x BFC for eastern and NE region. The RAC noted that local production of high quality disease-free seed cocoon was critical for success of silkworm farmers in the Eastern and NE region and suggested to produce the 12Y x BFC DFLs locally to avoid dependence on NSSO Bangalore and (if possible) attempt for financial support (viz., NABARD). The Committee suggested to find availability of seed cocoon, requested monitoring of seed cocoon transport by DoS (concerned State Govts) and possibility to introduce bivoltine seed zone.

Research highlights and follow-up action on 55th RAC recommendations

Dr. Kishor Kumar C.M., Director, CSRTI-Berhampore and Member-Convener, RAC presented the R&D highlights, extension activities, BV-CPP program, transfer of technologies, training activities of the CSRTI-Berhampore (WB) and its nested units located in different Eastern and North-Eastern States since the last meeting of the RAC. The Director emphasized on the necessity of freshly-recruited Scientists based on different subjects / disciplines for the Institute and its nested units.

The RAC suggested that the institute needs to coordinate field activities with selected *KVK*s to include sericulture field activities under village program and to obtain approval from Agricultural

Technology Application Research Institute (ATARI) / ICAR-ADG- Extension to make mandated programs by sorting out the issues related to budget (incl. source) as required for such activities. Budget for collaboration with selected *KVK*s may be included in action plan for approval.

AGENDA NO.4: REVIEW ON CONCLUDED PROJECTS

AIC 02004CN: **Molecular characterization and assessment of the efficacy of low molecular weight peptide isolated from mulberry leaf against flacherie disease of silkworm**

Dr. Pooja Makwana, Sci-C presented the report of the concluded project. On discussion the Committee suggested the following remarks:

1. Large scale bioassay of the selected two AMP peptides to be performed to test techno-economic feasibility. The expenditure involved in the activity was recommended to be met within the available budget and under Director's financial power as per the recommendation by the RAC.
2. Data for survival and traits of cocoon may be generated after bioassay with AMP that needs to be presented
3. Bioassay is to be performed in bivoltine breeds in addition to Nistari.

[Action: Dr. Pooja Makwana, Sci-C]

Pilot Study: Development of mulberry crop schedule for optimal silk productivity in West Bengal.

After detailed discussion, the RAC recommended to close the pilot study and may propose a new project on 'crop reschedule with backward linkage (P3-P2-P1) in concurrence with DoS, West Bengal and to consider the increased leaf yield and spacing (2 ft x 2 ft) therein.

[Action: Dr. Suresh. K, Sci-C]

AGENDA NO.5: NEW RESEARCH PROJECTS FOR APPROVAL: Nil

The aspect of no proposal for new research projects was discussed. Scientists were encouraged to propose new projects for immediate consideration.

AGENDA NO.6: REVIEW OF THE PROGRESS OF ON-GOING PROJECTS:

MULBERRY BREEDING & GENETICS SECTION

PIE 02002 SI: Evaluation of performance of mulberry genotype C-9 under red and laterite soils

PIB02010SI: Final yield trial of promising high yielding mulberry genotypes for Eastern and North-Eastern India

Dr Suresh. K (PI) presented the progress of the two projects. The progress was as per schedule of activities. The Committee advised to record rainfall data in rain-fed area in terms of availability of soil moisture.

[Action: Dr. Suresh. K, Sci-C]

PIE 13001MI: All India Co-ordinated Experimental Trial for Mulberry Varieties (Phase –IV)

Dr Suresh. K (PI) presented the progress. The Committee suggested to identify incidence of thrips and other insect-pests and diseases in the respective mulberry fields with help of concerned Scientists.

MOE 02014SI: Popularization of improved technologies developed in the field of mulberry sector for Eastern & North-Eastern India.

Component I: Popularization of new mulberry varieties (C-2038, Tr-23/BC259 & C-2028)

Progress of the project is as per milestone. No specific comments were made.

[**Action: Dr. Suresh. K, Sci-C]**

PIB 02007 SI: Improvement of mulberry leaf longevity in Eastern and North Eastern states of India

Dr**.** Deepika, Sci-C presented the progress which is as per milestone.

1. On discussion, the Committee suggested to perform toxicity test of different treatments on silkworms.
2. The best combination may be identified by performing Multiple-trait analysis for field testing.

[Action: Dr. Deepika, K.U., Sci-C]

MOE 02015MI: Evaluation of improved technologies developed in the field of mulberry sector for Eastern & North Eastern India

[Component I: Evaluation of High Yielding & Bacterial leaf spot resistant mulberry variety C-2070]
Dr Deepika, Sci-C presented the progress which is as per milestone. No specific comments were made.

[Action: Dr. Deepika, K.U., Sci-C]

Component II: Evaluation of High Yielding and Low temperature stress tolerant varieties C-2060 & C 2065
Dr Suresh, Sci-C presented the progress which is as per milestone. No specific comments were made.

[Action: Dr. Suresh, K., Sci-C]

Component III: Low Cost Drip Fertigation system for mulberry
Dr. Yallappa Harijan, Sci-C presented the progress which is as per milestone. No specific comments were made.

PIE 02013SI: Final yield trial (FYT) of newly identified mulberry genotypes for leaf productivity and quality
Dr. Yallappa Harijan, Sci-C presented the progress which is as per milestone. The Committee advised to provide data for potential yield of the variety.

[Action: Dr. Yallappa Harijan, Sci-C]

PPA 02005SI: Optimization of spacing and nutrient dose for newly developed high yielding mulberry variety C 2038 under irrigated condition
Dr. Yallappa, Sci-C presented the progress of the project that was as per schedule. Professor D. Basu advised to use Duncan Multiple Range Test or Tukey's test for analysis.

[Action: Dr. Yallappa, Sci-C]

PIB 03013SI: Development of high yielding quality mulberry (*Morus* spp.) genotypes under sub-tropical conditions of Northern India (Coll. with RSRS-Jammu)
Dr. Yallappa, Sci-C presented the progress of the project that was as per schedule

[Action: Dr. Yallappa, Sci-C]

APS 02020MI: Improvement of seed crop productivity in West Bengal
(in collaboration with DoS, West Bengal and NSSO)
Dr. Satadal Chakraborty, Scientist-D & PI presented the progress, which has been appreciated by the house and expressed that the project is for self-sufficiency and independence of the state for multivoltine (Nistari) and bivoltine (SK6 x SK7) seed cocoon generation. The project can solve the problem of seed cocoon generation of West Bengal, to produce required quantity of multi x bivoltine dfls, which is a long-pending problem of the state. After detailed discussion, following suggestions were made:

1. Primary data to be collected through survey through preparation of questionnaire duly discussed among the Scientists of the CSR&TI Berhampore

2. Include P1 seed farmers from North Bengal

[Action: Dr. Satadal Chakraborty, Sci-D]

MULBERRY PROTECTION SECTION
(Collaborative projects with other CSB institute- as CI)
ARE01028MI: Recommendation of novel fungicidal and insecticidal application for mulberry
Mr. Khasru Alam, Sci – C, (Co-PI) presented the progress. The Committee queried on the management of powdery mildew and leaf spot and suggested to find the LD_{50} and bio-efficiency of the fungicide after discussion with CSRTI, Mysore. Further it was suggested to discuss on the regulation for usage with an Agricultural University, follow regulations of IRAC and fine tune the procedures accordingly, before recommending the product through generation of appropriate data for label claim.

[Action: Mr. Khasru Alam, Sci – C]

MOE 02014SI: Popularization of improved technologies developed in the field of mulberry sector for Eastern & North-Eastern India.
Component II: Popularization of Bio-control Agents for the management of mulberry pests
Dr. Khasru Alam, Sci-C presented the progress. Chairman queried on parasitization data. Professor Varatharajan advised a protocol to assess the parasitization of *Chrysoperla* on thrips.

[Action: Mr. Khasru Alam, Sci – C]

AIB 02006 MI: Improvement of Nistari lines for survival and Silk productivity
Dr. Ranjita Devi, PI presented the progress which was as per milestones. The committee suggested the following:

1. To present data for different traits for the Generation 1 (G0) to G13 for all the seasons. A separate presentation can also be made for favorable and unfavorable seasons to appreciate the seasonal influence on the different traits.
2. Develop hybrids from improved Nistari and find heterosis.
3. To perform next Generation sequencing of G0 and G13 samples for Improved Nistari (Marked) and Improved Nistari (Plain) to understand genetic variability. A similar approach can also be undertaken among different lines of Nistari viz., Debra, Marked, Plain and Chalsa to assess changes at the genome level.
4. To segregate G13 population into two: One population has to be subjected to directional selection and the second population without selection, to evaluate selection pressure on the traits.

[Action: Dr. Ranjita Devi, Sci – C]

AIE 02018SI: Identification of superior Bivoltine foundation cross as a male component to improve cross breed productivity in E & NE India
Dr. N. Chandrakanth, Sci-C, PI presented the progress under the project.
The Committee suggested the following:

1. To present data for different traits viz., survival, cocoon weight, shell weight, shell ratio and evaluation index.
2. To improve the MV parent, collect oval breeds from KSSRDI/ APSSRDI/ CSGRC & other sources.

[Action: Dr. Chandrakanth N, Sci – C]

AIB 01009MI: Evaluation of New Bivoltine Double Hybrid, TT21 x TT56 at Farmers Level for Authorization for Commercial Exploitation (Coll. of CSRTI - Mysore)
Dr. Chandrakanth, PI presented the progress under the project that was as per schedule. No specific comments were made.

[Action: Dr. N. Chandrakanth, Sci-C]

AIT 02012CI: Characterization of mulberry silkworm, *Bombyx mori* L. mutants for tolerance to flacherie syndrome through genome editing tools (DST-JSPS project)
Dr Pooja Makwana, PI presented the progress under the project that was as per schedule. The Committee advised to use bivoltine race in addition to multivoltine races for genome editing. Reconstitution of IBSC, registration of Institute is over and approval for IBSC by the DBT (GoI) is pending.

[Action: Dr. Pooja Makwana, Sci-C]

AIT 02008 SI: Identification of high humidity tolerant silkworm breeds/hybrids for Eastern & North-Eastern India
Dr. Ravi Raj, PI presented the progress under the project that was as per schedule. Expression analysis of candidate genes has been presented. The Committee advised to find the correlation of candidate gene expression with heat tolerance

[Action: Dr. Ravi Raj, Sci-C]

AIB 02019MI: Development of bivoltine double hybrids suitable for different regions of India
Dr. Ravi Raj, PI presented the progress. He informed that RSRS, Manipur is included for experimental rearing for the North East region as per suggestion of the RAC and Dr. Somen Singh, Sci D is the Associate for that region. After discussion, the Committee advised the following:

1. To test for homozygous markers associated with stress tolerance traits in more numbers of individuals.
2. Collect data on segregations, phenotypic and genotypic data and send to the Project Coordinator.

[Action: Dr. Ravi Raj, Sci-C]

Pilot study: Establishment of pilot plant for production of pharmaceutical grade sodium copper chlorophyllin from silkworm feculae
Dr. Mihir Rabha, Sci C presented the progress and explained the results obtained from Mass spectrometry and NMR analysis. Due to the presence of several impurities, extraction of Pharmaceutical grade chlorophyllin may not be economically feasible. However, the Committee suggested to discuss with Biochemists in detail.

[Action: Dr. Mihir Rabha, Sci-C]

AIT 08005MI: Development and evaluation of Bidensovirus resistant silkworm hybrids developed from marker assisted breeding lines-Phase II (Coll. of SBRL- Kodathi)
Dr. Mihir Rabha, Sci C presented the progress and informed that the project will be concluded in February 2023 as per schedule. The Committee suggested to develop a kit to identify viral and bacterial flacherie at field level.

[Action: Dr. Mihir Rabha, Sci-C]

MOE 02014SI: Popularization of improved technologies developed in the field of mulberry sector for Eastern & North-Eastern India.

Component III: Popularization of eco-friendly disinfectant, NIRMOOL
Dr. Mihir Rabha, Sci C presented the progress under the project that was as per schedule.

Component V: Popularization of Sampoorna
Dr. Mihir Rabha, Sci C & CI presented the progress under the project that was as per schedule.

MOE 02015MI: Evaluation of improved technologies developed in the field of mulberry sector for Eastern & North Eastern India

Component IV: Evaluation of Eco-friendly Silkworm Rearing Bed Disinfectant Seri-Win

Dr. Mihir Rabha, Sci C & CI presented the progress under the project that was as per schedule.
The Committee advised to present the economics of Sampoorna.

[Action: Dr. Mihir Rabha, Sci-C]

SEEM DIVISION
Dr. Srinivasa G briefed the work and extension activities undertaken by the Division

MOE 02011EF: Development of Seri-Entrepreneurship in chawki Rearing [NABARD-Funded project]

MOE 02014SI: Popularization of improved technologies developed in the field of mulberry sector for Eastern & North-Eastern India.

Component IV: Popularization of Chawki, Shoot/Shelf rearing & plastic collapsible mountages
Dr. Shafi Afroz, Sci C presented progress of two projects and is as per schedule.

1. The Committee enquired / suggested the following:
2. To explore the possibility to perform sericulture activity through Farmer Producers' Organizations (FPOs) under different KVKs
3. Advised to extend CRC for other Districts with DoS support
4. Plan an exposure visit of prospective farmers from other Districts to the CRC unit in Murshidabad

MTS 13002 MI: Impact Assessment of Mulberry Sericulture Technologies in India
(Project Co-ordinator: Dr. S.M. Moorthy, Scientist-D, RCS, Bangalore)

Dr. Shafi Afroz, Co-PI presented the progress under the project that was as per schedule.
The Committee suggested to undertake Impact assessment using new statistical technologies.

[Action: Dr. Shafi Afroz, Sci C]

MOT 02016EF: Seri-Entrepreneurship Development in Aspirational Districts of North-Eastern India (DBT funded)
Dr. Parameswaranaik PI presented the progress under the project that was as per schedule. He explained various activities performed in both the aspirational districts (Dhalai dist. of Tripura and Chandel of Manipur). Professor D. Basu suggested to conduct a one-day 'follow up' training for the same batch of trained farmers to assess the problems/ issues facing the farmers under EDP program.

[Action: Dr. Parameswaranaik, Sci C]

MTL 02017CN: Study on sericulture based IFS in hilly region of West Bengal
Dr. Harish Babu PI, RSRS, Kalimpong presented the progress under the project that was as per schedule. After discussion the following suggestions were made by the Committee

1. To perform economic assessment
2. To identify the level of integration, linkage and gap
3. To seek KVK help for collection of data and analysis and for improving integration
4. Compare between seri-based and non- seri-based farmers

[Action: Dr. Harish Babu, Sci C, RSRS, Kalimpong]

Training Activities
Dr. Parameshwarnaik, Training Co-ordinator explained the different programs undertaken by the Division. No specific comments were made. He requested for one Assistant in the section on contractual basis, which was recommended by the RAC within the framework of rules of the CSB.

[Action: Dr. Parameshwarnaik, J., Training Co-ordinator]

ANY OTHER POINTS FOR DISCUSSION

1. Revision of budget of the project MTL 02017CN: Budget reduced from Rs.4.60 lakh to Rs.4.10 lakh was approved by the RAC.

The Director presented a report on Challenges and Opportunities in Sericulture in East and NE region. The Director informed the house that the issues will be discussed with Directors of all other Sericulture Institutes, RAC Chairmen, Professor Deshpande, RCS Section, Director (Tech) and RAC members to crystallise the aspects appropriately.

General comments:

- Do suitable Statistical analyses
- Make index of different parameters (technology combinations) and short list the best combination for utilization
- Dr. Moorthy suggested to identify seed zone region specific for BV in West Bengal.
- Modify the title of the projects according to the objectives wherever it is mismatching.
- Keep Nistari with original traits and basic population should not be improved. The committee suggested to collect bench mark for different traits before sanctioning any project.
- Budget should contain yearly budget and expenditure for the current year
- On utilization of funds, the RAC suggested to adjust the amount among Recurring Heads under the allotted budget with approval of The Director, CSR&TI, Berhampore.
- The RAC suggested to perform silkworm rearing using different combinations of technologies for bioassay and statistical analyses.
- The CSR&TI Berhampore should discuss the issues of mandate as per the present and future activities, revise them suitably in coordination with CSR&TI Mysore and CSR&TI Pampore through adequate online discussions as per the recommendations of the RCC (Nov 2022). Mandate of the Institute may be finalised to three - four bullet points and sent to CSB for approval.

Comments from RAC Members

Professor R. Varatharajan

1. Appreciated the work progress and presentation and lab to land programs

Professor Somnath Bhattacharya

1. Focus on rain-fed area and soil changes for improvement of mulberry
2. Collect area-wise cocoon productivity data from West Bengal
3. Year-wise budget for each project to be presented
4. Statistical analysis, mean ± SD, graphs, chart to be included

Dr. K. Sashindran Nair, NSSO, CSB

1. Avoid over-dependence on NSSO at CSB for large-scale production of DFLs
2. True hybrids may be developed suitable for the regions
3. For Seed cocoon production, DoSs (respective State Govts) are to be requested

Dr. S. Manthira Moorthy, RCS, CSB

1. Assess the impact of technology on seed farmers
2. Do mid-term corrections of the projects when required
3. More viable concepts to be developed and submitted

Professor Debabrata Basu

1. New Statistical tools to be used based on data structure
2. Techno-economic process to be made in project mode for execution
3. Assess gender-related issues in Sericulture

Dr. S. Nirmal Kumar

1. Standard bench mark value to be noted for mulberry and silkworm before initiating the project

2. To be more vigilant about field requirements by visiting the field regularly through interactions.
3. Cost of production of 1 kg cocoon to be analyzed for MV/ BV and ICB breeds.
4. Value chain intervention for beneficial linkages may be worked out.

Dr. B. T. Srinivas, Director (Tech)

1. Suggested to address the developed breeds which have not been used
2. Silk Samagra to be implemented successfully through DoS in different states.
3. Inform Commissioner, Sericulture to represent the Commissionarate in RAC meetings for interactions

Dr. Chirantan Chattopadhyay, Chairman

1. The Chairman suggested to update information on newly developed fertilizers and applications. A lecture by an expert on this aspect may be arranged in *on-line mode* for all the Sericultural Institutes which will be coordinated by RCS as informed by Dr. S. Manthira Moorthy, Sci.- D.
2. Suggested for training of young Scientists at ICAR NAARM on research project management.
3. Suggested to integrate Breeding with Biotechnology or work in multi-disciplinary mode
4. Advised Scientists not to use banned pesticides and instead use listed alternatives (CIBRC).
5. Advised Scientists to think "out of the box" ideas to meet the Sericulture requirements
6. Advised Scientists to develop and submit new viable concepts

Meeting ended with Thanks to Chair

Minutes **APPROVED**

28 Feb 2023

Dr. Chirantan Chattopadhyay, Chairman

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IN DUAL MODE (PHYSICAL / VIRTUAL)

LIST OF MEMBERS WHO ATTENDED THE 56th MEETING OF RESEARCH ADVISORY COMMITTEE (RAC) HELD during 17-18 Jan 2023

#	NAMES	DESIGNATION
1	Dr. Chirantan Chattopadhyay	Chairman, RAC
2.	Dr. Somnath Bhattacharya	Professor, BCKV, Member
3.	Dr. R. Varathaarajan	Professor, Manipur University, Member (Virtual)
4.	Dr. Debabrata Basu	Professor, B.C.K.V., Member
5.	Dr. S. Nirmal Kumar	Ex. Director, Member
6.	Dr. B.T. Srinivas	Director (Tech), C.O.-Bangalore, Member
7.	Dr. Sasindran Nair	Scientist-D, Rep. Director(NSSO), Bangalore, Member
8.	Shri Surajit Chaudhury	DDS, MSD, Rep. Commissioner, Govt. of W.B., Member
9.	Dr. Kishor Kumar C.M.	Director, CSR&TI, Berhampore, Member Convenor
10.	Dr. S. Manthira Moorthi	Scientist-D, RCS, C.O.-Bangalore
11.	Dr. Dip Kumar Gogoi	Scientist –D, RSRS, Koraput
12.	Dr. Kartik Neog	Scientist –D, RSRS, Jorhat
13.	Dr. Srinivasa G.	Scientist –D (SEEM), CSR&TI, Berhampore
14.	Dr. A. R. Pradeep	Scientist –D, CSR&TI, Berhampore
15.	Dr. Dipesh Pandit	Scientist –D(PMCE), CSR&TI, Berhampore
16.	Dr. Satadal Chakraborty	Scientist –D, CSR&TI, Berhampore
17.	Dr. N. Chandrakanth	Scientist- C, CSR&TI, Berhampore
18.	Dr. K. Rahul	Scientist- C, CSR&TI, Berhampore
19.	Dr. Suresh K.	Scientist- C, CSR&TI, Berhampore
20.	Dr. Pooja Makwana	Scientist- C, CSR&TI, Berhampore
21.	Dr. Shafi Afroz	Scientist- C, CSR&TI, Berhampore
22.	Dr. Raviraj, V.S.	Scientist- C, CSR&TI, Berhampore
23.	Dr. Parameshwar Naik	Scientist- C, CSR&TI, Berhampore
24.	Dr. Mihir Rabha	Scientist- C, CSR&TI, Berhampore
25.	Dr. Deepika Kumar Umesh	Scientist- C, CSR&TI, Berhampore
26.	Dr. Yallappa Harijon	Scientist- C, CSR&TI, Berhampore
27.	Dr. Ranjitha Devi	Scientist- C, CSR&TI, Berhampore
28.	Shri. Khasru Alam	Scientist- C, CSR&TI, Berhampore
29.	Dr. Harish Babu, S.	Scientist- C & I/c, RSRS, Kalimpong
30.	Ms. Lipika Mardi	Project Assistant, SEEM Division
31.	Md. Anowar Hossain	Project Assistant, SBG Section
32.	Mrs. Shahnaz Khatun	Project Assistant, Mulberry Protection Section
33.	Ms. Susmita Devi	Project Assistant, Training Division
34.	Ms. Y. Surjalata Devi	Project Assistant, Biotechnology Division
35.	Mrs. Nilofer Yasmin	JRF, Biotechnology Division
36.	Md. Sahin Hossain	JRF, Mulberry Protection Section
37.	Smt. Mahua Chattopadhyay	Sr. Tech. Asst.
38.	Sri Subrata Sarkar	Sr. Tech. Asst.
39.	Smt. Subhra Karmakar Mustafi	Sr. Tech. Asst.

Meeting was arranged in dual mode (Physical & Virtual)

ABSENTEE:

1. Sri Bikash Chandra Roy, Rearers' Representative, Member
2. Md. Salauddin Momin, Reelers' Representative, Member
3. The Director, DoS Tripura, Govt. of Tripura, Member
4. Director, DoS, Manipur, Govt. of Manipur, Member