

केन्द्रीय रेशम बोर्ड CENTRAL SILK BOARD (वस्त्र मंत्रालय, भारत सरकार Ministry of Textiles - Govt. of India) केरेबो कॉम्प्लेक्स, बी टी एम लेआऊट, मडिवाला CSB Complex, BTM Layout, Madiwala बेंगलूरु Bangalore - 560 068

सं No.केरेबो CSB-31/2 (Action Plan)/2020-21/RCS

दिनांक Date : 08/04.2020 E-mail/ Speed Post

To
The Director/ Officer-in-Charge
CSR&TI Mysuru / Berhampore / Pampore
CTR&TI Ranchi / CMER&TI Ladoigarh /
CSTRI Bengaluru / CSGRC Hosur /
SBRL Kodathi / SSTL Kodathi / NSSO Bengaluru
BTSSO, Bilaspur / MSSO/ ESSO Guwahati

Madam/Sir,

Sub: Minutes of the Annual Action Plan meeting for the year 2020-21 held on 24/25th February 2020 – reg.

With reference to the above cited subject, please find herewith attached the minutes of the Annual Action Plan meeting of CSB R&D Institutes and Seed Organizations for the year 2020-21 held on 24/25th February 2020 for perusal and needful action.

You are hereby requested to submit the progress of physical and financial achievements made against the targets fixed for the year 2019-20 (as on 31st March 2020). Also, please submit the revised Annual Action Plan for the year 2020-21 based on the decisions taken during the said meeting and also the first meeting of the Core Committee of CSB Directors held on 25.02.2020. You may please submit both the progress for 2019-20 and the revised Annual Action Plan for the year 2020-21, latest by 30.04.2020. Item-wise budgetary provisions proposed for infrastructure creation/maintenance and purchase of equipment/ instruments etc., may please be furnished, which would form basis for approvals during 2020-21.

Further, you are requested to furnish detailed Action Taken Report (ATR) on the decisions concerned to your R & D institute/ seed organization may be submitted by 30th June 2020.

Encl: as above

Dr R.K. Mishra) Director (Tech)

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Copy for information and needful to:

- 1. Director (Finance), CSB, Bengaluru.
- 2. Joint Director (Admn.), CSB, Bengaluru
- 3. Scientist-D, Seed Cell, CSB, Bengaluru
- 4. Scientist-D, CBT, CSB, Bengaluru
- 5. Deputy Director (Finance), CSB, Bengaluru
- 6. Deputy Secretary [Tech], Technical Cell, CSB, Bengaluru
- 7. Assistant Director (Publicity), CSB, Bengaluru

(Dr R.K. Mishra)

Director (Tech)

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MINUTES OF THE ANNUAL ACTION PLAN MEETING OF CSB INSTITUTES AND SEED ORGANIZATIONS HELDON 24TH AND 25TH FEBRUARY, 2020 AT CO, CSB, BENGALURU

The Annual Action Plan Meeting of Central Silk Board for the year 2020-21 was convened on 24th and 25th February 2020 at Central Silk Board, Bengaluru. Dr. R. K. Mishra, Director (Tech) welcomed the Chairperson, Shri. Rajit Ranjan Okhandiar, IFS, Member Secretary, Central Silk Board and the participants to the meeting. The list of participants is appended as *Annexure-I*. He informed the house that the current years' annual action plan meeting is more strategic and important in view of the proposed National Silk Policy and expectations of Ministry, there on.

In his opening remarks Shri.Rajit Ranjan Okhandiar, IFS, Member Secretary welcomed all the participants to the annual action plan meeting 2020-21 and stressed for better quality of the research projects with better field utility of the project outcome through systematic TOTs. In view of the decreased number of field units of CSB, reduced extension manpower with DOSs, he also sought the inputs from the Extension Divisions/ field units of CSB institutes in devising alternative extension support systems *viz.*, role of para-extension workers, community resource persons in mega clusters/ Seri- Producer Organizations, involving KVKs wherever possible etc. Member Secretary advised the Directors of CSB institutes to act on the following issues.

- 1. To ensure PMCEs and Research Council (RC) of CSB Institutes to be more pro-active in order
 - a) to have field interface while conceptualizing the research projects, with equal focus on conventional systems of breeding and maintenance of germplasm/ silkworm breeds,
 - b) forging collaboration within and outside CSB besides industrial collaboration.
 - maintain timelines for proposing/ revision of concept notes, seeking/ incorporating referee comments/ recommendation of RAC, submission of periodical reports & final report, and
 - d) to have proper system of taking ahead research output on retirement/ transfer of scientists, proper accounting and budget utilization on research, analysis/ documentation of research contribution to raw silk production etc.
- 2. To come out with research ideas for horizontal expansion through utilization of watershed and forest lands with tree-based cultivation, package of practices for host plant management including soil/ water conservation practices, field disinfection w.r.t. vanya sector, prophylactic measures etc.
- 3. To explore external funding opportunities in research and technology development, Smart Sericulture, Product Development Cell etc. For example, for development, validation & pre-commercialization of products/ technologies provision under PACE (Promoting Academic Research Conversion to Enterprise) and "i4" (intensifying the Impact of Industrial Innovation) of BIRAC (Biotechnology Industry Research Assistance Cell) can be tapped. However, set procedure for approval may be followed for all external funded/ collaborated projects.
- 4. Directors to review the manpower availability (scientific, administrative, technical and TSFWs) at institute & its field units and propose reorganization (including

retrenchment and utilization of suitable TSFWs in testing/ office works) besides handing over of infrastructure, in light of closure/ merger of units.

Action: All CSB Institutes & RCS

Dr. R. K. Mishra, Director (Tech.) briefly presented the progress on research projects initiated/ concluded by CSB institutes during 2019-20 and the observations of the RCS. He informed that against the target of 50 research projects to be initiated during 2019-20, only 26 projects were coded till January 2020. Institute-wise details on number of scientists per research project, concept notes submitted/ approved by RCS, delay in conclusion etc., were discussed. Further, Dr. K. Sathyanarayana, Scientist-D, RCS presented the ATR on the decisions taken during the last Annual Action Plan meeting held on 5th & 6th March 2019, following decisions were taken in this regard.

a) **GENERAL**:

5. As per the CCEA instructions, the number of RSRSs/RSTRSs should be 20. Institutes were requested to again review the functioning of RSRS, with them and based on the need or justification of continuation or closure of RSRSs/RSTRSs may be proposed.

Action: All CSB Institutes

6. As research publications do not commensurate with number of scientists and also projects handled, scientists in research institutes shall regularly publish the research outcome in NAAS rated/ National and International journals with high impact factor. However, those in seed organizations and field units may publish more popular articles. Establishment Section may consider these criteria while reviewing/ grading the APARs and during FCS.

Action: All CSB Institutes/ Seed Organizations/ Estt. Section

7. Towards reducing the production costs, CSB institutes shall work on mechanization in collaboration with Engineering colleges/ IITs in the field of host plant cultivation, silk worm rearing, seed production *viz*. shoot harvester cum binder, escalator type of arrangements for shoot racks for ease in feeding and bed cleaning, collapsible shoot rearing racks, automation of disinfection and cleaning activity, electric dusters for dusting of bed disinfectants, drones for spraying/ dusting, insect/ pest control etc.

Action: All CSB Institutes

8. Details of field impact of top ten technologies developed from institutes in the last two decades, which are contributing the most for increase in production, improvement in quality and reduction in cost of production with Benefit: Cost Ratio shall be furnished to CO, CSB for further appraising MoT.

Action: All CSB Institutes

9. To assess the importance/ justify the existence of the CSB Institutes, it was decided to document the details on status of technologies developed since inception of the institute, list of technologies still in field/ being popularized, technologies patented/ commercialized vs year-wise royalty/ proposals to defer payment of annuity, impact of technologies from institutes in field etc., and furnish the same to CO, CSB by 30.4.2020, besides uploading in the institutes' website. If required, the firms which awarded the license to be inspected to check the production particulars, randomly.

Action: All CSB Institutes

10. Water requirement for production of 1 kg silk fabrics vis a vis other natural fibres viz., cotton, jute etc., to be worked out so as to document the environmental sustainability of silk production. For the purpose, institutes may compile the research outcome on water use efficiency w.r.t. to mulberry and host plants of vanya silkworms, total water utilized for producing one kg of leaf (plantation till harvest), water requirement from leaf to cocoon production and from cocoon to fabric with all major process options.

Action: CSR&TI, Mysuru, CTR&TI, CMERTI & CSTRI Bengaluru

11. CSB institutes/ Seed Organizations shall submit the success stories/ best practices and also report on conduct of various field programmes to the Publicity Section at CO, CSB for its submission to PTI and national level newspapers.

Action: Publicity Section, CSB

12. On the lines of National Rural Livelihood Mission (NRLM), a panel of Seri-Resource Persons (Retired scientists and technical staff) with their willingness needs to be prepared and submitted to CO, CSB latest by 30thApril, 2020, for their deployment at national as well as international levels, as per requirement.

Action: All CSB Institutes

13. An inventory with the available major equipment/ machinery (each costing Rs. 50000/- and more) available with respective institutes to be prepared, to be uploaded on institutes' website, and also submit the details to CO, CSB latest by 30th April, 2020. This shall improve the utility of high-end equipment/ machinery besides avoiding its purchase at other institutes.

Action: All CSB Institutes

14. To review functioning of the Sericulture Resource Centers (SRCs) developed previously periodically in the RC/ Extension Officers Meeting and report the progress. These should be used for facilitating farmers training/ creating awareness among them.

Action: All CSB Institutes

15. To explore possibilities of commercialization of technologies through all available options including NRDC.

Action: All CSB Institutes

16. Directors/ Officer in-charges to review scientist-wise output and furnish a detailed report to CO by 30.04.2020.

Action: All CSB Institutes

b) **INSTITUTE SPECIFIC:**

i) CSR&TI, MYSURU:

- 1. To review the progress made with regard to development of protocol for production of medically fit quality mulberry cocoon and furnish the status by 30.04.2020.
- 2. To keep in mind the cost of the ALA (Alpha Linoleic Acid) extracted from other sources and also identify suitable industrial partner for commercialization of ALA from silkworm pupae latest by 30.04.2020, which is being patented.

- 3. Utilization/commercialization of project output from the proposed research project on utilization of silkworm pupa for human and animal consumption (including pupae oil) with other organizations/ institutes shall be integral part with proper MoU, benefit sharing with justifiable project cost.
- 4. To provide the soft copy and five hard copies of already published success stories to all the CSB Institutes/ seed organizations enabling them to go for similar publications, immediately.
- 5. To include the following under OST for the year 2020-21.
 - ➤ Validation of chawki feed supplement formulation (CFSF) in chawki rearing at RSRSs and also at private CRC
 - ➤ Validation of the M-LAMP technology in both mulberry and vanya sectors in co-ordination with NSSO, CTR&TI/ BTSSO and CMERTI/ MSSO/ESSO.
 - ➤ Evaluation of three Bivoltine hybrid combinations viz. D2xCSR50, DUN18xCSR16, N6xN7 & 2CxS8 along with checks with minimum of 20000 dfls for each combination and complete the trials before December, 2020 so as to include them for authorization trials.
- 6. To include the following under OFT for the year 2020-21.
 - ➤ Evaluation of improved Pure Mysore PM-04 line for productivity and silk quality along with checks at BSF of DoS Karnataka and cross breeds at farmers' level.
 - Evaluation of NPV tolerant hybrids CSR52NxCSR26N & (CSR52NxS8N) x (CSR16NxCSR26N) along with checks.
- 7. To complete printing and distribution of Soil Health Cards (SHCs) by 30.04.2020 and publish success stories/ experience sharing with regard to SHCs in Indian Silk.
- 8. To address the extension needs in view of shortage of extension staff, institute may devise a viable model of new/ private extension mechanism with mega clusters as Sericulture Resource Centers, for adoption by DOSs with required customization. The detailed structure, requirement of staff/ resource persons, modality of functioning, other modern and sophisticated facilities etc., shall be submitted to CO latest by 30.04.2020.
- 9. Training Hostel at CSRTI, Mysuru should be renovated with all modern/ hi-tech facilities, besides upgrading RECs with all training materials and facility for video conferencing.
- 10. To submit the proposal for establishment of Central Instrumentation Laboratory, Incubation Centre & Facility for Start-Ups at CSRTI, Mysuru to CO, CSB latest by 30.04.2020.

ii) CSR&TI, BERHAMPORE:

- 1. Charka reeling unit/ machine vetted by CSTRI (SCTH, Malda) and CSR&TI, Berhampore to be evaluated to avoid repetition and also to decide on its suitability to West Bengal and similar conditions and further popularization.
- 2. To focus on introducing an additional silkworm crop during the lean period in North and North Eastern India to increase the silk production and also to improve income generation at farmers' level.

- 3. To actively collaborate to bring out the automatically controlled rearing houses in project mode (together with CSR&TI Pampore) to promote multiple crops in East and North East India, with industry participation, wherever possible.
- 4. To include the following under OST for the year 2020-21.
 - Evaluation of thermo-tolerant double hybrids along with check
 - > Evaluation of High yielding and Bacterial Leaf Blight resistant varieties along with check
 - ➤ Validation of eco-friendly disinfectant NIRMOOL.
- 5. To include the following under OFT for the year 2020-21.
 - > Evaluation of BHB double hybrid along with check
 - > Popularization of C-2038 mulberry variety

iii) CSR&TI, PAMPORE:

- 1. To conduct a detailed enquiry on shortfall in achieving the objectives under the project ARP 3607 Development of antibody-based biosensor for early and rapid detection of silkworm viruses at chawki rearing centres, which was concluded by Feb, 2020, fix the responsibility against the concerned and furnish detailed report by 30.04.2020.
- 2. To immediately publish "Hand Book on Sericulture" with focus on North and North-West India on the lines of the publication brought out by CSR&TI, Mysuru for South India.
- 3. To introduce new & renewable energy use, shoot rearing with collapsible mountages and also address the field problems in North and North-West India through suitable extension programmes, in collaboration / association with State Govt.
- 4. To actively collaborate to bring out the automatically controlled rearing houses/ low-cost rearing houses and engineering solutions for mechanization in collaboration with CBRI Roorkee/ IIT Kharagpur on project mode (together with CSR&TI Berhampore) to promote multiple crops in North and North west India, with industry participation, wherever possible.
- 5. To include 'Validation of package and practices for autumn rearing through fortification of Mulberry leaf' under OST for the year 2020-21.
- 6. To include the following under OFT for the year 2020-21.
 - Demonstrations of root rot disease management of mulberry at farmer's level in Kashmir
 - Development of agro-based model of mulberry tree cultivation with pruning technologies

iv) CTR&TI, RANCHI:

1. Immediate action needs to be taken on various issues raised by CO, CSB on serious lapses in execution of the R&D projects at CTR&TI, Ranchi by fixing the responsibilities after detailed enquiry by the Director.

- 2. To adopt and validate conveyor type mother moth examination instead of manual/ one to one moth examination and also PVS for pebrine detection in mulberry, muga and eri sectors for its efficacy.
- 3. To expedite installation of conveyer system of cocoon drying at RMB premises in collaboration with CSTRI.
- 4. To take up detailed study to check on volume of transactions by RMB, if transaction of pierced cocoons from BSMTCs is stopped. Further, as marketing is not mandatory function of CSB, handing over of operation of Raw Material Bank (RMB) to any active Producer Institution/ NGO may be explored at the earliest. Detailed Report in this regard shall be submitted by 30.06.2020.
- 5. Continuation of Raw Material Bank (RMB) should be re-assessed because marketing is not CSBs role. RMBs role can be given to some other agency/ outsourced or it can be reoriented, latest by 30.06.2020.
- 6. To include the following under OST for the year 2020-21.
 - > Validation of chemical trap for Ichneumonid wasp,
 - > Evaluation of IPM for control of gall fly
 - ➤ Validation & popularization of cooking package developed for three eco-races
 - Establishment and popularization of new improved Tasar host plant accessions 102 & 123.
- 7. To include the following under OFT for the year 2020-21.
 - Evaluation of biotic factor management using light reflector paints to reduce erratic and delayed emergence
- 8. Evaluation of application of neem based pesticides for control of bark eater & testing of Pebrine visualization solution need not be taken up as OFT, as these are proven and hence need to be commercialized.

v) CMER&TI, LAHDOIGARH:

- 1. To support raising of eri perennial food plants and eri silkworm rearings at both ESSPC Hosur and SSTL Kodathi so as to take up experimental rearing.
- 2. To take up research project on grainage performance of muga silkworm fed on various food plants separately and in combination, in collaboration with MSSO.
- 3. To take up OSTs/ OFTs involving MSSO, Guwahati for early popularization of the technologies developed by the institute.
- 4. To bring out Hand book on Sericulture (Muga and Eri) on priority basis.
- To produce required quantity of Oak Tasar seed at Imphal, to support the Oak tasar sector and as decided in last meeting plan transfer of oak tasar silkworm seed production to BTSSO.
- 6. To include the following under OST for the year 2020-21.
 - Validation of new disinfection formulation for controlling flacherie disease,
 - Testing of semi-synthetic diet for early stage rearing of muga silkworm in CRC mode

- > Validation of microbial formulation for reclamation of oil contaminated soils
- ➤ Evaluation of two eri (YP X GBZ & GBS X GBZ) and two muga silkworm breeds (CMR-1 & CMR-2) so as to include them for authorization trials
- > Validation of two ITKs for higher muga cocoon yield.
- > Validation of LED light traps for control of muga insect pests
- > Validation of use of Sodium hypocholorite for seed treatment against tiger band disease of Oak tasar silkworm
- > Validation of use of PET bottles for uzi trap in Oak tasar silkworm
- Establishment and popularization of new breed C-27 among farmers
- 7. To include the following under OFT for the year 2020-21.
 - Popularization of Eri host plants Borpat Ailanthus grandis,
 - Popularization of Eri host plants Kesseru morphotypes HF 005 & HF 008
 - > Evaluation of INM package for castor
 - > Evaluation of Beneficial gut microflora in muga silkworm rearing
 - > Evaluation of new eri cocoon opener
 - > Evaluation and popularization of eri egg incubation device

vi) CSGRC, HOSUR:

- 1. Institute should come out with more research publications, commensurating with the number of projects concluded.
- 2. The targets proposed under revenue generation for the year 2020-21 is less than 2019-20, which needs to be reworked.
- 3. To complete the printing of compendium on cataloguing of new accessions and the SOPs within 30.06.2020.

vii) CSTRI, BENGALURU:

- 1. CSTRI should come out with research projects within 3 to 6 months, in association with IISc/ IITs etc on use of artificial intelligence (AI) in the post cocoon sector *viz.*, sex separation at cocoon level with a non-destructive method to promote male cocoon reeling, non destructive method of detection of the silk in fabrics etc.
- 2. CSTRI should develop a web-based reporting mechanism for data collection & functioning of the ARMs in the country and furnish consolidated report to CO, every quarter.
- 3. To take up a study on harmful effects of Hydrogen Peroxide use in silk industry on human beings and also on soil microflora, physical and chemical properties.
- 4. To complete installation of conveyer cocoon drying machine at RMB, Chaibasa within 30.06.2020, positively with CTR&TI, Ranchi.
- 5. To publish outcome of the research projects with industry use *viz.*, crease recovery, etc., in textile journals of international reputation, exhibit at national and International

- textile exhibitions/ expos to commercialize the same, collaborate with fashion houses like BIBA/ marketing teams to improve the marketability of project outcome etc.
- 6. RSTRSs should take up adaptive research projects on the requirement in the respective zones, test/ fine-tune the project outcome of the main institute through ToTs, collect information/ status of various technologies in field, field needs and other market related issues in the states under jurisdiction and report to CSTRI every quarter. RSTRSs in vanya sector to carryout detailed study on the status of functioning of various machines supported under CDP/ CSS in the last two decades, record the research gaps/ field requirements and furnish the state-wise reports by 30.06.2020. Performance evaluation of Buniyad machine in Tasar sector to be studied.
- 7. To have focused research in PCT of vanya sector in collaboration with the concerned institutes, on priority.
- 8. To include the following under OST for the year 2020-21.
 - > Popularization of eco-degumming machine, Sericin extraction & technology
 - > Validation of quality improvement of silk degumming and dyeing
 - > Popularization of yarn finishes for handloom weaving units
 - > Field programme on application of sericin finish
 - > Validation of High Temperature High Pressure (HTHP) for cooking

viii) SBRL, KODATHI:

- 1. It was decided in the Core Committee of CSB Directors meeting that all the biotechnology related projects of the R & D institutes will be in collaboration with SBRL only and required basic research work viz., breeding, pathology etc., shall include in the work plan of other collaborating R & D institutes so as to have better field relevance of the projects in the field of biotechnology.
- 2. SBRL to coordinate OST with RSRS Imphal on the use of sodium hypochlorite as disinfectant of eggs to control of tiger band disease in Oak tasar silkworm.
- 3. SBRL should consolidate the output of the projects for developing technologies/breeds for field utilization.

ix) SSTL, KODATHI:

- 1. SSTL need not take up field activities, other than technology demonstration programmes, once it is popularized.
- 2. To include the following under OST for the year 2020-21.
 - > Validation of muga silkworm seed & seed cocoon preservation in selected SSPCs and RSPs, by involving MSSO units
 - Large scale testing of application of Mulberry volatiles for enhancing egg laying in *Bombyx mori L*. at SSPCs Bangalore, Hosur and Vijayapura
 - ➤ Validation & fine tuning of the two year seed preservation schedule for bivoltine seed of the silkworm *Bombyx mori* L and to be conducted with a sizable quantity of seed both at parental and hybrid level

x) NSSO, BENGALURU:

- 1. To review the reasons for stagnation in silkworm seed production by DOSs, though the same by RSPs is picking up along with strategy to meet the gap in seed production. State-wise analysis shall also be made to find out the reason for low uptake of dfls by rearers/reduced demand for silkworm seed from the States.
- 2. Study shall also ascertain the reasons for not taking up of sericulture activity by the farmers, though the cocoon rates are high.
- 3. To take up multiplication of Nistari in the state of West Bengal itself.
- 4. To work in coordination with DOS West Bengal to generate entire requirement of seed cocoons, which are being supplied at present by NSSO, from south and may not be possible to continue from 2020-21.
- 5. To initiate measures to improvise the existing scale suction (vacuum pump cleaner) developed by CSRTI with required modifications, in collaboration with the institute.

xi) BTSSO, BILASPUR:

1. Action has to be initiated for collecting the DCB arrears of the earlier years.

xii) MSSO/ESSO GUWAHATI:

- 1. As there is no separate entity for ESSO, MSSO and ESSO may be given one single name *viz.*, M & ESSO on the lines of CMERTI.
- 2. MSSO to share the software programme developed for monitoring of DCB arrears with NSSO & BTSSO.
- 3. RSP concept of muga sector can also be adopted in Eri sector.
- 4. Justification for awarding construction to parties other than CPWD has to be supported with proper documents and the said party shall be part of the list of authorized construction agencies as per GFR.
- 5. A detailed proposal for cocoon transport vehicle along with justification including the detail of expenditure incurred for transportation during the past three years may be submitted to CO for consideration.

xiii) TRAINING/CBT:

1. A DO letter to be written to Ministry of Textiles for setting-up of targets under SAMARTH for the year 2020-21.

c) ANY OTHER POINTS:

- 1. Seed Cell, CSB shall ensure a communication from the Secretary (Textiles) to the Chief Secretaries of States, where DCB arrears are long due.
- 2. Short films/ videos on technology transfer to be prepared by all the Institutes in coordination with Publicity Section, CO, CSB. Similarly, coverage of the ECP programmes/ ToT activities on AIR & Doordarshan shall be taken up by the institute with the support of Publicity Section of CO CSB.

- 3. Institutes shall process the proposals under Capital Head in the first quarter itself for speedy processing and approvals within the second quarter to avoid year-end rush in clearances. In view of the shortcomings in proposals, administrative staff of institutes may be given refresher training at an interval of 4-5 months by the Finance Section to ensure proper submission.
- 4. Institutes shall present the impact of technologies evolved by them to DoSs in RAC and other meetings for their popularization besides including them in the developmental schemes including state plan schemes, convergence proposals viz., RKVY, MGNREGS etc.
- 5. Institutes shall submit the final progress for the year 2019-20 and also revised Annual Action Plan with revised targets for research projects, TOTs, ECPs, CBT, budget proposal etc., latest by 30.04.2020 to CO, CSB. Based on the above, Finance wing of CSB shall communicate the BE to all institutes with a copy to RCS.
- 6. CSB institutes shall bring out Handbook on Sericulture in English language for their respective zones/ sectors on the lines of Handbook published by CSR&TI Mysuru, as per the template to be circulated by the Publicity Section with due approval of CO, CSB.
- 7. To harness potential of the young scientists, institutes may bring out publication of books and propose innovative R&D project proposals.
- 8. Details of KVKs in their command zone and possible collaboration for seri extension and training besides other supports shall be explored by the institutes and communicated to CO latest by 30.4.2020.
- 9. Efforts should be made to ensure continuous (round the year) engagement of producers in the entire value chain and by promoting Producer Institutions/ Organizations in vanya sector. Needful infrastructure/ support to be provided for Cocoon/ Yarn Bank for which interested Producer Institutions/ Organizations need to be identified.
- 10. As decided in the Core committee of CSB Directors meeting held on 25th Feb., 2020, the institute wise number of ECPs to be conducted for the year 2020-21 along with number of participants and budget per event is appended as *Annexure –II*. The institutes shall include the same in the Action Plan document.

The outgoing Officers on superannuation during February and March, 2020, Dr. Alok Sahay, Director, CTRTI, Ranchi, Dr. B.Choudhury, Scientist-D, MSSO, Guwahati and Dr. Ranjana Das, Scientist-D, CMERTI, Lahdoigarh were felicitated by the Member Secretary and their services to the board were remembered on the occasion.

The meeting ended with thanks to the chair.

(Rajit Ranjan Okhandiar) Member Secretary & Chairman

Place: Bengaluru Date: 09.04.2020

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LIST OF PARTICIPANTS IN THE ANNUAL ACTION PLAN MEETING HELD ON 24TH & 25TH FEBRUARY, 2020 AT CO, CSB, BENGALURU.

- 1. Shri. Rajit Ranjan Okhandiar, IFS, Member Secretary, CSB, Bengaluru
- 2. Dr. Narendra Rebelly, IRS, Director (Finance), CSB, Bengaluru.
- 3. Dr. R.K.Mishra, Director (Tech) & Director, NSSO, Bengaluru
- 4. Dr. V. Sivaprasad, Director, CSR&TI, Berhampore
- 5. Dr. Subhas Naik, Director, CSTRI, Bengaluru
- 6. Dr. Alok Sahay, Director, CTR&TI, Ranchi.
- 7. Dr. Pankaj Tewary, Director, CSR&TI, Mysuru
- 8. Dr. Sukhen Roy Chowdhury, Director, CSR&TI, Pampore
- 9. Dr. B. Choudhary, Scientist-D & In-charge, MSSO, Guwahati
- 10. Dr. Ranjana Das, Scientist-D & In-charge, CMER&TI, Lahdoigarh
- 11. Dr. Sashindran Nair, Scientist-D, NSSO, Bengaluru (For Director, NSSO)
- 12. Dr. K.M.Ponnuvel, Scientist-D, SBRL, Kodathi (For Director, SBRL)
- 13. Dr. Somprakash, Scientist-D, CSGRC, Hosur (For Director, CSGRC)
- 14. Dr.M.S.Rathore, Scientist-C, BTSSO, Bilaspur (For Director, BTSSO)
- 15. Dr. K. M. Vijayakumari, Scientist-D, SSTL, Kodathi

Board Secretariat:

- 16. Shri.A.Manoharan, Joint Director (Finance), CSB, Bengaluru
- 17. Dr. C. M. Bajpeyi, Scientist-D, CSB, Bengaluru
- 18. Dr. K. Sathyanarayana, Scientist-D, RCS, CSB, Bengaluru
- 19. Shri.H. Rudranna Gowda, Scientist-D, CSB, Bengaluru.
- 20. Shri. Joy N John, Scientist-D, CSB, Bengaluru
- 21. Dr.P.Kumaresan, Scientist-D, CSB, Bengaluru.
- 22. Shri. S. Nazeer Ahmed Saheb, Scientist-D, RCS, CSB, Bengaluru
- 23. Dr. Prashanth Sangannavar, Scientist-C, RCS, CSB, Bengaluru
- 24. Shri.R.K.Sinha, Assistant Director (Publicity), CSB, Bengaluru

Other Participants:

- 25. Dr.S. Manthira Moorthy, Scientist-D, CSR&TI, Mysuru.
- 26. Dr. Jalaja S. Kumar, Scientist-D, RSRS, Kodathi.
- 27. Dr.P.Sudhakar Rao, Scientist-D, SSTL, Kodathi
- 28. Dr.Reeta Luikham, Scientist-D, CMER&TI, Lahdoigarh.
- 29. Dr.M.Maheswari, Scientist-D, CSGRC, Hosur.
- 30. Shri.R.Ranganatha, Assistant Director (A&A), SBRL, Kodathi.

Annexure-II

Proposed ECPs for 2020-21 for CSB institutes

Institute	Krishi Mela / Reelers mela cum exhibition	Farmers Field Day	Awareness programme	Enlightenment programmes	Workshop/ Seminars & Conferences	Total program mes
	No. of	No. of	No. of	No. of events	No. of events	
CCD OFFI	events	events 30	events 10 at RSRSs	10 at RSRSs	1 at main	193
CSR&TI, Mysuru (5 RSRSs & 17 RECs)	1 at main 5 at RSRSs		68 at RECs	68 at RECs	1 at mam	193
CSR&TI, Berhampore (3 RSRSs & 9 RECs)	1 at main 3 at RSRSs	18 (6 events/ RSRS)	6 at RSRSs 36 at RECs	6 at RSRSs 36 at RECs	1 at main	107
CSR&TI, Pampore (2 RSRSs & 6 RECs)	1 at main 2 at RSRSs	12 (6 events/ RSRS)	4 at RSRSs 24 at RECs	4 at RSRSs 24 at RECs	1 at main	72
CTRTI, Ranchi (6 RSRSs & 4 RECs)	1 at main 6 at RSRSs	36 (6 events/ RSRS)	12 at RSRSs 16 at RFCs	12 at RSRSs 16 at RECs	1 at main	100
CMERTI, Lahdoigarh (2 RSRSs &3 RECs)	1 at main 2 at RSRSs	4 (2 events/ RSRS)	4 at RSRSs 12 at RECs	4 at RSRSs 12 at RECs	1 at main	40
CSTRI, Bengaluru (5 RSTRS & 9 STSCs)	1 at main 5 at RSTRSs		10 at RSRSs 36 at RECs	10 at RSRSs 36 at RECs	1 at main	99
SSTL, Kodathi	-	2	4	5	-	11
NSSO, Bengaluru	-	-	10	-	-	10
BTSSO, Bilaspur	-	-	18	, see	-	18
MSSO, Guwahati	1	10	10	() w	1	22
ESSO, Guwahati	1	3	3	-	-	7
Total	31	115	283	243	7	679

And the state of the second se	Krishi Mela/ Reelers mela cum exhibition	1.5		Technology demonstration Enlightenment programmes	n/Workshop/ Seminars & Conferences
No. of farmers	400-500	50-100	50-10)	20	100
Unit cost (Rs. lakhs)	2.50	0.07-0.15	0.05-0 10	0.01	2.00

Note: Krishimela at RSRSs with 200-300 farmers at L. 1.25 lakh budget