

**Central Silk Board,
Bangalore-560068**

**Minutes of Joint Coordination Committee Meeting for NER held at
Guwahati on 18th November 2016**

The Joint Coordination Committee (JCC) meeting for NER was held under the Chairmanship of Dr Nagesh Prabhu, Member Secretary, Central Silk Board on **18th November 2016** at Hotel Brahmaputra Ashok, Guwahati. The list of participants is appended at **Annexure-A**.

At the outset the Chairman welcomed all the Members & Invitees for the meeting. He informed the house that the basic objective of the JCC meeting is to have holistic review of the silk sector in North Eastern Region and to improve the coordination among CSB and State for the overall development of the silk sector. He expressed that the JCC for NER is being held after a period of around 2 years and 10 months and deliberation in the meeting should bring the conspicuous change for the development of the silk industry in the region. He stressed the need to assess impact of the various initiatives introduced under CDP / CSS and NERTPS schemes to support the Mulberry, Muga, Eri and Oak Tasar sector and review the progress made for raising the systematic plantations, infrastructure development in seed and post cocoon sectors, private participation in seed production, technology development & transfer in pre-& post cocoon sector and disease monitoring mechanism for productivity enhancement, implementation of convergence programme, conservation of Vanya silkworms, and raw silk production achieved so far by the different States during 2015-16 and 2016-17 and also to assess reasons for shortfall, if any along with preparedness of State Sericulture Department, to achieve the raw silk production targets of the 2016-17.

He further emphasized that Govt of India has funded around 22 development project under NERTPS and fund flow to the silk sector has tremendously increased and as such, larger responsibility lies on the States to successfully implement these projects to achieve production and productivity goals assigned for NER States. Thereafter threadbare discussions were held on Agenda Items and following decisions were made:

Item No. 1: Confirmation of the minutes of the last JCC meeting held on 21.1.2014 at Kolkata

Since, no comments were received from any quarters, the minutes of last JCC meeting held on 21.1.2014 at Kolkata were confirmed.

Item No.2: Follow-up action on the decisions taken in the last JCC meeting held at Kolkata on 21.01.2014.

States presented Action Taken Report on the follow up actions of the last JCC meeting held at Kolkata on 21.01.2014, which were discussed in details and following decisions were taken to further follow up by the concerned departments.

Manipur:

- I. The mulberry silk production in Manipur has gradually declined from 243 MT in 2013-14 to 147 MT in 2015-16 in spite of greater support extended to the State under CDP and NERTPS programmes. Manipur State to address the lapse in the implementation of said programmes and submit a detailed Action Plan for arresting decline in the mulberry raw production in the State.

(Action: DOS, Manipur)

Oak Tasar:

- II. As regards Oak Tasar, Govt of Nagaland informed that the State has reared 2600 dfls during 2015-16 and produced 48,000 cocoons. State has informed that the Kikruma farm is in dilapidated condition and need renovation. State also requested to train 6 of its staff in grainage activity to utilize 192 ha of Oak plantations available in Farms.
- III. Govt of Mizoram informed that State has one Oak Tasar Farm at Champhai and reared 1000 dfls obtained from RTRS, Imphal during 2015-16 and produced 20,000 cocoons. The first crop was successful and second crop failed due to Uzi infestation.
- IV. Arunachal Pradesh informed that state has reared 200 dfls obtained from RTRS, Imphal in Dhirang farm during 2015-16. Rearing has failed.
- V. RTRS has informed that 42,340 dfls were produced by the Institute during spring 2016 and supplied to State Govt, ASR and NGO for multiplication. Institute has preserved around 2.48 lakh seed cocoons in its grainage from which around 50,000 dfls (basic) shall be produced for rearing in Spring, 2017.
- VI. It is observed that States like Manipur, Nagaland and Mizoram are not multiplying the basic seed supplied to them by RTRS, Imphal and the seed cocoons produced are dried and used for production silk yarn instead of multiplying the seed stock for rearing. Chairman opined that there is huge requirement of Oak Tasar silk yarn in the country which is being presently imported from China and advised State Govt to prepare Action Plan for promotion of Oak Tasar Industry in their state for providing livelihood and employment to the poor people in remote areas of the NER States.
- VII. It is observed that RTRS Imphal should take more proactive steps for optimum utilization of Oak Tasar resources in the region. Considerable improvement is required for providing extension support.**

(Action: DOSs of Manipur, Mizoram and Nagaland, RTRS, Imphal, Director, CSTRI, Ranchi)

Seed Zones

- VIII. It is observed that the except Mizoram, other states are yet to identify and document the seed zones and strictly use them for raising seed crop by following seed crop protocol. MSSO should document the specific seed zones for Muga and Eri in consultation to all the concerned NER states within two months. State to follow raising of seed crops in the seed zones only and contain disease by conducting disease monitoring on regular basis.

IX. All State Govts to implement Silkworm Seed Act and expedite registration of Chawkie Rearing Centers, Adopted Seed Rearers (ASRs) and Private Graineurs. Regional Office of CSB shall coordinate with all the NER States to complete the registration formalities within two month and conduct Awareness programme. MSSO & R.O. Guwahati to compile list of seed zones for all sectors, Chawkie Rearing Centers, Adopted Seed Rearers (ASRs) and Private Graineurs. Disease management protocols should be strictly followed and additional manpower (Sericulture graduates/ Diploma holders in sericulture) required can be contracted utilizing CSB funds allotted.

(Action: All DOSs of North Eastern States, MSSO, Guwahati & R.O., Guwahati)

Conservation of Wild Muga silkworm

X. It is observed that in spite of repeated reminders, no substantial work has been done for conservation of Muga silkworm in wild except identification of some sites. Chairman advised Director, CMER&TI, Lahdoigarh to expedite the process for entering into MOU between State Department of Sericulture (s), concerned Forest department of State and CMER&TI. Director, CMER&TI to submit details **Management Plan for Wild Life Sanctuary** to Central Office latest by 31st December, 2016.

(Action: DOSs, Assam, Ar Pradesh, BTC and Meghalaya; Director, CMERTI, Lahdoigarh & R.O., Guwahati)

Popularisation of C-2 Eri Breed

XI. Most of the States informed that C-2 Eri breed performs very well during Spring and Autumn crops, however the performance of the breed during summer and rainy season is not very encouraging. Chairman advised Director, CMERTI, Lahdoigarh to examine the issues of the breed during summer and rainy season and improved the breed. It was further advised that Institute to make necessary preparations for production and supply 1.0 lakh dfls of C-2 Breed to NER States during 2017-18.

XII. Director, CMERTI, Lahdoigarh informed the house that the institute has developed 17 improved technologies for the Muga and Eri sector. Most of the NER States informed that barring a few, they are not aware of the improved technologies developed by the CMER&TI for Muga & Eri sectors and no technology descriptor is provided to them. Chairman observed that transfer of technology to the field is very poor and advised Director CMERTI, Lahdoigarh to transfer the improved technologies along with technology descriptor to the states before December, 2016 under intimation to Central Office, Bangalore. The Technology Brochures in local language may be made available to all prospective beneficiaries free of cost. Transfer of Technology workshops should be held to popularise the new technologies.

(Action: Director, CMERTI & All DOSs of North Eastern States)

Post Cocoon issues

XIII. As regards to post cocoon technology, Scientist-C, RSTRS, Khanapara informed that out of the 585 different reeling machines to be supplied to NER States, orders have been placed for 427 reeling machines of which 95 have been installed. As regards to Multiend Reeling Machines, Hot air driers and twisting machines, he informed that sanction order have been issued to DOS, BTC and Tripura to place the orders to the suppliers of their choice, which is pending from States. States have informed that they wish to buy machines from M/s Aryan but he is not accepting orders. Chairman advised Scientists-C, RSTRS to examine the issue with concerned manufacturers and expedite supply of the machines to the States within two months.

XIV. As regards supply of Eri cocoon opener, Scientist-C, RSTRS, Khanapara informed that the 75 eri cocoon openers have been supplied to Nagaland (25 nos), Manipur (20 nos), BTC (15nos), Mizoram (10 nos) and Arunachal Pradesh (4 nos). DTH, Arunachal Pradesh informed that he has not seen the eri cocoon opener and told that the State need Eri cocoon opener in large numbers. States have told that all 4000 eri farmers to be supplied with the eri cocoon openers for which arrangement should be made by Scientist-C, RSTRS, Khanapara with the manufacturer. The fund shall be provided from the head supply of "Eri Rearing equipments" covered in the project sanctioned under NERTPS. This item is also not taken seriously by RSTRS, Khanapara in spite of repeated directions. Required numbers of eri cocoon openers should be supplied before March, 2017.

(Action: Director, CSTRI, Bangalore, RSTRS, Khanapara & All DOSs of North Eastern States)

Item No.3: Review of Mulberry and Vanya silk Industry in North Eastern States

A: Area under systematic plantation during 2015-16 and Action Plan for development of Kissan Nurseries / block Plantations for achieving plantation targets during 2016-17.

Committee reviewed the progress and took following decisions.;

1. The committee opined that States should record and report to CSB the authentic plantation areas existing both under systematic block plantations and also natural plantations in the forest used for Mulberry, Muga, Oak Tasar and Eri in the prescribed format given at **Annexure-I** by end of **December, 2016**.
2. States to take utmost priority for maintaining systematic host plantations raised during 2015-16 & 2016-17 under different schemes of Govt of India as well as from State Plan funds including MGNREGA, RKVY, NIC, etc.
3. States to prepare Action Plan for raising of new systematic plantations under various developmental programme of GOI as well as State plan during 2017-18 and development of Kissan Nurseries accordingly and submit the Target details in the prescribed format given at **Annexure-II** to CSB by the end of January, 2017. Regional Office, Guwahati will coordinate for finalizing plantations target for all varieties of silk (excluding NERTPS area) for 2017-18 by December, 2016

4. States and CSB units to certify the protocol for nurseries for ensuring quality of seedlings/ saplings.

(Action: DOSs of North Eastern States, Director (s), CMERTI, Lahdoigarh and CSRTI, Berhampore)

B. Review of Mulberry and Vanya silk Industry in North Eastern States – State wise area under plantations, DFLS Consumption and Raw silk production in NE States during the year 2014-15 and 2015-16– Analysis of production trends.

Committee reviewed the progress and observed the following;

1. Year on year basis growth of Mulberry, Eri and Muga silk is around 7.0 % in NE during the 2015-16 over 2014-15. Contribution of Mulberry, Muga, Eri and Oak Tasar is 5.8%, 3%, 91% and 0.7 respectively in the entire silk production of NE.
2. Significant increase in silk production is observed in the states of Arunachal Pradesh, Meghalaya and Mizoram during 2015-16 whereas sharp decline is observed in Sikkim.
3. A decline is observed in the production of **Mulberry Raw silk** in Manipur, Meghalaya and Sikkim during 2015-16 and advised these state to initiate measures to improve production.
4. **Average dfls consumption/ ha and silk productivity/ ha is found very poor** in all the NE states which stands to 233 dfls / ha and 12.1 kg silk / ha for mulberry, 1003 dfls / ha and 9.92 kg silk / ha for muga and 58 dfls / ha and 0.5 kg silk / ha for oak Tasar.

Chairman opined that all NE States are implementing NERTPS projects with sufficient support for infrastructure development in the field and there is ample scope for increasing contribution of Mulberry silk in N E Region. He advised States to put emphasis to enhance silkworm brushing capacity / ha and improve cocoon productivity by containing disease loss in the field through well coordinated extension efforts and transfer of technological intervention to farmers on massive scale.

(Action: All DOSs of North Eastern States, CMERTI, Lahdoigarh, Regional Office, Guwahati)

C: Discussion on Target and Achievement of Raw Silk Production during the year 2016-17 and Action Plan to achieve the Target

Committee observed that NE States together have achieved raw silk production of 2169 MT (Mulberry- 109 MT, Muga-69.4 MT, Eri-2096 MT and Oak tasar-3 MT) till September, 2016 against a target of 5956 MT (Mulberry- 430 MT, Muga-220 MT, Eri-5758 MT and Oak tasar-8.8 MT) during the year 2016-17 (**Annexure-III**). Achievement is around 35% of the total targets. Further demand of Mulberry silkworm seed from NSSO is found static as NSSO supplied a total of 16.51 lakh dfls during 2015-16 and an indent of 16.21 lakh only placed with NSSO during the year 2016-17 of which 12.26 lakh dfls have already been supplied till October and supply of remaining 3.95 lakh dfls is in process. Chairman enquired how the demand of remaining mulberry seed is being met by the States. States have informed that they are also meeting some demand seed from State grainages.

Regarding achieving silk production target, States have informed the house that targets of the mulberry and eri sector shall be achieved as there are still two crops in the year. However, targets of muga silk are difficult to achieve due to prevalence of pebrine disease in the field. DOS, Assam informed that there are only two commercial crop and both the crops are completed by November end. Hence it is difficult for the State to achieve the target of 183 MT of muga silk as the entire seed stock in the State farms and farmers field is contaminated during the ongoing Autumn commercial crop. Scientist-D, MSSO also confirmed occurrence of pebrine in the muga silkworm basic seeds prepared by units of MSSO for Baisakhi crop (April-May 2016) which has seriously affected the rearing plans in Assam State. However, DOS, Meghalaya informed that incidence of pebrine in the state is restricted in certain areas and necessary step have initiated to contain the disease.

Committee took the pebrine disease incidence seriously and after detailed deliberation, took the following decisions;

1. States to re-examine requirement of mulberry seed in view of the raw silk production targets for the year 2016-17 and place indents for additional quantity of Dfls to NSSO, immediately.
2. Regional Office, Guwahati to collect the details of the mulberry dfls produced and supplied by the state grainages in the NER in the enclosed format appended at Annexure-I and submit to CSB, Bangalore by 31 December, 2016.
3. Since, 2016-17 is the terminal year of 12th five year Plan; all the States were advised to prepare detailed Action Plan and to initiate necessary action for achieving the raw silk targets, already fixed for the year 2016-17.
4. CSB, Bangalore to constitute a committee of experts to examine the pebrine incidence both in MSSO units and Seed farms of the Govt of Assam to assess the extent of pebrine disease incidence in the field and also in parental seed chain and grainages of MSSO and Seed farms of Govt of Assam and the steps taken by MSSO / State Govt. to check further spread of disease in the field and grainages.
5. The committee will also investigate the reasons of incidence of disease at such a massive scale, lapse in protocol for management of disease in parental / commercial seed production chain (P-4 to P-1), possible source of primary and secondary contamination in seed establishments as well as in the farmers fields and recommendations for fixing the responsibilities for lapse occurred at various level.
6. State Govts also to institutionalize the mechanism for disease monitoring in their state farms, Adopted Seed Rearers, private graineurs and commercial farmer level.
7. MSSO and State Govts to replenish disease free seed in the entire seed production chain of MSSO, State Seed Farms and Private Graineurs. They will sanitize all the farms, equipments and infrastructures of MSSO/ State Govt, private graineurs and farmers through exhaustive disinfection drives.
8. MSSO to prepare Action Plan for replenishment of seed, disinfection of farms, infrastructure and farmers fields along with the linkages / possibilities of utilizing the isolated Seed Zones identified by MSSO for production of required quantities of basic and commercial seed for the year 2017-18.

9. MSSO units and State grainages to gear up for production of additional muga silkworm seed to address the shortfall of muga raw silk production during 2016-17.

Implementation of DBT

10. All NER States to register themselves at Public Finance Management System (PFMS) of Govt of India to follow DBT while implementing Govt of India schemes and to provide information of database of beneficiaries, asset register and display boards to CSB as requested time to time.
11. **States to submit details of District level Sericulture Offices to CSB by 15th December, 2016 for creation of login ID and password for them to facilitate uploading details of farmers and reelers by the District Sericulture Offices. Expenditure for hiring the Data entry operator may be sourced from funds available under ICE head under different projects.**
12. All NER States to ensure submission of Monthly & Quarterly production returns (MIS) to CSB as per stipulated timeframe through hard copy as well as through e-mail to smis.csb@nic.in or stats.csb@nic.in.

(Action: CSB, Bangalore, MSSO, Guwahati, All DOSs of North Eastern States & Nodal Officer, NER)

Item No 4: Review of assistance released for Implementation of Catalytic Development Programme (CDP) during 2014-15 and CSS during 2015-16 under XII Plan and utilization Status.

Committee observed that funds released under CDP during 2014-15 have not been utilized fully by the states of Manipur and Mizoram. Utilization of Rs 6.71 Cr is pending with Manipur and Rs 0.12 Cr with Mizoram State. Chairman advised the DOS (s), Manipur and Mizoram to submit pending utilization latest by 30th December, 2016. Regional Office, CSB, Guwahati to follow up with states for submission of utilization certificates. In case the UCs are not submitted by above states by 30th December, 2016, CSB will write to the Chief Secretaries of the above states for desired action.

(Action: DOS, Manipur & Mizoram and R.O., CSB, Guwahati).

Item No.5: Discussion on Programmes taken up by States for Vanya Silkworm conservation in natural habitats.

Director, CMERTI, Lahdoigarh informed the house that a Brainstorming session was held at Guwahati on 25th August, 2016 for establishing Wild life sanctuaries of Muga silkworm and sites for conservation of muga silkworm in Upper Daigurng Forest (Assam), Mebo Reserve Forest in East Siang district (Arunachal Pradesh), Near Manas, District Chirang (BTC) and Balpakram National park in South Garo Hills (Meghalaya) have been selected and MOU with State Govt and respective State department of Forest are under process.

Committee observed that no significant progress has been made for conservation of Muga silkworm in Natural Habitat in the states of Assam, Meghalaya, Arunachal Pradesh and BTC as approved under ISDP project under NERTPS and took the following decisions;

1. Director, CMERTI, Lahdoigarh in association with respective State Govts to expedite the process for establishing wild life sanctuaries of Muga silkworm. MOU may be signed by Director, CMERTI, Lahdoigarh with respective State Govt and Department of Forest explicating the roles and responsibilities of each agency.
2. Director, CMERTI, Lahdoigarh to prepare a detailed **Management Plan of wild life Muga Sanctuaries** in close coordination with District Forest officers indicating details of the Hot spots identified, objectives, interventions to be made, methodologies for conservation, roles and responsibilities of CSB, State and department of Forest, utilization of wild silkworm by CSB for breeding/ research, etc and submit to CSB, Bangalore for its vetting. Further no construction activity should be proposed in wild life sanctuaries as per Forest Act.
3. Similarly, Scientist-D, RTRS, Imphal was advised to identify Hot Spot for *Antherea frithi* & *Antherea prolei* in the forest of Manipur State and submit a detail plan for conservation of these oak Tasar silkworms in Core areas by incorporating details of the project areas (Hot spots), objectives, methodologies, physical and financial targets detailing number of camps to be organized / year, no of cocoons/ camp, cost of seed cocoon of eco-races, other input & material support and labour cost per camp, expected output (tangibles and intangibles) for conservation of potential eco-races in the **geographically demarcated core areas** for a defined period of 5 years.
4. Apart from this Govt of Manipur should also take up multiplication of Oak Tasar silkworm in fringe peripheral forest areas for livelihood of the tribal's dependant especially on Oak Tasar collection from natural forests.

(Action: DOSs of Assam, Meghalaya, Arunachal Pradesh, BTC and Manipur; Director, CMERTI, Lahdoigarh, Director, CTRTI, Ranchi and RTRS, Imphal)

Item No. 6: Review of Convergence Progress of Sericulture Programmes under CDP/CSS with MGNREGA, NAP, GIM & RKVY.

The review of the progress made towards convergence programmes indicate that during the year none of the State has submitted proposals for seeking assistance under MGNREGA and RKVY during the year 2016-17. In this regard, CSB has already circulated the detailed guidelines for submission of project proposal under MGNREGA/ RKVY to every State. Besides, the ROs of CSB have also been advised to assist the concerned States in preparation of Gram Panchayat-wise suitable project proposal for submission to the District Authorities.

The committee expressed concerned about lack of information flow in this regard and advised the following;

1. All DOSs of NER States to immediately submit progress report and status on convergence from different agencies MGNREGA, GIM & RKVY, NEC, State Plan, etc in the prescribed format to CSB latest by 30th December, 2016.
2. States to prepare projects for funding under RKVY and MGNREGS for the year 2017-18 well in advance in consultation with RO and submit to respective departments like, Rural Development/ Agriculture, etc of their States.
3. Regional Office, CSB, Guwahati and Nodal Officer, CSB for NER to co-ordinate and monitor the progress. In the regard, if any policy intervention is required, States may write to CSB with full details.

(All DOSs of North Eastern States, Regional Office, Guwahati and Nodal Officer, CSB, NER)

Item No. 7: (A) Review of progress of Muga/ Eri Seed production by MSSO and State level during 2014-15 & 2015-16 & (B) Target for the year 2016-17 and preparedness of MSSO/ ESSO & States .

Committee observed that while MSSO has exceeded its target for production and supply of basic and commercial seed of both Muga and Eri sector during 2014-15 & 2015-16, the institute could achieve production of 2.26 lakh muga seed only against the target of 8.12 lakh during 2016-17. Scientist-D, MSSO, Guwahati informed the house that target of muga seed could not be achieved during 2016-17 in view of the incidence of pebrine in seed stock in MSSO units. MSSO has already initiated necessary action to purify the stock and sanitize all the units from pebrine disease.

Committee expressed serious concern on pebrine incidence and advised the following;

1. MSSO to fix the responsibility of lapse for not following protocols to be observed for multiplication of basic seed at different levels. Scientist-D, MSSO, Guwahati to submit a detailed report on the pebrine incidence, measures taken for purify the stock and sanitization of the MSSO farms.
2. CSB (HQ) to constitute a committee of experts to examine the issue in a holistic way and to suggest remedial measures along with refinement of protocols to be followed in Seed multiplication in CSB and State farms.
3. MSSO, Guwahati and Director, CMERTI, Lahdoigarh to develop a detailed protocol to be observed for replenishment of P-4 seed from CMERTI to MSSO, farms.
4. MSSO and State were advised not to supply any quantity of silkworm seed without testing for disease and develop a mechanism for certification of silkworm seed produced by private agencies. **Only certified seed to be supplied to the farmers.**
5. MSSO to maintain data base of seed infrastructure at State and private level created through various schemes and projects and monitor performance / multiplication of basic seed supplied to them. MSSO, Guwahati to compile the details of seed production by States and private graineurs (State-wise) to identify the gaps, if any and take up suitable steps to meet the requirement.
6. MSSO to closely monitor Seed zones of all NE States and plan for silkworm seed production in co-ordination with States to meet the targets for 2016-17.
7. States to inform CSB about their preparedness regarding seed production targets for the year 2017-18 by 31st December, 2016.
8. MSSO to fix realistic target for production of basic and commercial seed considering demand of seed from non- traditional states like, U.P, etc, which are by and large dependant on CSB for practicing Ericulture. The entire demand of eri silkworm seed of the non- traditional states to be fulfilled by ESSO.

(MSSO, Guwahati, DOSs of Assam, Meghalya, BTC, Mizoram and Nagaland, CMERTI, Lahdoigarh)

Item No-8: Review of progress on use of Agro-Textile products in various sericulture activities.

Committee observed that all the details pertaining to formulation of project proposal for establishing demonstration centers for popularizing usage of Agro-textiles in sericulture have been

circulated long back to the MSSO and CMERTI, Lahdoigarh. Proposals were desired to be submitted by 16th November, 2016 to CSB. However no substantial progress has been made for formulation of the project

Chairman observed that the scheme is very useful for promoting agrotexiles in Vanya sector as the rearing is conducted outdoor on trees. Shade net house with irrigation shall be useful for nursery raising, preservation of seed cocoons; Hail protection net are useful for Chawkie rearing and Bird protection nets for adult rearing; pond liners are useful for water harvesting and collection structure/ ponds, ground covers are useful for moisture management and vermicompost bed for organic farming.

Committee advised Scientist-D, MSSO, Guwahati and Director, CMERTI, Lahdoigarh to submit detailed proposal along with physical and financial outlays and numbers of beneficiaries to be supported under them within 15 days.

(All DOS s of NER States, MSSO, Guwahati, & CMERTI, Lahdoigarh)

Item No. 9: Disease Management and Surveillance system for containment of silkworm diseases

Committee observed that task forces constituted for monitoring of disease are not functioning properly in the field. The teams are not visiting the field and reporting the incidence of various diseases. State Govts are also not reporting incidence of disease in writing to CSB, Bangalore. As a matter of fact, pathogen load has build up in the field which has adversely affected the muga silk industry leading to crop failures and shortage of supply of quality seed during 2016-17.

Chairman observed that the Disease Monitoring Teams / Task Force are to function by following a protocol supported with well defined mechanism and periodicity for conducting surveys /recording the disease levels in the MSSO farms, State Seed Farm, Private Graineurs and at farmers level in the field during commercial rearing. They are supposed to issues forewarning to the related institutions of CSB and State Govts based on their finding during surveys, which is not happening. After a detailed deliberation, committee advised the following.

1. MSSO and Director, CMER&TI, Lahdoigarh to prepare a disease calendar and protocols covering processes to be followed, sampling size, periodicity of surveys, clientele to be covered , etc which are to be followed scrupously by the disease monitoring teams both Muga and Eri sector. Disease Monitoring Mechanism and Calendar/ activities followed in Tasar sector may be taken as a reference and fine tuned based on the requirement of muga and eri sectors.
2. Director, CMER&TI, Lahdoigarh to constitute Joint Disease Monitoring Teams with representation from CMERTI, MSSO, ESSO, DOSs, PIAs for each State, along with a detailed terms of reference. These Committees will conducted field survey on disease incidence periodically in MSSO farms, State Seed Farm, Private Graineurs and at farmers level in the field during commercial rearing as per the calendar and submit report in the prescribed formats along with recommendations to States, MSSO, Guwahati and Director, CMERTI, Lahdoigarh.
3. RTRS, Imphal to follow the same procedure for Disease Monitoring in Oak Tasar sector.

4. Director, CMER&TI, Lahdoigarh and RTRS, Imphal shall compile the reports of Joint Disease Monitoring Teams and submit the compiled report along with their observations/ recommendations to CSB, Bangalore on quarterly basis.
5. MSSO to procure Mobile Disease Testing Van to create **infrastructure for mobile disease testing already approved under the CSS schemes**, to intensifying the disease monitoring & surveillance in seed crop rearing, cocoon preserved in grainage, grainage operations at MSSO/ ESSO units, State Grainages and Private Graineurs levels, beside in commercial rearing.
6. State Govt to expedite training of **door to door service agents** for carrying out field disinfection as approved in NERTPS projects for all the States.

(MSSO, Guwahati, CMERTI, Lahdoigarh, RTRS, Imphal and all DOSs of NER States)

Item No. 10: Review of Technology Development (Pre-& Post -Cocoon) & transfer in North Eastern States

States informed the house that they are not aware of various improved technologies developed by the CSB research institutes for NE region both in pre and post cocoon sectors. RECs should demonstrate the technologies and technology descriptor should be provided in regional languages. DOS, Nagaland and BTC requested for demonstration of newly developed Vanya reeling/ spinning machines, eri cocoon opener in Dimapur (Nagaland) and Konkrajhar (BTC). Govt of Assam requested for providing training to its staff on improved technologies. Chairman observed that technology percolation is very poor in the field and the CSB institutes to take lead for this. After detailed deliberation, following decisions were taken.

1. RECs should be a model for farmers to demonstrate all activities/ technologies both in Mulberry and Vanya sectors. They should maintain Journal for the nurseries in the north eastern states. Director of CSB research institutes to develop Action Plan for demonstartion of technologies in the field to farmers, reelers and weavers in collaboration of State Govt. Action Plan for the this year and 2017-18 should be submitted to concerned state Govt and CSB (HQ) by 31st december, 2016. Director, (HQ), CSB, Bangalore to coordinate the implementaion of the action plan.
2. REC should support the farmers for all sector (Mulberry, Tasar, Eri and Muga irrespective of their administrative center) with CSR&TI, Bangalore & CMERTI, Lodhaigarh. Land and other facilities / equipment's available with REC should be put to optimum use and maintained well.
3. CSB Research Institute to circulate technology descriptor and technology packages to all the State Govt of NER latest by 31st December, 2016 under intimation of Regional office, Guwahati and Central Office, Bangalore.
4. Institutes of CSB should take immediate action for transfer of all the technologies to the field.
5. CSB research Institutes/ RSTRS/ RTRS to develop action plan for conducting training of State Govt official for improved technoluquies and circulate the calender to concerned State Govts for nominating the officials.

6. RSTRS, Khanapara to demonstrate newly developed Vanya reeling/ spinning machines, eri cocoon opener in Dimapur (Nagaland) and Konkrajhar (BTC).
7. RSTRS, Khanapara to visit Kokhrajhar and Dimapur and give a field visit report on the new post-cocoon projects, after studying the NERTPS project components
8. RSTRS to examine the delay for supply of reeling machines with concerned manufacturers and expedite supply of the remaining machines to the States within two months.
9. Mongaldai farmers require training in weaving. RSTRS, Khanapara to conduct training for weaving in all North Eastern States and make a plan of action.
10. RSTRS to coordinate supply of eri cocoon opener to all the eri farmers being covered under NERTPS Projects. Necessary fund provision are available under the head supply of “Eri Rearing equipments” covered in the project sanctioned under NERTPS.

(CMERTI, Lahdoigarh, MSSO, Guwahati, RSRS, Jorhat, RSTRS, Khanapara, RTRS, Imphal and all DOSs of NER States)

Item No. 12: Settlement of Debit Credit Balance (DCB) arrears of Mulberry & Vanya Silkworm seed supplied to States by NSSO/ MSSO-Outstanding DCB arrears

It was informed that DCB arrears of **Rs 50.81 lakh** are due to different states on account of cost Muga / Eri seed supply and **Rs 144.86 for mulberry silkworm** seed. Detail statement showing DCB arrears against different States (as on 31.09.2016) is given below.

(Rs in lakhs)				
#	State	MSSO (Muga & Eri)	NSSO (Mulberry)	Total
1	Assam	22.25	63.73	85.98
2	BTC	4.66	5.21	9.87
3	KAAC, Assam	0.11	0	0.11
4	Arunachal pradesh	1.03	1.66	2.69
5	Meghalaya	2.0	0	2
6	Mizoram	1.4	8.82	10.22
7	Manipur	1.03	42.75	43.78
8	Nagaland	4.83	15.38	20.21
9	Sikkim	0.26	0	0.26
10	Tripura	0	7.31	7.31
11	West Bengal	0.616	0	0.616
12	Madhya Pradesh	0.33	0	0.33
13	Uttarakhand	0.2	0	0.2
14	Tamil nadu	0.017	0	0.017
15	Private / ASRs	8.95	0	8.95
16	CMERTI	0.72	0	0.72
17	Others	2.89	0	2.89
	Grand total	50.81	144.86	195.67

It was observed that there is delay in settlement of DCB as invoice are raised against the indenting offices of the State Govt. which take time for compilation and settlement. Govt of

Meghlaya requested for providing duplicate copies of invoice to settle DCB. Committee decided the following;

1. Henceforth indent for seed will raised from the “**Single Window**” in the State Govt (Hq) and accordingly invoice shall be raised in favour of State (HQ). Thus, DCB settlement shall be cleared from the **Single Window** at State Hq). Committee advised all States to establish **Single Window** mechanism at HQs.
2. MSSO to provide duplicate copies of invoice to Govt of Meghlaya with 10 days.
3. State Govt who need duplicate invoice/ details of pending DCB from NSSO to write Director, NSSO, Bangalore within 10 days.
4. States to settle DCB arrears as per the schedule given below. In the event of non clearance of DCB arrears, seed supply from CSB units to states will be very badly affected and matter will be taken up with your next higher controlling authorities for settlement of dues on priority.

Ageing of DCB Dues	Status of DCB dues	Time limit for Settlement of DCB dues
5 years & above	OLD	100 % by 31 st December 2016
2- 4 years	OLD	50% by 31 st December 2016 and balance in 3 equal instalments from January – March 2017.
Upto 1 year	NEW	75 % by 31 st March 2017 and balance 25% by September 2017.

(MSSO, Guwahati, NSSO, Bangalore and all DOSs of NER States)

Item No.13: Fixation of price of Muga and Eri seed cocoons and Dfls.

Committee observed that in recent years demand for quality seed has increased manifold. CSB and States have taken initiatives to involve and encourage private participation in the seed sector to cater the requirement of seed. Current price of muga seed cocoon is Rs.2.50 per seed cocoon and Rs.8.00 per dfl of muga (basic and commercial). Similarly current price of eri seed cocoon is Rs 0.70 per seed cocoon and Rs. 2.50 per eri dfl (Rs.5.00 per gram), which is not to sustainable due to increase in seed cocoon prices. Hence, it was decided to fix reasonable cost of the seed cocoon and dfls for muga and eri seed for sustainability of grainages at Govt level and those of private graineurs. Committee took the following decisions;

1. Price of muga seed cocoon is increased from Rs. 2.5/- to Rs. 3.0/- per cocoon and muga dfls price increased from Rs 8.00 to Rs 10.00 per Dfl for Basic / commercial based on the justification given by MSSO and with agreement of the House.
2. Price of Eri seed cocoon is increased from Rs. 0.7/- to Rs. 1.0/- per cocoon and Eri dfls price increased from Rs 2.5 to Rs 5.00 per Dfl (Rs 10.00 per gram) for Basic / commercial based on the justification given by MSSO and with agreement of the House.
3. The enhance price of seed cocoon and dfl shall be effective from 1st January, 2017.
4. States may also provide incentives to Private Graineurs and subsidize the cost of seed at beneficiary level.
5. All Muga / Eri graineurs and Adopted Seed rearers are to be registered under Seed Act.

6. Only certified disease free seed to be supplied for rearing in the field. MSSO/ States to work out strategic measures to certify the disease freeness and quality of seed produced by Govt and private sector and circulate the protocol to be followed for ensuing quality and backup assessment to concern.

(MSSO, Guwahati and all DOSs of NER States)

Item No.14: Marketing Support to Vanya Silks through Raw Material Bank (RMB)

It was informed that there is very high demand of muga and eri cocoons and as such farmers are getting better price of muga and eri commercial cocoons than the floor price fixed by the RMB. The Local Advisory Committee (LAC) of MRMB fixes the price of different grades of muga and eri cocoons on regular intervals. Prices are fixed based on the production cost of cocoons. The rates are flashed to DOSs of the NER States and also communicated to a host of leading Buyers/Consumers/Traders. Prevailing floor price of Muga cocoon price are Rs 1800/- , Rs 1600/- and Rs 1300/- for Grade –A, B and C for 1000 cocoons. Similarly, floor price of eri cocoon shells are Rs 750/- , Rs 650/- and Rs 550/- for Grade –A, B and C for 1.0 kg cocoons. RMB only intervenes when the price fall below the floor price. Committee reviewed and expressed satisfaction on the initiatives taken up by RMB, Sibsagar to stabilize the cocoon rates in different states.

Chairman opined that VSMPC has taken several measures to promote product development, diversification and marketing of Vanya silk products. Newly designed and developed products have been displayed at P3D Cell at CSB, Bangalore. State Govts may visit P-3D cell and also depute master weavers to adopt the designs and products for improving their products spread and marketing. P3D cell shall make available the details of new designs to all user agencies at regular intervals.

Item No.15: Review of the Oak Tasar Silk production during 2014-15 & 2015-16 and Action Plan for 2016-17 in terms of preparedness of seed production.

During last decade Oak Tasar has gradually declined and remained static around 4 to 5 MT/ year. At present, Oak Tasar culture is practiced in Uttarakhand State in North West and Manipur, Mizoram and Nagaland in North East. The States of Himachal Pradesh and J&K are not encouraging Oak Tasar culture. Manipur is the highest contributor and production is consistent whereas contribution from other states is variable and negligible. A target of 12 MT is proposed for production of Oak Tasar Silk in the country by 2020-21. While the units of CSB shall be responsible for production and supply of Basic seed its multiplication for production of commercial shall be the responsibility of department of Sericulture of respective States. The year-wise requirement of different categories of Seed is presented below:

(Lakh Nos.)						
#	Year	Raw Silk (MT)	Commercial Dfls	Seed Cocoons	Basic Dfls	Seed Cocoons
1	2016-17	5.5	3.76	15.04	0.44	1.99
2	2017-18	5.9	4.51	18.04	0.53	2.39
3	2018-19	7.85	5.63	22.52	0.66	2.98
4	2019-20	9.95	7.13	28.52	0.84	3.77
5	2020-21	12	9.01	36.04	1.06	4.77

The State-wise Action Plan for plantation areas, number of beneficiaries to be covered and basic and commercial seed was circulated to States during the meeting.

Committee reviewed the progress of Oak Tasar in the States and observed that State Govt of Manipur, Nagaland and Mizoram are to come forward to promote the Oak Tasar industry in their states as there is huge demand of oak Tasar silk in Indian Tasar industry which as of now is fulfilled by importing silk from China/ Korea. Committee took the following decisions;

1. Oak Tasar industry has the potential to give livelihood to large number of tribal families in the NE states. DOS of Manipur, Nagaland and Mizoram to initiate various measures to promote the oak tasar culture as per Action Plan provided to them in the meeting.
2. **RTRS, Imphal to prepare Action Plan to cater the requirement of basic seed of the States and facilitate States Govts through training and extension of improved technologies.**
3. State to utilize their infrastructure to multiply basic seed and increase production of commercial seed to support the farmers.
4. Apart from this, Livelihood programme through multiplication of Oak Tasar eco-race in natural forest shall be taken up by RTRS, Imphal and Govt of Manipur..
5. CSB to formulate projects for the development of oak Tasar culture after assessing the ground realities in Manipur, Nagaland and Mizoram.

(DOSs, Manipur, Mizoram and Nagaland, CSB, Bangalore, Director, CTRTI, Ranchi and RTRS, Imphal)

Item No.16: Review of Progress of Integrated Sericulture Development Project (ISDP) & Intensive Bivoltine Sericulture Development Project (IBSDP) under NERTPS

In order to boost the Sericulture and Silk industry in North Eastern States, the Ministry of Textiles, Govt. of India had initially sanctioned 14 projects including 12 nos of Integrated Sericulture Development Projects under NERTPS for the NE States, namely, Assam, Arunachal Pradesh, Bodoland Territorial Council (2), Manipur (2 project, one for valley and another for Hill Districts), Meghalaya, Mizoram (2), Nagaland (2), Tripura, for promoting the mulberry, muga and eri silks in NE States and two projects for Silk Printing & Processing Unit for Tripura and development of Seed infrastructure for CSB in respect of Mulberry, Eri and Muga for implementation from 2014-15 to 2016-17 (some upto 2017-18).

Similarly for production of quality Bivoltine Silk in North Eastern States, 9 (nine) Cluster Development Projects has been prepared by CSB in association with States by covering two Blocks of one District in each State for a period of 3 years (2015-2016 to 2017-2018). A total 4500 acres (@ 500 acres each state) will be covered under Systematic Mulberry plantation including maintenance by covering 9000 nos. of Women beneficiaries during the Project period.

Committee reviewed the progress and observed that activities related to establishing plantations and creating supporting infrastructure are progressing well under these projects, but any significant impact of these projects on raw silk production is yet to be achieved. He advised States to optimally utilize the plantations raised by the farmers and infrastructure created for silk production under these projects by proper assessment of dfl requirement and ensuring dfl supply. Committee took the following decisions;

1. Transparent procedure to be followed for selection of beneficiaries involved in Sericulture projects implemented with funding from Govt. of India.
2. For the newly approved Udalguri Soil to Silk Project, BTC will give wide publicity through advertisement in print and electronic media inviting application from prospective beneficiaries, both for on farm and post cocoon / yarn activities from the identified blocks, as per the guidelines of project components. Option may be given for submission of application both online and offline, within a given time frame. Based on the applications received, screening and selection may be done by a committee as defined in the project. After selection of the beneficiaries, it may be vetted by the respective Deputy Commissioner.
3. All the saplings and chawki worms supplied to the farmers should be certified by the State / CSB units. RECs of CSB should maintain nursery journal for all the nurseries with data of source of cutting, supply details, health of plantations developed etc. This is applicable in case of chawki worms also.
4. All future plantations should be developed with recommended spacing to facilitate mechanization for tilling, weeding, pruning, manure application etc.
5. States should release matching State share as well as recommend for MGNREGS share for the projects ongoing under ISDP.
6. Fund transfer to the stakeholders under NERTPS to be 100% through DBT by March, 2017, as per guidelines of Govt. of India.
7. All States to immediately finalize the MIS on ISDP and start uploading the data. Additional manpower may be engaged, especially computer experts on contract basis for this purpose by the States. States to regularly update MIS on IBSDP & ISDP.
8. DOS, BTC who has developed the MIS on behalf of all NE States to take up few modifications immediately in the MIS on IBSDP & ISDP as suggested by Ministry of Textiles for retrieving information as needed by Ministry from time to time, by involving the respective agency. Additional expenditure could be met from the provision approved under Project Implementation & Monitoring Head.
9. Scientists of RECs in NE States who have been identified as Nodal officers for monitoring seed production by State grainages may arrange to furnish information to CSB on monthly basis indicating the production by State grainages for Mulberry and State /Private graineurs for Eri and Muga. States are not furnishing progress reports on seed production.
10. In respect of Mulberry seed, the statement should contain the total target of seed requirement, target of production by State grainage, production for the reporting period, requirement from NSSO and supply by NSSO. For Vanya sector, the statement should contain the quantity of basic / commercial seed supplied by MSSO /NSSO, RTRS, Imphal, its multiplication at various levels by State and private graineurs, against the total requirement for the State.
11. It is reported that, mulberry silkworm seed supplied by NSSO to NE States are not effectively handled and incubated before supply to CRC / Farmers resulting in poor hatching and low yield of cocoons. Problems reported in respect of dfls supplied by MSSO also.
12. It is noted that the silk production reported by the States do not commensurate with the seed production and supply either by CSB units of States / Private graineurs. MSSO should maintain a data base of all seed infrastructure both under Mulberry and Vanya in NE States,

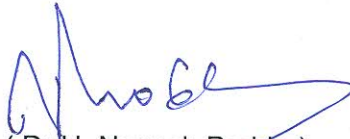
and private graineurs as well and closely monitor their performance and multiplication of basic seed supplied by MSSO includes seed zones of States.

13. RECs should be a model for farmers to see all activities to get educated / gain knowledge in the field of Mulberry and Vanya sectors.
14. Govt of Manipur to examine reason of decline in Mulberry raw silk production in spite of a huge project of NERTPS projects in the State and take suitable measures for improving Mulberry raw silk production.
15. Regional Office, Guwahati shall submit the progress report of NE States (ISDP and IBSDP) on monthly basis with their critical comment and suggestions, as per the format designed by Member Secretary which was already communicated. Further, Regional Office, Guwahati may re-visit the Sericulture Map developed by CSB and design the same, keeping in view the present development of Mulberry and Vanya in different States.
16. RSTRS, Khanapara to visit Kokhrajhar and Dimapur and give a field visit report on the new post-cocoon projects, after studying the project components.
17. The year-wise UC against fund release shall be supported by consolidated UC against the total funds released by Ministry under the project.

Item No. 18: Other subject, if any with permission of Chairman

Chairman thanked the members for their valuable suggestions in decision making process. He requested all participants to take up follow up action on the decisions taken and take proactive measures for promoting sericulture in North East.

The meeting concluded with vote of thanks to the chair


(Dr H. Nagesh Prabhu)
Member Secretary

Annexure-I

**Format for submission of Plantation status as on November, 2016
(Other than NERTPS)**

#	State	Status of Plantation (ha) as on 2016-17								
		Mulberry	Muga		Eri		Oak Tasar		Total	
			Block	Natural	Block	Natural	Block	Natural	Block	Natural
1	Assam									
2	BTC									
	(Assam+BTC)									
3	Ar. Pradesh									
4	Manipur									
5	Meghalaya									
6	Mizoram									
7	Nagaland									
8	Sikkim									
9	Tripura									
	Total									

Note: Natural refers natural forest flora used for rearing silkworm. Block refers to artificial Plantations raised for rearing silkworms)

Annexure-II

**Format for submission of Plantation Targets decided by States for the year 2017-18
(Other than NERTPS)**

#	State	Plantation Target (ha) of States during 2017-18				
		Mulberry	Oak Tasar	Eri	Muga	Total
1	Assam					
2	BTC					
	(Assam+BTC)					
3	Ar. Pradesh					
4	Manipur					
5	Meghalaya					
6	Mizoram					
7	Nagaland					
8	Sikkim					
9	Tripura					
	Total					

Annexure-III

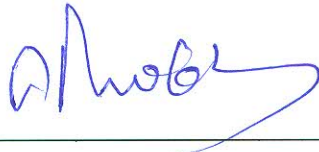
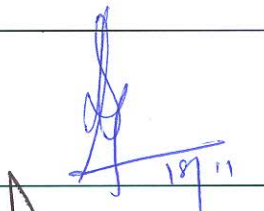
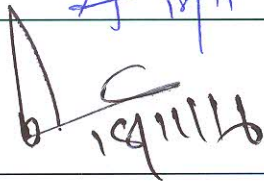
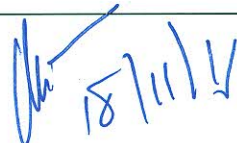

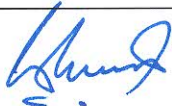
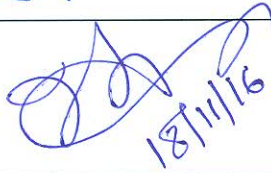

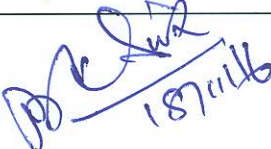
TARGET & ACHIEVEMENT OF MULBERRY SEED & RAW SILK PRODUCTION IN NE STATES DURING 2016-17
Progress till October, 2016

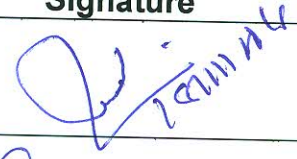


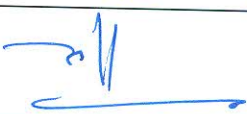
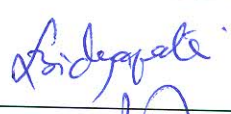
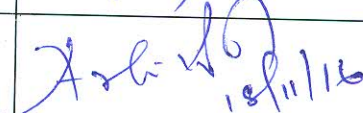

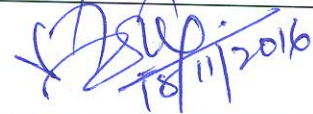
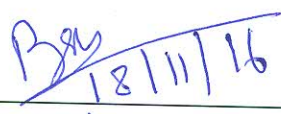
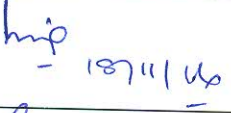
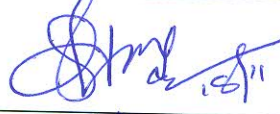

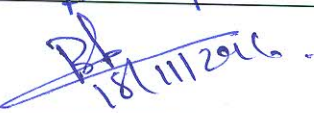
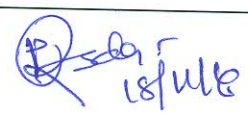

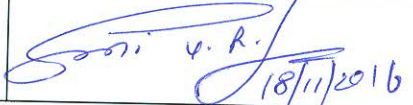
#	State	DFLs Targets												DFLs Achievements (Supply)												DFLs to be brushed						Mulberry Raw Silk														
		State			Target			NSSO (SSPC)			State Grainage			Total			NSSO (upto -Oct)			State			Procurement from other State /sources			Total			BV			CB			Total			BV			CB			Total		
		BV	CB	Total	BV	CB	Total	BV	CB	Total	BV	CB	Total	BV	CB	Total	BV	CB	Total	BV	CB	Total	BV	CB	Total	BV	CB	Total	BV	CB	Total	BV	CB	Total	BV	CB	Total	BV	CB	Total						
1	Assam	3.45	0	3.45	5.72	0	5.72	3.45	0	3.45	9.17	0	9.17	3.71	0.04	3.75	0.45	0.45	0.90	0	0	0	4.16	0.49	4.65	4.52	0.00	4.52	55	0	55	16.8	0.00	16.80												
1a	BTC	0.51	0	0.51	1.99	0	1.99	0.51	0	0.51	2.50	0	2.50	0.66	0	0.66	0.30	0	0.30	0.69	0.00	0.69	1.65	0.00	1.65	0.85	0.00	0.85	15	0	15	10.2	0.00	10.20												
2	Ar. Pradesh	0.4	0	0.4	0.43	0	0.43	0	0	0	0.83	0	0.83	0.20	0	0.20	0.40	0	0.40	0	0	0	0.60	0.00	0.60	0.23	0.00	0.23	5	0	5	2.00	0.00	2.00												
3	Manipur	22.8	2	24.80	3.37	2.8	6.20	22.80	2.00	24.80	31.00	4.83	35.83	4.80	0.00	4.80	15.48	4.490	19.97	5	0	5.00	25.3	4.49	29.77	0.89	0.34	1.23	157	29	186	82.00	12.11	94.11												
4	Mizoram	7.3	0	7.30	2.7	0	2.70	7.30	0	7.30	10.00	0	10.00	0.44	0.67	1.11	3.70	2.10	5.80	0	0	0	4.14	2.77	6.91	3.09	0.00	3.09	60	0	60	33.81	18.26	52.07												
5	Meghalaya	4	0	4.00	0.17	0	0.17	4.00	0	4.00	4.17	0	4.17	0.10	0.08	0.18	1.601	0	1.601	0	0	0	1.70	0.08	1.78	2.39	0.00	2.39	25	0	25	6.70	0.00	6.70												
6	Nagaland	0	0	0.00	2.17	0	2.17	0.00	0	0	2.17	0	2.17	0.60	0.73	1.33	0	0	0	0	0	0	0.60	0.73	1.33	0.84	0.00	0.84	13	0	13	3.80	1.37	5.17												
7	Sikkim	0	0	0.00	1	0	1.00	0.00	0	0	1.00	0	1.00	0.03	0.01	0.04	0	0	0	0	0	0	0.03	0.01	0.04	0.96	0.00	0.96	6	0	6	0.00	0.00	0.00												
8	Tripura	4	1	5.00	2.5	3.3	5.80	4.00	1.00	5.00	6.50	4.30	10.80	1.02	1.39	2.41	0	0	0	0	0	0	1.02	1.39	2.41	8.39	0.00	8.39	45	20	65	0.00	5.80	5.80												
	Total	42.46	3.00	45.46	20.1	6.13	26.18	42.06	3.00	45.06	62.5	9.13	71.64	11.56	2.92	14.48	21.93	7.04	28.97	5.69	0.00	5.69	39.2	9.96	49.14	22.16	0.34	22.50	381	49	430	155	38	193												

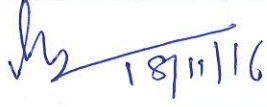





R.O.Guwahati to update the dfls production and supply status from different agencies and how the gaps will be addressed.

BV- Bivoltine CB- Crossbreed

**Attendance of the Members of Joint Co-ordination committee meeting
for North Eastern States held on 18th November, 2016 at Guwahati**

#	Name, designation & address	Signature
1	Dr. H. Nagesh Prabhu, IFS Member Secretary Central Silk Board, Bangalore	
2	Shri B. John Tlangtinkhuma, IAS Director of Sericulture, Govt. of Manipur, Imphal	
3 <i>Addl.</i>	Smt. Sonam Bhutia, IFS, Director of Sericulture, Govt. of Sikkim	
4	Shri Mukta Nath Saikia, ACS Director of Sericulture, Govt. of Assam	
5	Shri L.T Darlong, TCS, Director, Handloom, Handicrafts & Sericulture, Govt. of Tripura	
6	Shri Peto Ete, Director of Textiles & Handicrafts Govt. of Arunachal Pradesh	
7	Shri Bokul Chandra Hajong, Director, Sericulture & Weaving Govt. of Meghalaya, Shillong	
8	Shri Lalrinmawia, Director of Sericulture, Govt. of Mizoram, Aizawl	
9	Shri J. Deuri, Director of Sericulture, BTC	
10	Shri Imtisosang Addl. Director of Sericulture Govt. of Nagaland	
11	Dr. B.K. Singh Director CMER&TI, Central Silk Board Jorhat.	

#	Name, designation & address	Signature
12	Shri Sarat Deori Joint Secretary (Tech) Regional Office, Central Silk Board, Guwahati	
13	Shri B. Choudhury Scientist-D & Head MSSO, CSB, Guwahati	
14	Dr. R. S. Teotia, Scientist-D, Central Silk Board, Bangalore	
15	Dr. Somen Gogoi, Scientist-D, RSRS, CSB, Jorhat	
16	Dr. L. Bidyapati Devi, Scientist-D, RTRS, CSB, Imphal	
17	Shri A.K. Pal Scientist-C RSTRS, Guwahati	
18	Shri Moncy Issac, Deputy Secretary (Tech), Central Silk Board, Bangalore	
19	Shri Albern Dutta Assistant Secretary (Tech) MRMB, Sivsagar	
20	Smt Barnali Sur Deputy Director, Ar. Pradesh	
21	Shri Nemaimura Singh Deputy Director Govt. of Tripura	
22	Shri Sanjay Roy Sericulture Officer, Nagaland	
23	Shri Vikehelie Pienyu Sericulture Officer, Nagaland	
24	Dr. B.T. Kakati Scientist-D RO, CSB, Guwahati	
25	Shri Pradip Saha Sericulture Officer Govt. of Tripura	
26	Dr. R. Choudhury Scientist-D, MSSO, Guwahati	
27	Shri Soni Visaykumar RSTRS, Guwahati	

#	Name, designation & address	Signature
28	Sri S.K. Mandal Jt. Director of Sericulture Assam.	 18/11/16
29	Sri B. Das, Scientist-C MSSO, Guwahati.	
30	Sri A.K. Bora Asstt. Supdt., Pb, Guwahati.	 18/11/16
31	Sri C.K. Hazarika, Dy Director, Meghalaya	
32	Sri N. Harman Sr. Assistant, DCS, Assam	
33	Shri. S. Kaushik. Sr. P.A., CSB, Ghy	
34		
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