<u>Proceedings of one day Brainstorming Workshop on "PROMOTION OF OAK TASAR</u> <u>CULTURE" organized at RSRS, Imphal</u>

A Brainstorming Workshop on "**Promotion of Oak Tasar culture**" was organized at Regional Sericultural Research Station, Imphal on 16th March 2022 under the aegis of Central Muga Eri Research & Training Institute, Lahdoigarh, Jorhat, Assam. The programme was graced by Shri. L. Geetchandra Singh, MCS, Director of Sericulture; Govt. of Manipur as Chief Guest, Dr. K. Sathyanarayana, Director, Central Tasar Research and Training Institute, CSB, Ranchi as Special Guest and Dr. K.M. Vijaya Kumari, Director, CMER&TI, Lahdoigarh, Jorhat presided over the function.

At the outset all the participants of the workshop were welcome by Dr. Y. Debaraj, Scientist-D & Head, RSRS, Imphal. After lighting of the inaugural lamp, the dignitaries and participants from different states were felicitated. After that Dr. K.M. Vijaya Kumari spoke about the objective of the workshop and its importance for the development of Oak tasar culture in North Eastern and North Western states of India where oak tasar culture is practiced. Dr.K. Sathyanarayana expressed about the present need and co-ordination between NE & NW states for future development of oak tasar culture. Shri L. Geetchandra Singh highlighted about the present status of oak tasar culture and opined that new project on oak tasar will be included in the Silk Samagra-2 for the benefit of the farmers.

Further deliberations were made by the invited speakers on different topics *viz.*, (i) "Status, problems and prospects and future strategies for development of oak tasar culture in Manipur" presented by Shri. L. Geetchandra Singh, MCS, Director of Sericulture, Govt. of Manipur (ii) "Strategies to improve Oak tasar host plant for quality leaf production" presented by Dr. N. Ibotombi Singh, Scientist-D (Retd.), RSRS, Imphal (iii)"Technologies on grainage and rearing of oak tasar silkworm" presented by Dr. L. Somen Singh, Scientist-D, RSRS, Imphal (iv)"Status of Oak tasar culture in Uttarakhand, its problems and prospects and future strategies for development" presented by Shri Anand Kumar Yadav, Director of Sericulture, Govt. of Uttarakhand and (v) "Implications of oak tasar culture and its remedial measures" presented by Dr.N.Ibohal Singh, Scientist-D (Retd.), RSRS, Imphal and Ex-OSD-cum-Consultant (Sericulture), Govt. of Manipur.

In the afternoon session, penal discussion on oak tasar culture, discussion with stakeholders including farmers/reelers in pre- and post-cocoon sectors, discussion on "Specific interventions needed to achieve SDGs in oak tasar culture" and discussion on "Preparation of time bound action plan for enhancing the production of oak tasar" and various recommendations were made by the penal experts (Copy enclosed). One progressive farmer, Mr. Lallun requested the forum to include cocoon storage-cum-resting shed and also to increase cocoon price so as to benefit the farmers. Some lady entrepreneurs also expressed their opinion that they required more oak tasar cocoons for enhancement of reeling and weaving activities so that their income can be increased. About 65 participants including Directors/ representatives/ officials of Department of Sericulture, Govt. of Manipur, Assam, Mizoram, Nagaland and Uttarakhand, CSB Scientists from CMER&TI, Jorhat, RSRS,

Bhimtal, CTR&TI, Ranchi, RSRS, Imphal, Serifed, Manipur, Retired Scientists of RSRS, Imphal, Entrepreneurs, Reelers, Weavers and farmers attended the programme. The programme ended with vote of thanks by Dr. Y. Debaraj, Scientist-D & Head, RSRS, Imphal.



Fig.1: Welcome speech by Dr. Y. Debaraj, Scientist-D & Head, RSRS, Imphal.



Fig.2: Invited speech by Dr. N. Ibotombi Singh, Scientist-D (Retd.), CSB

RECOMMENDATIONS OF PANEL EXPERTS:

- 1. The revised advisories of the Ministry of Environment and Forestry, Govt. of India will be made available to all the Directors of Sericulture of North Western/ North Eastern States for implementation in promotion of Tasar/ Oak Tasar Culture. Further, DOS of NE States will take up the matters related to utilizing forest oak for silkworm rearing with Joint Forest Management Committees/ Village Chiefs.
- 2. All DOSs of North East/ North West States should prepare a comprehensive action oriented rational action plan for substantially enhancing production and productivity of Oak tasar raw silk from 2022 2030 showing achievable targets for each year so that the production target of 10 MT oak tasar raw silk can be achieved by 2030. The same should be submitted to the Director, CMERTI, Lahdoigarh by 30th April 2022.
- **3.** The action plan should encompass the systematic seed organization for production of P1 seed cocoons (Parental stock) by adopting trained seed rearers proportionate to the production of required commercial seed every season. Facilities for agronomical practices, rearing appliances, disinfectants, chawki rearing cum cocoon storage house at the farm should be provided to the farmers.
- 4. The action plan should also include rearing of both seed as well as commercial crops during spring season by utilizing maximum exploitable host plants so as to augment production of reelable cocoons.
- 5. DoSs should ensure enhanced cocoon price for seed rearers.
- 6. Infrastructure for foolproof seed cocoon preservation from June February next to check loss of seed cocoons due to erratic emergence and maintain vigour of silk moths to lay maximum eggs as well as maximum hatching be developed by the DoSs. Such practice will certainly improve the COCOON to DFL ratio and DFL to DFL ratio. Dfl to dfl ratio can be improved to 1: 7.
- 7. DOSs of NE/ NW states should attempt for second crop rearing exclusively for seed during Sept./Oct. by utilizing at least 30% seed cocoons from spring harvest by terminating the pupal diapause through light treatment for 16 =(12+4) hours a day for 20-25 days.
- **8.** Silkworm eggs should be well disinfected by following prescribed sodium hypochlorite disinfection technology of RSRS Imphal.
- **9.** Appropriate agronomical practices for second crop rearing be strictly followed prior to rearing as recommended by the Research Stations to ensure more robust seed cocoons harvest for the next spring. Indoor rearing of silkworm up to 3rd stage and outdoor rearing under nylon net from 4th stage may be practiced to ensure cocoon harvest.

- 10. The evidence based research findings show that tiger-band-disease of Oak Tasar silkworm could be significantly reduced/ eradicated by thorough disinfection of grainage building, chawki rearing house, rearing site, rearing appliances, nylon nets etc. Using 5% Bleaching powder and by thorough spraying of 0.02% sodium hypochloride solution on the sprouting foliages, twigs and stems before rearing. The practice may be invariably followed to reduce the losses due to tiger band disease.
- 11. Regional Sericultural Research Stations should meet the demand of Basic seed/ Nucleus seed of *Antheraea proylei* to the DOSs of NE/NW as per their requirement. RSRS Imphal should supply nucleus seeds of the breeds C27 and RTRS1 to RSRS, Bhimtal, REC Palampur and DOSs for further multiplication and exploitation.
- **12.** Focused research should be carried out for evolving high yielding, disease resistant and season/region specific breeds/hybrids.
- **13.** Skill development programmes should be timely and regularly organized by the research stations to upgrade and update the knowledge of silkworm rearing to the seed /commercial rearers and also for post cocoon activities.
- 14. DOS Directors should visit tropical tasar areas to get first hand information on the practices followed.
- **15.** *In-situ* and *ex-situ* conservation of oak tasar silkworm genetic resources should be taken up on priority for utilization in breeding programmes to develop high yielding breeds/hybrids.

(Dr. K.M. Vijaya Kumari) Director, CMER&TI, Lahdoigarh

LIST OF THE PARTICIPANTS

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