

Area Brochure of Agriculture and Rural Extension Area: An Overview

The north-eastern states of India are one of the richest in the country in terms of their diverse biological resources. Bamboo and rattan, orchids, medicinal and aromatic plants, and different horticultural species are the rich resources of the region. In the sericulture sector, Muga and Eri silkworms are unique to the region particularly in the state of Assam. The aquatic fauna of the region is an invaluable bio-resource for development of scientific freshwater aquaculture. The vast natural resources and rich biodiversity of the region have enormous scope for technological intervention towards improvement of livelihood through adoption of location specific sustainable land-based and off-farm activities. With this backdrop, the Agriculture and Rural Extension Area was created in 2009 to work on agriculture and extension-related works. The Agriculture and Rural Extension Area of the centre focuses on rural development and extension-oriented activities and implementation of projects related to development of agriculture, horticulture, natural resource management, and watershed development activities. The area has started its research activities on sericulture particularly on the Muga and Eri silkworms.

Notable work carried out by the area in production and demonstration of quality planting material, sericulture, watershed development, forestry, capacity building and advocacy. The area continues its efforts for production of quality planting material of Banana, Khasi Mandarin, Black Pepper and Assam Lemon at its Byrnihat Planting material production centre, Assam.

In watershed sector the area planned and implemented a community based participatory watershed conservation and management project in six revenue villages covering 2500 ha area. The area has also been working as MEL&D agency for monitoring, and evaluation IWMPs in five districts of Assam.

In the Sericulture sector the area conducted an R & D project on production of Disease Free Layings (DFLs) and demonstrated muga food plant cultivation, rearing, reeling etc. Agriculture and Rural Extension area has also been implementing a project on Eri silk for socioeconomic development of women in Kamrup and Udalguri districts of Assam.

The area is also carrying out plant diversity assessment in Borail Wildlife sanctuary, Assam under a DBT, Govt of India sponsored project.

In the capacity building initiative, the area organise different capacity building programmes, workshop and training programmes for student, teachers, professional from NGOs, Government Departments, farmers and private organization on environment, sericulture, sustainable agriculture, ecotourism, watershed etc.

Thrust Areas

- Agriculture: Development of commercial horticulture through production and post-harvest management, poverty alleviation of rural poor through technological interventions in horticulture, production of quality planting material of priority crops of the region, and demonstration at farmers' fields, etc.
- Watershed management: Watershed development and conservation of its natural resources, development of natural water bodies for water conservation, and to provide nutritious food to rural communities.
- Preparation of Detailed Project Report (DPR) for watershed management and natural resource management
- Biodiversity: Biodiversity assessment of protected areas, assessment of important wetlands in Assam, survey and documentation, development of agro techniques, value addition and popularization of wild edible fruits and vegetables, medicinal and aromatic plants
- Research and Development (R&D) activities for development sericulture
- Natural resource management
- Capacity building and rural extension.

Facilities

- Planting material production centre facility at Byrnihat for large-scale hardening of tissue culture plants and production of quality planting materials through vegetative means
- Grainage facility for production of Disease Free Layings (DFLs) of Muga
- Training hall at Byrnihat for on-field and hands-on training programme on quality planting material production and management.
- Training halls at TERI-NE office complex

Major on-going Projects of the ARE Area

1. Ericulture for upliftment of Socio-Economic Condition of Rural Women in Tribal villages of Assam funded by DBT, Govt. of India
2. Concurrent Process monitoring under Monitoring, evaluation, learning and documentation (MEL&D) of projects of Integrated Watershed Management Programme, Assam funded by SLNA-IWMP, Assam
3. Cultivation of Packing Leaves Plant for Livelihood Enhancement of ST Communities and Promotion of Packing Leaves as Substitute of Plastics in Meghalaya funded by Ministry of Environment, Forest and Climate Change
4. An ethnobotanical survey of indigenous plants of Assam, Arunachal Pradesh and their pharmacological screening for antiulcer potential funded by DBT, Govt. of India
5. Inventorization of plant diversity of Borail wildlife sanctuary, Assam funded by DBT, Govt. of India

Major completed projects of the ARE Area

- Production of Disease Free Layings (DFLs) of Muga and Establishment of Model Muga Farm for Rural Development; *Sponsor:* Department of Biotechnology, Government of India, New Delhi
- Conservation and Resource Management of *Jatropha* Germplasm; *Sponsor:* Department of Biotechnology, Government of India, New Delhi
- Production of Quality Planting Material, Demonstration and Capacity Building (Under Horticulture Mission for north-east and Himalayan states); *Sponsor:* ICAR, Government of India
- Preparation of Detailed Project Report (DPRs) under Integrated Watershed Management Programme (IWMP) for 16 Watersheds in Morigaon, Nagaon, Darrang, and Sonitpur Districts of Assam; *Sponsor:* State Level Nodal Agency (SLNA), IWMP, Assam
- Evaluation of Preparatory Phase of IWMP Projects of 2009–10, 2010–11 and 2011–12 in Dhemaji, Lakhimpur, Jorhat, Sibsagar, Dhubri, Bongaigaon, Barpeta, Nalbari and Karbi Anglong districts of Assam; *Sponsor:* State Level Nodal Agency (SLNA), IWMP, Assam
- DNA Clubs-DBT-TERI Mentoring the Schools of Assam, *Sponsor:* Department of Biotechnology, Government of India, New Delhi
- Multilocational Field Trial of Superior *Jatropha* Clones in Different Agroclimatic Zones & Study of Agronomic Practices, *Sponsor:* Department of Biotechnology, Government of India, New Delhi
- DBT Mission for North East for Quality Planting Material Production and Demonstration; *Sponsor:* Department of Biotechnology, Government of India, New Delhi
- Multilocational Field Trial of Superior *Jatropha* Clones in Different Agroclimatic Zones of Northeastern States; *Sponsor:* Department of Biotechnology, Government of India, New Delhi
- Demonstration and Field Trial of Superior *Jatropha* clones in Different Agroclimatic Zones of Northeastern States; *Sponsor:* Department of Biotechnology, Government of India, New Delhi
- Integrated Watershed Conservation and Development in a Part of Kalang Watershed, Assam; *Sponsor:* CAPART (Council for Advancement of People's Action and Rural Technology, Ministry for Rural Areas & Empowerment, Government of India
- Bioremediation of Low Oil Containing Oily Sludge and Acidic Sludge at Digboi Refinery. *Sponsor:* Indian Oil Corporation Limited (Assam Oil Division)
- Bioremediation of Low Oil Containing Oily Sludge at Guwahati Refinery, *Sponsor:* Indian Oil Corporation Limited
- Bioremediation of Oily Sludge at Bongaigaon Refinery, *Sponsor:* Indian Oil Corporation Limited
- Plantation of Elephant Food Plants and Natural Barrier Plants; *Sponsor:* International Elephant Foundation, Texas, USA.

For further information, contact

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