



**Creating Innovative Solutions
For a Sustainable Future**

The TERI North Eastern Regional Centre was established in August 1993 in Guwahati to work on the challenges for efficient utilisation of North East India's rich natural resources for the region's sustainable development and economic empowerment. The eight states of North East India are unique in their ecological richness as well as fragility.

The Centre's thrust areas have been agriculture, rural extension, and biotechnology, with notable work in production and demonstration of quality planting material, sericulture, watershed development, bioremediation, forestry, capacity building, and advocacy.





SUSTAINABLE AGRICULTURE

The Centre established a Tissue Culture Laboratory in 1999 with support from the Department of Biotechnology, Govt of India. TERI-NE also led the DBT Mission for Quality Planting Material Production and its Utilisation in the North East, launched in January 2008. The Centre has been spearheading projects involving production of quality planting material, setting up of quality farms, demonstration, capacity building, and partnering with institutions and organisations across the region.

The Centre continues its efforts for production of quality planting material of Banana, Khasi Mandarin, Black Pepper, and Assam Lemon at its two-hectare Byrnihat facility. It focusses on commercial horticulture through production and post-harvest management, poverty alleviation in rural Assam through technological interventions in horticulture, quality planting material production, and demonstration of mandate crops.

TERI has also started constructing North East India's first private food lab for quality testing of various foods and beverages. The proposed NABL-accredited, state-of-the-art lab will provide standard testing services to entities including manufacturers of agro-based products and packaged foods and beverages in the region.

The background image shows three men standing on a concrete dam structure. The man on the left is wearing a light blue shirt and dark trousers. The man in the middle is wearing a dark blue shirt and dark trousers. The man on the right is wearing a light blue shirt and dark trousers. They are looking towards the camera. The dam is a concrete structure with water flowing over it. The background is a lush green valley with a river and a forested hillside.

WATERSHED CONSERVATION AND DEVELOPMENT

The Centre undertook a pioneer watershed development project in Assam's Brahmaputra valley to develop economically and environmentally viable solutions for resource conservation. The project addressed sustainable economic development of the indigenous community in six revenue villages that were directly dependent on a 2,500-hectare (ha) watershed. The Centre built watershed related infrastructure facilities to aid water conservation and utilisation for agriculture.

The state's nodal agency for Integrated Watershed Management Programme (IWMP) also made TERI-NE the Monitoring, Evaluation, Learning and Documentation (MELD) agency for IWMP in five districts.



SERICULTURE

Assam is known for Muga and Eri silks. In its work on Muga silk, the NE Centre produced Disease Free Layings (DFLs) and demonstrated Muga food plant cultivation, rearing, reeling, etc. It also undertook awareness generation and capacity building exercises for rearers.

The Centre has also implemented an Eri silk project for socioeconomic development of women in Assam's Kamrup and Udalguri districts. Capacity building and awareness creation about Eri silkworm rearing has been done among beneficiaries, apart from creating initial market linkages.



Eri rearing house

Biotoilets in a school
in Meghalaya

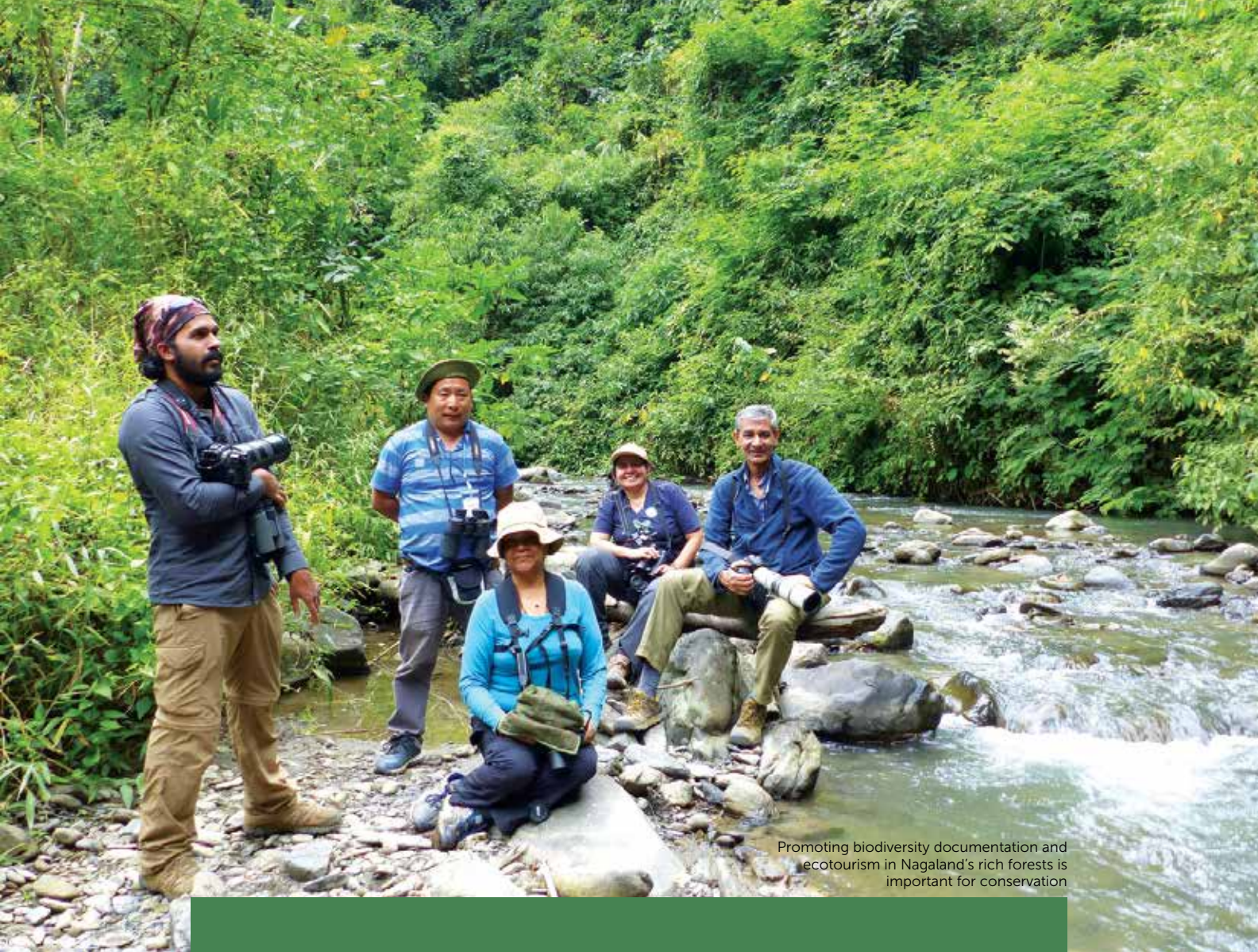


CAPACITY BUILDING AND ADVOCACY

The Centre initiated a mentoring programme under which DBT's Natural Resource Awareness (DNA) Clubs were started in 391 schools in all eight North Eastern states. The aim was to promote deeper awareness about bioresources and their sustainable utilisation through biotechnology.

TERI also promotes behavioural change among schoolchildren for good hygiene and has disseminated 100 TERI-designed biotoilets in an equal number of schools. These toilets are easier to transport and maintain in remote locations due to their utilisation of locally available microbes to convert fecal waste to gas and water. These models are being used in areas ranging from 50 metres above sea level at TERI's Guwahati centre, to 2,200 metres above sea level in the Kasturba Gandhi Balika Vidyalaya Hostel, Kanchenjunga, Sikkim.

The Centre has also been holding capacity building workshops and training programmes for professionals from NGOs, government departments, and private organisations. The aim is to demystify technologies and bridge the information gap in biotechnology, energy, environment, sericulture, and sustainable agriculture.



Promoting biodiversity documentation and ecotourism in Nagaland's rich forests is important for conservation

FORESTRY

With support from experts, TERI is developing bird and butterfly tourism in Nagaland's biodiversity-rich forests. Rampant hunting, forest degradation, and tree felling are greatly threatening the state's forests. However, communities have revived traditional conservation practices through the creation of Community-Conserved Areas (CCAs) where they set aside parcels of forests within productive, jhum (shifting cultivation) landscapes. Given the enormous opportunity costs people face by donating land for CCAs and giving up certain hunting and fishing practices, it is imperative to develop ecotourism-based livelihoods for them.

TERI works with local communities in three villages in Nagaland's Zunheboto district to strengthen community conservation. This includes creating and linking CCAs across the landscape and providing training in identification of birds, butterflies and moths to enable communities to document their own biodiversity.



(From left) Effects of bioremediation in an oil field in Duliajan, Assam.



BIOREMEDIATION

TERI-NE has demonstrated bioremediation of wastewater generated from natural rubber latex processing in North Tripura. This has been done by identifying algae that can clean the wastewater by using the pollutants therein as nutrients for algal growth. In just three weeks, the algae can grow up to 2.6 grams per litre of wastewater, generating enough algal biomass to be used as raw material in biodiesel and biofuel industries. The water is cleaned enough for reuse in the industry.

TERI has also used its patented Oilzapper technology to reclaim vast stretches of oil-contaminated land in oil refining areas, especially Duliajan, Nazira, and Jorhat.

In its quarter century-long existence, the highlight of the Centre's activities has been its grassroots implementation initiatives to develop and disseminate practical interventions for efficient use of natural resources and checking degradation. While it celebrates its silver jubilee, the work will continue to both benefit this ecologically rich and fragile region and continue to learn from its natural wealth and heritage.



CONTACT US

North Eastern Regional Centre
The Energy and Resources Institute (TERI)
Chachal Hengrabari,
Express Highway,
Guwahati - 781 036, Assam
Tel: (0361) 233 4790
Fax: (0361) 233 4869
Email: terine@teri.res.in

The Energy and Resources Institute (TERI)
Darbari Seth Block,
IHC Complex, Lodhi Road,
New Delhi - 110 003, INDIA
Tel: (+91 11) 2468 2100
Fax: (+91 11) 2468 2144, 2468 2145
Email: mailbox@teri.res.in