

**Department of Biotechnology**

**Ministry of Science & Technology**

**Government of India**

**Invites Proposals on**

**“Development and Utilization of Bioresources of North East Region for Generating Livelihood Security and Entrepreneurship”**

The North Eastern Region is one of the global biodiversity hotspots and home to many different ethnic groups with a rich traditional knowledge of the endemic bioresources. Despite being rich in bio-resources, the region remains underdeveloped as compared to the rest of the country. The rich bioresources of the region provide ample opportunity for furthering socio-economic growth through strategic biotechnology intervened programmes for harnessing these resources.

With the aim to promote sustainable development and utilization of the unique bioresources of NER and linking it with socio-economic upliftment of the region, the Department invites proposals for **“Development and Utilization of Bioresources of North East Region for Generating Livelihood Security and Entrepreneurship”.** Only those proposals that can demonstrate an entrepreneurial potential or that can lead to some enterprise that would enhance and add diversity to local livelihoods of people will be supported**.**

Thus, the proposals should strictly adhere to demonstrating and or deploying the entrepreneurial outcomes of the already available technologies with proven effectiveness, developed on the priority resources of NER by ICAR, CSIR, DBT and other departments/agencies in NER. The proposal should focus on evaluation and demonstration of these technologies at field level to find out their social and economic relevance as well as ecological feasibility in the region. The proposal may address the additional research and translational needs along with scale-up of these useful technologies.

**Some of the Priority areas to be covered under the call are listed below:**

1. Captive cultivation and value-addition of unique plant resources of North East Region such as *Prinsepia utilis* (as a source of oil), *Prunus nepalensis* (for use in jam, squash etc.), *Zanthoxylum armatum* (remedy for tooth ache), *Bixa orellana* (source of dye), *Gaultheria fragrantissima* (oil for arthritis), *Cheilocostus speciosus* (as anti-inflammatory), *Ficus auriculata* (substitute of fig), *Docynia indica* (source of Vitamin C), *Curcuma caesia* (black ginger having medicinal properties), *Hedychium spicatum* (source of extract / AYUSH products) etc.
2. Captive cultivation and value-addition to develop nutraceutical products from millets, gingers, Moringa, etc. through locally adopted technology intervention along with appropriate marketing strategies.
3. Demonstration and processing of aroma crops such as Lemon grass, Patchauli, *Litsea cubeba*, ginger oil, agarwood oil, orange / citrus oil, etc. at farmers level along with training to the farmers / potential entrepreneurs and making buy-back arrangements with industries.
4. Captive cultivation and sourcing of medicinal plant raw material in partnership with industries along with the quality assurance of the material and improved post-harvest processing technologies.
5. Exploring the prospects of promoting the domestication and utilization of: Wild Edible Leaf Species (aimed at woman and child health); Wild Edible Fruit Species (aimed at provided safety net for marginal communities; Wild Edible Tuber Species
6. Demonstration of floriculture / orchids-based entrepreneurship in North East Region and training to the farmers / potential entrepreneurs along with making buy-back arrangements. Promotion of value-added products such as dehydrated floral crafts etc.
7. Exploring *ex situ* bioresources based enterprises (e.g. domestication and developing package of practices for potential ornamental plants from wild along with marketing strategies)
8. Generating quality planting material of horticulture crops by raising high-tech nurseries in NE Region including establishment of healthy nurseries (plug-tray nurseries) for vegetable crops.
9. Mass production of agriculture bioinoculants (biofertilizers and biopesticides) and developing entrepreneurship in North East Region.
10. Domestication and life-cycle studies on edible insects of North East Region. Developing rearing technologies and entrepreneurship development

**Eligibility:** Researchers / Scientists working in the Government Organisations / Universities /Academic Institutions / National Laboratories / SIRO recognised Non-Profit Organisations, with sound scientific & technical backgrounds and relevant publications in the proposed areas can submit projects proposals.

**Norms for Assistance:** The proposals should be NER centric with multi-institutional participation from institutions within NER or with outside NER Institutions. If the projects are with outside NER institutions then the budget sharing should be in the ratio of upto 60:40 between NER and outside NER institutions, respectively. Preference will be given to major network collaborative projects. Having collaboration with relevant NER State Government departments or Councils for S&T is highly desirable.

**Submission of Proposals:** The proposals will be received by DBT in two Phases:

1. **Submission of Letter-of –Intent**
* The Letter-of-Intent should also be submitted to nerdiv@dbt.nic.in, on or before the deadline.
* The preliminary proposal (Letter-of-Intent), should note be more the 3 pages and should include the following fields :
1. Brief abstract (stating the idea of the proposal)
2. Perceived Gap in the area which the proposal is likely to address
3. Objectives (not more than 3)
4. Technology readiness level of the project when complete (to be capable of generating livelihood security & entrepreneurship)
5. Deliverables (in terms of training, demonstrations, livelihood creations, job diversification etc.)
6. Partner institution/industry (s)
7. CV (short CV) of PIs
8. Approximate budget
9. **Submission of Full-length proposals (for the shortlisted LoIs)**
* The Shortlisted LoI Applicants should submit a full the proposal on or before the deadline through DBT eProMIS portal (<http://dbtepromis.nic.in/Login.aspx>) under the **“NER Programme”.**
* **Two hard copies** of the proposal should also be submittedto ***Dr. Vaishali Panjabi, Scientist ‘E’***, Department of Biotechnology, Block-2, 7th Floor, CGO Complex, Lodi Road, New Delhi-110003.
* A softcopy of the proposal should also be submitted to nerdiv@dbt.nic.in.

**Deadline for Submission:**

For Letter-of-Intent : **5th November 2020**

For Submission of Full-length proposals (for the shortlisted LoI) : **20th November 2020**

**Contact for further information:**

* **Dr. Vaishali Panjabi,** Scientist ‘E’, DBT, New Delhi
* **Dr. Amit Kumar Yadav,** Scientist ‘C’, DBT, New Delhi

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