

Title	National Program for Conservation and Development of Forest Genetic Resources- CoE IFGTB (NPC: Dr. R. Anandalakshmi, IFGTB) (Comprises 7 components)
Principal Investigator	1. Dr. R. Anandalakshmi, Scientist-G 2. Dr.A.Vijayaraghavan,Scientist-F 3. Dr.D.Thangamani,Scientist-D 4. Mrs.S.Lalitha, CTO 5. Mr.K.Gireesan,CTO
Project Associate	
Start and Completion dates	2019-2025 (five years)
Objectives <ul style="list-style-type: none"> • To generate understanding and knowledge on Forest Genetic Resources of the country through exploration, documentation, characterization, and to develop and strengthen in situ and ex situ FGR conservation programmes for their long term safeguard for the benefit of humanity. • The major focus of Phase-I would be to document and bring out status of the FGRs in the country, put in place systems for networking and inter-institutional collaborative working, prioritizing FGRs for action on the basis of their conservation status and commercial value, and kick start research and conservation action on the prioritized FGRs. 	
Funding Agency	MoEFF&CC
Total budget outlay	Rs. 1014.31 lakhs
SUMMARY	
<ul style="list-style-type: none"> • The National Program for Conservation and Development of FGRs was launched in March 2025. Seminars on Forest Genetic Resource Management was conducted involving genetic resource conservation experts from organizations like National Bureau of Plant Genetic Resources, Hyderabad, State Agricultural Universities, Forest officers and scientists from networking institutes to sensitize and draw guidelines for implementation of the program. • Two workshops on prioritization of FGRs were conducted involving various stakeholders and totally 200 species were prioritized based for the program based on a scoring mechanism developed, with 75 species for ICFRE-IFGTB, Coimbatore, 65 species for ICFRE-TFRI, Jabalpur, 30 species for ICFRE-IWST, Bengaluru and 30 species for ICFRE-IFB. Hyderabad. • Two field orientation trainings for the project staff and two trainings on Ecological Modelling using Maxent Software and Database Management Software to the networking institutes were conducted. 	

- An Interactive meeting was conducted with networking institutes and developed strategies and action plan for FGR program.
- Based on ground data recorded, prepared 200 distribution maps covering 137 species from different states and using Maxent model developed eco-distribution maps for 30 species which highlights information about probable areas for adaptability of a species.
- Documented germplasm details of already worked 20 species and developed their distribution maps. A customized Data Base Management Software named VAN VISTARA was developed to manage FGR data and the data collected were incorporated in the portal.
- Conducted field survey in the states of Tamil Nadu, Kerala, Karnataka, Andhra Pradesh, Goa, Maharashtra, Madhya Pradesh, Chhattisgarh, Telangana, Odisha and UTs of Puducherry and Andamans, developed Species specific conservation strategies for all the study species, arrived at population relative density for the study species. Collected seed/fruits for 134 species, leaf samples for 12 species from different forest divisions for seed related studies, nursery raising and molecular/biochemical studies.
- For *in situ* conservation carried out regeneration studies for 48 species in different forest areas and derived the phytosociological parameters.
- Standardized seed extraction, processing, and pretreatments for species of seed and field gene bank species and quick viability test for seed gene bank species.
- Established a seed germplasm bank where in a -20°C walk in cold storage facility was created at IFGTB and assembled different accessions of 105 seed species.
- Morphological characterization was carried out for 105 species using Image Analyser and standardized DNA extraction for 12 species. Carried out biochemical characterization for 7 species.
- The four institutes upgraded nursery facilities and raised seedlings of field gene bank species. IFGTB obtained 40 ha land from TNFD at Tiruvannamalai, created infrastructure facilities, and established field gene bank.
- Germplasm of 10 species such as *Aegle marmelos*, *Ailanthus triphysa*, *Butea monosperma*, *Ceiba pentandra*, *Chloroxylon swietenia*, *Hardwickia binata*, *Neolamarckia cadamba*, *Sapindus emarginatus*, *Strychnos nux-vomica* and *Swietenia mahagoni* has been established at Tiruvannamalai in 10.0 ha and in 4.0 ha at Gudalur by IFGTB.
- Conducted an International Symposium on FGR conservation and Utilization in the 59th Annual Meeting of the Association for Tropical Biology and Conservation.
- Successfully launched the Database Management Software (DBMS) software named 'Van Vistara'. A carpellarium to exhibit various forest fruit/seeds of 150 species was established.