



# ICAR – Central Agroforestry Research Institute ISO 9001 : 2015 Certified Constituent Lab of ICAR

CAFRI At a Glance



# **Indian Council of Agricultural Research**

Department of Agricultural Research & Education Ministry of Agriculture & Farmers' Welfare Government of India

CAFRI

# **ICAR - Central Agroforestry Research Institute**

#### About us

ICAR-Central Agroforestry Research Institute (ICAR-CAFRI), formerly the National Research Centre for Agroforestry, is a multidisciplinary premier research institute of the Indian Council of Agricultural Research (ICAR) with a major focus on integrating trees, crops and livestock on the same farmland. The Institute is in Jhansi, Uttar Pradesh (25.5° N 78.5° E), India and has a total area of 254.859 acre (214.079 research farm and 40.78 office & residential area). CAFRI is the only dedicated research institute of the country working on key research areas of agroforestry with 31 scientists, 16 technical, 12 administrative and 8 skilled supporting staff as its sanctioned cadre strength. CAFRI has developed robust agroforestry models and package of practices for different agroclimatic conditions covering small and marginal farmers, and provides technical backstopping to the States and stakeholders.

#### History

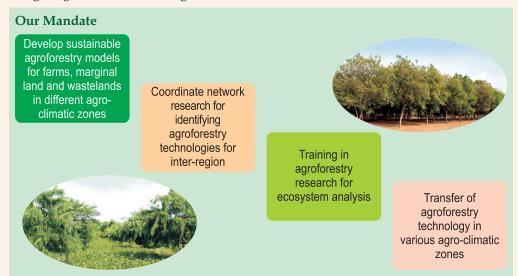
- ICAR initiated a network project for organized agroforestry research in 1983 i.e., All India Coordinated Research Project on Agroforestry
- The National Research Centre for Agroforestry (NRCAF), as a unit of ICAR was established on 8<sup>th</sup> May 1988
- Renamed as Central Agroforestry Research Institute (CAFRI) on 1<sup>st</sup> December 2014

### Vision

To improve the quality of life of rural people by integrating perennial crops in agricultural landscape for harnessing social, economic and environmental benefits.

### Mission

Integration of woody perennials in the farming system to improve land productivity through conservation of soils, nutrients and biodiversity by augmenting natural resource conservation, restoration of ecological balance, alleviation of poverty and mitigating risks of weather vagaries.



### **Research Areas**

- Exploration, collection, evaluation, characterization, multiplication, conservation and genomics of tree germplasm and agroforestry associated microbial flora and fauna
- Conducting basic, strategic, applied research on treecrop interactions, soil fertility improvement and ecological productivity
- Analysis of ecosystem services and socioeconomics of agroforestry systems
- Development of location-specific agroforestry interventions for livelihood security, value addition, watershed management, technology refinement and carbon sequestration
- Demonstration and promotion of best agroforestry models for rainfed/irrigated/arable/non-arable ecosystems
- Framework for agroforestry outreach and policy analysis

# AICRP on Agroforestry

- The coordinating unit of the All India Coordinated Research Project on Agroforestry (AICRPAF) was initially located at ICAR HQ in New Delhi
- CAFRI, Jhansi w.e.f. April 1, 1997, took over the responsibility of AICRPAF
- A network of 37 centres are in operation covering different agro-ecological regions of the country

# Lab to Land

- Promoting agroforestry through awareness and demonstration in adopted villages under "Mera Gaon-Mera Gaurav" program of ICAR
- Conducting national/international trainings/workshops including capacity building of all stakeholders in agroforestry technologies
- Development of digital platforms including mobile *app* for agroforestry extension
- Enabling implementation of Sub-Mission on Agroforestry and National Bamboo Mission



TREE + CROP + LIVESTOCK = "AGROFORESTRY FIRST"









Laboratories in the Institute: Agroforestry, Agronomy, Horticulture, Soil Science, Tree Physiology, Tree Improvement, Tissue Culture, RS&GIS & ATIC

# Model Nursery

- CAFRI has modern hi-tech nursery with automated temperature, ventilation, light, and watering facility available for mass multiplication
- Standardized propagation techniques such as miniclonal technology, tissue culture, budding, grafting, cuttings and through seed for agroforestry tree species
- Major species of production: Teak, Indian sandal, Neem, Melia, Bamboo, Mahogany, Shisham, Moringa, Dragonfruit, Guava, Aonla, Citrus, Mango, etc
- CAFRI in association with World Agroforestry gave the guidelines to produce quality planting material of agroforestry species

# **Digital Agroforestry**

- Mapping of agroforestry area using Remote Sensing and GIS techniques; 26.329 m ha under agroforestry in the country
- FarmTree Mobile *App*, a user-friendly, bilingual (English and Hindi), android based platform developed with all basic information on 25 commonly grown promising agroforestry tree species
- The *app* can be downloaded from google playstore https://play.google.com/store/apps/details?id=com.cafri.farmtree

# Partnerships For Research

- ICRISAT, Hyderabad
- ICRAF, Kenya
- FAO, India Office
- ICFRE, Dehradun

### **For Education**

- RLBCAU, Jhansi
- FRI, Dehradun
- IGKV, Raipur
- SHIATS, Prayagraj
- Bundelkhand University, Jhansi

# For Extension

• NCCF

.....and many others

# Institutional Linkages Central Agencies

- NITI Ayog
- DoAC & FW, DAHD, NRAA, MoEFCC, ICFRE

### **State Agencies**

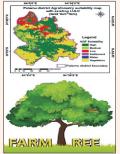
- Sub-Mission on Agroforestry & National Bamboo Mission
- State Forest Departments
- State Agricultural Universities











### Success Stories

# Successful agroforestry models for different agroecological regions of India

- Developed bankable agroforestry models for 20 agro-ecological regions of India covering arid, semiarid, coastal, humid, sub-humid and island ecosystems of India
- These models help in conservation of soil, water, nutrients and support the livelihood of farmers

# Management of Parasai-Sindh Watershed (ICRISAT **Partnership**)

- Enhanced water availability in target villages through rainwater harvesting and recharging of wells
- Enhanced water-use efficiency and agricultural productivity through improved management of land and water resources
- Established a site of learning within five years of project inception
- Transformed villages from degraded to productive stage

### Our commitments to you!

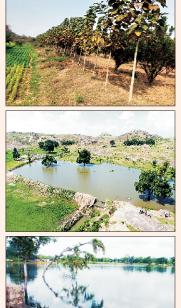
- Providing location-specific agroforestry techniques
- Providing quality planting material of tree species
- Capacity building to stakeholders through skill development trainings
- Providing consultancy services
- Guiding students through dissertation and internship

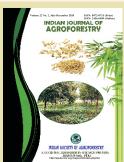
### **Indian Society of Agroforestry**

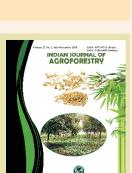
- Established in 1998
- Total life members : 500+
- Membership fee:

| Life Membership | - | Rs. 5000/- per individual |
|-----------------|---|---------------------------|
| Annual          | - | Rs. 500/- per individual  |
| Institutional   | - | Rs. 2500/- per annum      |

- Journal: Indian Journal of Agroforestry (NAAS Rating : 5.19)
- Awards
  - K.G. Tejwani Award for Excellence in Agroforestry R&D
  - Dr. S. Chinnamani Award for Excellence in Agroforestry Extension
  - Lifetime Achievement Award
  - ISAF Gold Medal Award
  - ISAF Fellowship Award
  - ISAF Best Paper Award









For further information: Please visit <u>www.cafri.res.in</u>

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