



Research Experiments @ CAFRI (QR Codes)

Agroforestry Experiments through Digital Innovation



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About CAFRI

The Central Agroforestry Research Institute (CAFRI), located in Jhansi, UP, is a premier national institute under the ICAR. Established in 1988, CAFRI is dedicated to developing sustainable agroforestry systems that integrate trees, crops, and livestock to improve rural livelihoods and optimize land use. The institute conducts cutting-edge research in areas such as tree improvement, carbon sequestration, and climate-smart technologies to combat land degradation and enhance ecological resilience. Through its extensive network and field experiments, CAFRI bridges the gap between scientific innovation and field-scale implementation, empowering farmers across diverse agro-climatic zones with sustainable agricultural practices.

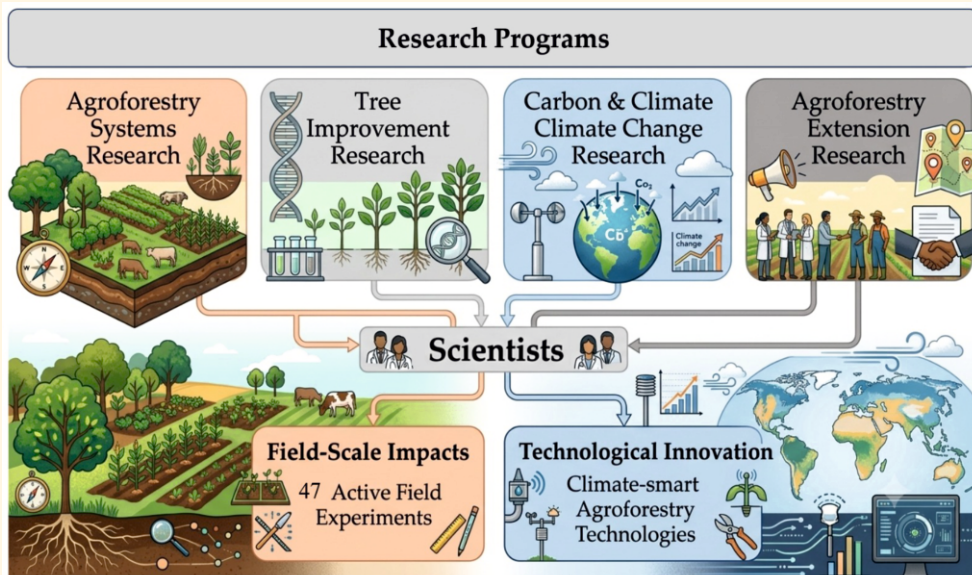
Designated Nodal Agency of the Ministry

CAFRI is the nodal agency for implementation of the agroforestry component of the RKVY scheme by MoA&FW, Government of India, providing technical support and promoting nursery accreditation across India. In addition, the standards for seedling certification of agroforestry tree species have also been developed by CAFRI.



Research Experiments @ CAFRI at a glance

The experiments at CAFRI majorly focus on improving tree-crop interactions, developing climate-resilient production systems, enhancing soil health, carbon sequestration, tree improvement, and farmer-centric extension strategies which provide practical solutions for increasing productivity, restoring degraded lands, and promoting sustainable agroforestry across India.



			
ASR-1 Suitability evaluation of crops under <i>Melia dubia</i> based agroforestry system for better performance	ASR-2 Performance evaluation of understory crops under bamboo-based agroforestry system	ASR-3 Crop assessment of Sandalwood (<i>Santalum album</i> L.) based agroforestry system in semi-arid conditions	ASR-4 Analysis of productivity in guava-based agroforestry system for livelihood security in semi-arid conditions
			
ASR-5 Ecophysiological assessment of understory crops in teak-based agroforestry system	ASR-6 Study on the impact of <i>Melia dubia</i> based agroforestry system on microclimate modulation	ASR-7 Assessment of soil quality in bamboo-based agroforestry system	ASR-8 Evaluation of soil resilience in guava-based agri-horticulture system
			
ASR-9 Study on disease dynamics in <i>Melia</i> based agroforestry system	ASR-10 Development of IDM (Integrated Disease Management) practices for Teak based agroforestry system	TIR-1 Evaluation of PT-2 & PT-6 germplasm of Shisham for growth and wood properties	TIR-2 Developing standards for seedling certification of Shisham and Neem
			
TIR-3 Evaluation of Neem germplasm for Nimbin and Salanin secondary metabolites	TIR-4 Transcriptome analysis of Neem and Pongamia for SAF	TIR-5 Agroforestry Trait Descriptor Framework for Selected Tree Species	TIR-6 Evaluation of inter-species wood properties of <i>Dalbergia</i> species

			
TIR-7 Characterization of <i>Melia dubia</i> (MPT-2) clones for waterlogging stress tolerance	TIR-8 Decoding multiple abiotic stress potential in selected tree germplasms at early stages	TIR-9 Assessment of wood properties of elite neem germplasm	TIR-10 Assessment of wood properties of <i>Tectona grandis</i> in agroforestry systems across different DBH classes
			
CCCR-1 Litter fall and production dynamics of agroforestry trees	CCCR-2 <i>In-situ</i> litter decomposition pattern of agroforestry trees	CCCR-3 Development of package of practices for urd-barley cultivation in teak-based conservation agroforestry	CCCR-4 Development of package of practices for urd-durum wheat cultivation in Teak-bael based conservation agroforestry
			
CCCR-5 Assessment of Ecosystem Services in a Neem-Based Woodlot Agroforestry System	CCCR-6 Assessing the Natural Capital Underpinning Ecosystem Services in Established Neem (<i>Azadirachta indica</i>)	CCCR-7 Development of standard methods for assessing ecosystem services in teak-based agroforestry system	CCCR-8 Development of standard methods for assessing ecosystem services in neem-based agroforestry system
			
CCCR-9 Integrating <i>Murraya koenigii</i> under eucalyptus-based agroforestry system in semi-arid region	CCCR-10 Performance evaluating of multi-tier agroforestry system for higher productivity in semi-arid region	AER-1 Development and validation of an extension module for promoting eucalyptus-based agroforestry systems	AER-2 Analysis of farmers' preferences towards different agroforestry systems

			
AER-3 Valuation of AMMA model for nature-positive agriculture: enhancing biodiversity, climate resilience and farmer income	AER-4 Development of farm typologies in fruit-based agroforestry systems	AER-5 Valuation and impact assessment of agroforestry systems	AER-6 Marketing efficiency and supply chain analysis of agroforestry produce
			
AER-7 Development of farm typologies in agroforestry systems	AER-8 Behavioural intentions and constraints of farmers practicing agroforestry	OTOT-1 Developing climate-resilient agroforestry models for land restoration	External Project-1 Tissue-specific multi-omics analysis of green gram (<i>V. radiata</i>) for shade adaptive traits for agroforestry
			
External Project-2 <i>In vitro</i> regeneration of <i>B. monosperma</i> Lam. and its assessment for mass propagation of QPM	External Project-3 Agro-ecological evaluation of moringa and ashwagandha-based agroforestry in the semi-arid conditions of Central India	External Project-4 Comparative study on carbon dynamics and rhizosphere microbial biomass in dry- and wet-tropical agroforestry systems	External Project-5 Deciphering the role of agroforestry in wheat terminal heat stress management
			
External Project-6 Development and evaluation of anar-based agroforestry systems in Bundelkhand for higher productivity and economic returns in the farmer's field		External Project-7A Growth and Productivity of <i>Bambusa vulgaris</i> under different management conditions	External Project-7B Growth and Productivity of <i>Bambusa</i> sp. and <i>Dendrocalamus</i> sp. in semi-arid conditions



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