

New Delhi Workshop Paves the Way for Farmers to Benefit from Carbon-Smart Agriculture

Scientists from ICAR and State agricultural University trained to turn climate-friendly farm practices into credible carbon projects

NEW DELHI, 30 August 2026: A two-day national workshop at the National Agricultural Science Complex (NASC), New Delhi, brought agricultural scientists together to explore how climate-friendly farming can move from research plots to farmers' fields - and how credible carbon projects may reward farmers for verified environmental benefits.

The workshop, titled "Designing and Implementing Agricultural Voluntary Carbon Market Projects", was held on 29-30 August 2026. It was organised by Core CarbonX Solutions Private Limited in association with the ICAR-Indian Institute of Soil Science (ICAR-IISS), Bhopal, and GIZ India under the Climate Adaptation, Resilience and Climate Finance in Rural India (CAFRI II) project.

Scientists from 16 agricultural research institutions participated. The programme aimed to build the practical skills needed to design transparent, scientifically sound and farmer-focused carbon projects.

Carbon credits in simple terms

A carbon credit represents one tonne of greenhouse-gas emissions reduced or removed from the atmosphere. In agriculture, credits may be generated when farmers adopt eligible practices - such as improved nutrient and water management, conservation agriculture, residue management, agroforestry or practices that increase soil carbon - and the resulting climate benefit is carefully measured and independently verified.

Companies may purchase such verified credits to support their climate commitments. For farmers, a well-designed project can potentially provide an additional source of income alongside benefits such as healthier soil, better water use, improved resilience and lower input losses. However, credits are not automatic: projects must prove that the climate benefits are real, additional, measurable and lasting, and must clearly explain how farmers will participate and share benefits.

Scientific leadership and institutional support

Dr. Amaresh Kumar Nayak, Deputy Director General (Natural Resource Management), ICAR, attended the inaugural session as the Chief Guest. He emphasized the crucial role of scientific institutions and the need for an enabling policy framework to develop a credible, transparent, and effective voluntary carbon market in India.

Dr. Monoranjan Mohanty, Director, ICAR-Indian Institute of Soil Science, Bhopal, highlighted the importance of integrating relevant national missions with carbon-market initiatives to achieve coordinated climate and sustainable-development outcomes. Mr. Niroj Mohanty, Managing Director, Core CarbonX Solutions Pvt. Ltd., outlined the context, objectives, and expected outcomes of the workshop, while Mr. Sarat Kannepalli, Advisor-Climate Change, GIZ, explained the role of climate finance in supporting scalable and inclusive agricultural carbon projects. Dr. Sangeeta Lenka, Principal Scientist, ICAR-IISS, Bhopal, described scientifically robust approaches for accurately quantifying carbon removals and emission avoidance in agricultural systems.

From technical concepts to workable projects

The sessions followed the full journey of a carbon project - from identifying a suitable farming intervention to setting a baseline, estimating emission reductions or carbon removals, preparing a Project Design Document (PDD), and completing validation, monitoring and independent verification.

Participants worked in groups on real project components rather than relying only on lectures. Exercises covered legal compliance, stakeholder consultation, environmental and social safeguards, methodology selection, data collection, greenhouse-gas calculations and monitoring, reporting and verification (MRV). The second day focused on monitoring plans, data quality and the evidence needed to establish credible carbon benefits.

Discussions also addressed practical challenges: bringing many smallholders into a project, reducing measurement costs through digital MRV, arranging finance, connecting projects with buyers, ensuring transparent contracts, and building fair benefit-sharing mechanisms for farmers, including women and small and marginal landholders.

What comes next

The workshop concluded with an action-planning session in which participants identified priority tasks, responsible institutions and timelines for advancing pilot PDDs. Pre-workshop and post-workshop assessments were also used to measure learning and collect participant feedback.

The initiative seeks to position ICAR institutes and State Agricultural Universities as strong technical partners in India's emerging agricultural carbon market. The larger goal is to connect reliable science with farmers' needs so that climate action in agriculture delivers credible emission reductions, stronger rural livelihoods and transparent benefits at the field level.



