**SECOND CIRCULAR** 

# INTERNATIONAL CONFERENCE ON DECARBONIZING AGRICULTURE

NOVEMBER 25 - 27, 2023

### MANGALORE, KARNATAKA

















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## Why ICDA-2023 Carbon created creatures. Can carbon combat climate change?

With longer summers, extreme winters, wildfires, rising sea levels, heatwaves and other calamitous events, the impact of climate change is evident. In 2015, in Paris, the nations of the world committed themselves to trying their best to prevent the planet warming by more than 1.5°C from its pre-industrial state. Despite low per-capita emissions (1.8 tonnes CO2), India is the third-largest emitter globally, emitting a net 2.9 gigatonnes of carbon-dioxide equivalent (GtCO2) every year as of 2019. The Sixth Assessment Report (AR6) of the Intergovernmental Panel on Climate Change (IPCC) tells us that global emissions need to be reduced by 43% within this decade for us to have a fighting chance of limiting global temperature rises to within 1.5° C. How, then can India realize the promise of its green transformation ? Net zero refers to a state, wherein the emissions of greenhouse gases by a country are offset by absorption, or removal, through futuristic technologies, so that the net emissions from the country are zero. Prime Minister Narendra Modi, announced at COP26 that India would reach net-zero emissions by 2070. India has also set for itself, reducing total projected carbon emissions by an additional 1 billion tonnes. India has the potential to create 287 gigatonnes of carbon space for the world. In the LoS scenario, India could reduce annual emissions from a historical trajectory of 11.8 GtCO2 to 1.9 GtCO2 by 2070, a 90% reduction in economic emissions intensity compared with 2019. It can reach 0.4 GtCO2 by 2050 in the accelerated scenario, with a potential to get to its net-zero-by-2070. Global warming is one of the most pressing issues today and emissions are contributing to climate change, which is a real and present threat to planet Earth. One way to mitigate climate change is by reducing their carbon emissions. This can be done through a practice called carbon offsetting or decarbonising. Decarbonizing refers to the process of reducing carbon emissions and transitioning to a low-carbon economy.



## AGRICULTURAL TECHNOLOGIES FOR DECARBONIZATION

India's green revolution, helped it, overcome a hunger crisis. The time is now ripe for India's second green revolution, to shift away from a carbon-intensive legacy growth model and leapfrog into a green growth model. Agriculture is a significant contributor to global greenhouse gas emissions, accounting for approximately 25% of total emissions. By implementing changes such as Carbon Farming, Conservation Agriculture, Agroforestry, Afforestation, Reforestation, Farming System Approaches, Organic Farming, Natural Farming, Eco Agriculture, LEISA, Crop Livestock Integration, Bioenergy Crops, Regenerative Agriculture, Biodynamic Farming, Mountain Farming, Green Synthesis of Fertilizers, Cropping System Approaches, Inclusion of Pulses, Drought Management, Fallow Management, Grassland and Pasture Management, Cropping Systems, Crop Diversification can bring back overall sustainability of the systems. Monitoring and reporting progress of changes in growing environment such as DSR,SRI,SCI in rice, growing of biotic and abiotic stress tolerant cultivars, Biorational and biocontrol agents in agriculture, IPM for controlling pests and many such practices, can reduce greenhouse gas emissions and mitigate the impacts of climate change, eventually lowering the carbon footprint. Government of India's flagships initiatives such as Ethanol revolution, Nano Urea, Nano DAP, Nano Zinc, neem coated urea, Manure management, LCC, PM KUSUM, PM PRANAM, solar-powered agro vehicle, Mangrove restoration and conservation, nature based solutions, residue management, enhancement of biodiversity & ecosystem services ,conservation, agro tourism towards carbon neutral villages can increase the resilience of agricultural systems and improve food security. Sadguru's Save Soil movement and implementing practices that promote soil organic carbon, knowing, soil stores more carbon than plants and the atmosphere combined, farmers can earn now carbon credits and trading of such carbon credits can augment farm income, bring sustainability and make agricultural systems more resilient that benefit both people and the planet. India is all set to launch the Carbon Credit Trading Scheme soon that will ensure a robust and credible domestic carbon market.

The Bureau of Energy Efficiency (BEE) under the Union Ministry of Power along with the Union Ministry of Environment are developing the Carbon Credit Trading Scheme aiming to attract more investment in India into technology and nature-based climate solutions. The government plans to develop a national framework with the objective to decarbonise the Indian economy by pricing the GHG emission through trading of the carbon credit. Currently, India has an energy savings-based market mechanism and the new scheme will enhance the energy transition efforts with an increased scope that will cover the potential energy sectors. Decarbonising agriculture will require a combination of policy interventions, technological innovations, and changes in farming practices. Overall, decarbonising is a complex process, requires a collaborative effort between governments, businesses, and individuals. In this context, ICDA- 2023 conference will try to take a pole position for presenting noble and fundamental advances and marching innovations by facilitating communication among researchers, policy field practitioners. business makers. consumers. heads. trading professionals, and farmers. Several innovations happening very fast and then noteworthy achievements made, under the circumstances, the organizing team have been in forefront to bring the mutual exchange of ideas, connectivity, the communications among all the stakeholders through scientific deliberations, research papers, technological breakthroughs, outstanding innovations, field based changes, governmental supports, success stories, farmers innovations, indigenous conservation systems, geographical indicators, agricultural heritage systems, exhibitions, display, citations, books, book chapters, popular articles, manuscripts, documents and many more. This particular, ICDA- 2023, will attract several experts who will deliberate either electronically or through physical presence and from abroad. With the presence of highly decorated personalities, researchers, scientists champion farmers, students, researchers, field practitioners, across the world, focused on decarbonizing agriculture, this, ICDA- 2023 conference is providing the platform for learning and sharing the new developments.





# **Scientific Sessions**

#### with Eminent Personalities as Chairman

**Climate Change Impacts, Mitigation and Adaptation strategies** comprehensive summary of the current state of knowledge on climate change and its impacts, based on the most up-to-date scientific research.

Measuring baseline emissions, Determining emissions reductions, Verification and validation in all aspects of Agronomy, Horticulture, Agroforestry, Irrigation, Fertilizer application, Farm mechanization Food, Nutrition both traditional and modern, Documenting indigenous practices, changes in farming practices, Soil Organic Matter, Ocean Uptake, Geological Sequestration.

Use of precision agriculture platforms for optimizing agricultural production for reducing greenhouse gas (GHG) emissions.

Decarbonising Agriculture Charting a Pathway for Sustainable Growth- Green sysnthesis of fertilizers, nano fertilizers, Natuarl Farming, Biodynamic farming, Advances in cultural practices, Crop-Livestock Integration,organic farming, Eco-agriculture& perm cultur, Using renewable energy, Adopting agroforestry practices Innovative methods of Pest and disease management, PM KUSUM Scheme, R strategy, Zeba technologies,Changjng growing environments siuch as SRI, DSR,AWD SCI etc.

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**Phenomics and Genomics approach of decarbonizing** develop disruptive technologies to meet goal of decarbonisation, Plant Photosynthesis.

**Carbon sequestration** happens through various natural processes, including plant photosynthesis, soil organic matter formation, ocean uptake, and geological sequestration. By understanding these processes, we can develop strategies to enhance carbon sequestration and mitigate the impacts of climate change.

**Developing carbon credit trading platform** Soil carbon modeling, Carbon accounting, Carbon sequestration, Soil carbon fractionation, soil organic carbon (SOC) stock-increasing SOC levels is an important strategy for decarbonizing agriculture and mitigating the impacts of climate change. By implementing practices that promote SOC, farmers can help to build more sustainable and resilient agricultural systems that benefit both people and the planet.

**Creating knowledge base and awareness** About carbon emissions data, accounting rules, technologies for carbon capture, storage and utilization, quantifying carbon emissions, targets, actions, schemes, policies for emissions reduction in agriculture, and setting emissions reduction targets

**Carbon footprint analysis** Per capita carbon emissions ,carbon accounting system and assessment processes and methodologies in agriculture, carbon capture storage and sequestration strategies in agriculture. Developing a carbon trading mechanism ,Certifying emissions reductions

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### **Abstract, Book and Book Chapters**

Abstract submission: Abstracts not exceeding 300 words on any of the aforesaid themes should be

written to icda-2023@krishitantra.com on or before 25th October,2023. Registration is mandatory for publication of abstract in e-Souvenir. Delegates desirous of availing the opportunity of publishing research paper or seeking authorship/editorship/ with one registration, strictly are advised to submit new and unplagiarised content, ranging from 25 pages in double space, Arial narrow font, 12 in size on any theme of the ICDA-203 and should be submitted

Last date for submissions 30th October, 2023 to the email id: icda-2023@krishitantra.com

#### **Important Dates:**

First Circular & Website Lunching	25th May 2023
Registration Starts	30th May 2023
Registration Ends	30th October 2023
Abstracts, Lead papers, Keynote / Book chapter submission	30th October 2023
Final intimation of acceptance letters / Confirmation of particip	oation 30th October 2023
Hotel stay confirmation	30th October 2023
Conference Dates	25th, 26th & 27th November 2023

#### Registration

The conference is purely for pre-registered delegates Delegates registration is must except Foreign delegates who will be honorary guests and will be joining virtually unless earmarked as Physical attendees Important Entitlements

Category	Entitlements (Only Digital Certificates for all purposes	) Charges
Registration fee in case of online attendance for Students, Farmers/ FPOs	Web conference Participation certificate, Abstract publication + if selected for oral presentation	₹ 1000 Only
Registration fee in case of online attendance for Scientists / Professors	Web conference Participation certificate, Abstract publication ++if selected for oral presentation	₹ 3000 Only
Registration fee in case of boarding /in person attendance	Two nights stay + fine dining experience + full conference access + One Journal paper /book authorship/editorship as co author/co editor in a multi authored/edited journal/book related to any of the theme of the conference-decided solely by the scientific organizing committee members)	₹ 10,000 for all activities mentioned under this category

For All Conference related issues, payment of the fees/papers//book chapters write only to one email id – icda-2023@krishitantra.com. All payments regarding registration , fees, Hotel stay bookings and advance payments can be paid by Online. All delegates who pay the fee using this app, will automatically get registered and their entire required particulars reaches to all the concerned persons automatically. There is no other way to pay the registration fee.



Scan QR Code for registration

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#### **Knowledge Partners**













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