



5th Edition of

Advanced Technology Programme in Agriculture

Global Dialogue on
“Innovating at the Frontier from Agriculture to Agribusiness”
2021

14th | 15th | 16th December 2021
CII Hive Virtual Platform

Programme
INAUGURAL SESSION

Day 1 (14 Dec 2021)

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| 1930 – 2045 Hrs | Inaugural Session | Strategizing Indian Agtech@75 |
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The role of innovations and their actual deployment is integral to accelerate the adoption of technologies at farm level. The information technology revolution in India, new technologies in agriculture, private investments especially on research and development, government efforts to rejuvenate the cooperative movement to address the problems of small holdings and small produce etc are changing face of agriculture in India.

Lessons from across the world also call for building of a robust agritech policy framework in India which includes collaboration between all market participants such as farming communities, agritech companies, food processing organizations, technology providers and research institutions. Cross-country collaboration on agritech technologies and operating models could also be driven through such a policy framework.

Inaugural address from International subject experts along with Govt. representation would discuss the context to build a technology led growth strategy for agriculture to ensure resilience and sustainability.

Opening remarks & Setting the context

Session Chair

Mr. Sanjiv Puri

Chairman CII National Council on Agriculture
Chairman and MD, ITC Ltd

Address

Mr. Aadarsh Baijal

Partner, Southeast Asia Digital Practice
Bain & Company, Singapore

Address

Mr. Rajesh Ranjan

CEO, NABVENTURES Pvt Ltd

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| Address | Mr. Parmesh Shah Global Lead, Data Driven Digital Agriculture, World Bank |
| Key Note Address | Prof. Vikram Adve Co-Director, Center for Digital Agriculture, University of Illinois Director, AIFARMS National AI Institute |
| Guest of Honour | Mr. Sanjay Aggarwal Secretary, Department of Agriculture & farmers Welfare Ministry of Agriculture & Farmers Welfare Government of India |
| Concluding Remarks | Mr. Sanjiv Puri Chairman CII National Council on Agriculture Chairman and MD, ITC Ltd |

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| 1400-1530 hrs | Session 2 | Next-Gen Heroes in AgTech |
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Despite a pandemic-hit year, Agri-Tech Start-ups in 2020 saw over \$300 million of investments. The number of such Start-ups has shown steady growth with around 600-700 Start-ups dominating the Indian AgriTech ecosystem.

Reflecting on the evolution of Ag-Tech in India with Start-ups getting a tail wind the session would be having seasoned next gen Start-ups who would be discussing their innovation and the impact created towards pushing agriculture to agribusiness. Focus would be on role of their technological innovations and actual deployment which is integral to accelerate the process of transformation.

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| Session Chair | Mr Rohtash Mal Co-Chair CII Task Force on Startups Chairman, EM3 Agriservices Pvt. Ltd |
| Venturing to Agtech and Investment Landscape | Mr Amar Singh Managing Director, FMC Ventures |
| Startup India- An initiative towards building new India | Ms. Aishwariya Chauhan Invest India |

“Tech Punch”

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| <i>“Effective & affordable Agri biologicals with novel biomolecules”</i> | Dr Renuka Diwan Founder , BioPrime AgriSolutions |
| <i>“Engineering Hyperlocal farm services from Input to Advisory”</i> | Mr. Rajendra Lora Co-Founder & CEO, Freshokartz Agri |

“Precision Agriculture through Phytology, Microbiology & AI”

Mr. Agam Khare
Co-Founder, Absolute Foods

“Rapid Automated Soil test with advisory services”

Mr. Sandeep Kondaji
Founder & CEO, KrishiTantra

“Post Harvest AI driven sorting and grading”

Mr. Kshitij Thakur
CEO & Co-Founder, Agrograde

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| ession 3 | Innovative approaches to traditional agricultural challenges |
| Reimagining – Mapping Indian DNA to emerging global technologies | |

INTERNATIONAL PANEL SESSIONS

| Panel 1: Soil Health and Water management | |
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| Date: 14 Dec 2021 | Time: (1630- 1745 Hrs) IST |
| <ul style="list-style-type: none"> ✓ Soil and water are two important natural resources for sustaining agricultural productivity. Soil and Water management is the key to development of sustainable agriculture. These two natural resources are vital for ensuring agricultural and environmental safety. Soil and water resource status and management is a holistic approach to agriculture that can play an important role in addressing the challenges for sustainable agriculture. ✓ The session would discuss the Global innovations happenings across world mainly in Germany, Australia, Finland, Netherland and their scope towards serving Indian Farming community. | |
| Opening remarks & Setting the context | <u>Session Chair</u> Mr Randhir Chauhan Member, CII National Council on Agriculture MD, Netafim India |
| Panel Discussion | Mr. Dominic Roth Co-Founder & CEO Stenon, Germany Mr. Sam Duncan CEO and founder, FarmLab, Australia Mr. Johannes Tiusanen Chief Science Officer, Soil Scout, Finland Mr. Henri Hekman CEO and Founder, AgroCares, Netherlands |

| Panel 2: Farm Monitoring and Disease Prediction | |
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| Date: 14 Dec 2021 | Time: (1800- 1915 Hrs) IST |
| <ul style="list-style-type: none"> ✓ Farm digitization and IoT technologies contribute to improving our understanding by continuously monitoring and measuring different physical phenomena, producing a huge amount of data, termed as Big Data. Agricultural big data is successfully being used for various tasks, such as yield prediction, weed and pest/disease detection, crop and food detection, risk management. ✓ The session has seasoned globally renowned agtech founder who would be discussing recent advancements across France, Germany, Ireland, Canada and seeing their alignment with Indian Agtech ecosystem. | |
| Opening remarks & Setting the context | Session Chair Mr Ramesh Ramachandran Co-Chairman, CII WR Subcommittee on Rural-Urban Connect Senior Vice President, Mahindra & Mahindra, India |
| Panel Discussion | Mr. Michael Bruniaux Co-Founder, CEO, Sencrop, France Ms. Simone Strey CEO, Plantix, Germany Mr Bernard Wright Managing Director & Co-Founder, Fiedly, Ireland Mr. Dmitry Dementiev Co-Founder, GeoPard Agriculture, Germany Mr. Mike Morris CEO, Resson Aerospace, Canada |

Day 2 (15 Dec 2021)

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| 1000-1230 hrs | AgLIVE 2021 <i>(Live Pitching Event)</i> |
| <i>Exclusive platform for Entrepreneurs and Innovators to showcase their technology and Pitch before a Distinguished Jury to mobilize funding and secure potential incubation opportunities along with access to FPOs</i> | |



We have selected Top 12 Startups who would be presenting their case in front of expert Jury Panel.

A LIVE PITCHING EVENT

| Panel 3: Mechanization & Automation | |
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| Date: 15 Dec 2021 | Time: (1630- 1745 Hrs) IST |
| <ul style="list-style-type: none"> ✓ Today agricultural robots can be classified into several groups: harvesting or picking, planting, weeding, pest control, or maintenance. Scientists have the goal of creating „robot farms“ where all of the work will be done by machines. The main obstacle to this kind of robot farm is that farms are a part of nature and nature is not uniform. Factories are built around the job at hand, whereas, farms are not. Robots on farms have to operate in harmony with nature and these are the objective of budding agtech startups. ✓ The panel session would discuss the new dimension of Ag-Food robotics from Academic expert from Wageningen University, Netherland and Kansas State University, United States. Startup founders from Australia and Israel would explain their disruptive innovations. | |
| Opening remarks & Setting the context | <u>Session Chair</u> Mr Rohtash Mal Co-Chair CII Task Force on Startups Chairman, EM3 Agriservices Pvt. Ltd. |
| Panel Discussion | Mr. Paul Voutier Founder, Ambit Robotics, Australia Dr. Ajay Sharda Associate Professor- Precision Ag/Machine Systems Kansas State University, USA Mr. Ben Alfi Founder & CEO, Blue White Robotics, Israel Mr. Paul Goethals Wageningen University & Research, Netherlands |
| Panel 4: Post-Harvest Technologies | |
| Date: 15 Dec 2021 | Time: (1800- 1915 Hrs) IST |
| <ul style="list-style-type: none"> ✓ Steady food supply across the world is solely dependent on agricultural activities around the world. The whole process of cultivation involves a lot of direct and indirect actors. ✓ Solving these problems in the agricultural system is very important to keep continuous food supply running without facing the global food shortage. Technology like blockchain, Yield estimation before harvest, Shelf-life extension products and Grain analysers can solve these problems by providing a distributed network of connected sellers and buyers. ✓ On those lines, current panel session would take a deep dive in to the subject with seasoned experts and talk about latest trends and happenings across Pre-Post Harvest ecosystem. | |
| Opening remarks & Setting the context | <u>Session Chair</u> Mr. Devendra Gupta Member CII- Task Force on Post Harvest and Logistics CEO/Co-Founder, Ecozen Solutions Pvt Ltd, India |
| Panel Discussion | Mr. Raja Ramachandran Founder, Ripe.io, United States Mr. Thomas de Masi Co-Founder/CEO, Coolsan Australia Pty Ltd Mr. Emiliano Genorini EMEA and India Account Manager, Viavi Solutions, Italy Mr. Georg Karner CEO & Co-Founder, Pixofarm, Austria |

| Panel 5: Advancements in Agri Biotech and Agrochem | |
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| Date: 15 Dec 2021 | Time: (1930- 2045 Hrs) IST |
| <p>✓ Biotechnology has played an important role in the advancement of the health sector with great benefits to human race. We need a balanced and diverse mix of seed, crop protection, and digital solutions focused on maximising productivity to enhance yield, sustainability, and profitability. Nowadays high-throughput physiological phenotyping screening with new generation plant specific biologicals are leading the race of the Ag-Biotech innovation.</p> <p>✓ The session would align the thought of global experts from Corporates and Startups to see the emerging issues and converge their innovations accordingly.</p> | |
| Opening remarks & Setting the context | <p><u>Session Chair</u> Dr Vairamani Ramanathan Chief Innovation & Technology, Rallis India Ltd</p> |
| Panel Discussion | <p>Dr. Nimrod Israely CEO, Biofeed Ltd, Israel</p> <p>Ms. Keren Moshelion CEO, Plant-DiTech, Israel</p> <p>Dr. M. V. Rajam Dept. of Genetics, Delhi University, India</p> <p>Mr. Raman Babu Digital Ag Lead for Asia-Pacific, Corteva Agriscience, India</p> |

SPECIAL PLENARY

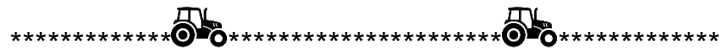
Day 3 (16 Dec 2021) [Thursday]

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| 1900 - 2030 Hrs | Special Plenary - Scaling deployment of Digital Agriculture - Policy and Partnerships |
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Data is a new oil in Agriculture. To address the challenge, aligned to the Centre's digital India program, 'Agri Stack' aims to create a unified platform for farmers to provide them end to end services across the agriculture food value chain. However, lack of open agriculture data standards has much of agri data stored in silos, which in turn is a key barrier to nurturing an AgTech ecosystem in India.

Given this background the session will focus on strategies towards leveraging 'Agri Stack' for scaling digital agriculture and precision farming, PPP frameworks towards helping farmers realize higher income and better profitability, global learnings on ensuring integrity and data protection state experiences around project conceptualization, deployment, learnings, and successes

| Panel Session on Agri Stack IDEA (India Digital Ecosystem of Agriculture) | |
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| “Enabling Data Sharing towards Digitalization of Agriculture” | |
| Opening remarks & Setting the context | Session Chair Mr. S Sivakumar Chairman CII Core Group on AgTech Head- Agri & IT Businesses, ITC Limited |
| Special Address by | Mr. Andre Laperriere Executive Director Global Open Data initiative for Agriculture and Nutrition (GODAN) |
| Special Address by | Dr. Vijay Rajmohan Director (Digital Agriculture), Ministry of Agriculture & Farmers Welfare Government of India |
| Special Address by | Sri. Jayesh Ranjan, IAS Principal Secretary, Industries & Commerce Department Government of Telangana |
| Panel Discussion | Mr. Ranveer Chandra Managing Director- Research for Industry CTO of Agri-Food at Microsoft Mr. Anand Patil CTO, Cisco Systems, India Mr. Pankaj Gupta* Head Business Development Amazon Internet Services Private Limited |
| Concluding Remarks | Mr. S Sivakumar Chairman CII Core Group on AgTech Head- Agri & IT Businesses, ITC Limited |



*FACE is CII's Centre of Excellence dedicated to building efficiencies across the agricultural value chain from Farm – to- Fork. FACE is charged with the mission of improving competitiveness of India's agriculture and food sector by catalysing innovations, building capacity and **enhancing productivity** across the value chain.*

- Meetu Kapur, CII
