



Indian Technical and Economic Cooperation (ITEC)
International ITEC Training Programme on
"AgriTech Startups for Enhancing the Agri Value Chain"
(For Participants from North Sumatera, Indonesia)
(April 19 to May 2, 2024)

at

National Institute of Agricultural Extension Management (MANAGE)

Introduction:

Startups in Agriculture play an instrumental role by solving age-old problems in Agriculture to increase any country's economic growth. Adaptation of innovative technologies by farmers is key to the success of the Agri Startups. Indian Agri Startups are playing a pivotal role not only in India but also in other emerging economies across the world by their presence across the world.

India, the third-largest startup ecosystem in the world, after the US and China both in terms of the number of Incubators and number of startups (1,18,260 DPIIT-recognized startups), is home to numerous pioneering Agri-startups.

Besides sharing India's experiences and competence through the ITEC programmes, the Work of startups in the sector application of various advanced technologies and in the Indian Agri startup ecosystem, how the same models can be implemented and utilized in the context of other emerging economies will be explored during the process. Cross-border linkages will be explored with the Indonesian Country.

Aims and Learning Objectives of the program

- ❑ To know the Indian Startup Ecosystem and Agri Startup Ecosystem
- ❑ To understand various technologies adapted by the startups
- ❑ To experience the various offerings by Indian startups through experiential learning
- ❑ To develop a gap analysis for technology adaptation in the home country
- ❑ Developing startup ideas for the Agri ecosystem of Indonesian Country
- ❑ To develop a Cross border implementation plan for the Indian startup Technologies



Schedule of ITEC Training Programme

Day – 1, April 19, 2024: Agri Startup Ecosystem – MANAGE Experiences

MANAGE - Centre for Innovation and Agripreneurship is one of the leading Agribusiness Incubators in India and is a Knowledge Partner & Centre of Excellence under the Innovation and Agri entrepreneurship initiative under RKVY-RAFTAAR (Rashtriya Krishi Vikas Yojana-Remunerative Approaches for Agriculture and Allied Sector Rejuvenation), MoA & FW.

MANAGE-CIA has trained 754 startups and incubated 425 startups from various focus areas of the Agri & Allied Sectors. A total of 158 startups have been funded so far with a grant in aid of ₹ 15.83 Crores under RKVY-RAFTAAR. As a knowledge partner under RKVY-RAFTAAR, MANAGE-CIA has the responsibility of handholding four RKVY-RAFTAAR Agribusiness Incubators (R-ABI). This session MANAGE and MANAGE-CIA activities will be discussed.

Time	Session Details	Speakers
10.00 – 11:15	Registration	Training Program participants Team MANAGE-CIA
11.15 – 11:45	Tea Break	
11.45 – 13:00	MANAGE-Centre for Innovation and Agripreneurship – Experiences	Dr. Saravanan Raj Director (Agricultural Extension) & CEO-Centre for Innovation and Agripreneurship , MANAGE
13:00 – 14:00	Lunch	
14:00 - 14:30	Overview of Indian Startup Ecosystems	Mr. Amit Kale Marketing Manager MANAGE-CIA
14:30 – 15:30	Inaugural Session	Dr. P Chandra Shekara Director General MANAGE
15:30 – 16:00	Tea Break	
16:00 – 17:30	Startup Ecosystems in Participant countries – Discussion	Mr. Yuvaraju A Business Manager MANAGE – CIA



Day – 2, April 20, 2024: Agricultural Value Chain – Role of Startups

The agricultural value chain is the entire process of producing, processing, and distributing agricultural products at the farm level to the plate to the end consumer. It involves a series of interconnected activities that add value to raw agricultural commodities, ensuring they reach consumers in a usable and desirable form. In recent years, various innovations have been introduced across the agricultural value chain to improve efficiency, sustainability, and overall productivity. These innovations leverage technology, data, and new business models to address challenges and create opportunities within the agriculture sector. innovations collectively contribute to the transformation of the agricultural value chain, making it more sustainable, resilient, and responsive to the challenges of a rapidly changing global environment. These Innovations will be discussed along with Experience sharing sessions by the startups in the sector.

Time	Session details	Speakers
09:30 – 10:00	Recap Session	Dr. Saravanan Raj Director (Agricultural Extension) & CEO-Centre for Innovation and Agripreneurship , MANAGE
10:00 – 11:15	Indian Startup Ecosystem - Agri Startup Ecosystem in India	Mr. Amit Kale Marketing Manager MANAGE-CIA
11.15 – 11:45	Tea Break	
11:45 – 13:00	National Policy for Supporting Incubation Ecosystem – A Case of RKVY-RAFTAAR from Ministry of Agriculture & Farmer's Welfare, Government of India	Dr. Saravanan Raj Director (Agricultural Extension) & CEO-Centre for Innovation and Agripreneurship , MANAGE
13:00 – 14:00	Lunch	
14:00 – 15:30	Agricultural Value Chain in India – Opportunities for Agri Startups	Mr. Satyadev Founder & CEO ABY Farmers LLP
15:30 – 16:00	Tea Break	
16:00 – 17:30	Agricultural Value Chain in Soybean Products	Mr. Rakesh Mungelkar Founder Parikshith Foods

Day – 3, April 21, 2024 (Sunday)



Day – 4, April 22, 2024: Millet Value Chain – Role of Startups

Millet, a group of small-seeded grasses grown as cereal crops, has gained attention in recent years due to its nutritional benefits, adaptability to diverse climates, and potential for sustainable agriculture. Startups have played a crucial role in enhancing the millet value chain by introducing innovations and addressing challenges at various stages of production, processing, and distribution. 2023 was the “International Year of Millets” as declared by the United Nations and thrust was given to Millet cultivation and consumption by various activities across the world. Startups in the Millet value chain play a crucial role in processing, market linkages creating multiple value-added products, and taking millets to the plate of the consumer.

Time	Session details	Speakers
09:30 – 10:00	Recap Session	Dr. Saravanan Raj Director (Agricultural Extension) & CEO-Centre for Innovation and Agripreneurship , MANAGE
10:00 – 11:15	Value Chain Intervention in Millets	Dr. Sangappa Scientist (Agricultural Extension) ICAR- Indian institute of Millets Research
11.15 – 11:45	Tea Break	
11:45 – 13:00	Value Chain Intervention in Millets – Agri Startup Experiences	Mr. Rama Subba Reddy Founder Sattva Millets
13:00 – 14:00	Lunch	
14:00 – 17:30	Visit ICAR - Indian Institute of Millets Research and Nutrihub-TBI	Dr. Stanley J Senior Scientist (Agricultural Entomology) ICAR- Indian institute of Millets Research



Day – 5, April 23, 2024: Livestock Value Chain – Opportunities in Livestock

The livestock value chain has activities and processes involved in the production, processing, and distribution of livestock and livestock products, from the farm to the consumer. The value chain has multiple components including Breeding and Genetics, Livestock Farming, Input Supply, Livestock Trading and Marketing, Transportation, Processing and Slaughtering, Distribution and Wholesaling, Retailing, Consumption, Waste Management, and Research & Development.

Innovations proposed to be discussed:

- Precision Livestock Farming (PLF)
- Genomic Selection
- Blockchain Technology
- Vertical Integration and Integration of Digital Platforms
- Smart Farming and IoT
- Alternative Protein Sources
- Mobile Technologies

Time	Session details	Speakers
09:30 – 10:00	Recap session	Dr. Saravanan Raj Director (Agricultural Extension) & CEO-Centre for Innovation
10:00 – 11:15	Milk Value Chain and Role of Agri Startups in Value Chain Integration	Ms. Pragnya Mishra Business Executive MANAGE-CIA
11.15 – 11:45	Tea Break	
11:45 – 13:00	Experience sharing by Agri startup	Akhil Reddy Founder LiveStockify
13:00 – 14:00	Lunch	
14:00 – 17:30	Visit to Sid's farm – Antibiotic free Milk producer	Team MANAGE-CIA



Day – 6, April 24, 2024: Horticulture Value Chain – Opportunities for Startups

The horticultural value chain refers to the series of interconnected activities involved in the production, processing, distribution, and marketing of horticultural products. Horticulture encompasses the cultivation of fruits, vegetables, nuts, seeds, herbs, sprouts, mushrooms, algae, seaweeds, non-food crops such as flowers and ornamental plants, and products such as honey and maple syrup. The horticultural value chain involves various stages, each contributing to the overall production and delivery of horticultural goods with Input supply, Production, Post-harvest, Processing, Distribution, Wholesale, Retail, Export, and import, Marketing, and promotion, Waste Management, Research, and Development as key components.

Innovations proposed to be discussed:

- Precision Agriculture and Smart Farming
- Vertical Farming and Controlled Environment Agriculture (CEA)
- Hydroponics and Aquaponics
- Biotechnology and Genetic Engineering
- Precision Harvesting
- Blockchain Technology
- Digital Platforms for Market Access
- Post-harvest Technologies
- Biopesticides and Integrated Pest Management (IPM)
- Precision Irrigation
- Urban Farming and Community Gardens
- Circular Economy Practices

Time	Session details	Speakers
09:30 – 10:00	Recap Session	Dr. Saravanan Raj Director (Agricultural Extension) & CEO-Centre for Innovation
10:00 – 13:00	Innovations in Horticultural Valuation – Opportunities for Startups and Site Visit to R&D Centre of Urban Kisaan	Dr Sairam Reddy Co-Founder Urban Kisan Gundlapochampalli, Hyderabad, Telangana
13:00 – 14:00	Lunch	
14:00 – 17:00	Visit to Parikshit Foods	Team MANAGE-CIA



Day – 7, April 25, 2024: Exploration visit to the Startup Ecosystem

Time	Session details	Speaker
09:30 – 10:00	Recap Session	Dr. Saravanan Raj Director (Agricultural Extension) & CEO-Centre for Innovation and Agripreneurship MANAGE
10:00 – 13:00	Visit to T-Hub - Govt. of Telangana initiative to Nurture Startups	T-Hub Team
13:00 – 14:00	Lunch	
14:00 – 17:30	Agri-Business Incubation Services by ICRISAT – Visit to ICRISAT	ICRISAT - AIP Team

Day – 8, April 26, 2024: Aquaculture value Chain – Role of Agri startups

India has a significant and growing aquaculture industry, playing a crucial role in the country's economy and meeting the increasing demand for seafood. Aquaculture in India encompasses a variety of species, including fish, shrimp, and mollusks. Agri startups can contribute to the development and enhancement of the aquaculture value chain Including but not limited to Technology Adoption, Sustainable Practices, Innovation in Breeding and Genetics, Market Linkages and Access, Disease Management Solutions, etc. The success of startups in the aquaculture sector will depend on their ability to understand and address the specific needs and challenges faced by local farmers. The session will focus on opportunities for startups in the sector along with experience-sharing sessions by founders of aqua startups.

Time	Session details	Speaker
09:30 – 10:00	Recap Session	Dr. Saravanan Raj Director (Agricultural Extension) & CEO-Centre for Innovation and Agripreneurship, MANAGE
10:00 – 11:15	Experience sharing session by Aqua-based startup	Mr. Kiriti Madina Founder Robic Rufarm Private Limited
11.15 – 11:45	Tea Break	
11:45 – 13:00	Opportunities in Aquaculture Value Chain – Role of Startups	Dr Mahidhar Bole Founder Marsco Nutraceuticals
13:00 – 14:00	Lunch	
14:00 – 17:30	Visit to National Fisheries Development Board	Team MANAGE-CIA



Day 9, April 27, 2024: Value Addition for enhancing the shelf life

Time	Session details	Speaker
09:30 – 10:00	Recap Session	Dr. Saravanan Raj Director (Agricultural Extension) & CEO-Centre for Innovation and Agripreneurship , MANAGE
10.00 – 13:00	Value Addition for enhancing the shelf life - the role of technology at farm-level processing	Harika Foods 2-6-95 Sikh Village Secunderabad – 500009 Telangana
13:00 – 14:00	Lunch	
14:00 – 17:30	Horticultural Value Chain Innovations - Experiences from Participant countries and Site Visit to CoE, Mulugu	Centre of Excellence for Fruits Department of Horticulture Mulugu, Siddipet Telangana

Day 10, April 28, 2024 (Sunday)

Day 11, April 29, 2024: Honey Bee Keeping and Value-Added products of Honey

Time	Session details	Speaker
09:30 – 10:00	Recap Session	Dr. Saravanan Raj Director (Agricultural Extension) & CEO-Centre for Innovation and Agripreneurship , MANAGE
10:00 – 13:00	Visit to L R Naturals	Team MANAGE-CIA
13:00 – 14:00	Lunch	
14:00 – 17:30	IKP Tour along with Stakeholders meet	IKP Team

Day 12, April 30, 2024: Hyderabad Startup Ecosystem Exploratory visit

Time	Session details	Speaker
09:30 – 10:00	Recap Session	Dr. Saravanan Raj Director (Agricultural Extension) & CEO-Centre for Innovation and Agripreneurship , MANAGE
10:00 – 11:45	Visit to ICAT-IIOR	Team MANAGE-CIA
13:00 – 14:00	Lunch	
14:00 – 17:30	Visit to Rural Technology Park - NIRD-PR	NIRD-PR team



Day 13, May 1, 2024: Hyderabad Startup Ecosystem Exploratory visit

Time	Session details
09:30 – 10:00	Recap Session
10:00 – 13:00	Visit to AgHub
13:00 – 14:00	Lunch
14:00 – 17:30	Visit to ICAR-NAARM
19:00 – 20:00	Cultural night followed by dinner

Day 14, May 2, 2024 Feedback and Certificate Distribution

Time	Session details
09:30 – 10:00	Recap Session
10:00 – 11:15	Reflection paper
11.15 – 11:45	Tea Break
11:45 – 13:00	Presentation by Participants
13:00 – 14:00	Lunch
14:00 – 15:30	Presentation by Participants
15:30 – 16:00	Tea Break
16:00 – 17:30	Feedback and Certificate Distribution

**Program Director****Dr. Saravanan Raj**

Director (Agricultural Extension), MANAGE &
CEO, Centre for Innovation and Agripreneurship
National Institute of Agricultural Extension Management (MANAGE)
Rajendranagar, Hyderabad-500030
saravanan.raj@manage.gov.in

Program Coordinators:**Mr. Yuvaraju A**

Business Manager (RKVY – RAFTAAR)
Centre for Innovation and Agripreneurship
National Institute of Agricultural Extension
Management (MANAGE) Rajendranagar
Hyderabad-500030
Email ID: bmrkvy.manage@gmail.com
Mobile No.: +91 9550114466

Mr. Amit Kale

Marketing Manager
(RKVY – RAFTAAR)
Centre for Innovation and Agripreneurship
National Institute of Agricultural Extension
Management (MANAGE)
Rajendranagar, Hyderabad-500030
Email ID: mmrkvy.manage@gmail.com
Mobile No.: +91 99709 11547

Mr. Saurabh Kumar

Business Executive (RKVY – RAFTAAR)
Centre for Innovation and Agripreneurship
National Institute of Agricultural Extension
Management (MANAGE) Rajendranagar
Hyderabad-500030
Email ID: be2rkvy.manage@gmail.com
Mobile No.: +91 9471662752