



Indian Technical and Economic Cooperation (ITEC)

International Training Programme on “Agri-Tech startups for Enhancing the Agri Value Chain”

National Institute of Agricultural Extension Management (MANAGE)

January 17-30, 2024

Hyderabad, India

Introduction

Startups in Agriculture play an instrumental role by solving age-old problems in agriculture to make the agriculture value chain more efficient. Adaptation of innovative technologies by farmers is key in the success of the Agristartups. Agri-Startups are playing pivotal role not only in India and other emerging economies across the world by their presence across the world.

India, third-largest startup ecosystem in the world, after the US and China both in terms of number of Incubators and number of startups (1.2I+ DPIIT recognized startups) and 5500+ Agri-Startups.

Besides sharing India's experiences and competence through the ITEC programmes, application of various advanced technologies and, possibility of scaling up of startups in other emerging economies will be explored during the progress. Cross border linkages will be explored for promoting Innovations and Agri-Startups for Agricultural Development.

Aims and Learning Objectives of the program

- To know Indian Agri-Startup Ecosystem
- To understand various technology innovations adapted by the startups
- To experience the various offerings by Indian startups through experiential learning
- To develop gap analysis for technology adaptation in the home country
- Developing startup ideas for the Agri ecosystem of respective countries
- To develop a cross border implementation plan for promoting Innovations and Agri-Startups

Day 1 : January 17, 2024 (Wednesday)

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 Innovation and Agri entrepreneurship initiative under RKVY-RAFTAAR (Rastriya Krishi Vikas Yojana-Remunerative Approaches for Agriculture and Allied Sector Rejuvenation), MoA & FW.

MANAGE-CIA has trained 754 startups and incubated 383 startups from various focus areas of the Agri & Allied Sectors. A total of 158 startups got 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
9.30-10.00	Registration	Training Program participants Team MANAGE-CIA
10.00-11.15	Introduction to the program	Dr. Saravanan Raj Director (Agricultural Extension) & CEO-Centre for Innovation and Agripreneurship MANAGE
11.15-11.45	Tea Break	
11.30-13.00	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	
14.00-15.30	Indian Startup Ecosystem – Agri-Startup Ecosystem in India	Mr Amit Kale Manager (Marketing & Communications) MANAGE-CIA
15.30-16.00	Tea Break	
16.00-17.30	Startup Ecosystems in Participant countries – Discussion	Mr. Yuvaraju A Business Manager MANAGE - CIA

Agricultural Value Chain – Role of Startups

The agricultural value chain is the entire process of producing, processing, and distributing agricultural products at 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.

Day 2 : January 18, 2024 (Thursday)

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	Inaugural Session	Dr P Chandra Shekara Director General MANAGE
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 Purushottam Rudraraju Agri Innovation Platform ICRISAT
15.30-16.00	Tea Break	
16.00-17.30	Agricultural Value Chain in India – Opportunities for Agri-Startups Participant Experiences	Mr. Yuvaraju A Business Manager MANAGE - CIA

Day 3 : January 19, 2024 (Friday)

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 “International year of Millets” as declared by United Nations and thrust was given to Millet cultivation and consumption by various activities across the world. Startups in Millet value chain playing crucial role in processing, market linkages and creating multiple value added products and taking millets to the plate of the consumer.

Time	Session details	Speaker
09.30-10.00	Recap Session	Dr. Saravanan Raj Director (Agricultural Extension) & CEO-Centre for Innovation and Agripreneurship MANAGE
10.30-11.15	Value Chain Intervention in Millets	Dr. Stanley J Senior Scientist (Agricultural Entomology) ICAR- Indian institute of Millets Research
11.15-11.45	Tea Break	
11.45-13.00	Value Chain Intervention in Millets – Agri-Startup Experiences	RKVY-RAFTAAR Supported Agri-Startup
13.00-14.00	Lunch	
14.00-17.00	Visit to ICAR-Indian Institute of Millets Research and Nutrihub-TBI	ICAR-IIMR Team

Day 4 : January 20, 2024 (Saturday)

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	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 Sid's Farm Pant	Team Sid's Farm
13.00-14.00	Lunch	
14.00-15.00	Innovations in Horticultural valuation – Opportunities for Startups	Mr Senthil Representative from Ninjacart
15.00-16.00	Experience sharing session by Agri-Startup in Aquaculture Value Chain	Dr Mahidhar Bolem Founder Marsco Nutraceuticals
16.00-17.30	Experience sharing session by Agri-Startup in Horticultural Value Chain	Mr Rojachand Founder Greem Gurukulam

Day 5 : January 21, 2024 (Sunday)

Day 6 : January 22, 2024 (Monday)

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
- Nutrigenomics
- Waste Utilization

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	Technological Interventions in Animal Husbandry – Role of Agri-Startups	Dr Sagar Deshmukh Assistant Director - ABM MANAGE
11.15-11.45	Tea Break	
11.45-13.00	Experience sharing by Agri-Startup	Mr Srinivas CEO Poultrymon
13.00-14.00	Lunch	
14.00-17.00	Visit to ICRISAT	ICRISAT Team

Day 7 : January 23, 2024 (Tuesday)

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 Rural Technology Park - NIRD-PR	NIRD-PR team
13.00-14.00	Lunch	
14.00-17.30	Hyderabad Ecosystem Exploration visit	Team MANAGE-CIA

Day 8 : January 24, 2024 (Wednesday)

Aquaculture Value Chian – 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. Collaborating with government bodies, research institutions, and industry associations can also be crucial for navigating regulatory frameworks and scaling innovative solutions. The session will focus on opportunities for the 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	Opportunities in Aquaculture Value Chain – Role of startups	Mr Sai Krishna Founder Fishyfarmers
11.15-11.45	Tea Break	
11.45-13.00	Experience sharing session by Aqua based startup	MANAGE Supported Agri- Startup
13.00-14.00	Lunch	
14.00-17.30	Visit to National Fisheries Development Board	Team MANAGE-CIA

Day 9 : January 25, 2024 (Thursday)

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 Urban farming facility -	Dr Sairam Reddy Co-Founder Urban Kisan
13.00-14.00	Lunch	
14.00 -17.30	Visit to Millet based Agri- Startup facility	Team MANAGE CIA

Day 10 : January 26, 2024 (Friday)

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	Hyderabad Startup Ecosystem Exploratory visit	Team MANAGE-CIA
13.00-14.00	Lunch	
14.00-17.30	Hyderabad Startup ecosystem Exploratory visit	Team MANAGE-CIA

Day 11 : January 27, 2024 (Saturday)

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 L R Naturals	Team MANAGE-CIA
13.00-14.00	Lunch	
14.00-17.30	Hyderabad Exploration Visit	Team MANAGE-CIA

Day 12 : January 28, 2024 (Sunday)

Day 13 : January 29, 2024 (Monday)

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	Hyderabad Ecosystem Visit	Team MANAGE-CIA
19.00-20.00	Cultural night followed by Dinner	ITEC Participants and Team MANAGE

Day 14 : January 30, 2024 (Tuesday)

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	Reflection paper	
11.15-11.45	Tea Break	
11.45-13.00	Presentation by Participants	ITEC program participants
13.00-14.00	Lunch	
14.00-15.30	Presentation by Participants	ITEC program participants
15.30-16.00	Tea Break	
16.00-17.30	Feedback and Certificate Distribution	

Program Director

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