





Indian Technical and Economic Cooperation (ITEC) International ITEC Training Programme on "Technological Interventions by Agri-Startups for Economic Growth" (October 9 - 22, 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 (1,47,801 DPIIT Recognized startups), is home to numerous pioneering Agri-startups.

Besides sharing India's experiences and competence through the ITEC programs, 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, October 9, 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
11.00 - 11:15	Registration	Training Program participants
11.00 - 11.15	Registration	Team MANAGE-CIA
11.15 – 11:45	Tea Break	
		Dr. Saravanan Raj
11.45 – 13:00	MANAGE-Centre for Innovation and	Director (Agricultural Extension) &
11.45 - 13:00	Agripreneurship – Experiences	CEO-Centre for Innovation and
		Agripreneurship, MANAGE
13:00 - 14:00	Lunch	
14.00 15.20	Ice Breaking session with	Ms. V. Usha Sree
14:00 - 15:30	Participants & MANAGE team	Manager, RKVY-RAFTAAR
15:30 - 16:00	Tea Break	
16.00 17.00	Overview of Indian Startup	Ms. V. Usha Sree
16:00 - 17:30	Ecosystems	Manager, RKVY-RAFTAAR







Day – 2, October 10, 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	TimeSession detailsSpeakers	
	Recap Session	Dr. Saravanan Raj
		Director (Agricultural Extension)
09:30 - 10:00		&
		CEO-Centre for Innovation and
		Agripreneurship, MANAGE
		Dr. Yogita Rana, IAS
10:00 - 11:15	Inaugural Session	Director General
		MANAGE
11.15 – 11:45	Tea Break	
	National Policy for Supporting	Dr. Saravanan Raj
	Incubation Ecosystem – A Case of	
11:45 – 13:00	RKVY-RAFTAAR from Ministry of	
	Agriculture & Farmer's Welfare,	
	Government of India	Agripreneurship, MANAGE
13:00 - 14:00	Lunch	
		Mr. Rakesh Mungelkar
14:00 - 17:30	Agricultural Value Chain in Soybean	Founder
	Products - Visit to Parikshit Foods	Parikshith Foods







Day – 3, October 11, 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 – working with FPOs	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	Ms. Sowmya Food technologist & Nutritionist Milennova Foods Pvt Ltd
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 – 6, October 14, 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
		Dr. Saravanan Raj
09:30 - 10:00	Recap Session	Director (Agricultural Extension) &
		CEO-Centre for Innovation
		Dr Sairam Reddy
10:00 – 13:00	Innovations in Horticultural Valuation – Opportunities for	Co-Founder
		Urban Kisan
	Startups	Gundlapochampalli, Hyderabad,
		Telangana
13:00 - 14:00	Lunch	
14:00 - 17:00	Site Visit to R&D Centre of Urban	Team MANAGE-CIA
11.00 17.00	Kisaan	







bay E-C7, October 15, 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, October 16, 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	Visit to Fishy Farmers	Mr. Sai Krishna
13:00 - 14:00	Lunch	
14:00 - 17:30	Visit to National Fisheries Development Board	Team MANAGE-CIA







Day 9, October 17, 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, Thurkapally
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, October 18, 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	Opportunities in Aquaculture Value Chain – Role of Startups	Dr. Mahidhar Bolem Founder, Marsco Nutraceuticals
13:00 - 14:00	Lunch	
14.00 - 17.30	Opportunities in Bee Keeping - Visit to Apiary	Ms. Anusha Jookuri







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	Innovations in Dairy Management, Experiences of Sids Farm	Mr. Suketu Sids Farm
13:00 - 14:00	Lunch	
14:00 - 17:00	Site visit to Sids Farm	

Day 13, October 21, 2024: Hyderabad Startup Ecosystem Exploratory visit

Time	Session details
09:30 - 10:00	Recap Session
10:00 - 13:00	Visit to NIRD PR
13:00 - 14:00	Lunch
14:00 - 17:30	Visit to MANAGE Incubation center
19:00 - 20:00	Cultural night followed by dinner

Day 14, October 22, 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







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