#### ITEC Training Programme on

"Technological Interventions by Agri-Startups for Economic Growth"

Rationale and justification for the ITEC programme at MANAGE,

Hyderabad

Startups in Agriculture play an instrumental role by solving age-old problems in Agriculture to make the economic growth of the any country. Adaptation of innovative technologies by farmers is key in the success of the Agri Startups. Indian 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 (1,18,260 DPIIT recognized startups), home to numerous pioneering Agri-startups.

Besides sharing India's experiences and competence through the ITEC programmes, 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 the other emerging economies will be explored during the progress. Cross border linkages will be explored.

## Aims and Learning Objectives of the program

- > To know 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 gap analysis for technology adaptation in the home country
- Developing startup ideas for the Agri ecosystem of respective countries
- > To develop an Cross border implementation plan for the Indian startup Technologies

# **Tentative Programme Schedule**

	Day - 1
9.30 - 10:30 am	Registration
10.30 am – 11:15	Inauguration of the Program
11.15 am	Tea Break
11.30 am	Interactive Session with participants
	Entry level test - understanding the background and
	experience of the participants
	Introduction to the program
01.00 pm	Lunch
02.00 pm	Indian Startup Ecosystem - Agri Startup Ecosystem in India
03.30 pm	Tea Break
03.45 pm	Agri-Business Incubators - A bird eye view
	MANAGE-Centre for Innovation and Agripreneurship - Journey
	of Agri-Business Incubator by MANAGE
05:15 pm	Close
	Day- 2
09:30 – 11:15 am	Indian Agri Startups - Use of Technology in Problem Solving -
	1 case studies
11.15 am	Tea Break
11.30 am	Indian Agri Startups - Use of Technology in Problem Solving –
	2 case studies
01.00 pm	Lunch
02.00 pm	Exploratory Session - Agri based Businesses Across the world
	with focus on Participants Countries - 1
03.30 pm	Tea Break
03.45 pm	Exploratory Session - Agri based Businesses Across the world
	with focus on Participants Countries - 2
05:15 pm	Close

	Day -3	
09:30 – 11:15 am	Use of IoT (Internet of Things) in Agriculture for data capturing	
11.15 am	Tea Break	
11.30 am	Use of IoT (Internet of Things) in Agriculture for data capturing	
01.00 pm	Lunch	
02.00 pm	Demonstration and experience sharing by IoT based Agri	
	Startup in Agriculture	
03.30 pm	Tea Break	
03.45 pm	Adoption and Implementation of Technology - Discussion	
05:15 pm	Close	
	Day - 4	
09:30 – 11:15 am	Artificial Intelligence (AI) and Machine learning (ML) - Use of	
	Data in Agriculture	
11.15 am	Tea Break	
11.30 am	Artificial Intelligence and Machine learning - Use of Data in	
	Agriculture	
01.00 pm	Lunch	
02.0 0 pm	Demonstration and experience sharing by AI & ML based Agri	
	Startup in Agriculture	
03.30 pm	Tea Break	
03.45 pm	Adoption and Implementation of Technology - Discussion	
05:15 pm	Close	
	Day - 5	
09:30 – 11:15 am	Drones for Agricultural Development - Drone for Spraying -	
	Use cases	
11.15 am	Tea Break	
11.30 am	Drones for Agricultural Development - Drone for Crop disease	
	detection - Use cases	
01.00 pm	Lunch	

02.0 0 pm	Demonstration and experience sharing by Drone based Agri	
	Startup in Agriculture	
03.30 pm	Tea Break	
03.45 pm	Adoption and Implementation of Technology - Discussion	
05:15 pm	Close	
	Day-6	
09:30 – 11:15 an	n Agri Business Incubation Services by of ICRISAT – Visit to	
	ICRISAT	
11.15 am	Tea Break	
11.30 am	Agri Business Incubation Services by of ICRISAT – Visit to	
	ICRISAT	
01.00 pm	Lunch	
02.0 0 pm	Visit to ICAR-Indian Institute of Millets Research	
03.30 pm	Tea Break	
05:15 pm	Visit to ICAR-Indian Institute of Millets Research	
	Day-7	
09:30 – 11:15	Urban farming and Hydroponics - New age farming solutions for	
am	sustainability	
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11.15 am	Tea Break	
	,	
11.15 am	Tea Break  Urban farming and Hydroponics - New age farming solutions for	
11.15 am 11.30 am	Tea Break  Urban farming and Hydroponics - New age farming solutions for sustainability	
11.15 am 11.30 am 01.00 pm	Tea Break  Urban farming and Hydroponics - New age farming solutions for sustainability  Lunch	
11.15 am 11.30 am 01.00 pm	Tea Break  Urban farming and Hydroponics - New age farming solutions for sustainability  Lunch  commercialization of urban farming - Experience sharing by AI &	
11.15 am 11.30 am 01.00 pm 02.00 pm	Tea Break  Urban farming and Hydroponics - New age farming solutions for sustainability  Lunch  commercialization of urban farming - Experience sharing by AI & ML based Agri Startup in Agriculture	
11.15 am 11.30 am 01.00 pm 02.00 pm 03.30 pm	Tea Break  Urban farming and Hydroponics - New age farming solutions for sustainability  Lunch  commercialization of urban farming - Experience sharing by AI & ML based Agri Startup in Agriculture  Tea Break	

11.15 am	Tea Break	
11.30 am	Pioneering Aquaculture technologies in India - MANAGE	
	Mentored Aqua based startups	
01.00 pm	Lunch	
02.00 pm	Providing solutions to the world - Indian Aqua startups working	
	with farmers across the world - Case studies	
03.30 pm	Tea Break	
03.45 pm	Adoption and Implementation of Technology - Discussion	
05:15 pm	Close	
	Day - 9	
09:30 – 11:15	Technologies for Animal Husbandry - Indian Agri Startups	
am	addressing needs of the farmers	
11.15 am	Tea Break	
11.30 am	Innovative solutions for Animal Husbandry in India - MANAGE	
	Mentored startups	
01.00 pm	Lunch	
02.00 pm	Gap Analysis for the Animal Husbandry problems - Mapping of	
	existing technologies for cross border implementation	
03.30 pm	Tea Break	
03.45 pm	Adoption and Implementation of Technology - Discussion	
05:15 pm	Close	
	Day - 10	
09:30 – 11:15	Optimizing the supply Chain through Technology	
am		
11.15 am	Tea Break	
11.30 am	Optimizing the supply Chain through Technology - Case study of	
	Fresh farm produce - Indian Startup success stories	
01.00 pm	Lunch	

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02.00 pm	Optimizing the supply Chain through Technology - Case study of	
	Fresh farm produce - Indian Startup success stories	
03.30 pm	Tea Break	
03.45 pm	Adoption and Implementation of Technology - Discussion	
05:15 pm	Close	
	Day - 10	
09:30 – 11:15	Value Addition for enhancing the shelf life - role of technology at	
am	farm level processing	
11.15 am	Tea Break	
11.30 am	Value Addition for enhancing the shelf life - role of technology for	
	secondary processing	
01.00 pm	Lunch	
02.00 pm	Case study of Agri startups in Food value chain and value	
	addition	
03.30 pm	Tea Break	
03.45 pm	Case study of Agri startups in Food value chain and value	
	addition	
05:15 pm	Close	
	Day - 11	
09:30 – 11:15	Building successful models - Case studies for the participants	
am		
11.15 am	Tea Break	
11.30 am	Building successful models - Case studies for the participants	
01.00 pm	Lunch	
02.00 pm	Presentations by the participants based on case studies	
03.30 pm	Tea Break	
03.45 pm	Presentations by the participants based on case studies	
05:15 pm	Close	

	Day - 12
09:30 – 11:15	Startups field visits for the participants
am	
11.15 am	Tea Break
11.30 am	Startups field visits for the participants
01.00 pm	Lunch
02.00 pm	Startups field visits for the participants
03.30 pm	Tea Break
03.45 pm	Startups field visits for the participants
05:15 pm	Close
	Day - 13
9:30 – 11:15	Project Presentations by Participants and Discussion
am	
11.15 am	Tea Break
11.30 am	Project Presentations by Participants and Discussion
01.00 pm	Lunch
02.00 pm	Project Presentations by Participants and Discussion
03.30 pm	Tea Break
03.45 pm	Project Presentations by Participants and Discussion
05:15 pm	Close

	Day - 14
09:30 – 11:15	Project Presentations by Participants and Discussion
am	
11.15 am	Tea Break

11.30 am	Project Presentations by Participants and Discussion
01.00 pm	Lunch
02.00 pm	Exit test
03.30 pm	Tea Break
03.45 pm	Valedictory and Take home Message
05:15 pm	Close

## **Expected learning outcomes from the course**

- > Firsthand experience Enhanced knowledge and understanding of participants about India Agri Startup Ecosystem
- understanding of Role of technologies in Agricultural development in India and across the world
- Firsthand experience of startups in Agriculture in India Implementation of technologies
- > Readiness for cross border implementation of technologies from India

## **Eligibility Conditions of the participants**

- 1. Firsthand experience in Agri-Business/ Agriculture
- 2. experience in Public/ Private/ Civil Societies in Agriculture and allied sectors
- 3. Applicants shall possess physical and mental skills and abilities for successfully completing the program.
- 4. Working knowledge of English is mandatory to understand the training content on sustainable agriculture development.

### Additional details for uploading on ITEC portal:

Educational qualifications of candidates	Graduation with Agriculture/Business  Management/Agri-Business/Rural  Development equivalent degree
Work experience (required) if any	Working experience in the field of agriculture / rural development / technology Management / technology

	companies /Food Technology for 3
	years
Minimum age	25 years
Maximum age	55 years
	Junior / Middle level Officers from
	Department of Agriculture, Small and
Target Group (level of participants,	Medium scale industries, Non-
target ministries or dept., etc.)	Governmental Organizations,
	Universities, Agri Startup founders and
	other Agri & allied ecosystem partners
Number of days of local trips	4 (Tentative)
Number of days for outstation trips	0
Number of nights for outstation trips	0
Places to be visited	Hyderabad, Golkonda,
Mode of transport	AC Bus/ AC Train
Transportation charges (approx.)	INR 50,000/- per batch
Accommodation charges, if hotel is	NA
required to be hired	
Entry ticket charges	INR 4500 per candidate

### **Course Director Details**

## Dr. Saravanan Raj

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