

## **International ITEC Training Programme on “Agri tech startups for Enhancing the Agri value Chain”**

**(Two week Programme)**

### **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 agriculture value chain more efficient. 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 (80,152 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 Agris 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**

<b>Day - 1</b>	
9.30 am – 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	AgriBusiness Incubators - A bird eye view MANAGE-Centre for Innovation and Agripreneurship - Journey of AgriBusiness Incubator by MANAGE
05:15 pm	Close
<b>Day- 2</b>	
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
<b>Day -3</b>	
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
<b>Day - 4</b>	
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
<b>Day - 5</b>	
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
<b>Day-6</b>	
09:30 – 11:15 am	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

<b>Day-7</b>	
09:30 – 11:15 am	Urban farming and Hydroponics - New age farming solutions for sustainability
11.15 am	Tea Break
11.30 am	Urban farming and Hydroponics - New age farming solutions for sustainability
01.00 pm	Lunch

02.00 pm	commercialization of urban farming - Experience sharing by AI & ML based Agri Startup in Agriculture
03.30 pm	Tea Break
05:15 pm	Adoption and Implementation of Technology - Discussion

<b>Day - 8</b>	
09:30 – 11:15 am	Technologies for Aquaculture Development - Indian perspective
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

<b>Day - 9</b>	
09:30 – 11:15 am	Technologies for Animal Husbandry - Indian Agri Startups 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

<b>Day - 10</b>	
09:30 – 11:15 am	Optimizing the supply Chain through Technology
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
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

<b>Day - 10</b>	
09:30 – 11:15 am	Value Addition for enhancing the shelf life - role of technology at 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

<b>Day - 11</b>	
09:30 – 11:15 am	Building successful models - Case studies for the participants
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

<b>Day - 12</b>	
09:30 – 11:15 am	Startups field visits for the participants
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

<b>Day - 13</b>	
9:30 – 11:15 am	Project Presentations by Participants and Discussion
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

<b>Day - 14</b>	
09:30 – 11:15 am	Project Presentations by Participants and Discussion
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**

- First hand 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
- First hand experience of startups inAgriculture in India - Implementation of technologies
- Readiness for cross border implementation of technologies from India

### **Eligibility Conditions of the participants**

1. First hand experience in AgriBusiness/ 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/AgriBusiness/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
Target Group (level of participants, target ministries or deptt., etc.)	Junior / Middle level Officers from Department of Agriculture, Small and Medium scale industries, Non-Governmental Organizations, Universities, Agri Startup founders and other Agri & allied ecosystem partners
Number of days of local trips	4 (Tentative)