













# Feed The Future India Triangular Training (FTF- ITT) Program

on

"Plant Health Management,

Biosecurity and Quarantine "

27th November - 11th December, 2018

National Institute of Plant Health Management (NIPHM) is a National level premier institute under Department of Agriculture, Cooperation & Farmers Welfare (Ministry of Agriculture & Farmers welfare), Government of India established in the year 1966 at Hyderabad. It became an autonomous body in the year 2008 with the expanded scope of promoting environmentally sustainable Plant Health Management practices in diverse & changing agro-climatic conditions through capacity building programmes, besides providing inputs for policy formulation on Plant Health Management, Plant Biosecurity & international market access, Pesticide Management etc. at national and International level. NIPHM is creating a pool of master trainers by training them on various aspects of PHM strategies to promote environmentally sustainable plant health management practices to reduce excessive reliance on chemical pesticides. NIPHM is also promoting low cost on-farm production techniques of biocontrol agents, biopesticides and biofertilizers.

NIPHM pioneered in training various international officials on plant health management, plant quarantine and pesticide management and hence, the program is prepared with special focus on Plant Health Management, Plant Bio-security and Quarantine.

Title	Plant Health Management, Biosecurity and Quarantine
Date & Duration	27th November – 11th December, 2018 (15 days)
Venue	National Institute of Plant Health Management (NIPHM),
	Rajendranagar Hyderabad, India
Course Director	Dr. Cherukuri Sreenivasa Rao
	Director - Pesticide Management & Plant Health Management i/c.
	Dr. J. Alice. R. P. Sujeetha
	Director - Plant Bio-Security
Course Coordinator (s)	Dr. O.P. Sharma , Joint Director (A&AM)
	Dr. Rajasri Mandali - Joint Director (PB)

Introduction: Plant Health is influenced by an array of biotic and abiotic stresses, which have to be managed through multipronged strategies. The looming threat of climate change may further exacerbate the crop losses due to various pests. Intensive use of ecosystems to enhance productivity is also affecting agroecosystems through soil erosion, water depletion / contamination, biodiversity loss and disruption in flow of ecosystem services, by imposing a bearing on plant health and biosecurity. The indiscriminate use of chemical pesticides has been causing wide spread environmental pollution, resistance, resurgence of insect pests and is impacting food safety. Plant Health Management is vital for the sustainable agriculture, food security, food safety, agro based industries and economy of a country. The present international training programme is planned to impart an insight to technologies available for sustainable plant health management in Asian countries.

### **Training Objectives:**

- To introduce the concept of Agro-Ecosystem Analysis (AESA) and Ecological Engineering based Plant Health Management
- To impart skills on new and innovative soil & plant health management strategies for sustainable agriculture leading to conservation of natural resources in different cropping systems
- To impart knowledge on International Regulatory Framework and SPS agreement
- To impart skills on pest risk analysis and phytosanitary treatments

- To impart knowledge on Food Safety Regulations
- Visits to National, International Institutes and farmers' fields to get exposure on issues and strategies
  related to plant heath management
- Identify country specific pest problems and their management options under selected cropping systems of Asian countries

## Session wise Learning objectives:

- Agro ecosystem analysis (AESA) based Plant Health Management in conjunction with Ecological Engineering;
- Integrated Soil Health & Nutrient Management and Integrated Pest Management (IPM) using biocontrol agents, biopesticides, biofertilizers & vermicomposting in agriculture
- Pest surveillance for early detection, identification and timely control of pests
- On farm production of Biocontrol agents, biopesticides, biofertilizers, Entomopathogenic fungi & nematodes, etc.
- International and National regulatory frame work SPS Agreement vis-à-vis Plant and Food Safety
- Biosecurity and incursion management, Stored grain pest management and phytosanitary measures
- Pesticide Residues in foods vis-à-vis International Food Trade
- Food Safety Concepts & Regulations
- Safe & Judicious of pesticides, pesticide application technology, pesticide residue analysis and safe and
  judicious use of pesticide applications
- · Vertebrate pest management

# **Teaching Methods:**

The training program is participatory in nature, which included lectures, group discussions, case studies, and hands on experience and field visits.

A learner-centered approach is being followed to orient the participants on "Plant Health Management, Biosecurity and Quarantine".

Methodology adopted for the program is as follows:

- · Participatory approach.
- Participants expected to contribute ideas and work in groups.
- Experiential learning methodology (Cross learning, field experiences) Interactive session with the faculty of Institute and Guest Speakers.
- Lectures and Group discussions
- Field visits to National and International institutions
- Special lectures/interactions with eminent personalities from the relevant field
- · Practical exercises
- Hands-on experience and evaluations
- · Group task assignment

#### Learning outcomes / Practical Applications:

The participants can learn about the sound plant health management techniques in the areas of biocontrol agents, biopesticides, biofertilizers, Ecological Engineering and Agro Eco System Analysis. The participants can learn about the International Regulatory bodies involved in plant health management and International trade. This training will also impart knowledge on pest risk analysis and phytosanitary treatments. This will help the participants to understand more on Food safety concepts and Pesticide Residues in International Trade







# NATIONAL INSTITUTE OF PLANT HEALTH MANAGEMENT

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