# TWO DAYS TRAINING PROGRAMME ON FOOD SAFETY AND QUALITY CONTROL FOR TECHNICAL STAFF UNDER ICFRE HRD PLAN FROM 10.03.2021 TO 11.03.2021

Two days training programme on Food Safety and Quality Control for Technical Staff was conducted from 10<sup>th</sup> to 11<sup>th</sup> March, 2021 through *Google Meet (online)* at IFB, Hyderabad.

Dr. Padmaja, Scientist – F official from National Institute of Nutrition, Hyderabad Shri G. Senthil Kumar, Executive-CQA from Marico Limited, Coimbatore, Shri Prakash Selvaraj, Senior Executive from ITC Limited, Bengaluru, Dr. Suchitra Naidu, Assistant Professor from Loyola Academy, Secunderabad, Dr. A. Jaya Madhuri Lata, Assistant Professor from Loyola Academy, Secunderabad, Shri Kavi Siddarthan, Scientist – B from IFB, Hyderabad and Shri Arulrajan, IFS, DCF from IFB, Hyderabad were the Resource Personals to the course curriculum. A total of 36 Officials from ICFRE Institutes have participated in the programme *i.e.* IFB, HFRI, TFRI, AFRI, FRI, RFRI, IFGTB, IFP & IWST.

Shri Arulrajan, IFS, Course Co-ordinator has designated the programme to suit the theme and subject.

A brief warm welcome addressed was given by Dr. Ratnaker Jauhari, IFS, Director, IFB to the participants on the importance of the training.

The programme is inaugurated by Honourable Chief Guest Smt. Kanchan Devi, IFS, DDG (Education), ICFRE to the Officials and briefed on the necessity of the training programme.

Shri Arulrajan, IFS, Course Coordinator has thanked the Director, IFB and DDG (Education) for kind support for organizing the programme and nominated staff and explained overview of the training course.

*In Day 1* Shri Arulrajan has commenced the session and delivered a presentation on Introduction to Food Safety & Quality Control. He briefed about Food and its essentiality, organic & inorganic food stuff, functions of the food, Psychological Function of Food, The Key Principles for Safe Food Preparation, Food Quality Control, Application of Principles / Safety Regulation, Components of a Food Control System, Food quality standards, Food Control & Safety.

Next session is initiated by Shri G. Senthil Kumar and gave a presentation on Food Safety with respect to Production & Consumption Process (Commercial Aspects). He briefed about food processing at industrial level, packing, safety measures, transport and important standards.

Further, Dr. Jaya Madhuri Lata has stated session and gave a presentation on Food Safety with respect to primary production. She briefed about primary production, be aware of

inappropriate farm production technologies, introduction to good agricultural practices (GAP), GAP key controls that are relevant for food safety, classes of hazards to consider in primary production, chemical hazards in crops, microbial hazards in crops, environmental hygiene, hygienic production of food sources, handling, storage and transport, cleaning, maintenance and personnel hygiene at primary production, Safety hazards in primary production and Food adulteration.

Final session taken by Shri Arulrajan and delivered a lecture on Global Nutritional Report 2020 and briefed about Reason for inclusive policy formulation for the world, Nutrition inequity, the state of global nutrition, the double burden of malnutrition, inequalities between countries, inequalities within countries, Leadership and governance, challenges in health systems, opportunities in health systems, food system framework, challenges in food systems, opportunities in food systems, challenges in equitable financing & critical actions.

*In Day 2* Shri Arulrajan, IFS, initiated the session and had a presentation on Food & its classification around the world and explained about Food, Food sources and classification of food.

Dr. T. Suchitra Naidu has initiated the next session and delivered a presentation on Food Safety with respect to consumption (House & Commercial Food Courts) and briefed about Food safety, demographics of foodborne diseases in India, factors contributing to foodborne diseases, Awareness of consumer, Food safety measures at domestic level, food safety measures at commercial food courts, five keys to safer food, technological innovations to improve food safety, regulatory agencies & Food ethics.

Dr. Padmaja, initiated the next session with presentation on Food Safety with respect to Production Process and explained on food safety, specific standards, food labelling, food additives, pesticide residue, principles of food hygiene, overview of microbiology & major hazards.

Shri Prakash Selvaraj has initiated the next session and delivered a presentation on Regulatory aspect of Food Safety & Quality. He explained about Acts, rules and regulations, food safety and standard regulations, compliance with standards, microbial limits, processing aids, food safety auditing, penalties, framing of regulations, standard making process & regulatory approach to address an issue to the authority.

Next Shri Arulrajan, IFS taken a session with presentation on Food based Illness/ Hazards and explained about food safety & hazards, Biological hazards, chemical hazards, physical hazards & unsafe food habits.

Further Shri Kavi Siddarthan taken a session and delivered a presentation on Different methods of detection of pathogens. He explained about methods for detection of microbes in food, different groups of microorganisms in food, Manifestation of microbial growth in food, microbial detection methods in food, conventional methods, immunology-based

methods, Nucleic acid-based methods, Biosensor based methods & Spectroscopy based methods.

Next session taken by Dr. T. Suchitra Naidu with presentation on Future of food and explained about challenges to feed the world, effects of climate change, climate change & diseases, food security, challenges for food security, addressing climate change, improving the agriculture productivity, pest surveillance techniques, innovative techniques, artificial intelligence, detection of plant disease & functional formulation with pre and probiotics.

Final session was taken by Shri Arulrajan with presentation on Food *Vs* Human-Microbiome and briefed about Human vs Microbiomes, Microbiomes vs Human Health, Role of Human Microbiome in body functions, Diversity of human microbiomes, Essentiality of Microbiomes in human system, Microbes over Skin, Microbes in Nasal Cavity, Microbes in Mouth/Oral Cavity, Microbes in Human Gut & Microbes in Reproductive Tract.

In the validation session, Shri E. Venkat Reddy, IFS, Head of Administration, IFB attended as a Chief Guest and addressed on the relevance of effective the training programme.

The training programme was concluded with vote of thanks by Shri Arulrajan, IFS extending thanks to the Director, IFB and DDG (Education) for the kind support in organizing the fruitful training sessions.

The training programme concluded by 5:30 PM on 11.03.2021.

# Glimpses







#### **INSTITUTE OF FOREST BIODIVERSITY (IFB) - HYDERABAD**

#### **ICFRE - HRD - PLAN**

#### Training (Online) program schedule

#### Webinar on

# Food Safety & Quality Control

(10.03.2021 & 11.03.2021)

#### **Course Coordinator:**

Shri P. Arulrajan, IFS, DCF, IFB, Hyderabad

#### **List of Resource Persons:**

- 1. **Dr. Padmaja**, Sc-F, National Institute of Nutrition, Hyderabad, Telangana
- 2. Shri. G. Senthil Kumar, Executive-CQA, Marico Limited, Coimbatore, Tamil Nadu
- 3. Shri. Prakash Selvaraj, Senior Executive, ITC Ltd, Bengaluru, Karnataka
- 4. Dr. T. Suchitra Naidu, Assistant Professor, Loyola Academy, Alwal, Telangana
- 5. Dr. A. Jaya Madhuri Lata, Assistant Professor, Loyola Academy, Alwal, Telangana
- 6. **Shri Kavi Siddharthan**, Sc-B, IFB, Hyderabad.
- 7. **Shri P. Arulrajan, IFS, DCF,** IFB, Hyderabad.

## **Two days Training Programme**

on

# **Food Safety & Quality Control**

Period: 10.03.2021 & 11.03.2021

Inaugural Session (10.03.2021)		
09:30 to 09:50 AM	Registration by <b>S.S. Prasad</b> , Technician, IFB	
09:51 to 10:00 AM	Honourable Chief Guest Smt. Kanchan Devi, IFS	
	Deputy Director General (Education),	
	ICFRE, Dehradun (Inaugural Address)	

## Training schedule for

### Day-1 (10.03.2021) Wednesday

Sessions	Scheduled Time	Program details		
Session I	09:30- 09:50 AM	Registration		
Session II	09:51-10:00 AM	Welcome Address & Overview of Training Program		
Session III	10:15-10:59 AM	Introduction to Food Safety & Quality Control by <b>Arulrajan</b>		
	11:00-11:15 AM	Discussion		
Break (11:16 AM to 11:29 AM)				
Session IV	11:30- 12:29 PM	Food Safety with respect to Production & Consumption Process (Commercial Aspects) by <b>Senthil Kumar</b>		
	12:30 -12:45 PM	Discussion		
Break (12:45 PM to 02:00 PM)				
Session V	02:01- 03:29 PM	Food Safety with respect to primary production by <b>Dr. J. M. Lata</b>		
	03:30 - 04:00 PM	Discussion		
Session VI	04:01 - 04:45 PM	Global Nutritional Report 2020 by <b>Arulrajan</b>		
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Discussion on day 1 programme (05.00 to 5.29 PM)				

## **Day-2 (11.03.2021) Thursday**

Sessions	Scheduled Time	Program details
Session I	09:30 - 09:45 AM	Recap of Previous day sessions
	09:46 - 10:15 AM	Food & its classification around the world by <b>Arulrajan</b>
	10:16 - 10:29 AM	Discussion
Session II	10:30 – 11:00 AM	Food Safety with respect to consumption (House & Commercial Food Courts) by <b>Dr. Suchitra</b>
	11:01 – 11:15 AM	Discussion
Session III	11:16-12:00 PM	Food Safety with respect to Production Process by <b>Dr. Padmaja</b>
	12:01-12:15 PM	Discussion
Session IV	12.15 -01:15 PM	Regulatory aspect of Food Safety & Quality by <b>Prakash Selvaraj</b>
	01:16 -01:29 PM	Discussion
	Break	(01:30 PM to 02:00 PM)
Session V	02:01 - 02:45 PM	Food based Illness/ Hazards by <b>Arulrajan</b> Different methods of detection of pathogens By <b>Kavi Siddharthan</b>
	02:46 - 03:00 PM	Discussion
Session VI	03:01 - 03:30 PM	Future of food by <b>Dr. Suchitra</b>
	03:31 - 03:45 PM	Discussion
Session VII	03:46 - 04:29 PM	Food vs Human-Microbiome by <b>Arulrajan</b>
	04:30- 04:59 PM	Discussion on complete Training programme

Validation Session (11.03.2021) (05.00 to 05.29 PM)		
05:01 - 05:15 PM	Validation Speech by the <b>Shri E. Venkat Reddy, IFS</b> , Head of Office, IFB, <b>Chief Guest.</b>	
05:16 - 05:30 PM	Thanks & Close by <b>Shri Arulrajan, IFS,</b> Course Co-ordinator, IFB, Hyderabad.	

# List of participants

Name & Designation	Concerned Institute/ Directorate
1. Shri M. Ganesh, Technical Assistant	IFB Hyderabad
2. Smt. G. Mounika, Technician	
3. Shri Dushyant Kumar, STO	HFRI, Shimla
4. Shri Vipin Kumar, Sr. Technician	
5. Shri H. D. B. Anthony, STO	TFRI, Jabalpur
6. Shri Y. K. Soni, STA	
7. Shri R. P. Baghel, Technician	
8. Shri D. L. Wadiva, STA	
9. Ms. Sushma Maravi, ACTO	
10. Shri Nahar Singh Mawai, ACTO	
11. Shri D. C. Kori, ACTO	
12. Shri R. K. Malviya, STO	
13. Shri S. K. Choubey, STO	
14. Shri Ram Bhajan Singh, TO	
15. Mrs. Shashi Kiran Barve, TO	
16. Shri Gautham Narnaware, TO	
17. Shri Ganesh Pawar, Sr. Technician	
18. Shri Anil Sharma, TO	AFRI, Jodhpur
19. Shri Kuldeepa Sharma, Sr. Technician	
20. Shri Bundesh Kumar, Sr. Technician	
21. Shri Aswani Kumar, TO	FRI, Dehradun
22. Shri Sushil Bhattarai, Sr. Technician	
23. Shri Gaurav Kumar, Technician	
24. Mrs. Nibedita Baruah	RFRI, Jorhat
25. Dr. Prosanta Hazarika	
26. Smt. R. Sumathi, CTO	IFGTB, Coimbatore
27. Shri Ravi Shankar Prasad, CTO	IFP, Ranchi
28. Shri Ravinder Raj Lali, CTO	
29. Shri Ram Kumar, STA	
30. Shri Suraj Kumar, STA	
31. Shri V. Krishna, TO	IWST, Bengaluru
32. Shri B. V. Tulasiram, TO	
33. Shri Sandeep Chakraborty, STO	
34. Shri Deepak, TA	
35. Shri H. C. Shiva Prasad, Technician	
36. Shri B. J. Dhanjay, Technician	