

#### **SHORT COURSE**



# Postharvest Food Loss and Waste Reduction: Towards Sustainable Food Systems

Capacity Building in Food Security (CaBFoodS-Africa) Project

**Dates:** 3 – 5 May 2021

**Delivery Mode:** Virtual (13 Lecture Modules & 2 Practical Sessions)

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#### **COURSE FACILITATORS**



Prof. Jane Ambuko, Course Coordinator, University of Nairobi



Prof. Linus Opara, Stellenbosch University



Dr. Rosa Rolle, UN, Food and Agriculture Organization



Dr. Dirk Maier, Iowa State University



Dr. Lise Korsten, University of Pretoria



Dr. Craig Hanson, World Resources Institute



Dr. Carola Fabi, UN, Food and Agriculture Organization



Dr. George Abong' University of Nairobi



Dr. Gloria Essilfie, University of Ghana



Prof. Willis Owino, Jomo Kenyatta Univ. of Agric. & Technology



Mr. Cephas Taruvinga, Postharvest Consultant



Dr. Vijay Yadav, Postharvest Education Foundation



Dr. Joseph Akowuah Kwame Nkrumah Univ. of Science & Technology

## **TECHNICAL AND LOGISTICS SUPPORT TEAM**



Mr. Kyle Poorman Consortium for Innovation in Post-Harvest Loss & Food Waste Reduction



Mr. Duke Gekonge University of Nairobi



Mr. Emmanuel Amwoka University of Nairobi



Mr. Paul Ongaro University of Nairobi

#### **TRAINING SCHEDULE**

DAY ONE (3 <sup>RD</sup> MAY 2021)			
TIME	OPENING SESSION		
8.30 - 10.00 AM	Opening Remarks  Prof. Jane Ambuko - Course Coordinator  Prof. Lindiwe Sibanda - Director, ARUA Center of Excellence for Sustainable Food Systems (ARUA-SFS)  Prof. James Muthomi - Chairman, Dept. of Plant Science & Crop Protection  Prof. Moses Nyangito - Dean, Faculty of Agriculture  Official Opening of the Training  Prof. Rose Nyikal - Principal, College of Agriculture & Veterinary Sciences		

#### **THEORY SESSIONS**

THEORY SESSION 1 (3 HOURS)				
TIME	ТОРІС	FACILITATOR		
10.00 - 10.30 AM	Unpacking Food Loss and Waste - Definitions, Description of the Extent, Drivers of Food Loss and Waste in Selected Crop Value Chains	Prof. Jane Ambuko		
10.30 – 11.00 AM	Drivers of Food Loss and Waste in Non- Crop Value Chains	Prof. Willis Owino		
11.00 - 12.00 NOON	Qualitative Food Losses - Managing Food Safety in Food Supply chains	Prof. Lise Korsten		
12.00 – 1.00 PM	Managing Food Loss and Waste in Food Systems: From Increased Production to 'Postharvication'	Prof. Linus Opara		
1.00 – 1.30 PM	1.00 - 1.30 PM BREAK			
THEORY SESSION 2 (3 HOURS)				
1.30 – 2.30 PM	Generating Economic and Social Benefit through Food Loss and Waste Reduction (Food Security Nexus)	Dr. Rosa Rolle		
2.30 – 3.30 PM	Food Loss and Waste versus Sustainable Food Systems: Climate Change Nexus	Dr. Craig Hanson		
3.30 – 4.30 PM	Measuring Food Loss and Waste - FAO Tools for Food Loss and Waste Measurement	Dr. Carola Fabi		
4.30 - 5.00 PM	WRAP UP OF DAY 1	Prof. Jane Ambuko		

DAY TWO (4 <sup>TH</sup> MAY 2021)				
8.30 - 9.00 AM	RECAP OF DAY 1	Prof. Jane Ambuko		
THEORY SESSION 3 (3 HOURS)				
TIME	TOPIC	FACILITATOR		
9.00 - 9.45 AM	Applicable Technologies for Postharvest Quality Preservation and FLW Reduction: Storage Technologies for Perishable Crop Commodities	Prof. Jane Ambuko		
9.45 - 10.30 AM	Applicable Technologies for Postharvest Quality Preservation and FLW Reduction: Technologies for Shelf-life Extension in Perishable Crop Commodities	Dr. Gloria Ladjeh Essilfie		
10.30 - 11.30 AM	Applicable Technologies for Postharvest Quality Preservation: Non-perishable Crop Commodities	Dr. Joseph Akowuah and Dr. Dirk Maier		
11.30 – 12.30 PM	Applicable Technologies for Postharvest Quality Preservation and FLW Reduction: Perishable Non-crop Commodities	Dr. George Abong		
12.30 – 1.00 PM	BREAK			
	THEORY SESSION 4 (3 HOURS)			
1.00 – 1.45 PM	Value Addition in Perishable Crop Commodities to Reduce Food Loss and Waste	Prof. Willis Owino		
1.45- 2.30 PM	Value Addition in Perishable Non-Crop Commodities to Reduce Food Loss and Waste	Dr. George Abong'		
2.30 – 3.30 PM	Capacity Building Initiatives/Approaches for Various Food Supply Chains Practitioners	Dr. Vijay Yadav		
3.30 - 4.30 PM	Strategies for FLW reduction - Designing National/Regional Strategies for FLW Reduction	Mr. Cephas Taruvinga		
4.30 – 5.00 PM	WRAP UP OF THE THEORY SESSIONS	Prof. Jane Ambuko		

# PRACTICAL SESSIONS (VIRTUAL)

DAY THREE (5 <sup>TH</sup> MAY 2021)				
TIME	PRACTICAL SESSION FOCUS	FACILITATOR		
9.00 - 10.00 AM	Introduction/overview of small scale processing of fruits, vegetables, milk and meat	Dr. George Abong/ Mr. Duke Gekonge		
10.00 AM - 12.00 Noon	<ul> <li>RECORDED PRACTICAL MODULE ON</li> <li>Small scale processing of fruits</li> <li>Small scale processing of vegetables</li> <li>Small scale processing of selected dairy products including pasteurized fresh milk, fermented milk, natural yoghurt, fruit-enriched yoghurt, cheese</li> <li>Small scale processing of sausages</li> </ul>	Dr. George Abong/ Mr. Duke Gekonge		
	Q & A and Plenary Discussions	ALL		
1.00 – 2.00 PM	LUNCH BREAK			
2.00 – 2.30 PM	Overview of harvest and handling of harvested perishable produce	Prof. Jane Ambuko		
2.30 – 4.00 PM	<ul> <li>RECORDED PRACTICAL MODULE ON</li> <li>Practical demonstration of sorting, grading, packaging of harvested fruits and vegetables</li> <li>Practical demonstration of good storage practices</li> <li>Practical application of selected low-cost cold storage technologies</li> </ul>	Prof. Jane Ambuko/Mr. Emmanuel Amwoka		
	Q & A and Plenary Discussions	ALL		
4.00 – 5.00 PM	<ul><li>CLOSING SESSION</li><li>General comments</li><li>Vote of thanks</li><li>Closing Remarks</li></ul>	ALL		

### **PRACTICAL SESSIONS PICTORIAL**

















