

## The Natural Resources Institute: Food and Nutrition Security Initiative (FaNSI)

### The FaNSI Conference 2021

#### Theme: Food Loss and Waste (FLW)

##### Introduction

Food loss and waste, including postharvest losses, represent both a major global challenge and an opportunity for improved resource use through value addition. This theme aims to measure food loss and waste, develop technical solutions, assess upgrading opportunities and provide guidance to researchers and practitioners.

##### Session objective(s)

- To explore new and future research themes in food loss and waste.
- To introducing/showcase NRI and FaNSI partner FLW research initiatives
- To test ideas and seek new partnerships

##### Approach

Over 2.5 hours (150 mins) will be split into three elements: a key-note session with presentations based on 'think piece' papers prepared in 2020 (20 minutes each), a rapid fire session with shorter, more focussed presentations by NRI staff and partner institutions (10 minutes each - maximum 3 slides), and a short panel/audience participation section (20 minutes). Each of the keynote and rapid-fire sessions will have a quick plenary Q&A for clarifications. The session will be hosted by a moderator (Prof Bennett). Selected panellists will be expected to provide verbal 'bullet points' from the presentations that they have been assigned to. There will then be a general discussion with a focus on 'Future Actions and Collaborations'.

##### Outline

Schedule (mins from start)	Item	Person	Content/Title/sub theme	Notes
0 - 10	Introduction	Bennett	Explain process, introduce speakers, set expectations	
Keynote session (20 mins)				
10 - 30	1	Rees/Kumar	Breaking the nexus of food loss, plastic packaging and pollution in developed and developing economies	Order not yet determined
		Addressing the dual challenge of reducing food loss whilst minimising plastic pollution to reach net positive food and environmental outcomes will be considered using examples from UK and India.		
30 - 50	2	Stathers/Lamboll	Exploring the complex relationships between food loss and waste, climate change and the environment to inform sustainable food system transformation	

		<p>Food loss and waste (FLW) reduction is identified as one of the key changes needed to transform food systems to deliver food security, while responding to climate change and reducing other environmental impacts. Food production and postharvest systems differ with location, reflecting the diversity of agro-ecological and socio-economic environments and the drivers influencing them. The interaction between drivers and environments, practices and products influence food-related greenhouse gas emissions and environmental impacts. These factors also influence the proportions of and causes of food that is lost during or after harvest or wasted at retail or consumer level. This think-piece examines the two-way relationships between climatic change, environment, and FLW within a broader food systems framework. We use case studies to explore these relationships in contrasting value chains and food systems assessing the trade-offs and synergies considering different stakeholders' goals and perspectives. This analysis contributes an approach for supporting decision-makers to make a more informed assessment of what is needed to achieve FLW reduction, taking the complexity of food systems and their multiple drivers of change into account.</p>		
50 - 70	3	Shee/Tran	Assessing the Measurement Methods of Food Loss and Waste: Opportunities and Challenges	
		<p>Understanding the magnitude of Food Loss and Waste (FLW) and where in the value chain they occur can provide policy perspectives in targeting innovations to reduce FLW. Since the seminal FAO report on global FLW and the adoption of SDG 12.3, there has been a surge of research efforts quantifying FLW in recent years. However, there is plenty of disagreement over how best to measure FLW. Without reliable data on FLW, it will be difficult to derive policy and action toward targeting the hotspots of FLW. In this synthesis, we review the available tools for measuring FLW, their advantages and disadvantages along with a comprehensive assessment of their ranking in terms of accuracy, cost, and meaningfulness. The methods for quantifying FLW may vary according to the stages and types of a food supply chain for which different resources and technical capabilities are required. Therefore, a strong call for the standardising of methodologies for FLW quantification is imperative to achieve the harmonisation of measurement tools and methods.</p>		
70 - 80	Keynote plenary			
Rapid fire session (10 mins)				
80 - 90	1	Acharya	Decoding Food Loss and Waste Challenges via Adaptive Innovation: Current Perspectives of the Food Business	Order not yet determined
		<p>The concept of adaptive flexibility will for corporate innovation to valorise food by-products will be discussed with examples from Europe.</p>		

90 - 100	2	Grace	Food safety solutions for informal markets in Low and Middle Income Countries	
		<p>Recently information is emerging on the huge health, social and economic burden of food borne disease in LMICs. The health burden is comparable to malaria, HIV/AIDs or tuberculosis and the economic burden more than 100 billion USD a year. To this must be added the risk of zoonotic disease spillover from unsafe food systems as vividly demonstrated by the ongoing COVID-19 pandemic. Most of these costs and losses occur because of disease in informal food systems yet these systems also provide affordable food and employment for billions, many of them women and youths. The challenge therefore is how to maintain or accentuate the benefits while minimising the risks. I will describe some of the efforts and experiments to improve food safety in informal markets and what we have learned from failure and success. In particular, the promise of the “three-legged stool” approach: capacity building, enabling environment and incentives. Without all three, I argue, food safety will get worse before it gets better.</p>		
100 - 110	3	Benue State, CEFTER BSU	Affordable Postharvest Handling Technologies for Small Holder Farmers	
		<p>The presentation will show challenges of small holder farmers in West Africa and our efforts to reduce Post harvest losses through training, development of technologies and extension services.</p>		
110 - 120	4	FUNAAB	Scaling Postharvest management of Root and Tuber Crops Value Added processing in Nigeria	
		<p>The researchers and practitioners will gain insight into North-South and South-South Partnership efforts in reducing postharvest losses of agricultural commodities (crop and livestock) in Nigeria. Postharvest solutions FUNAAB and her partners will be highlighted. Scaling readiness of some of the innovations will be discussed.</p>		
120 - 130	Rapid fire plenary			
Panel discussion (20 mins)				
130 - 150	Panel & audience discussion - future research foci			Panel TBA