

# OFFICIAL FEEDBACK FORM

<b>DIALOGUE DATE</b>	Thursday, 3 June 2021 20:00 GMT +10:00
<b>DIALOGUE TITLE</b>	Food Loss in Food Systems - Collaborative Research and Priorities
<b>CONVENED BY</b>	Australian Centre for International Agricultural Research, and the International Development Research Centre of Canada
<b>DIALOGUE EVENT PAGE</b>	<a href="https://summitdialogues.org/dialogue/14869/">https://summitdialogues.org/dialogue/14869/</a>
<b>DIALOGUE TYPE</b>	Independent
<b>GEOGRAPHICAL FOCUS</b>	Australia, Canada, No borders

The outcomes from a Food Systems Summit Dialogue will be of use in developing the pathway to sustainable food systems within the locality in which they take place. They will be a valuable contribution to the national pathways and also of interest to the different workstreams preparing for the Summit: the Action Tracks, Scientific Groups and Champions as well as for other Dialogues.

# 1. PARTICIPATION

## TOTAL NUMBER OF PARTICIPANTS

## PARTICIPATION BY AGE RANGE



## PARTICIPATION BY GENDER



## NUMBER OF PARTICIPANTS IN EACH SECTOR



## NUMBER OF PARTICIPANTS FROM EACH STAKEHOLDER GROUP



## 2. PRINCIPLES OF ENGAGEMENT

### HOW DID YOU ORGANIZE THE DIALOGUE SO THAT THE PRINCIPLES WERE INCORPORATED, REINFORCED AND ENHANCED?

This Dialogue aimed to bring together a diverse range of stakeholders to discuss the challenges and opportunities associated with food loss in transforming food systems. It was co-convened by the Australian Centre for International Agricultural Research and Canada's International Development Research Centre, who are together funding a Food Loss Research Program to better understand the nature of food loss in the Global South. The Dialogue sought to recognise the contributions of international partners (including government, industry and academia) in coming together to tackle complex food systems challenges, and particularly focused on Global South-South collaborations that are addressing food loss issues. The Dialogue was organised so that key international and domestic stakeholders could come together for robust discussion about the value of partnership in developing and scaling innovation. By allowing time for small-group discussions under Chatham House rules, the Dialogue encouraged participants to share the experiences and reflections confidently and freely. This resulted in higher levels of trust among these stakeholders, which will allow deeper exploration of complex issues moving forward. Representation at this Dialogue was from: Australia, Laos, Kenya, Canada, Thailand, Indonesia, Chile, Egypt, Philippines, USA, Vietnam, Sri Lanka, Pakistan, Malawi, Ghana, Samoa, Fiji, Taiwan, Zimbabwe, India, Taiwan, Zambia, New Caledonia, Israel, United Kingdom, Uganda, Bangladesh, China, France, Thailand, Italy, Brazil, Ecuador, Senegal, Egypt, Ivory Coast, Tonga, Sweden, Switzerland, Netherlands, Benin, Denmark, and Cambodia.

### HOW DID YOUR DIALOGUE REFLECT SPECIFIC ASPECTS OF THE PRINCIPLES?

The Dialogue was designed and implemented in a way that reflected all the Principles of Engagement suggested by the UN Food Systems Summit. Reflect complexity: The dialogue was very rich with a diverse range of perspectives and ideas on priority actions. Participants actively contributed to the discussion through small groups, which allowed ideas from many different contexts to be shared with a diverse group. In this way, the complexities of food loss from the perspective of different geographies and stakeholders were captured in the Dialogue. Act with Urgency: This Dialogue recognised the important place of food loss research in the transformation of food systems globally. Food loss and waste are often spoken about in the context of developed nations, but food loss is a real problem that requires attention all over the world, at many points of the value chain. Complement the work of others: The Dialogue was co-convened by two organisations on opposite ends of the world that both work in many other regions. The need to share knowledge and solutions has been highlighted by the Summit, and the interactive nature of this event enabled participants to seek out new connections and build new relationships around their work. Build Trust: All discussions took place under Chatham House Rules, which allowed participants to share their ideas freely and have respectful disagreements in order to advance a collective understanding of food loss issues.

### DO YOU HAVE ADVICE FOR OTHER DIALOGUE CONVENORS ABOUT APPRECIATING THE PRINCIPLES OF ENGAGEMENT?

# 3. METHOD

---

The outcomes of a Dialogue are influenced by the method that is used.

**DID YOU USE THE SAME METHOD AS RECOMMENDED BY THE CONVENORS REFERENCE MANUAL?**

**Yes**

**No**

# 4. DIALOGUE FOCUS & OUTCOMES

## MAJOR FOCUS

This Dialogue, convened by the Australian Centre for International Agricultural Research (ACIAR) and the International Development Research Centre, Canada (IDRC), focused on the global problem of food loss. Leading researchers from around the world joined together to discuss and advance a collective understanding of food loss challenges and opportunities.

Introductory remarks and four short keynote presentations were given to set the scene for this Dialogue. These presentations were recorded and are publicly available to view through the link to the recording in this report.

- How can research help us address global food loss? - Dr. Máximo Torero, Chief Economist of the Food and Agriculture Organization (FAO)
- What does food loss look like on the Pacific islands? - Prof. Steven Underhill, Professor of Horticulture, University of Sunshine Coast
- How does animal welfare and health impact food loss? - Dr. Rebecca Doyle, Animal Welfare Scientist, International Livestock Research Institute (ILRI)
- How can we bring technology closer to smallholder farmers? - Dr. Jane Ambuko, Associate Professor of Horticulture, University of Nairobi
- What are the opportunities for food loss recovery and transformation across ingredients and foods in developing regions? - Dr. Pablo Juliano, Group Leader Food Processing and Supply Chains, CSIRO

Following these introductory statements, participants were broken up into small discussion groups under Chatham House Rules. Each group had a mix of stakeholders to ensure diversity of industry and geography was represented. The discussions groups each had an experienced facilitator to guide conversation around two major questions:

What are the different dimensions to the food loss problem?  
How can we develop locally relevant solutions to reduce food loss?

These two main questions were followed by a number of supporting questions that encouraged participants to delve into specific challenges and opportunities related to food loss. Prompting questions included:

- What are examples of food loss issues experienced by men and women in different contexts?
- What are the different types of food loss (e.g. quantity, quality, value)?
- Who is being impacted by food loss issues and how is the impact different for particular groups (for example those in the informal sector, women, marginalised groups, immigrants etc.)?
- What are some solutions, and who is successfully delivering them?
- What can we learn from these solutions, in particular what solutions can make a difference for women and other marginalised people?
- How can these solutions be applied elsewhere in different socio-cultural and other contexts?

The design of the dialogue was informed, in part, by new research supported by IDRC and ACIAR. The new co-funded Food Loss Research Program focuses on enhancing South-South leadership and cooperation in addressing food loss issues. During the Dialogue, the details of these projects were discussed as examples of research that could help advance understanding of food loss issues. More information is available through the links section at the end of this report.

### ACTION TRACKS

- ✓ Action Track 1: Ensure access to safe and nutritious food for all
- ✓ Action Track 2: Shift to sustainable consumption patterns
- Action Track 3: Boost nature-positive production
- ✓ Action Track 4: Advance equitable livelihoods
- ✓ Action Track 5: Build resilience to vulnerabilities, shocks and stress

### KEYWORDS

- |                             |                           |
|-----------------------------|---------------------------|
| □ Finance                   | ✓ Policy                  |
| ✓ Innovation                | ✓ Data & Evidence         |
| □ Human rights              | ✓ Governance              |
| ✓ Women & Youth Empowerment | ✓ Trade-offs              |
|                             | ✓ Environment and Climate |

## MAIN FINDINGS

This Dialogue brought together a variety of stakeholders from all over the world. This means that the findings are drawn from a number of example contexts, though participants agreed that food loss is a complex issue across all regions.

The main findings from this Dialogue included:

- In order to address food loss, there must be high levels of awareness of this problem and high levels of good data. Some participants felt that awareness of food loss is not as deep or widespread as is needed to address these issues. There needs to be good collection of robust data in order to better understand the relevant behavioral aspects of food production and consumption leading to food loss. Raising levels of awareness and collection of baseline data would also create an opportunity to more easily engage with policy-makers on these issues.
- Food loss happens across many types of crops and livestock. Interventions should not focus exclusively on fruits and vegetables, but should acknowledge that food loss affects all value chains, including those of grains that provide major caloric nutrition for many people in developing nations. Food that is left unproduced is another type of food loss, for example livestock that does not reach maturity and cannot be slaughtered.
- Quality is an important aspect of food loss. Smallholders are producers and consumers of food, and quality should be considered equally to quantity when measuring food loss, as this issue impacts the nutritional value of food consumed in some communities. Farmers are often not paid in relation to the quality of their food, so it will take innovative solutions that assign responsibility for looking after quality in the value chain and reducing this type of food loss.
- Addressing food loss through systems-thinking would also allow the world to address other hidden costs of food production and loss across the value chain. Solutions will need to address the way in which COVID-19 has impacted food production and value chains, as well as ongoing food insecurity, lack of access to markets, and the gendered impacts of food systems.
- The impacts of COVID19 are affecting food loss in several ways. While there have been limitations to transport and access to markets, shorter value chains and decentralisation have occurred as a resilience response to the pandemic. In some cases, these shorter value chains have provided many benefits to local communities and may be reducing food loss. However, shorter value chains may also result in a loss of product value as compared to longer value chains. These trade-offs must be better understood in order to determine whether shorter value chains as a resilience response should be maintained in some contexts.
- There is an opportunity to translate a large body of research from developed countries into technologies that will be relevant to new contexts and adopted by new users, including smallholders across other regions. How do we better share information and resources to facilitate this? The best solutions will be those that are tangible and whose value can be demonstrated, in order to encourage adoption by smallholders and facilitate adaption to new contexts.
- The role of government in addressing food loss issues must start at the problem definition stage of innovation. This will create more buy-in between different levels of government that must work together to address food loss across multiple stages of value chains. Participation in innovation from all types of stakeholders early on, including industry and research, will be needed to translate data and technology into practical solutions that will work within local policy contexts.

### ACTION TRACKS

- ✓ Action Track 1: Ensure access to safe and nutritious food for all
- ✓ Action Track 2: Shift to sustainable consumption patterns
- Action Track 3: Boost nature-positive production
- ✓ Action Track 4: Advance equitable livelihoods
- ✓ Action Track 5: Build resilience to vulnerabilities, shocks and stress

### KEYWORDS

- ✓ Finance
- ✓ Innovation
- Human rights
- ✓ Women & Youth Empowerment
- ✓ Policy
- ✓ Data & Evidence
- ✓ Governance
- ✓ Trade-offs
- ✓ Environment and Climate

## OUTCOMES FOR EACH DISCUSSION TOPIC - 1/2

The first Discussion Topic asked participants to consider the different dimensions to the food loss problem. This section expands on the main findings presented above and provides supporting examples shared by participants to illustrate the nature of food loss issues in their own countries and regions.

There must be a focus on measuring food loss and providing baseline metrics in order to understand and address food loss.

- In some contexts there is political support and will to address food loss, but without adequate data it is difficult to know where to start. In order to be useful in policy and programming, there needs to be information about the drivers of food loss, the most affected regions, the concentrations of loss in a commodity group or a geography, and so on.
- There are hidden elements of food loss that are currently not being measured, and therefore will likely not be included in any policies designed to address these issues. More research is needed to uncover systemic causes and impacts of food loss.

Many participants agreed that food loss can be experienced differently by different groups, and the impacts of food loss can be felt more deeply by women than by men in some contexts.

- Many market vendors that experience food loss are women, as they run the majority of stalls in some local contexts. Women are often the ones who have to deal with food loss across a number of points in the value chain, as women deal with both small-scale production and post-harvest handling.
- COVID-19 has led to increased food loss, reduced availability and subsequent reduction in consumption by women (as food may be preferentially given to children). Food loss issues can affect women more strongly, especially in terms of access to fresh food.
- Power relations are an important consideration in food loss issues. Gender hierarchy can create barriers to women accessing solutions to food loss, including animal welfare solutions. In one example, when women were empowered to sell produce directly (after processing) rather than relying on men to take produce to market, there was a significant impact on women's livelihoods in the local community.

There was consensus that food quality needs to be considered as a dimension of food loss.

- Issues of food loss should consider qualitative losses as highly as quantitative losses, as nutritional content of food can otherwise go overlooked. One participant noted that women are more interested in nutritional content, while men are more concerned with quantity in market losses. Interventions should be designed to take advantage of these different concerns about food loss to create holistic solutions.
- A focus on volume rather than quality can be detrimental and lead to loss of value as well as loss of product (through improper storage of large quantities, for example).
- Loss of value can often happen at farm level, as produce is not often sorted for quality at the farm level before going to market. In one example given, when farmers graded their produce on the farm, they received 30% higher prices for their high-quality produce.

There may be many barriers to reducing food loss for smallholders.

- Lack of access to markets and other market forces can lead to food loss. Relevant examples given included situations where infrastructure is poor and farmers cannot transport their goods to market, storage facilities are too far from the production site and inhibit transfer of goods, proper cold storage is not available, or other costs of fulfilling transactions pose a barrier to selling goods and therefore contribute to food loss.
- Other examples given focused on the lack of a relevant market for certain goods. For example, in some countries there is very low vegetable and fruit consumption (relative to neighboring countries) and food loss is exacerbated by a lack of demand for available produce.
- Smallholders do not have the same level of resources as bigger producers to invest in food-loss reduction technologies. However, targeting interventions at bigger producers who can then help support and scale technologies could provide better adoption rates by smallholders.

## ACTION TRACKS

- ✓ Action Track 1: Ensure access to safe and nutritious food for all
- ✓ Action Track 2: Shift to sustainable consumption patterns
- Action Track 3: Boost nature-positive production
- ✓ Action Track 4: Advance equitable livelihoods
- ✓ Action Track 5: Build resilience to vulnerabilities, shocks and stress

## KEYWORDS

- Finance
- Innovation
- Human rights
- ✓ Women & Youth Empowerment
- ✓ Policy
- ✓ Data & Evidence
- ✓ Governance
- ✓ Trade-offs
- ✓ Environment and Climate



## OUTCOMES FOR EACH DISCUSSION TOPIC - 2/2

The second Discussion Topic asked participants to consider how the world can develop locally relevant solutions to reduce food loss.

There are already a number of solutions that help address food loss, and the challenge will be to adapt and scale these solutions in ways that are appropriate to local contexts.

- Cultural norms can differ across regions, and even within country contexts. Presenting solutions that do not fit with any existing norms or practices is likely to be unsuccessful, and so solutions may be iterative processes rather than overhauls of current systems.
- There is a big opportunity to engage with youth to address food loss, as this demographic is likely more interested in and has the aptitude for using new technologies to increase market opportunities (including development of e-commerce, as given in one example).
- Solutions must consider the demand for certain types of produce when considering food loss. It will not be enough to improve parts of the value chain to reduce food loss if there is no appropriate market. Behavioural changes may be considered, though these are often difficult to encourage.
- Researchers and innovators must check assumptions related to food loss and focus on education and awareness, as food loss may not be considered an issue where it is simply an acceptable part of daily life, and not thought of as a problem to be solved.
- Systems-thinking and circular production can also help reframe food loss if it leads to positive inputs for a broader food system.

Innovations to address food loss should be developed in a way that increases access to knowledge and technologies by smallholder farmers.

- Solutions must be affordable for smallholders to adopt them. It can be difficult to encourage long-term investment, so it is key to choose tangible solutions that have visible impacts. Start addressing food loss through 'low hanging fruit' solutions that will encourage smallholders to continue applying those interventions. Examples given included transporting tomatoes in boxes instead of bags, increasing the quality and value of all products sold at market.
- Smallholders must be supported to collaborate and to join resources. Creating more collective infrastructure in local areas or supporting collective co-investment in cold chain storage solutions could encourage more farmers to implement solutions that reduce food loss.
- An example was given of significant food loss of onions during monsoon season, which is prevented through drying them. Smallholders do not have the financial resources to invest in individual drying facilities, but are likely to use a community drying facility supported by government. This reduces food loss at harvest time and supports selling the produce over a longer period.

Bringing together policy-makers, researchers and industry is needed early on in the problem-definition stages of innovation to create culturally-relevant solutions.

- Local government action is key to encouraging engagement with proposed innovations. Local government (or other forms of local leadership) are often instrumental in supporting collective centres and collaborative action. Local government is likely to be most effective at implementing context-specific policies that can encourage adoption of available technologies.
- Researchers who provide information to government can be frustrated if this doesn't result in great impact. However, this may be because they have not successfully involved government stakeholders from the beginning and solutions are not viable in the policy environment. Sometimes research may not have involved government at the right level, and there is not enough buy-in to implement the proposed solutions.
- Private sector participation is also key, as industry often takes the initiative to reduce food loss, emissions, and other waste.

### ACTION TRACKS

- ✓ Action Track 1: Ensure access to safe and nutritious food for all
- ✓ Action Track 2: Shift to sustainable consumption patterns
- Action Track 3: Boost nature-positive production
- ✓ Action Track 4: Advance equitable livelihoods
- ✓ Action Track 5: Build resilience to vulnerabilities, shocks and stress

### KEYWORDS

- Finance
- ✓ Innovation
- Human rights
- ✓ Women & Youth Empowerment
- ✓ Policy
- ✓ Data & Evidence
- ✓ Governance
- ✓ Trade-offs
- Environment and Climate

## **AREAS OF DIVERGENCE**

### **ACTION TRACKS**

- Action Track 1: Ensure access to safe and nutritious food for all
- Action Track 2: Shift to sustainable consumption patterns
- Action Track 3: Boost nature-positive production
- Action Track 4: Advance equitable livelihoods
- Action Track 5: Build resilience to vulnerabilities, shocks and stress

### **KEYWORDS**

- |  |  |
|--|--|
| <input type="checkbox"/> Finance                   | <input type="checkbox"/> Policy                  |
| <input type="checkbox"/> Innovation                | <input type="checkbox"/> Data & Evidence         |
| <input type="checkbox"/> Human rights              | <input type="checkbox"/> Governance              |
| <input type="checkbox"/> Women & Youth Empowerment | <input type="checkbox"/> Trade-offs              |
|  | <input type="checkbox"/> Environment and Climate |

# ATTACHMENTS AND RELEVANT LINKS

---

## ATTACHMENTS

- **Food Loss Dialogue Programme**  
<https://summitdialogues.org/wp-content/uploads/2021/08/Food-Loss-Dialogue-programme.pdf>

## RELEVANT LINKS

- **ACIAR-IDRC Food Loss Research Program**  
<https://www.aciar.gov.au/aciarcidrcpartnership/food-loss-research-program>
- **Dialogue recording**  
<https://www.aciar.gov.au/media-search/events/food-loss-research-dialogue>