UN Food Systems Summit+2 Stocktaking Moment

SESSION REPORT

All session recordings will be available after the conclusion of the session. Please send the report of your session to Ms. Yota Nicolarea (Panayota.Nicolarea@fao.org) and Mr. Thembani Malapela (Thembani.Malapela@fao.org) by Tuesday 1st August COB.

Type (click one): ☐ HLS/PLENARY – ☒ LEADERSHIP DIALOGUE – ☐ SPECIAL EVENT

Food loss and waste prevention and reduction: a key lever for food systems transformation

Wednesday, 26th July, 14:30-16:00

Name of note-taker: Divine Njie
Organization/country: FAO
E-mail of note-taker: divine.njie@fao.org

List of speakers, in all segments, and key messages

<table>
<thead>
<tr>
<th>NAME AND TITLE OF SPEAKER</th>
<th>SEGMENT (opening, panel, closing, etc.)</th>
<th>KEY MESSAGES OR/AND RESPONSES TO QUESTIONS</th>
</tr>
</thead>
</table>
| 1. Máximo Torero Cullen, Chief Economist, FAO | Opening | • We need to be clear about the difference between “food loss” and “food waste”, because each one of them requires different policies and interventions to address it.  
• FAO’s latest estimate shows that 13.2% of food produced globally is lost. There are regional differences, with Sub-Saharan Africa having the highest levels at 20%. There are also differences across commodity groups.  
• Estimates by UNEP indicate that 17% of total global food production may be wasted.  
• Food loss and waste (FLW) occur against a backdrop of food insecurity and malnutrition. FLW also contributes to GHG emissions, environmental pollution and unsustainable exploitation of natural resources. |
Studies on the levels of losses across the early stages of the food supply chain (farmer level, middlemen and processors) show that most of the losses occur at the farmer level, where it is mainly attributed to the pre-harvest stage.

Simulations show that if we reduced FLW by 50%, there would be enough fruits and vegetables to meet nutritional recommendations.

70% of national pathway documents identified FLW as an important issue.

In Zimbabwe, losses are estimated to be 16% for maize, 9% for tomatoes, and an overall average level of 11%, which is lower than the sub-Saharan Africa average.

Critical points where losses happen: harvest, especially in the smallholder sector; drying; transport; processing and storage.

Food waste is receiving increasing attention.

Maize is the staple food in Zimbabwe, and 2.2 million metric tonnes are required annually. The 16% of maize that is lost can meet 2 months of the national requirement.

Targeting is important. A 50% reduction of losses would bring significant benefits in terms of food security, nutrition and reduction of GHG emissions.

Zimbabwe is putting in place very specific interventions starting in communal areas/rural households where 62% of the population reside and then moving on to the rest of the population. Actions taken include:

- A major awareness campaign with 35 000 villages, each with a farmer field school;
- Expanded silo capacity from 750 000 metric tonnes to 1.2 million metric tonnes;
- Increased combine harvester capacity by 41% to accelerate harvesting, and purchased 7 000 tractor units to increase mechanization capacity by 30%;
- Under a government scheme, provided 3 million households in communal Zimbabwe with a grain protectant to secure the harvest;
- In November 2023, will begin setting up a strategic grain reserve system, providing one silo per village.

Cost-benefit analyses indicate that these interventions are costly but necessary

Very specific targeted interventions by the public sector creating the enabling environment so that private sector can invest in business opportunities that lead to FLW reduction in the value chain.
| Panel | • FLW in the Arab region is valued at almost USD 60 billion, which is equivalent to the external debt of Jordan, Tunisia, Djibouti, Mauritania, Somalia and Yemen.  
• FLW has significant natural resource implications, in view of the scarcity of water in the region. Wasting food is equivalent to wasting water, which is important for stability and livelihoods and can lead to conflicts. Some water is transboundary.  
• Data is extremely important. We need to invest in collecting data to provide the basis for policy.  
• Actions being taken by UNESCWA:  
  ✓ Highlight the issue to policy makers across government, going beyond Ministries of Agriculture;  
  ✓ Helping in bringing the governance structure together so that the right policies can be made;  
  ✓ Improving efficiencies through technological advancements;  
  ✓ Capacity building of Members to advance knowledge and understanding;  
  ✓ Awareness-raising, including through education, using interactive messages, and informing students at an early age;  
  ✓ Promoting and advocating for a circular economy, through which food waste can be used in agriculture;  
  ✓ Working with the League of Arab States on issuance and promotion of regulations in the Arab countries;  
  ✓ Speaking to parliamentarians regarding legislation needed at country level. Advocacy and declaration for rules and regulations needed at country level;  
  ✓ Building partnerships with FAO and UNECE to develop guidelines.  
• Governments should look into taxing people who waste food.  
• Food aid programmes should be designed in such a way that they do not change eating habits of the local population because this would make the local population dependent on imported food.  
• Partnerships and multi-stakeholder collaboration should be promoted, while learning from one other and innovative approaches should be supported. |
<table>
<thead>
<tr>
<th>Panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Jennifer Moffitt, Under Secretary for Marketing and Regulatory Programs, United States of America</td>
</tr>
</tbody>
</table>

- We must address FLW to achieve sustainable food systems.
- In the USA, over one-third of food is lost and wasted, with significant food security, economic, environmental and livelihood implications.
- USA set a goal in 2015 of reducing FLW by 50% by 2030.
- It is important to set such a target, and to measure and report on progress in achieving the target. Measuring progress against a baseline is important and it takes all of government to do it, and in the USA, a team has been convened from across all of government from the federal down to sub-national levels, including municipalities.
- Actions being taken to meet targets:
  - Partnered with the private sector through the 2030 Champions Challenge involving different industry sectors who are taking measures, e.g. redirecting food to food banks;
  - Innovating with industry to redistribute food that is safe, and upcycling food waste into innovative products;
  - Partnership across the federal government and with municipalities, converting food into compost;
  - Supporting many partner countries through USAID. The FLW partnership facility grant of USAID, with interventions in countries like Tanzania and Kenya, enhancing cold and dry chains so that food stays safe;
  - On the pre-harvest side, USAID is working with many countries. In addition, USDA has been working with IPPC and through FAO in partnering on issues like pest management to reduce food loss;
  - USAID is supporting packaging innovation for products such as rice.
- Underscored the importance of the nexus between FLW and the utilization of the resources that are needed to grow food.
- Recognised the important role women play after food that would otherwise become FLW is recovered and redistributed.
- There is scope for countries to learn from each other; both when common approaches are taken, as well as when there are differences in the approaches.
5. Claire Bury, Deputy Director-General, Directorate-General for Health and Food Safety, European Commission (EC)

<table>
<thead>
<tr>
<th>Panel</th>
</tr>
</thead>
</table>
| • In July 2023, the EC proposed to Member States to set legally binding targets to reduce food waste at national level: 30% in retail, restaurants, food services and households, and 10% in processing and manufacturing by 2030.  
• Not losing sight of the SDG 12.3 target to reduce food waste by 50%, the above is an interim target and the situation will be reviewed in 2027.  
• The benefits of reducing food waste: saving money for countries; gains for the environment with a reduction of around 60 million tons of GHG emissions; saving of €400/year on average for a 4-person household, which is significant in the present context of high cost of living; and an overall value-added to the EU economy of €1.6 billion.  
• In order to reach the target, interventions within the framework of an EU action plan that has been under implementation since 2015, include:  
  ✓ Setting out clear measurements to provide the right data. Member States have gathered data for the past year.  
  ✓ Help Members to build their food waste reduction programmes, to monitor what they are doing and support them in:  
    (i) sharing best practices and resources and learning, and for this there are digital platforms;  
    (ii) for the consumer end, with the assistance of the European Parliament, a compendium of tools, solutions and recommendations, which Member States can tap into;  
    (iii) research and innovation. The research is aimed at investigating where the problems are in a scientific way. Members are provided grants to gather data.  
• The local context is important. The EU has overarching goals but Member states have to look at their own strategy.  
• A key part of the approach is to reach out directly to citizens and consumers to hear what they think is happening, what changes they would like to see, and how the EU can help them to change the situation. This feedback from the dialogue with citizens and consumers will inform innovations, EU policies and the way the Member States work going forward.  
• The global aspect is important and the EU wants to interact and collaborate with partners, sharing its expertise. |

<table>
<thead>
<tr>
<th>Panel</th>
</tr>
</thead>
</table>
| • FLW is a symptom of a broken system, shown by the fact that food is not priced right and we have not internalized the externalities i.e. the environmental, health and social costs.  
• Subsidizing investments to reduce FLW or providing concessional or grant financing is very valid, as FLW reduction contributes very strongly to public goods, for example reducing global GHG emissions.  
• Some success factors and intervention areas:  
  ✓ strong political commitment;  
  ✓ diagnostics to understand the drivers of FLW and the FLW hotspots for specific commodities in specific geographies;  
  ✓ awareness, including the relevance of FLW to the health of people and the planet;  
  ✓ partnerships bringing in the private sector and other actors (civil society, governments, philanthropic organizations, public finance, private finance, etc.) to support the innovations, technologies and infrastructure required to reduce FLW;  
  ✓ addressing FLW has an important healthy-diets aspect, because the more perishable nutritious products are prone to higher food losses. A lot of new technologies and start-ups are getting into prolonging shelf life of food;  
  ✓ In terms of means of implementation, there are two aspects:  
    (i) Diagnostics undertaken on specific commodities for specific geographies and linked to the development goals of the country. The World Bank has conducted assessments in 25 countries that have looked at FLW in terms of GHG emissions, trade balances, environmental impacts, farmer income and farmer welfare;  
    (ii) On the basis of the diagnostics, convene dialogues between the private and public sectors to agree on actions each party will take, with the public sector committing to put in place the necessary conditions for private sector action.  
• FLW reduction needs to be part of both the climate strategy and the food strategy of countries. It is important for the climate change adaptation and mitigation agenda, and for sustainable use of natural resources like water. |
<table>
<thead>
<tr>
<th>7. Máximo Torero Cullen, Chief Economist, FAO</th>
<th>Panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>- As shown through simulations on the situation of tomatoes in Rwanda, FLW reduction can help in the import substitution agenda, foreign exchange savings, and increasing food availability without the GHG emissions collateral.</td>
<td>- In our analysis, the first element was to figure out how to measure losses taking into account attributes and specificities of the commodities, which differ from country to country. The second aspect was how to conduct the analysis across the value chain.</td>
</tr>
<tr>
<td>- The major reasons we are finding for losses in the pre-harvest, harvest and post-harvest stages are mostly due to pest and diseases, climate-related issues (e.g. excess/lack of rain) and weak human capacity.</td>
<td>- In relation to the question on the contribution of lack of access to energy to losses:</td>
</tr>
<tr>
<td>- In the analysis, farmers did not mention energy as an issue of concern, because they are more concerned with what they put to the intermediary and the processor. Energy is more of an issue on the trading side, where tradespeople are concerned with how they can extend the shelf life of the product and trade it.</td>
<td>✓ In the analysis, farmers did not mention energy as an issue of concern, because they are more concerned with what they put to the intermediary and the processor. Energy is more of an issue on the trading side, where tradespeople are concerned with how they can extend the shelf life of the product and trade it.</td>
</tr>
<tr>
<td>- On the post-harvest and storage side, cooling facilities are essential to extend the shelf life for high value commodities. The problem is how to do it off grid, and we are working with mobile storage facilities that can be plugged into an on-grid hub storage facility. It is important how those hub facilities are located.</td>
<td>✓ On the post-harvest and storage side, cooling facilities are essential to extend the shelf life for high value commodities. The problem is how to do it off grid, and we are working with mobile storage facilities that can be plugged into an on-grid hub storage facility. It is important how those hub facilities are located.</td>
</tr>
<tr>
<td>- On the waste side, lack of access to electricity is very problematic. The situation is commodity and country specific, but it is a question of how peri-urban and intermediary households that do not necessarily have good electricity and good quality energy store their food and that can also cause damage.</td>
<td>✓ On the waste side, lack of access to electricity is very problematic. The situation is commodity and country specific, but it is a question of how peri-urban and intermediary households that do not necessarily have good electricity and good quality energy store their food and that can also cause damage.</td>
</tr>
<tr>
<td>- Water is a key issue. We need to minimize FLW, because there is embedded water in food that is lost or wasted. In addition through true cost accounting we have to reflect water in the price of the commodity traded</td>
<td>- Water is a key issue. We need to minimize FLW, because there is embedded water in food that is lost or wasted. In addition through true cost accounting we have to reflect water in the price of the commodity traded</td>
</tr>
<tr>
<td>- Incentives are an important issue. In order to incentivise producers and other value chain actors to adopt good practices and make the investments to reduce FLW, we have to look at developing legislation, standards and pricing schemes that recognise quality attributes.</td>
<td>- Incentives are an important issue. In order to incentivise producers and other value chain actors to adopt good practices and make the investments to reduce FLW, we have to look at developing legislation, standards and pricing schemes that recognise quality attributes.</td>
</tr>
<tr>
<td>8. Divine Njie, Deputy Director, Food Systems and Food Safety, FAO</td>
<td>Presentation of the #123 Pledge</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>• All stakeholders (private sector, civil society, academia, financial institutions, public sector, UN organisations, etc.) are invited to join the Food Is Never Waste Coalition.</td>
<td>• Thank Mr Máximo Torero for conceiving the session and for having worked with Italy in its preparation.</td>
</tr>
<tr>
<td>• All stakeholders are invited to make the #123 Pledge for Climate Action, which calls for concrete commitment to reduce FLW with a view to reduce GHG emissions.</td>
<td>• Italy is committed to the centrality of the issue of FLW.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9. Stefano Gatti, Special Envoy for Food Security, Italy</th>
<th>Closing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• There are multiple drivers – production level, economic, consumer behaviour, socio-economic issues, etc.— and there is no simple solutions to address FLW. It requires different actions from a variety of different actors and involves different parts of our economic system.</td>
<td>• Reducing FLW in a consistent and integrated manner throughout the entire food supply chain requires action at many levels, including the individual level where it requires advocacy to convince public opinion and young people of the importance and relevance of this issue.</td>
</tr>
<tr>
<td>• Underscored the environmental impact of FLW. As we get close to COP 28, the connection between food and climate is ever more apparent and in no area more so than FLW.</td>
<td>• Drew attention to the experience of Italy with the Waste Watcher Observatory. A Day of FLW has been instituted, which has gained a lot of traction in the media.</td>
</tr>
<tr>
<td>• Different solutions for different countries. For Italy, 30% of overall FLW occurs in the production chain while 70% occurs at the end around the consumer, which is why the emphasis of actions has been on food waste.</td>
<td>• Different solutions for different countries. For Italy, 30% of overall FLW occurs in the production chain while 70% occurs at the end around the consumer, which is why the emphasis of actions has been on food waste.</td>
</tr>
<tr>
<td>• The UNSG convened the UNFSS+2 to look at things that can make a difference and things we are not doing well enough. FLW is clearly one of the central issues we have to carry forward: ✓ COP 28 is one of the upcoming forums where we have to carry forward the issue of FLW; ✓ Italy will carry the issue of FLW forward to its G7 Presidency in 2024.</td>
<td>• The UNSG convened the UNFSS+2 to look at things that can make a difference and things we are not doing well enough. FLW is clearly one of the central issues we have to carry forward: ✓ COP 28 is one of the upcoming forums where we have to carry forward the issue of FLW; ✓ Italy will carry the issue of FLW forward to its G7 Presidency in 2024.</td>
</tr>
<tr>
<td>• Engaged and committed to work with FAO, which has a very important leading role in FLW.</td>
<td>• Engaged and committed to work with FAO, which has a very important leading role in FLW.</td>
</tr>
<tr>
<td>• The Food Is Never Waste Coalition is very important. Italy is part of the Coalition and encourages everybody to work on this Coalition.</td>
<td>• The Food Is Never Waste Coalition is very important. Italy is part of the Coalition and encourages everybody to work on this Coalition.</td>
</tr>
<tr>
<td>• FLW is clearly one of issues we need to work and make progress on together in the next few months and years. FLW should be kept high on the international agenda to unlock the potential of food to be a major solution to people and the planet.</td>
<td>• FLW is clearly one of issues we need to work and make progress on together in the next few months and years. FLW should be kept high on the international agenda to unlock the potential of food to be a major solution to people and the planet.</td>
</tr>
</tbody>
</table>
## Interventions from the floor

<table>
<thead>
<tr>
<th>SPEAKER</th>
<th>QUESTION OR KEY POINT OF INTERVENTION</th>
</tr>
</thead>
</table>
| **1. Mr Steven Victor,**  
Minister for Agriculture, Fisheries, and the Environment, Palau | • In Palau’s food systems dialogue, stakeholders identified food waste from school meals programmes, restaurants and customary events. They identified food loss from invasive species (e.g. wild pigs and rats) that primarily affect root crops and fruit flies that have an impact on an already limited supply of locally produced foods.  
• Climate change contributes to food loss in Palau. Inundations due to sea level rise and king tides have led to loss of taro.  
• Taken a whole of government and society approach to address FLW.  
• Working with cultural organisations, private sector and the Ministry of Human Resources, Culture and Tourism to tackle food waste from customary events and restaurants.  
• Primary strategy is to raise awareness of the contribution of food to healthy living and healthy lifestyles to help reduce NCDs and reduce food waste.  
• Food waste reduction is a key aspect of climate action.  
• Within tourism sector, developed a carbon calculator to help visitors and businesses understand the carbon footprint of their activities and product purchases.  
• Ministry of Health and Human Services, Ministry of Education, and bilateral partners from Japan and Taiwan have implemented a nutritional school meals programme that is helping reduce food waste. |
| **2. Mr Fuat Kasimcan,**  
National Convener and General Director for EU and International Affairs of the Ministry of Agriculture and Forestry, Türkiye | • Underscored the importance of a multi-disciplinary and multi-stakeholder approach to address FLW.  
• In 2020, in cooperation with FAO, launched the Save Your Food Campaign to raise awareness and combat FLW.  
• As part of the campaign, a national strategy on prevention, reduction and monitoring of FLW and an accompanying action plan were prepared.  
• With 881 000 pledges, the campaign broke the Guinness world record for the most pledges received by a campaign.  
• The campaign achieved significant benefits: household savings on waste reached USD 80 million and awareness of data labelling rose by 20%.  
• With Türkiye's financial support, FAO implemented a regional project on reducing FLW in Central Asia, Azerbaijan and Türkiye, which gave the opportunity to contribute to global progress to transform agrifood systems and achieve SDGs, especially SDG 12.3. |
| **3. Mr. Arief Prasetyo Adi,**  
Chief for National Food Agency, Indonesia | • FLW is a big part of Indonesia’s efforts to transform food systems to achieve socio-economic and environmental sustainability.  
• Between 2000 and 2019, FLW in Indonesia reached 48 million metric tonnes, costing USD 36.6 billion or 5% of GDP, and capable of feeding 125 million people or 47% of the country’s population. |
<table>
<thead>
<tr>
<th>Speaker</th>
<th>Key Points</th>
</tr>
</thead>
</table>
| **In the past 20 years, food loss declined from 61 to 45% in 2019, but food waste increased more than 50% and the consumption side is becoming an important issue for government to tackle.**  
Policy interventions cover: behaviour change; support systems; regulations; optimising funding; databases; and utilising FLW. The government created platforms, promoted cross-sectoral collaboration involving food providers, food hubs and food recipients, and provides logistics support to the platform.  
Ready to collaborate with IFAD to expand in 38 provinces in 514 districts in the next 5 years.  
Appreciate FAO’s efforts to facilitate all issues with them. | 4. Prof. Rattan Lal, Prof of Soil Science of Ohio State University |
| **FLW is an important subject. The attitude of producing and then wasting and throwing food is a crime against nature. We must stop it. We are using 5 billion hectares of land for agriculture, 3150 km³ of water for irrigation, more than 200 million tons of fertilizer with efficiency of hardly 30%.  
If we adopt proper food management, proper diets and better habits, we should return half of the land and most of the water back to nature by 2100.** | 5. Marco Lucchini, Secretary General, Fondazione Banco Alimentare of Italy and member of the board of European Food Bank Federation |
| **In Sudan, there are studies on FLW but not post-harvest.  
About 30% of staple food crops are lost. Simple calculations show that if 50% of this loss is saved, it can feed 4 million people.  
A strategy to reduce FLW is very important. Without a strategy, we are not going to gain anything because the loss is very, very costly.** | 6. (Name of speaker not clear) from Sudan |
| **The food bank project comes from a public-private collaboration involving the Ministry of Social Development and Family and the program *Elige vivir Sano* on the one hand, and the cooperation of *Mercado Alimentario* and the *Asociación Ferias Libres* on the other.  
The project came up with an agreement to create 79 micro food banks in all the regions of the country this year, and by the end of the year between 25 and 30 tonnes of safe and nutritious food will have been recuperated monthly in the country and donated to organizations that are mostly women-led. Aims to address food insecurity, estimated to affect 20 percent in the country last year.  
Collaboration with social protection programs diminishes the negative social, economic and environmental impacts of food waste, and strengthens social connections between farmers, markets and consumers.  
This has led to collaboration between different sectors and contributes to the Strategy for Food Sovereignty.** | 7. (Name of speaker not clear) from Chile |
8. Ms Manah Mosele from Botswana

- It is important to have a balance between food import and local production, taking into consideration periods of excess and periods when there is a deficit.
- This avoids political instability and problems with neighbouring countries. It is working well, especially in the horticultural industry.

9. Mr Mohamed Hassan, from Sudan, Member of Scientific Advisory Committee (SAC)

- Taking into consideration the fact that most food loss happens at farm level and that in sub-Saharan Africa 60% of farmers do not have access to electricity, how much food loss occurs because of lack of access to electricity?

10. Ms Alice Sidibé from Burkina Faso

- In Burkina Faso, a Sahel country, one should talk about sufficient production before talking about FLW. It is when there is enough food that there is FLW.
- In Burkina Faso, the most significant limiting factor is water, and we need the right approaches to store water and bring it to do production.
- Call on international community to accompany Burkina Faso in innovation and technologies to mobilize water so that production can be boosted.

Overall summary, conclusions and recommended actions (max 250 words)

1. FLW prevention and reduction can help reduce food insecurity and malnutrition, climate change, environmental degradation and unsustainable exploitation of natural resources such as water, while also providing socio-economic benefits, livelihood opportunities and economic savings for countries and households. As such, it can help accelerate transformation of food systems to achieve the SDGs.

2. Interventions to address FLW should be based on evidence gathered to identify the baseline levels, the causes and critical points where FLW occurs across the food supply chain and appropriate interventions to address the issue, taking into consideration the needs of specific groups such as women, youth and Indigenous Peoples. A circular approach should be taken that includes recovering and redistributing safe food, and recycling and upcycling wasted food into valuable products. Targets should be set, taking into consideration the SDG 12.3 target, and progress monitored periodically and reported.

3. A whole-of-government approach, coherent policies and adequate governance structures at national and sub-national levels are required. The public sector should create an enabling environment for the actions of private sector entities and other food systems actors by putting into place an adequate institutional and regulatory framework, adequate infrastructure and instruments to incentivize adoption of improved practices and the investments that are required to reduce FLW in a sustainable way. Other complementary interventions include awareness raising, advocacy, capacity building, and multi-stakeholder platforms and partnerships at sub-national, national, regional and global levels.

4. The issue of FLW should be kept high on the international agenda in order to unlock the potential of food as a major solution for the benefit of people and the planet. In view of its strong links with climate change, FLW is one of the central issues that should be carried forward to COP 28.

5. All stakeholders are encouraged to be involved in the Food Is Never Waste Coalition.