



Food and Agriculture Organization  
of the United Nations

**REPORT OF  
THE TECHNICAL CONSULTATION  
ON THE CODE OF CONDUCT  
FOR FOOD LOSS AND WASTE REDUCTION**

**17 SEPTEMBER 2019  
ADDIS ABABA**

**REPORT OF  
THE TECHNICAL CONSULTATION ON THE CODE OF CONDUCT FOR FOOD LOSS AND WASTE  
REDUCTION  
HELD ON 17 SEPTEMBER 2019  
DURING THE 2<sup>ND</sup> ALL AFRICA POSTHARVEST CONGRESS AND EXHIBITION  
AFRICAN UNION COMMISSION, ADDIS ABABA**

## **1. INTRODUCTION**

At its 26th Session of October 2018, the FAO Committee on agriculture (COAG) requested FAO to take the lead, in collaboration with relevant actors, to develop voluntary codes of conduct (CoC) on the reduction of food loss and food waste. In response to the request, FAO launched a global process for developing a CoC that would present voluntary, global, internationally agreed, guiding principles and practices that different stakeholders can adopt and apply in order to achieve food loss and waste (FLW) reduction while yielding positive outcomes in terms of the environment, natural resources, livelihoods, food security and nutrition in alignment with the 2030 agenda.

In order for the CoC to represent a global consensus on internationally accepted principles and practices for FLW reduction, that takes into consideration and reflects country diversities and the views of all key stakeholders related to FLW, an inclusive consultative process has been put in place to develop the CoC. It is in this regard that a side-event was organized on 17 September 2019 during the 2nd All Africa Postharvest Congress and Exhibition (AAPHCE) in Addis Ababa, Ethiopia. The side-event had the following objectives:

- Discuss and gather inputs from different stakeholder groups on the guiding principles and practices that should be covered by the CoC.
- Identify priority FLW issues relevant to the sub-Saharan Africa context that need to be addressed by the CoC.
- Raise awareness about the CoC among sub-Saharan African stakeholders.
- Obtain guidance on the applicability of the CoC within the African context.

The programme of the side-event is presented in Annex I, while a list of participants is in Annex II.

## **2. MAIN CONCLUSIONS AND RECOMMENDATIONS**

The following are the main points that emerged from the event.

### **2.1. The need for and applicability of the code of conduct in the sub-Saharan Africa context**

The participants considered that a code of conduct is important and there is a strong need for standards of practice that are verified at high level, harmonize best practices, and provide a model from where to start and customize. They also emphasized that the code should be practical, have national and or regional applicability in Sub-Saharan Africa (SSA), be durable and useful on the ground, and be developed through a transparent and inclusive process.

### **2.2. The main FLW issues in Sub-Saharan Africa and measures to address them**

#### *2.2.1. Policies and strategies*

There is a lack of appropriate policies and, where they exist, policies are fragmented and give insufficient recognition to post-harvest losses. Resources allocated to post-harvest issues are not

adequate as they typically target primary production (the crops and livestock sectors). There is also inadequate policy dialogue. To address these issues, measures proposed for the CoC include:

- Strengthening the political will to address the issue of FLW.
- Designing policies, strategies, institutions and regulations that are specific to or support the postharvest sector, and developing financial and investment plans and programmes to reduce FLW. In all cases, these should be designed for the particular context.
- Implementing policies, strategies and regulations, where these exist.
- Creating road maps towards accomplishment of FLW reduction.
- Alignment, not only at government but at all levels, including by international organisations and the private sector.
- Putting in place incentives that facilitate availing certain technologies at scale (for example, metal silos and hermetic bag technologies, even though environmentally-friendly and fitting well within some farming systems, remain unavailable to farmers, even the ones who can afford and do want these technologies, because there are no private sector takers to run with these technologies).
- Improve access to and facilitate adoption of postharvest technologies.
- Putting in place proper market-based instruments (MBIs) which include taxes, charges, fees, fines, penalties, liability and compensation schemes, subsidies and incentives and tradable permit schemes. MBIs can have an incentive effect that results in a change of behaviour, or a revenue-raising effect. A number of market-based instruments and incentives can potentially be applied to the design of food waste reduction and prevention policies.

#### *2.2.2. Access to Finance*

Lack of access to finance, which constrains research and innovation, the adoption of solutions (equipment, infrastructures) and good practices to reduce FLW. To address this, financing should be provided through subsidies, and the private sector should, for example, facilitate access to equipment for farmers' organizations. The Asian experience can be drawn upon in this regard, in terms of establishing public-private partnerships (PPPs), with specific reference to farmers' training and establishing marketing agreements between the private sector and farmers – which may involve the putting in place of cold chain systems by the private sector.

#### *2.2.3. Private sector*

The private sector is weak and there is a lack of private sector engagement in FLW issues. Measures proposed include: supporting farmers to formalize their businesses and increasingly involve the private sector in every step of the food supply chain (in distribution, packaging, logistics, with a particular emphasis on the role of private sector in financing technologies such as refrigerated vans and packaging which may facilitate the delivery of safe and good products to supermarkets).

#### *2.2.4. Data*

There is lack of data on FLW. To address this the measures proposed include: countries should conduct assessments of the levels of FLW; standards and harmonized methodologies for FLW estimation are needed; at research level, investigating the economic impacts of FLW, conducting comparative economic analysis of alternative approaches to FLW reduction; improving awareness on the need for FLW related data; and developing systems for systemic routine reporting.

#### *2.2.5. Technologies*

With regard to technologies, there is a lack of technology in terms of availability, affordability, appropriateness and accessibility (the 4 A's). Measures to be implemented include promoting and supporting local/low-cost technology developers and linking them to the end-users; promoting the use of low-cost technologies like solar driers constructed with locally available materials; farmer field schools/learning centres to test technologies; providing farmers with a basket of improved technological options so that they can choose the most applicable ones. In addition, champions should be identified to help scale up adoption of technologies.

#### *2.2.6. Infrastructure*

Poor infrastructure (e.g. poor farm to markets roads and lack of storage facilities) are key causes of FLW, and actions to address them include development of transport infrastructure (including low cost transportation), cold stores and cold chains.

#### *2.2.7. Poor linkages to markets*

Improving linkages between farmers and markets, improving coordination among food supply chain stakeholders, strengthening farmers based organizations, and formalizing the sector so that all actors in the supply chain are registered, were mentioned as important measures to reduce FLW.

#### *2.2.8. Awareness*

There is lack of awareness along the value chain, which can be addressed by massive awareness-raising. Mass sensitization can lead to considerable reduction in FLW. People need to be constantly reminded of the need to prevent wastage in gatherings.

#### *2.2.9. Research and innovation*

Gaps exist in research and innovation due to factors such as lack of financing. Climate change is a key issue for research and innovation. Measures proposed include: promoting and supporting local/low cost technology developers and linking them to end-users; promoting innovation platforms, which should be appropriately designed (e.g. if the focus is losses at the village level, these platforms should include farmers and reach the rural level, while if the focus is food waste they should initiate facilities for composting, food donations, etc., an example being the WFP cold chain system to redistribute food to institutions in Kenya).

#### *2.2.10. Training and extension*

Capacity gaps exist due to lack of training and weak extension services. To address them: training and capacity building are required; postharvest training services should be set up; existing vocational training centres should be reinforced; the issue of FLW should be incorporated in curricula and training programs, and the tertiary education curriculum should be reviewed to incorporate or increase training in post-harvest management; postharvest training and service centres (PTSC) should be established; farmer field schools/learning centres should be used as platforms for training on FLW reduction. Examples of lessons cited: the Asian Development Bank financed training institutions in which FAO provided the technical resources and training at different levels and constituted a pool of trainers; and the Uganda farmers' training centre funded by a German private company.

#### *2.2.11. Multi-stakeholder platforms*

Working together of different groups needs to be encouraged. To address this, post-harvest working groups and forums are needed to mobilize several actors and resources at continent, regional, national and community levels.

#### *2.2.12. Access to information*

Lack of information and access to information should be addressed. Measures include strengthening information management system (e.g. in the fish value chains).

#### *2.2.13. Sociocultural Issues*

Sociocultural norms are an important cause of food waste, for example in relation to special celebrations. Measures are needed to promote acceptable alternative practices. Raising awareness and training interventions are key aspects of this.

### **2.3. Most optimal solutions to address food waste**

The points advanced for addressing food waste include: better management of portion sizes; sharing platforms (e.g. Facebook pages); repurposing safe and nutritious leftovers (for the preparation of other meals or for insects/animal feeding; proper sorting and exploitation of leftovers for animal feed, biogas, bio fertilizer etc. Other points raised include: recycling in supermarkets; enhancement of the cold chain; use of solar energy; taking packaging into consideration and improving the shelf life of products.

### **2.4. Achieving FLW reduction while respecting the 3 dimensions of sustainability**

In terms of achieving FLW reduction while respecting the 3 dimensions of sustainability the following points were advanced:

- the use of climate smart-technologies and infrastructure, renewable energies, sustainable mechanization, and technologies that can make systems more climate-smart;
- modification of systems to make them more sustainable;
- considering indigenous innovations, being cognizant of local indigenous knowledge and practices and how to build on them (some just need a small modification to be improved);
- taking a systemic approach to interventions, addressing trade-offs to create opportunities and revenues;
- promoting innovation to ensure that the FLW measures (including agro-processing and value addition practices) are environmentally, socially (inclusive including women and youth) and economically sustainable ;
- reinforcing market linkages among regions and especially regarding food production and redistribution;
- capacity building of food supply chain actors in approaches and practices that promote the three elements of sustainability ( e.g. recycling of used hermetic storage bags);
- using legal measures, such as outlawing inappropriate practices;
- making sure that food, originally produced for human consumption, reaches the final consumers while maintaining its safety and nutritional aspects.

### **2.5. Guiding principles to be followed for FLW reduction**

Among the guiding principles to be followed for FLW reduction, the following points were advanced:

- the right to food;
- looking at the food system in its entirety while addressing social, economic and environmental dimensions;
- linking to the African Union as a critical source of information; and

- the profitability and business case for FLW reduction.

## **2.6. Framework of practices and generic measures**

In terms of the framework of practices and generic measures that can be used to later define practical technical guidelines for FLW reduction, the following points were advanced:

- Ensuring adequate production inputs: such as good quality seeds that will put forth produce that can withstand various unfavourable conditions including the need for prolonged shelf life;
- Improving post-harvest and handling practices, applying GAP, GMP, Good hygienic practices;
- Considering the reduction of losses as a sub-sector of actions to address food security;
- Marketing issues – mainly regarding surplus production
- Importance of guidance documents, best or most useful in the context of the region;
- Use of existing strategic guidelines at country level to facilitate the formulation of the CoC and then later to be used in aligning and creating new strategies in countries/at national levels;
- Creation of road maps towards accomplishment;
- Alignment not only at government but in all levels by international organisations and the private sector (awareness and information sharing).

## **2.7. Areas of disaccord that need to be negotiated**

In terms of areas of disaccord that need to be negotiated (in the neutral platform offered by FAO) to seek convergence of the views of different stakeholder groups, the following were identified:

- FLW reduction is a matter of managing trade-offs. Where there are losers or where there are groups that pay the price and others do not, then there is scope for disaccord. For example, along the value chain there may be winners and losers, with the agro-industry reducing FLW and shifting the problem upstream (rejections for grading) or downstream (accrued supply to consumers or increased food prices) where farmers and consumers are weaker than the industry;
- Negotiating business versus environmental benefits where stakeholder groups are interested in one but not in the other. For example, farmers and private sector businesses do not have the broader perspective and value for the environmental dimensions as the public sector and governments have, and therefore they are unwilling to pay for the negative externalities or for more expensive but environmental-friendly practices.
- Different methodologies of conducting assessment in a particular country – methodologies could include those from institutions with a mandate to publish information about assessment on FLW (national bureau of statistics), the FAO case study methodology and those used by private sector actors.
- The public and private sectors need to negotiate the level of investments each needs to make for reducing FLW.

## **2.8. Moving into the future**

- Meeting the SDGs demand that as countries approach FLW reduction, they should also ensure sustainability in its 3 dimensions.
- This requirement will become the measuring rod of correct practices, and the CoC will provide the seal that helps to differentiate those that adopt sustainable practices from those that do not.

- Different technical guidance documents and capacity building will be required for governments to implement the CoC. FAO and other partners will support countries in these areas.

## Annex I: Programme of the side event

08.30-09.00	Registration
09.00-09.15	Opening remarks
09.15-09.20	Ice breaker: What are the most relevant post-harvest issues?
09.20-09.50	How the technical consultation will contribute to the CoC.  Outline of the CoC
09.50-10.00	Ice breaker: What is the most optimal solution to address food waste?
10.00-10.20	Coffee break
10.20-11.20	<p>Break-out groups</p> <p>Participants from: Eastern Africa, Southern Africa, International Organisations</p> <ol style="list-style-type: none"> <li>1. What are the main FLW issues in the SSA context?</li> <li>2. What are the main measures to be implemented at micro/meso/macro level to address FLW in SSA?</li> <li>3. Provide specific examples of policies, interventions, initiatives, alliances and institutional arrangements that should be considered as best practices for FLW reduction in SSA</li> </ol> <p>Participants from: Academic Institutions, Public Sector, International Organisations</p> <ol style="list-style-type: none"> <li>1. Achieving FLW reduction while respecting the 3 dimensions of sustainability</li> <li>2. Guiding principles to be followed for FLW reduction</li> <li>3. Framework of practices and generic measures that can be used to later define practical technical guidelines for FLW reduction</li> </ol>
11.20-11.50	Presentation of recommendations from break-out groups
11.50-12.50	Plenary discussions and collection of inputs for revising the CoC <ol style="list-style-type: none"> <li>1. Area of disaccord with regards to the CoC</li> <li>2. How to make the CoC useful in the sub-Saharan Africa context</li> </ol>
12.50-13.30	Next steps/Follow up activities Closing remarks



## Annex II: Participants

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## Annex III: Proceedings of the side-event

### Introduction session and plenary discussions

Mr. Divine Njie welcomed the participants and provided background information on the side event. He indicated that the request for a CoC on FLW prevention and reduction was made by COAG in October 2018 and that the CoC is supposed to be delivered by October 2020. He also stated that:

- The aim of the CoC is to provide a high-level framework that can be adapted to local level and to specific conditions for use by stakeholders
- The Coc comes at a time of multiple challenges – global food insecurity and malnutrition (820 million hungry people) and significant foot print of food systems (environment, GHG, natural resources).
- The 2030 Agenda and the Sustainable Development Goals (SDGs) must be achieved in their totality, even though the focus for FLW is target 12.3 of SDG 12: “By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses”
- At regional level, in 2014 the African Union committed “to halve the current levels of Post-Harvest Losses, by the year 2025”
- In order to achieve this, a transformational change is required.

He stated that the aim of the consultation was to collect information on the perspectives from Sub-Saharan Africa (SSA), therefore it was important that all participants be engaged and think out of the box.

Ms. Gaiani then took participants through an ice-breaker exercise by posing the question:

#### **What are the most relevant post-harvest issues?**

This generated the following responses:

- lack of technology and data
- lack of storage facilities, weather unpredictability, diseases
- Lack of information, technology and infrastructure
- Lack of private sector engagement, lack of access to technology, food safety issues
- lack of access to finance
- lack of awareness and capacity gaps, lack of training and extension services
- linkages between farmers and markets, lack of training and of coordination among food supply chain stakeholders. Fragmentation in policies and lack of policies in general

Mr. Njie informed participants that by design a limited number of AAPHCE participants had been selected to take part in the consultation in order to allow for quality discussions and interaction.

He then inquired whether participants felt there is a need for a CoC. In this regard, Mr. Brighton Mvumi mentioned that a code is important and there is a strong need for standards of practice verified at high level (and that people can customize). Ms. Lisa Kitinoja indicated that having a model from where to start is the most important aspect. The code must be something practical and durable. The process behind the code must be transparent and inclusive. The code should harmonize best practices. Its primary goal must be to prevent and reduce food waste.

Mr. Njie proceeded to describe the CoC as a document that should be internationally agreed-upon and present locally adaptable voluntary principles and practices that involve different stakeholders. It should represent a framework to guide country strategies, policies, legislation and programmes and should provide guidance as to what constitute acceptable practices against which stakeholders can gauge their actions. He then described the structure of the CoC, and said it will be made up of 2 main sections:

- Section 1: Introductory section giving the background, rationale and scope of the CoC, its objectives, target audience, and the process followed in its development.
- Section 2: Guiding principles and practices, which are classified into:
  - general guiding principles; and
  - specific guiding principles and practices on prevention and reduction, redistribution, animal feed, industrial uses and fertilizers, anaerobic digestion, composting, incineration and landfill, and cross cutting aspects.

Ms. Gaiani, through a second ice-breaker exercise, asked participants to consider the question: **What is the most optimal solution to address food waste?**

The following responses were proffered:

- Sharing platforms (like Facebook pages), recycling in supermarkets, use leftovers to make soups.
- Feed the insects with food waste and then feed the insects to animals.
- Enhancement of the cold chain and better management of portion sizes. Solar energy could also be an additional solution. It is important to take packaging into consideration and improve the shelf life of products.
- Understand exactly where food waste takes place the most and understand where the critical limits for FLW in general are.
- Take food safety issues also into consideration.

## Group Work 1

Participants were divided into three groups (East Africa region, Southern Africa region, and International organisations), which were asked to provide answers to 3 sets of guiding questions:

- 1. What are the main FLW issues in the SSA context?**
- 2. What are the main measures to be implemented at micro/meso/macro level to address FLW in SSA?**
- 3. Provide specific examples of policies, interventions, initiatives, alliances and institutional arrangements that should be considered as best practices for FLW reduction in SSA**

### *East Africa Group*

Rapporteur: Tigist Tadesse Shonte, College of Agriculture and Environmental Sciences  
Haramaya University, Dire Dawa, Ethiopia, [tigisttadesse59@gmail.com](mailto:tigisttadesse59@gmail.com)

Answers to question 1:

- The 4A's of technology (Availability, affordability, appropriateness and accessibility)
- Lack of awareness along the value chain or else micro-meso-macro
- Gap in research and innovation
  - Lack of financing

- Lack of linkage
- Lack of training (farmers, wholesalers, retailers, policymakers)
- Climate change

Answers to question 2:

- Designing and enforcing policies, strategies and regulations that support postharvest
- Development and enforcements of the existing policies and strategies for those who have it
- Capacity building
  - Development of infrastructure (e.g. road)
  - Development of cold chain storage and transport
  - Establishment of postharvest training and service centre (PTSC)

Marketing system regulations

- Strengthening farmers based organizations
- Postharvest incentives to farmers who adapt technologies (e.g. awarding farmers with simple postharvest tool kits, or thrashers)
- Providing regular postharvest training services

Answers to question 3:

- Strengthening information management system
- Tax exemptions on post-harvest machineries/infrastructures
- Development of climate smart agriculture
- Promoting and supporting local/low cost technologies developers and link them to the end-users
- Access to finance for farmers dealing with postharvest
- Market segmentation (e.g. discouraging farmers from marketing)

### *Southern Africa Group*

Rapporteur: Chewenkonde, PhD, Lecturer and Researcher (Ag. Development and Markets)

Department of Agricultural Economics and Extension, School of Agricultural Sciences, University of Zambia, chewenkonde@gmail.com

Answers to question 1:

- Policy level: insufficient recognition of post-harvest losses, skewed resource allocation (more going to agronomy and livestock), more policy dialogue required
- Research level: economic impacts to be investigated, hard data on comparative economic analysis of alternative approaches to FLW reduction (not many economic investigations have been conducted so far)

Answers to question 2:

- Need champions running with technologies to help scale up adoption
- Need political will and institutionalization
- Establishment of post-harvest working groups
- Establishment of post-harvest fora to mobilize several actors and resources at continent, regional, national and community levels
- Training at postgraduate level (there is a need for informed young generations to give continuity to FLW reduction more troops for continuity)
- Tertiary curriculum review to increase training in post-harvest management

Answers to question 3:

- Farmer field schools/learning centres to test technologies
- Processing at meso-level to manage waste
- Working together of different groups needs to be encouraged
- Move away from working in silos
- Promote Innovation platforms
- Need to integrate market system approach for systemic change
  - What are the constraints?
  - Who are the actors?

*International Experts Group*

Rapporteur: Mireille Totobesola, Project Manager, FAO Nutrition and Food Systems Division (ESN), mireille.totobesola@fao.org

The Code of Conduct needs to clarify how to address losses vs. waste.

The international organizations 'group' mostly focused on loss reduction, therefore targeting stallholder producers.

Answers to question 1:

- Training and capacity building
- Accessibility

Answers to question 2:

- Training and capacity building
- Accessibility: Access to finance to access / adopt solutions (equipment, infrastructures) good practices (Accessibility need to focus on the farmers/producers)
- Innovators/trainers/ training organizations targeting farmers

Answers to question 3:

- Funding of existing initiatives of trainings / capacity building
  - For example the Asian Development Bank financed training institutions, FAO provided some technical resources, established training at different levels and constituted a pool of trainers (Senior trainers)
  - Reinforce existing vocational training centres and universities for extension agents, linked with private sector and value chain actors
  - In the case of Ethiopia there is a need to change the curricula to include PHM, with the support of the Government
  - Uganda case of farmers' training centre funded by German private company is a good example
- Partnerships between government and other actors
  - Establishment of post-harvest innovation platforms that reach down to the farmers (as platforms established by FAO). If the focus is losses at the village level, the funding should be to be at rural level. If the focus is at urban level (waste), funding should be initiated by providing facilities for composting, food donations, or in general for actors to be used (e.g. for restaurant managers)
  - The private sector need to pick up to use the facilities for producing gas

- An example is the WFP's cold chain system to redistribute food for institutions in Kenya
- Make sure affordability is assured for rural producers (and training is provided alongside access to finance to adopt and use the equipment and best practices to reduce FLW)
  - Financing can take place through subsidies, and the private sector should facilitate farmers' access to the equipment
  - Asian experience: Private sector to train and employ the farmers, cold chain system. A PPP was established, agreements starting from the markets
- Issue of access to information needs to be addressed
  - For example in the case of fish value chains, there is no information system
- Lack of data/statistics should be addressed
  - When developing policies on FLW it would be important to always include resources for data collection for statistics. There is need for more awareness on need for data related to FLW
- Waste creation is often connected to cultural issues (abundance, special celebration)
  - Need for massive awareness building

## Group Work 2

In a second group exercise, participants were again divided into three groups – academic institutions, the public sector, and international organisations. Each group was requested to provide answers to the following guiding questions:

- 1. Achieving FLW reduction while respecting the 3 dimensions of sustainability**
- 2. Guiding principles to be followed for FLW reduction**
- 3. Framework of practices and generic measures that can be used to later define practical technical guidelines for FLW reduction**

### *Academia Group*

Rapporteur: Julius Kewir TANGKA (Ph.D Energy and Machinery), Administration:  
 Director of Development Physical Plant and Infrastructure, University of Bamenda,  
 Julius.Tangka@uniba-edu.cm

#### Answers to question 1:

- Sociocultural aspects affect food consumption losses in our societies. Serving of food in public is often guided by some sociocultural norms that could directly contribute to significant losses. These can be modified while still maintaining the sociological norms. If it is expected that a group of people must eat from one large central bowl, then the food can be served as they eat and not at once
- Mass sensitization of target groups in serving chain can have considerable reduction in FLW. People need to be constantly reminded of the need to prevent wastage in gatherings
- Proper sorting and exploitation of left over foods can reduce food loss. Left over can be sorted into bones for bone meal for animals, biogas and bio char material, bio fertilizer etc...

#### Answers question 2:

- We need to discourage farmers from retailing their produce themselves. Many farmers like to handle and bring the food themselves to the market. Because they do not have the necessary technologies to handle and transport these goods they generate a lot of losses. The

Private sector should organize and buy all the food from the market with refrigerated vans and then properly package them for clean markets like the supermarkets

- We have to promote the use of low cost technologies like solar driers constructed with local materials so to increase the shelf life of perishable products
- Supply of perishable products to the market must be well programmed to approximately go with periodic demands in the market
- There is the need to develop low cost transportation methods
- Poor farm to markets roads have been identified as the main cause of some postharvest losses
- Market segmentation should be encouraged. Governments should develop a system whereby, farmers are not allowed to, retail their products in the market or along the streets. In this system, the wholesaler should collect the products in the different farms in refrigerated vans with standard packaging materials for processing and display in supermarket shelves.

Answers to question 3:

- Improved seeds have to be supplied to farmers. Considerable post-harvest losses come from the use of poor quality seeds. Farmers need seeds that will put forth produce that can withstand various unfavourable conditions including the need for prolonged shelf life
- Farmers must be provided with a basket of improved technological options so that they can choose the most applicable options such as storage facilities and handling techniques
- Governments must put at the disposal of rural farmers, competent Postharvest Extension officers
- Establishment of postharvest training service centre

*Public Sector Group*

Rapporteur: Silvia Gaiani, Consultant on FLW, FAO SP4, [silvia.gaiani@fao.org](mailto:silvia.gaiani@fao.org)

Answers to question 1:

- FLW should happen in line with the 3 dimensions of sustainability. Technology (silos) but not always economic feasible- used by households but at commercial level
- Technology that allows recycling hermetic bags is very important
- Market linkages should be reinforced – among regions and especially regarding food production and redistribution.
- Simple post-harvest practices like handling practices
- Capacity building in the food supply chain
- Outlaw some practices – in the case of flooding / drying in the sun can be risky
- Indigenous knowledge practices (some just need a small modification to be improved)
- Agro-processing practices

Answers to question 2:

- Every actor in the supply chain must be registered
- Strengthening information management
- Same methodologies to conduct FLW assessments - Standards and harmonized methodologies for FLW estimations
- Countries must conduct assessments and strategies



- Awareness across the food supply chain
- Systemic routine reporting
- Stand-alone policies on post-harvest losses
- National post-harvest management strategies
- Ensure implementation of post-harvest policies, strategies and regulations
- Member States must incorporate the issue of FLW in the curricula/training programs

Answers to question 3:

- Improving post-harvest and handling practices
- GAP, GMP, Good hygienic practices, post-harvest practices
- Each country should have a financial and investment plans to reduce FLW
- Conducting surveys on FLW is very expensive- we must commit the countries
- Tanzania- losses as a sub sector of food security
- Marketing issues – mainly regarding surplus production
- Creating awareness and actors should play a role in it

*International Organizations Group*

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Answers to question 1:

Social aspects

- More inclusive including women and youth
- Use of food so to maximize its nutritional aspects

Economic aspects

- Trade-offs?
- Innovation and value addition
- Use of food so to maximize its economic value

Environment aspects

- Sustainable mechanization for environment impacts
- Use of water and fertilizers
- Renewable energies
- Climate smart technologies and infrastructure
- Modification of the food system to make it more sustainable, use of technology that can make the system more climate smart
- Consider indigenous innovations, cognizant of local indigenous knowledge and how to build on it
- systematic approach to intervention, addressing trade-offs to create opportunities and revenues

Answers to question 2:

- To look at the food system in its entirety while addressing social, economic and environment
- Looking at the key issues at the higher level
- Linking to African Union as critical source of information, alignment to the code
- Right to Food
- Price
- profitability, business case of doing FLW

Answers to question 3:

- Importance of guidance documents, best or most useful in the context of the region
- Postharvest strategies lacking in countries
- Use of existing strategic guidelines in country levels to facilitate formulation of the COC and then later to be used in aligning and creation of new strategies in countries/national levels
- Creation of a Road map towards accomplishment
- Alignment not only at government level but in all levels to be done by international organizations, private sector and governments (awareness and information sharing)

## Plenary Discussions

A last round of questions were posed in plenary:

### 1. Areas of disagreements that need to be negotiated in a neutral forum

Ms Carola Fabi indicated that FLW reduction is a matter of managing trade-offs, and that where there are losers or where there are groups that pay the price and others do not, then there is scope for disaccord. She also gave the following two examples:

- Economics along the value chain. There may be winners and losers, for example the agro-industry reducing FLW and shifting the problem upstream (rejections for grading) or downstream (accrued supply to consumers or increased food prices) where farmers and consumers are weaker than the industry.
- Economic versus environmental dimensions. Farmers and businesses look primarily at the profitability dimension while governments have a broader perspective and value the environmental dimensions. Economic operators may not be willing to pay for the negative externalities or for more expensive but environmental-friendly practices. It is up to the public sector to arbitrate to formulate compensatory measures.

The experience of Tanzania with respect to the methodology for measuring FLW was provided as another example of an area that needs to be negotiated. The national bureau of statistics, FAO methodologies and private sector actors have different methodologies.

Mr. Brighton Mvumi mentioned that the public and private sectors need to negotiate to increase investment in PHM for reducing FLW. Some incentives might be required to facilitate certain technologies to be availed at scale and ensure that customers/farmers access these technologies in their communities. For example, evidence abounds that metal silos work under farmer circumstances but there are no private sectors takers to run with the technology and so the technology remains unavailable to farmers even to those who can afford it. In some countries, there are no hermetic bag manufacturers but farmers can afford and do want to use them. All these technologies are environmentally-friendly and fit well within the farming systems.

### 2. How to make the CoC useful

Mr. Joseph Mpagalile indicated that the document should be accessible and used on the ground at national and regional level. There should be a strategy on how to make the document available and used by the people on the ground. For example, the Regional Economic Commissions (RECs) should be engaged in promoting it.

## **Moving into the Future - Application of the Coc and further support**

Ms. Rosa Rolle indicated that a key question that prospective users and appliers of the CoC will pose is the benefit of the CoC to them and why they should invest the time in it. She drew the analogy with the HACCP system which has now become a measure of acceptable practice related to food safety. She said that the CoC will similarly be a seal for acceptable practices to reduce FLW in a sustainable way (in the economic, social and environmental sense). The CoC will facilitate adoption of sustainability principles and practices, and one of the steps to be followed after development of the CoC will be to develop different practical guidelines to assist in the application of the CoC.

## **Closing Remarks**

Mr. Njie thanked participants for accepting to participate in the side-event, and for their contributions during the consultation. He wished them a successful AAPHCE and safe return home.