



Food and Agriculture
Organization of the
United Nations

SUSTAINABLE
DEVELOPMENT
GOALS

SDG 12.3.1.a Food Loss Index

Guiding questions on the steps of
the data collection strategy

December 2020



WHERE WE ARE

The first session was focused on the SDG 12.3.1.a definition, current state and methodology, as well as the planning phase of the data collection strategy and the first steps to start with. In the following two sessions, data collection methods will be discussed (2. session), and how food loss data is aggregated to obtain food loss indicators for the whole supply chain and for the country.

- **The following steps of the data collection strategy on food losses were presented:**
 - Select the commodities to be included (10 out of 5 commodity groups)
 - Select the critical food loss points of the priority commodities
 - Select and screen data collection instruments and define the scope of food losses to be included
 - Identify coordination mechanisms
- **What of these steps did you already do in your country?**
 - What commodities/commodity groups were selected?
 - What are the critical food loss points of these commodities?
 - What instruments will be used to collect data on food losses?



POSSIBLE NEXT STEPS

Objectives in the medium and long term:

- What will be the next steps to put food losses measurements in place?

For example:

- Select the commodities to start with/select additional commodities to those already identified
- Review studies, discuss and select the most relevant critical food loss points with experts and stakeholders in order to measure where data is most needed
- Screen and select the main surveys to collect food loss data (and which critical food loss points will be covered, which will not be covered)
- Decide on the scope of food losses to be considered in the surveys
- Start to design the questionnaires and chose the methods to collect food losses data



POSSIBLE NEXT STEPS

The next session will be focused on designing food loss data collection methods and instrument on concrete commodities and points of the supply chain using mainly sample-based surveys (for instance collect food loss data on harvest and post-harvest losses on-farm, on grain storage, or on slaughtering of animals, etc.). It will be useful to have results on the preparatory steps in order to work directly on concrete cases, e.g concrete commodities, critical food loss points, identified surveys.

- **On which of these steps will you/or do you wish to work on from here to the second session of the regional seminar (probably end of February)? For instance:**
 - Select 2-3 commodities to focus on as a first exercise and understand the different concepts and definitions on these commodities
 - Identify critical food loss points and think about how food losses present themselves in these
 - Select 1-2 surveys to start designing food loss data collection (screen the surveys in terms of coverage of stages/actors/operations/other information; define the scope of food losses)
 - Start to design the questionnaires to collect food loss data (questions, concepts, method, etc.)



FIST STEP: DEFINE THE COUNTRY COMMODITY BASKET (choosing the criteria)

Example of criterias to select commodity basket for SDG 12.3.1 a									
Heading	Commodity	Production and contribution to agricultural sector			Food Security and Nutrition		Socioeconomic Factors	Policy Factors	Relevance for Food Loss Reduction
		Production Volume (tons)	Percent of total volume of commodity group	Production Value (1000 Dollar)	Percent contribution to average food basket (%)	Priorities for nutrition	Relevance small scale farmers	Part of policy priorities/ programmes	Relevance for food losses
Cereals and pulses	Wheat	2,511,008	5%	609,498	6.0%	Medium	Low	Medium	Low
Cereals and pulses	Barley	963,288	2%	116,405	4.0%	Low	Low	Medium	Low
Cereals and pulses	Rice	587,980	1%	70,791	8.0%	Medium	Low	Medium	Low
Cereals and pulses	Maize	11,896,456	26%	4,002,147	18.0%	High	High	High	High
Fruits and vegetable	Tomatoes	2,669,982	6%	1,495,688	6.0%	High	Medium	High	High
Fruits and vegetable	Onions	943,848	2%	20,590	2.0%	Medium	Low	Medium	Medium
Fruits and vegetable	Mango	902,014	2%	1,316,557	2.0%	Medium	Medium	Medium	High
Fruits and vegetable	Bananas	594,295	1%	671,627	3.0%	High	High	High	High
Meat & Animals Products	Eggs	2,772,544	6%	1,178,366	9.0%	High	High	Medium	Medium
Meat & Animals Products	Raw milk of cat	3,099,608	7%	1,197,611	11.0%	High	High	Medium	Medium
Meat & Animals Products	Meat of cattle	2,315,441	5%	10,315,245	6.0%	Medium	Low	High	High
Meat & Animals Products	Poultry Meat	3,277,342	7%	4,866,832	10.0%	High	Medium	High	Low
Roots, Tubers & Oil-Bearing	Soyabean	433,564	1%	139,646	0.0%	Low	Low	Medium	Medium
Roots, Tubers & Oil-Bearing	Palm kernals	804,923	2%	9,034	0.0%	Low	Low	Low	Low
Roots, Tubers & Oil-Bearing	Potatoes	1,257,076	3%	303,268	6.0%	Medium	Low	Medium	High
Roots, Tubers & Oil-Bearing	Coconut	1,002,283	2%	127,986	0.0%	Low	Medium	Low	Low
Fish & Fish Products	Freshwater	273,982	1%	1,095,928	0.0%	High	Medium	Medium	High
Fish & Fish Products	Demersal Fish	217,392	0%	1,086,960	0.0%	Medium	Medium	Medium	High
Fish & Fish Products	Pelagic Fish	826,321	2%	2,478,963	1.0%	High	Medium	High	High
Fish & Fish Products	Crustaceans	319,038	1%	2,871,342	0.0%	Low	Medium	Medium	Medium



FIRST STEP: DEFINE THE COUNTRY COMMODITY BASKET (choosing the criteria)

What policies and criteria might be the focus for food loss reduction in your country?

- Food Security
- Small Scale Farmers/ Rural households
- Environmental Policies
- Policies related to food systems/ value chain development
- Others
- Or maybe Food Waste

What would be the priority commodities in your country?

- Cereals and pulses: ...
- Fruits and Vegetables: ...
- Roots and Tubers: ...
- Animal Products: ...
- Fish and Fish Products: ...
- Others: ...



SECOND STEP: SELECT CRITICAL FOOD LOSS POINTS

What might be the critical food loss points of the commodities you mentioned?

- On-farm: Small-scale farmers, exporting producers, etc.
- Processing Industry: Slaughtering, meat processing industry
- Transportation Sector: Meat and milk transportation, fruits and vegetables
- Wholesale Markets

What might be the main food loss points and loss causes at these stages?

- Harvesting operations: e.g. harvest practice or on-farm storage...
- On-farm storage:...
- Grading:...
- Processing/Packaging:...
- Transportation:...
- Storage:...



THIRD STEP: IDENTIFY AND SELECT DATA SOURCES TO BE USED

What instruments exist on the supply chain stages and commodities you selected for food loss data collection? How well is the food system covered by the national statistics system?

- Agricultural Surveys
- Meat Production Surveys (Slaughterhouses)
- Industrial/Manufactural Surveys
- Trade Surveys
- Storage Surveys
- Transportation Surveys
- Wholesale Surveys
- Others
- If no survey is in place, what other data sources could be used?

In which of these do you consider it is relevant to include food losses?



THIRD STEP: DECIDE THE SCOPE TO INCLUDE FOOD LOSSES IN THE INSTRUMENT

Which commodity?

*The instrument may cover different commodities
Different varieties of crops
(e.g. for human consumption or animal consumption)*

Which type of actors?

Maybe focused on small-scale farmers, or on export producers, on certain industries (small/family businesses)

Which operations?

Not all operations are relevant for food losses

On-farm storage, harvesting losses, grading losses, transportation losses

What additional information?

*Causes of losses
Methods, technologies, equipment used*

What frequency?

*Food losses do not have to be collected every year (structural)
Decide the frequency to collect data vs the level of detail, interpolation*

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THIRD STEP: DECIDE THE SCOPE TO INCLUDE FOOD LOSSES IN THE INSTRUMENT

Of the identified surveys, what of the following aspects are fulfilled?

- The target population and coverage is adequate
- The required operations are covered (e.g. post-harvest operations on farm)
- The level of disaggregation (by commodity groups or by commodity) is sufficient
- Food losses are or can be included
- Other relevant indicators are covered by the survey (type of actor, technologies used, size, etc)



FOURTH STEP: DECIDE ON THE COORDINATION MECHANISM

Institutions, stakeholders, institutional mechanism

Coordinating Body

Data providers

Data users

Dissemination

Institutions, stakeholders, institutional mechanism

*Data Quality
Assessment and
Validation*

*Data Resolution
and Integration*

Baseline

Frequency