



Food and Agriculture Organization  
of the United Nations

# MAPPING OF TERRITORIAL MARKETS

## METHODOLOGY AND GUIDELINES FOR PARTICIPATORY DATA COLLECTION







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Food and Agriculture Organization of the United Nations  
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## ABSTRACT

Malnutrition in all its forms (undernutrition, micronutrient deficiency, overweight and obesity) is a major global challenge, and improving nutrition is a key priority for global development, as recognized in the UN Decade of Action on Nutrition (2016–2025) and the 2030 Agenda for Sustainable Development. In this context, ensuring availability, physical accessibility and affordability of healthy and nutritious food at territorial level is crucial to ensure the achievement of the Sustainable Development Goals (SDGs). A number of studies show that the majority of fruits and vegetables in Low-Income Countries (LICs) are still purchased through territorial markets.

Territorial markets are not only key retail outlets for fruits and vegetables, but also for animal source foods and staple foods. These trends indicate the relevance of these market outlets on a macro-level. However, data concerning the availability of the different food groups and characteristics of food retailers and consumers in territorial markets are seldom considered in national data collection systems.

This publication presents a structured methodology and a series of guidelines for mapping territorial markets, as developed by the Food and Agriculture Organization of the United Nations (FAO), along with representatives of producer organizations and academics.





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# INTRODUCTION

## Importance of mapping territorial markets

Malnutrition in all its forms (undernutrition, micronutrient deficiency, overweight and obesity) is a major global challenge, and improving nutrition is a key priority for global development, as recognized in the UN Decade of Action on Nutrition (2016–2025) and the 2030 Agenda for Sustainable Development.

Nearly 2 billion people – the greatest share of whom live in Africa and Asia – do not have regular access to safe, nutritious and sufficient food (FAO et al., 2020). Similarly, and despite progress made in recent decades, there are still over 2 billion people living in poverty, including 736 million who live in extreme poverty (World Bank, 2018). A large majority of the world's poor are smallholders and family farmers, and depend on agriculture for their food and income (FAO, 2017a). In this context, a transition towards sustainable food systems that are inclusive for smallholders and family farmers, and that encourage people to make healthier food choices, is a prerequisite for achieving the Sustainable Development Goals.

Smallholder farmers are responsible for most of the world's food production and most of the investments made in agriculture (CFS, 2016a, 2016b; FAO, 2017b). They also play a major role in preserving biodiversity, which is in turn a key asset for ensuring their own food security and nutrition, and that of their communities (FAO, 2019; Herrero et al., 2017). Yet the markets in which smallholder farmers most commonly operate are systematically neglected, often due to pervasive gaps in information about these markets. The issue therefore is not one of market access in general, but rather of access to remunerative markets that work for smallholders, and of the bargaining power that smallholder farmers have in markets.

In reality, there are many different types of markets with a wide range of characteristics. In recent years however, the term has been identified with a single, specific kind of market, generally referring to agribusiness value chains. This tends to lead to simplistic solutions – for example when 'market integration' is proposed as a one-size-fits-all approach, without considering the type of market and its conditions. It is important to remember that "a market is not only an abstract system of prices, preferences, supply, demand and automatically generated equilibriums. A market is also about concrete transactions between concrete people who exchange concrete products according to concrete infrastructural patterns" (Ploeg, 2015).

The available research and information on markets that are embedded into local, national and regional food systems confirms that they are crucial not only for ensuring market access to smallholder farmers, but also for food security and nutrition, since only 10–12 percent of all agricultural products are traded on the international market (FAO, 2015).

The Committee on World Food Security (CFS) defined these 'embedded markets' as 'territorial markets' (CFS, 2016a), characterized by the following criteria:

- ▶ They are directly linked to local, national and/or regional food systems (the vast majority of products, producers, retailers and consumers are from the given territory).
- ▶ They are more characterized than other markets by horizontal (i.e. non-hierarchical) relations among the various stakeholders.
- ▶ They are inclusive and diverse in terms of stakeholders and products.
- ▶ They have multiple economic, social, cultural and ecological functions within their respective territory, and are thus not limited to food supply.



- ▶ They are the most remunerative for smallholder farmers (as compared to other kinds of market), as they offer the farmers greater bargaining power over prices.
- ▶ They contribute to structuring the territorial economy, creating wealth and redistributing it within the territory.
- ▶ They can be formal, informal or a hybrid of the two.
- ▶ They can be located at different levels within territories (local, national and cross-border).

Despite increasing awareness, there is still a lack of data on territorial markets. This results in public policies that tend to focus far greater attention on global value chains while seldom supporting and incentivizing these markets.

This underscores the important need for a participatory methodological guide to the mapping of territorial markets, in order to help promote, strengthen and defend this type of market, and further enhance its critical role in benefitting small producers across different contexts and realities, while also ensuring consumer access to healthy and diversified diets.

The COVID-19 pandemic has highlighted the significant vulnerabilities of the world's food systems to disease outbreaks and other phenomena of this kind. In particular, the virus has shown that territorial markets and short supply chains are often a critical component of agrifood systems, improving access to fresh food, ensuring higher farmer remuneration and reducing vulnerability to fluctuations in international markets. Having policies that support and strengthen territorial markets has therefore become twice as important.

## Mandate and target audience

In 2016, the CFS adopted policy recommendations aimed at “establishing a link between small

producers and markets”, highlighting the following as a first recommendation:

Collect comprehensive data on formal and informal markets, both rural and urban, linked to local, national or regional food systems in order to improve the evidence base for policy guidance, including data which can be broken down by age, gender and geographical location, and include this information as a regular feature of data collection systems available to small-scale farmers (CFS, 2016a).

To implement the CFS recommendations, FAO initiated a process of collaboration in the following year, together with producer organizations, non-governmental organizations (NGOs)<sup>1</sup> and research institutions,<sup>2</sup> towards the development of a well-structured methodology for the collection of reliable and comparable data and information on territorial markets at local, national and transboundary level.

This document includes a series of steps and tools that contribute to a better understanding of how territorial markets work, how they are linked to the activities and livelihoods of small-scale food producers, and how they help ensure healthy and diversified food systems. The methodology for collecting data and information on territorial markets is designed for use by a range of different stakeholders; for example it aims to:

- ▶ Support policymakers and international organizations in designing evidence-based policies to transition toward sustainable food systems for healthy diets.

<sup>1</sup> These include La Via Campesina, the Network of Peasant Farmers' and Agricultural Producers' Organizations of West Africa (ROPFA) and Terra Nuova.

<sup>2</sup> These include the French National Institute for Agricultural Research (INRA), the Institute for Research and Promotion of Alternatives in Development (IRPAD) and Wageningen University.



- ▶ Assist producer organizations in better monitoring the markets where they work and advocating for public policies supporting these markets as primary outlets for small-scale farmers. (It also serves to support members of producer organizations in productivity improvement, production planning and marketing strategies).
- ▶ Support research institutions and academia in improved learning on what different food systems look like, thus contributing to a better understanding of how localized food systems can become more sustainable.
- ▶ Assist NGOs in supporting producer organizations in their countries, both in order to strengthen territorial markets directly and to influence decision makers on the importance of these markets in the fight against poverty and malnutrition.

## How to use this document

This document provides guidance on how to map territorial markets by adopting a common methodology that allows data gathering and comparison among territories within a country as well as among countries. It can be used to develop projects and initiatives aimed at building evidence and collecting data on territorial markets and their role in local food systems. It can also be used to analyse and better understand how to foster the transition towards sustainable food systems.





# MAPPING TERRITORIAL MARKETS: A PARTICIPATORY APPROACH

## Process

The proposal to develop the present document follows a series of efforts as conducted by FAO in collaboration with small-scale producer organizations. This initiative responds to the CFS recommendations on “Connecting smallholders to markets”, adopted in 2016. These recommendations highlight the importance of markets connected to local, national and regional food systems as the markets most beneficial to small-scale producers, as well as to food security and rural economies. The CFS recommendations of 2016 were approved as a follow-up to a preceding set of recommendations on “Investment in small-scale agriculture” (CFS, 2013) and were based on the High Level Panel of Experts on Food Security and Nutrition (HLPE) report on Investing in smallholder agriculture for food security (HLPE, 2013).

In 2017, an ad hoc coordination group defined the objectives and general principles of the mapping process methodology. In June 2018, FAO held an International Workshop on Territorial Market Data Collection in Rome. The workshop was attended by representatives from 15 global and regional networks and producer organizations who shared relevant experiences and made proposals on the variables to be considered for the mapping of territorial markets. In addition, four regional workshops have been scheduled to take place between 2018 and 2021, in order to consult on and validate the methodology for mapping territorial markets with representatives of local institutions and producer organizations in specific regions.

## Objectives of the mapping

The overall objective of the mapping of territorial markets is to fully recognize the importance of these markets for greater advocacy and support

towards their improvement, and for informed policymaking processes towards sustainable food systems for healthy diets.

Specific objectives of the initiative include:

- ▶ making territorial markets more visible, with a view to influencing the public policies adopted to foster them;
- ▶ developing mechanisms for data gathering and processing on territorial markets; and
- ▶ establishing alliances between different actors, in order to strengthen linkages between markets and production systems.

## General principles

The following general principles have been identified to guide the development of the methodological proposal and ensure its coherence:

- ▶ **Inclusiveness:** the data collection processes should be conducted with the involvement of relevant actors and stakeholders, in particular producer organizations, relevant institutions and researchers.
- ▶ **Progressiveness:** the mapping process should follow a stepwise approach, first by taking into consideration a limited number of variables and indicators and a specific geographical area, then broadening the process to include other variables and geographical areas.
- ▶ **Mastery:** the mapping process should build on existing experiences so as to enable the lead organizations and/or institutions to develop and master the collection of information and other activities, in synergy with the other actors involved.



- ▶ **Harmonization:** while some variables should be common to all the data collection processes to ensure the comparability of results (see Variables), indicators may vary from one data collection process to another due to local specificities.
- ▶ **Multidisciplinary approach:** the data collection processes should involve and ensure the participation of all the various actors having different domains of experience as needed to understand the different aspects of territorial markets.
- ▶ **Triangulation:** the data should be cross-checked against other types of data and existing information, to corroborate their reliability.

## Variables

To allow for the comparability of results from different mapping exercises, the following variables have been identified and should be considered by all organizations and institutions carrying out data collection on territorial markets:

- ▶ status of the market, geographical scope and frequency (whether formal, informal, local, national, cross-border, daily, weekly, etc.);
- ▶ product supply (characteristics of the provider and of the product itself);
- ▶ product demand (characteristics of the buyer and of the product itself);
- ▶ infrastructures and basic services supporting the market and fostering the alignment of supply and demand;
- ▶ role of price in market organization (including income dynamics and income distribution);

- ▶ role of women and youth in the market; and
- ▶ standards and rules involved in enabling the functioning of markets, as set forth by relevant actors, local government authorities and the state.

An additional set of variables have been defined as optional. While these variables were identified as important when collecting data and information on territorial markets, they may not pertain to all contexts and/or translate easily into indicators. Along with other variables that may pertain to specific contexts, these variables may or may not be included in each data collection process. The optional variables are:

- ▶ regional regulations and the implications of international or regional standards on the markets; for example the rules of the Economic Community of West African States (ECOWAS), the European Union, the Southern Common Market (Mercosur) and the World Trade Organization (WTO);
- ▶ different modes of product exchange between actors of the local system;
- ▶ consumer perceptions of the quality of the products sold on territorial markets; and
- ▶ other non-commercial services provided by the markets.

## Scale of the mapping process

The scale for conducting a mapping process should be territorial; the recommendation is therefore to work first at a municipal or district level and then progressively cover the entire country. Institutions or organizations are free to choose the geographical coverage that best fits their context. This choice will be justified by the institution/organization itself during the methodological workshop (see Methodological procedure).





## METHODOLOGICAL PROCEDURE

The methodological procedure entails the active involvement and participation of producer organizations, institutions and researchers working on market-related issues in the considered territory. A preliminary desk review of previously completed and ongoing market data collection experiences within the target area should be conducted. This ensures that the mapping process builds on existing studies. It also facilitates the identification of all relevant actors that should be involved and improves the overall quality of the process and the analysis of the data collected. The active involvement of relevant actors and stakeholders and their ownership of the process is crucial, as is their participation in the validation workshops. This allows for a process that is well-adapted to the specific context and serves to strengthen the reliability of the collected data.

The methodological procedure uses a stepwise approach, composed of nine steps as described below.



### Step 0

#### Preparatory work

Step 0 is intended to lay the groundwork for the rest of the process. In this step the lead organization/institution should:

- 1 Clearly define the target area/territory for the mapping exercise.
- 2 Conduct a desk review of existing documentation in order to:
  - a. identify actors within the territory that have worked on this topic;
  - b. take stock of the work that has already been done; and
  - c. identify the different kinds of markets in the territory (for example, urban food markets, open-air markets, wet-markets and informal markets).
- 3 Propose a sample of markets to be considered for the mapping exercise.

### Step 1

#### Adaptation of questionnaires

Two standard questionnaires must be adapted for the local context – one for the preliminary analysis of territorial markets and one for food retailers (see Annex I and Annex II). Each questionnaire may require adaptation as follows:

- 1 The unit of measure for standard questions may need to be revised to ensure it is clear and relevant to the respondents.



- 2 The options in the standard multiple choice questions may need to be revised to ensure they are relevant to the reality of the context.
- 3 Further questions may need to be added according to specific needs.

## Step 2

### Validation workshop

A validation workshop should be organized for the agreement and validation of the data collection plan. This will ensure the participation and involvement of all relevant actors and stakeholders.

## Step 3

### Adaptation of data collection tools

According to agreements made during the validation workshop, the lead organization/institution should adapt the standard Google Forms data collection tools as developed by FAO.<sup>3</sup> The adaptation should be based on changes as proposed in Step 1 of the methodological procedure and as validated in Step 2.

<sup>3</sup> Google Forms is a free, web-based software application for survey administration, and is included as part of the Google Docs Editors office suite. The Google Forms data collection tools developed by FAO allow users to edit the tools online and adapt them to local contexts. Once the tools are ready to be administered, Google Forms automatically enters the collected information into Google Sheets, a spreadsheet program for data analysis that is compatible with Microsoft Excel.

The Google Forms data collection tools developed by FAO can be used both online and offline, and allow for the easy administration of collected data.

In case the lead organization/institution does not have access to laptops or smartphones with which to record data while in the market, paper versions of the data collection tools can be used. The data entered can then be transferred to the Google Forms data collection tools.

## Step 4

### Training of enumerators

Before starting the data collection process in the selected sample of markets, enumerators should be trained not only in the use of the tools themselves and the questions included, but also in how best to approach and conduct data collection (for example in terms of overall attitude and behaviour). Training should be facilitated by the appropriate person/s from the lead organization/institution, ensuring they have both relevant experience and knowledge of data collection processes. The duration of the training depends on the needs and capacities of the enumerators.

The training of enumerators should also include a field trial of the data collection tools. One market from the identified sample may be selected for this trial, in which the facilitator should follow and support enumerators in using the data collection tools, ensuring they achieve the competence and skills necessary to carry out the data collection process themselves.



## Step 5

### Data collection

After the enumerators have been trained, the data collection process can begin. This should involve at least two visits to the market, as follows:

In the first visit, the enumerators must carry out a preliminary analysis of the territorial market, in order to define a representative sample of retailers to be interviewed in the second and subsequent visit. As indicated in the standard preliminary market analysis questionnaire, this representative sample of retailers should be defined using the following criteria (see Annex I):

- ▶ total number of retailers operating in the market;
- ▶ category of products sold;
- ▶ sex; and
- ▶ age group.

To save time, this preliminary market analysis can be conducted with the help of key informants such as market managers and/or other officials, and then complemented with direct observation by enumerators.

Once the sample of retailers has been defined, the enumerators are ready for a second visit to the market, during which they will use the data collection tool to interview and gather information from the selected food retailers.

It is important to remember that food retailers and others working in the market context are typically very busy and that their time is valuable. Enumerators should therefore seek to demonstrate appreciation and respect for the time they are given and avoid unnecessary or intrusive questions. The key to a successful interview is to build empathy and earn trust.

## Step 6

### Data processing and analysis

Data collected in Step 4 have to be processed and analysed. This requires that all data collected for a given market first be consolidated. The lead organization/institution should then proceed with the analysis of the collected data as follows:

- 1 Cross analysis of data: Given the sample has been selected based on (i) category of products sold, (ii) sex, and (iii) age group, all collected data can be disaggregated according to these three dimensions. Cross analysis can then be conducted to identify trends and differences among food retailers. For example, the average net or take-home income disaggregated by sex can thus be calculated to understand if there is a pay gap between men and women.
- 2 Expansion of data: For answers regarding the volume of product sold, and for other information on the relevance of the market within its food system, an expansion factor may be applied to give a realistic picture at the overall market level. For example, if the selected sample of retailers reflects 20 percent (i.e. one-fifth) of all food retailers operating in the given market, the data manager can gather the data on the quantity of products sold by interviewed retailers and multiply this quantity by 5 (as an expansion factor), in order to arrive at an estimate of the total quantity of products sold at market level.
- 3 Calculation of indicators: To allow for comparisons among markets, as well as to facilitate the appropriation of the results by other stakeholders, four synthetic indicators are proposed (see Annex III):
  - a. food diversity indicator;
  - b. gender inclusion indicator;
  - c. business environment indicator; and
  - d. producer–consumer link indicator.



## Step 7

### Reporting

A report on the mapping process and the markets mapped should be prepared, including both a narrative of the data collection process and the collected data and analysis. The report allows for the sharing of results with relevant actors and stakeholders, comparison across markets and the eventual identification of entry points for specific interventions at market level. The report may also include an overview of the role these markets play within the territorial food systems.

## Step 8

### Final validation workshop

A final validation workshop should be organized to share and validate the report with all relevant actors and stakeholders. This allows for participant feedback to be gathered and incorporated into the report, while also providing an opportunity for participants to come up with proposals to enrich the work and to identify domains for more thorough analysis, with a view not only to enhancing the quality of the findings, but also to improving territorial markets.





## CONCLUSIONS AND RECOMMENDATIONS

This mapping process aims to provide information on the dynamics of territorial markets, such that collected data can be used to foster dialogue and knowledge exchange between public institutions and a range of stakeholders – including small-scale farmers, processors, herders and other agricultural workers, as well as fishing and forestry communities, artisans and indigenous peoples – in order to support participatory and informed policymaking processes.

Small-scale producer participation is important not only to improve and expand sustainable food production practices and strengthen their capacity to access and generate economic opportunities, but also to allow them better access to the necessary resources, services and markets, and to strengthen their opportunities for collective action and meaningful participation in negotiations and policy processes aimed at reducing malnutrition and poverty.

It is therefore recommended that the mapping process be conducted in an inclusive and participatory way, involving producer organizations, women, youth and other relevant stakeholders, to ensure that all parties contribute according to their particular roles and responsibilities in order to identify and translate the specific needs of territorial markets into concrete action plans at regional and national level.

Territorial markets are typical of short food supply chains, which are generally characterized by the involvement of few intermediaries, as well as by geographical and cultural proximity, trust and high social capital. They promote family farming, market inclusivity for small-scale entrepreneurs and producers, and a direct relationship between consumers and producers, as well as improved availability and accessibility for healthy and diversified diets at territorial level. It is therefore essential that the contribution of territorial markets – both to consumer dietary patterns and to the sustainable development of localities and regions – is made visible through the collection of reliable, timely and relevant data. Such data can also contribute to the design of public policies that support and strengthen this type of market.







## REFERENCES

**CFS (Committee on World Food Security).** 2013. Investing in smallholder agriculture for food security and nutrition. Rome.

**CFS.** 2016a. Connecting smallholders to markets. Policy recommendations. Rome.

**CFS.** 2016b. High-level forum on connecting smallholders to markets. Background document. Rome.

**FAO.** 2015. *Food outlook: Biannual report on global food markets*. Rome.  
(also available at <http://www.fao.org/3/a-i4581e.pdf>).

**FAO.** 2017a. Supporting family farmers to reduce rural poverty. Rome.  
(also available at <http://www.fao.org/3/a-c0376e.pdf>).

**FAO.** 2017b. *The State of Food and Agriculture in the World 2017. Leveraging food systems for inclusive rural transformation*. Rome. (also available at <http://www.fao.org/3/a-i7658e.pdf>).

**FAO.** 2019. *The State of the World's Biodiversity for Food and Agriculture*. Rome. (also available at <http://www.fao.org/3/ca3129en/ca3129en.pdf>).

**FAO, IFAD (International Fund for Agricultural Development), UNICEF (United Nations Children's Fund), WFP (World Food Programme) & WHO (World Health Organization).** 2020. *The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets*. Rome, FAO. (also available at <https://doi.org/10.4060/ca9692en>).

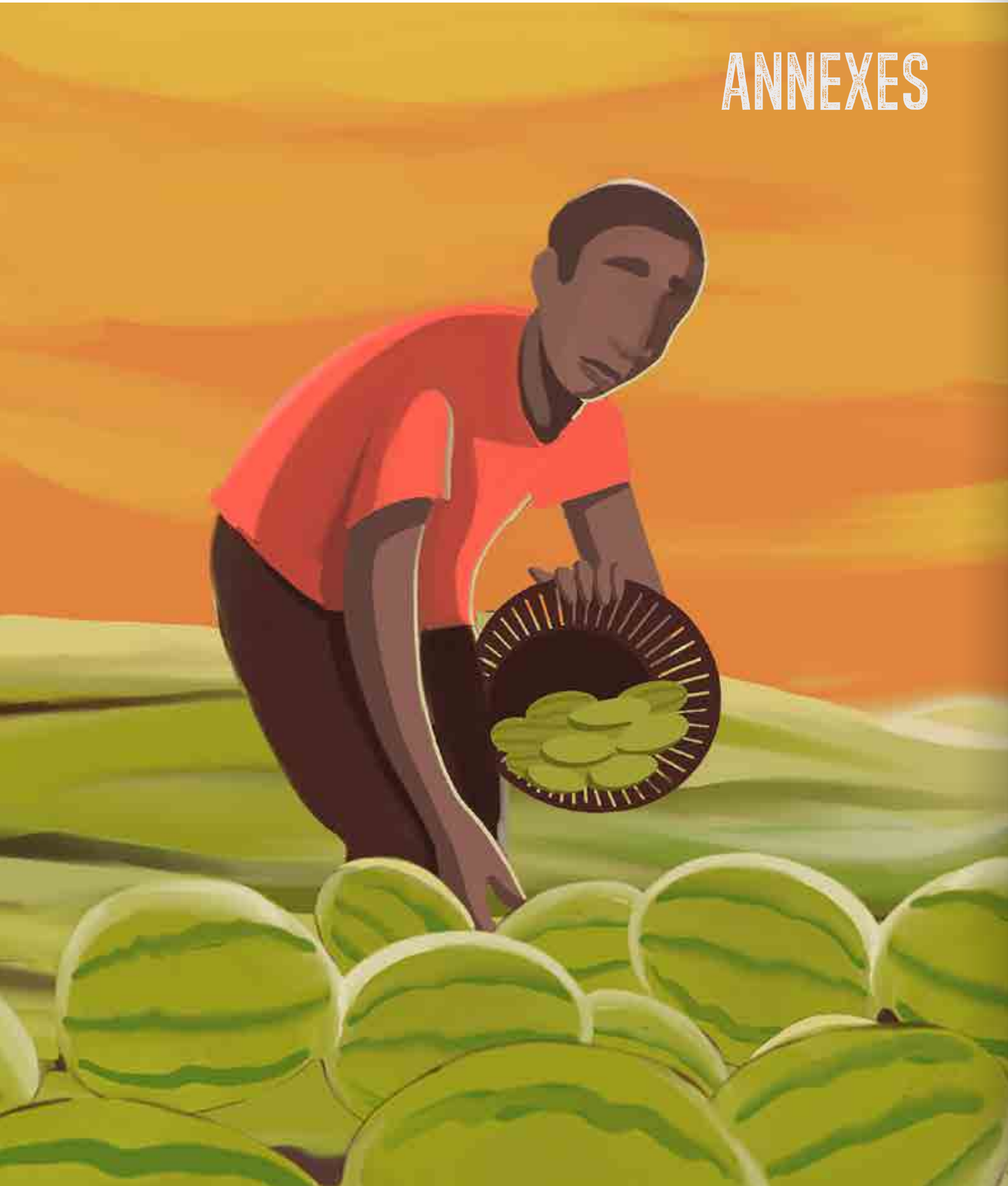
**Herrero, M., Thornton, P.K., Power, B., Bogard, J.R., Remans, R., Fritz, S., Gerber, J.S. et al.** 2017. Farming and the geography of nutrient production for human use: a transdisciplinary analysis. *The Lancet Planetary Health*, 1: e33–42.

**HLPE.** 2013. Investing in smallholder agriculture for food security. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security. HLPE Report 6. Rome. (also available at <http://www.fao.org/3/a-i2953e.pdf>).

**Ploeg, J.D. van der.** 2015. Newly emerging, nested markets: a theoretical introduction. In: P.G.M. Hebinck, J.D. van der Ploeg & S. Schneider, eds. *Rural development and the Construction of New Markets (Routledge ISS Studies in Rural Livelihoods)*, pp. 16–40. Abingdon, UK, Routledge.

**World Bank.** 2018. *Poverty and shared prosperity 2018: Piecing together the poverty puzzle*. Washington, DC.

# ANNEXES





## ANNEX I

### PRELIMINARY MARKET ANALYSIS QUESTIONNAIRE

TM0Q1 - Region

TM0Q2 - District

TM0Q3 - City/village name

TM0Q4 - Market name

TM0Q5a - GPS location (latitude)

TM0Q5b - GPS location (longitude)

TM0Q6 - Date of data collection



Q1 - What is the market frequency?

- ▶ Daily
- ▶ Weekly
- ▶ Monthly

Q2 - On average, how many retailers sell at this market?

Q3 - How many retailers are women?

Q4 - How many retailers belong to each of the following age groups?

- ▶ Less than 25 years old
- ▶ Between 25 and 55 years old
- ▶ More than 55 years old

Q5 - How many retailers sell the following categories of products?

- ▶ Grains, white roots and tubers, and plantains
- ▶ Pulses (beans, peas and lentils)
- ▶ Nuts and seeds
- ▶ Dairy products
- ▶ Meat
- ▶ Poultry
- ▶ Eggs
- ▶ Fish and sea food
- ▶ Vitamin A rich fruits and vegetables
- ▶ Other vegetables
- ▶ Other fruits
- ▶ Ultra-processed food and beverage



## ANNEX II

### FOOD RETAILER QUESTIONNAIRE

**TM0Q1 - Market name**



**TM0Q2 - Name of main respondent**

**TM0Q3 - Contact details**  
(cell number/landline)

**TM0Q4 - Date of interview**

#### Retailer characteristics

**Q1 - Sex of retailer**

- ▶ Male
- ▶ Female

**Q2 - Age of retailer**

**Q3 - Where do you live?**

- ▶ This village
- ▶ Neighbouring village
- ▶ Closest town
- ▶ Elsewhere in the region
- ▶ Elsewhere in the country
- ▶ Another country

**Q4 - Number of household members**

**Q5 - Business type**

**Q6 - When did the business start operating in this market?**

**Q7 - In a typical month, approximately how many days do you work in this market?**

**Q8 - Are you a member of an organization or association?**

- ▶ No
- ▶ Yes, I am a member of a farmers' organization
- ▶ Yes, I am a member of a cooperative
- ▶ Yes, I am a member of a Union
- ▶ Yes, I am a member of a market association
- ▶ Other

#### Earning and costs

**Q9 - What is the total value of sales in this business in a typical month? That is, how much do you receive from the products you sell?**

**Q10 - After all the expenses in inputs, wages and other costs, what was the net take-home income from the operation of this business, in a typical month?**

**Q11 - Do you rent or own the building/stall/ location where this business operate?**

- ▶ Rent
- ▶ Own
- ▶ Free use

**Q12 - Who is the owner of the building/stall/ location where this business operates?**

- ▶ Private individuals
- ▶ Private organization (e.g. cooperative/ farmers organization, etc.)
- ▶ Public entity
- ▶ Other

**Customers****Q13 - In a typical month, how many customers come to your retailing point each market day?****Q14 - From where your customers come from?**

	None	Less than 25%	Between 25% and 50%	Between 50% and 75%	More than 75%
This village					
Neighbouring village					
Closest town					
Elsewhere in the region/ province					
Elsewhere in the country					
Another country					

**Q15 - To which socio-economic group do the costumers belong?**

	None	Less than 25%	Between 25% and 50%	Between 50% and 75%	More than 75%
Poor					
Middle class					
Wealthier class					





#### Q16 - Who is the main customer in terms of volume of sales?

- ▶ Households/private individuals
- ▶ Other Business/ store/trader
- ▶ Millers
- ▶ Livestock markets/auctions
- ▶ Government
- ▶ Institution
- ▶ Other

#### Q17 - What share of your sales accrue from your main customer?

### Problems and benefits

#### Q18 - What are the main problems that affect your businesses?

	Yes	No
No cold chain		
Poor storing infrastructure		
Poor quality of raw material		
Limited demand		
Low prices		
High food losses		
Security		

#### Q19 - What are the benefit for you to sell at this market?

	Yes	No
Better prices		
Security		
Less price volatility		

#### Q20 - Do you have any line of credit or loan?

- ▶ Yes (go to Q21)
- ▶ No (go to Q22)

#### Q21 - What type of institution granted the credit or loan?

- ▶ Private commercial bank
- ▶ State-owned banks or government agency
- ▶ Non-bank financial institutions
- ▶ Cooperative/ business association
- ▶ Other informal

#### Q22- Why you did not get any line of credit or loan?

- ▶ No need for a loan - business had sufficient capital
- ▶ Application procedures for formal loans are too complex
- ▶ Interest rates were not favourable
- ▶ Collateral requirements were too high
- ▶ Did not think it would be approved

### Product characteristics

#### Q23 - Are you offering the following products?

- ▶ Grains, white roots and tubers, and plantains
- ▶ Pulses
- ▶ Nuts and seeds
- ▶ Dairy products
- ▶ Meat
- ▶ Poultry
- ▶ Eggs
- ▶ Fish and sea food
- ▶ Vitamin A rich fruits and vegetables



- ▶ Other vegetables
- ▶ Other fruits
- ▶ Ultra-processed food and beverage

#### Q24 - List the varieties on sale for all the offered product categories

#### Q25 - What is the geographical origin of the products? (Please ask only for offered product categories)

- ▶ This district
- ▶ Elsewhere in the region/province
- ▶ Elsewhere in the country
- ▶ Another country

#### Q26 - How are the products you sell produced? (Please ask only for offered product categories)

	Yes	No
Agroecological		
Organic		
Conventional		
Traditional without agrochemical inputs		
Traditional with agrochemical inputs		
Don't know		

#### Q27 - What is the origin of the products?

(Please ask only for offered product categories)

- ▶ Exclusively my production
- ▶ Partly my production partly purchased from other producers/traders
- ▶ Exclusively purchased from other producers/traders

#### Q28 - Did you buy the products directly from the farmer/livestock owners or from a trader?

(Please ask only for offered product categories)

- ▶ Farmers only
- ▶ Traders only
- ▶ Both farmers and traders

#### Q29 - What are your margins (by percentage of selling price) on the products? (Please ask only for offered product categories)

- ▶ Less than 10%
- ▶ Between 10% and 20%
- ▶ Between 20% and 50%
- ▶ More than 50%

#### Q30 - What is the volume of products that you sell in a typical month? (Please ask only for offered product categories)

### Sales

#### Q31 - Out of the total volume of products that you offer, how much you manage to sell in a typical market day?

- ▶ More than 75%
- ▶ Between 75% and 50%
- ▶ Between 50% and 25%
- ▶ Less than 25%

#### Q32 - What do you do with products that you can't sell?

- ▶ I consume them
- ▶ I take them back to the manufacturer
- ▶ I use them in another marketing channel
- ▶ I trade them for another produce
- ▶ I have nothing left



## Market management

**Q33 - Is the market formally recognized by public authorities?**

- ▶ Yes
- ▶ No

**34 - Who established the rules governing the functioning of the market?**

	Main regulator	Secondary regulator	Marginal role	No role
Municipal-level				
County/ department-level				
Regional-level				
National-level				

**Q35 - Who owns the market property and infrastructure?**

- ▶ Public property
- ▶ Private property
- ▶ Mixed

## Infrastructure

**Q36 - What are the existing infrastructures in the market?**

	Yes	No
Electricity		
Water		
Toilets		
Warehouses		
Cold warehouses		
Retailers' booths		

**Q37 - Who manage the infrastructures?**

- ▶ Retailers
- ▶ Market owner
- ▶ Both

## Prices

**Q38 - Do you think the prices you propose are similar to those offered by other retailers in this market?**

- ▶ Yes
- ▶ No

**Q39 - What is the main factor influencing the price difference?**

- ▶ Different quality
- ▶ Number of intermediaries
- ▶ Other

**Q40 - How do you set your selling prices?**

- ▶ Considering the cost of production and retailing margins
- ▶ Through price setting committees
- ▶ Bargaining between retailers and consumers
- ▶ Fixed by public authority
- ▶ Other



## ANNEX III

# PROPOSAL FOR SYNTHETIC INDICATORS

### Food diversity indicator

This indicator may be calculated as follows:

- 1 Consider Q24 of the food retailer questionnaire and list how many varieties are available at the market level for each product category.
- 2 According to the number of varieties available for each product category, assign a score as follows:
  - ▶ 0 if no varieties are available for the given product category (i.e. the product category is not available);
  - ▶ 0.25 if only one variety is available for the given product category;
  - ▶ 0.5 if two varieties are available for the given product category;
  - ▶ 0.75 if three varieties are available for the given product category; and
  - ▶ 1 if four or more varieties are available for the given product category.
- 3 Sum the obtained scores.
- 4 Calculate the ratio between the sum of the obtained scores and the maximum score (as there are 12 product categories, the maximum score is 12). A value between 0 and 1 will be obtained, with 0 indicating the lowest food diversity and 1 indicating maximum food diversity (i.e. when there are 4 or more varieties available for all 12 product categories).

### Gender inclusion indicator

This indicator may be calculated as follows:

- 1 Consider Q10 of the food retailer questionnaire:
  - ▶ Calculate the average net or take-home income disaggregated by gender.
  - ▶ Calculate the ratio between the average net or take-home income of women (as numerator) and the average net or take-home income of men (as denominator). The obtained value is between 0 and  $+\infty$ , where 0 reflects total inequality affecting women and  $+\infty$  reflects total inequality affecting men. The closer the value is to 1, the greater the equality between men and women in terms of net or take-home income. This is the first value to be retained in order to calculate the indicator.
- 2 Consider Q22 of the food retailer questionnaire:
  - ▶ Calculate the number, disaggregated by gender, of men retailers who selected 'b', 'c', 'd' and 'e' for Q22, and calculate the ratio against the total number of men retailers. Do the same for women retailers. The obtained value is a share to be provided as a value between 0 and 1. Calculate the ratio between the two values, using the value for men as numerator and the value for women as denominator. The result is a value between 0 and  $+\infty$ , where 0 reflects total inequality affecting women and  $+\infty$  reflects total inequality affecting men. The closer the value is to 1, the greater the equality between men and women in terms of access to financial services. This is the second value to be retained in order to calculate the indicator.



- 3 Sum the two obtained values and divide by two. The closer the obtained score is to (but lower than) 1, the more there is equal inclusion of/for both men and women. The closer the score is to 0, the less inclusion there is of/for women. The higher the score is above 1, the less inclusion there is of/for men.

### Business environment indicator

This indicator may be calculated as follows:

- 1 Consider Q36 of the food retailer questionnaire:
  - Calculate the average share of retailers who reported the existence of infrastructures (i.e. if 60 percent of retailers reported the existence of toilets and 20 percent of retailers reported the existence of cold storage warehouses, then the average share is 40 percent). Provide the shares as values on a scale between 0 and 1. The obtained value lies between 0 and 1, where 0 reflects a total lack of infrastructures and 1 indicates that all infrastructures are available to all. This is the first value required in order to calculate the business environment indicator.
- 2 Consider Q20 and Q21 of the food retailer questionnaire:
  - Calculate the share of retailers who selected '1' for Q20 (i.e. 'Yes'). Provide the shares as values between 0 and 1.
  - Calculate the share of retailers who selected 'a', 'b' and 'c' to Q21. Provide the shares as values between 0 and 1.
  - Multiply the two shares. The obtained value lies between 0 and 1, where 0 reflects a total lack of access to formal financial services and 1 indicates that all retailers have access to formal financial services. This is the second

value required in order to calculate the business environment indicator.

- 3 Sum the two obtained values and divide by two. The result is a score between 0 and 1. The closer the score is to 1, the more the business environment is favourable to food retailers.

### Producer–consumer link indicator

This indicator may be calculated as follows:

- 1 Consider Q27 of the food retailer questionnaire:
  - Calculate the share of retailers who selected '1' and '2' (i.e. 'Exclusively my production' and 'Partly my production and partly purchased from other producers/traders'). Provide the share as a value between 0 and 1. The closer the value is to 0, the lower the number of retailers who are also producers. The closer the value is to 1, the higher the number of retailers who are also producers. This is the first value required for the producer–consumer link indicator.
- 2 Consider Q28 of the food retailer questionnaire:
  - Calculate the share of retailers who selected '1' (i.e. 'Farmers only'). Provide the share as a value between 0 and 1. The closer the value is to 0, the lower the number of retailers who purchase directly from farmers. The closer the value is to 1, the higher the number of retailers who purchase directly from farmers. This is the second value required for the producer–consumer link indicator.
- 3 Sum the two obtained values and divide by two. The result is a score between 0 and 1. The closer the obtained score is to 1, the greater the degree to which farmers are directly linked to consumers, without intermediaries.









CONTACT  
US

Food and Nutrition Division - Economic and Social Development  
[MLVC@fao.org](mailto:MLVC@fao.org)

Food and Agriculture Organization of the United Nations  
Rome, Italy