

## Territorial markets and their role in shaping diets

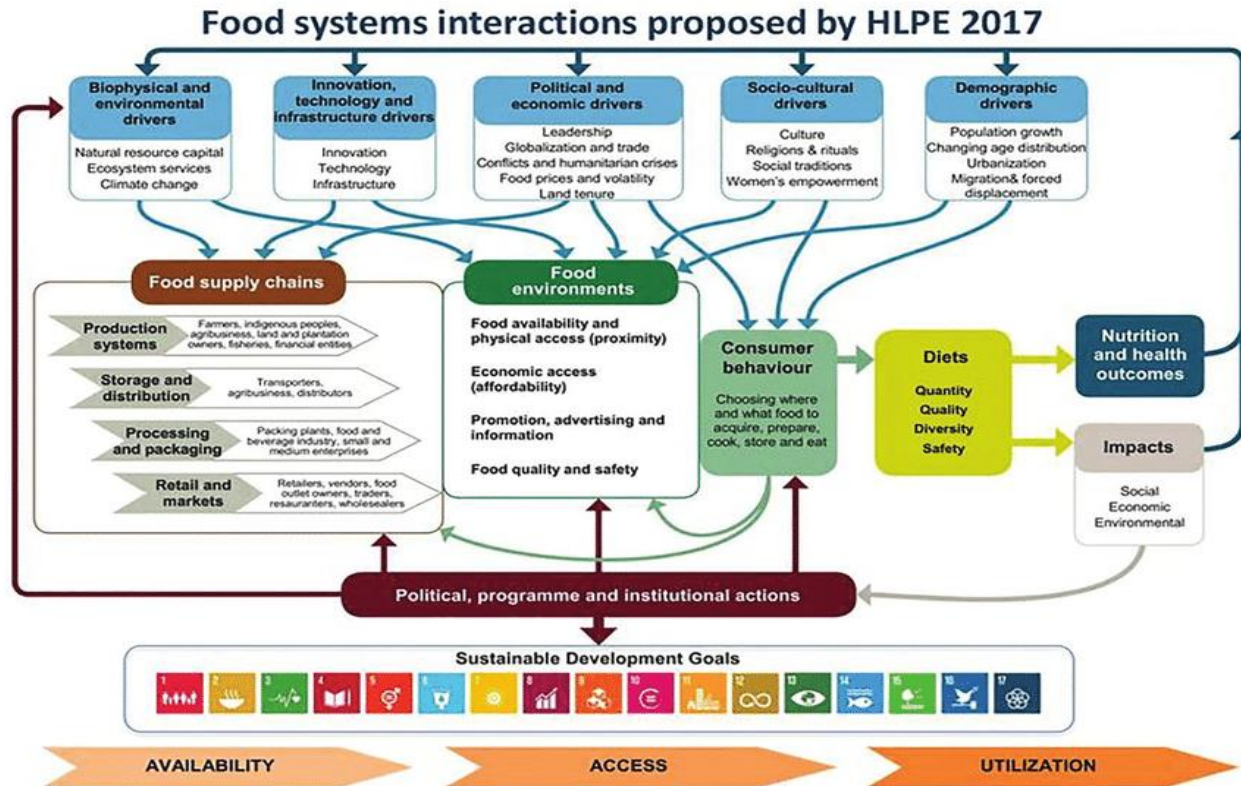
### Background

Today's food systems are failing to drive improvements in nutrition and to deliver healthy diets for all, as nearly one in three people (2.37 billion) in the world still don't have access to adequate food, while the high costs of healthy diets put them out of reach for around three billion of people (FAO et al., 2021). According to the Standing Together for Nutrition Consortium, more than 1.5 billion people would not be able to afford even half of the cost of a healthy diet by 2022 (Laborde et al., 2021). On top of the 720-811 million people estimated to be undernourished in 2019 (FAO et al., 2021), an additional 8-13 million people are projected to become undernourished in 2022-23, meaning that they will be unable to acquire enough food to meet the daily minimum energy requirements over one year (FAO, 2022).

Even before COVID-19, the world was not on track to achieve targets for any of the nutrition indicators by 2030 with over 200 million children affected by stunting, wasting, or overweight (FAO et al., 2021). New estimates consider that 13.6 million more children will be affected by wasting (the most lethal form of malnutrition) in 2022, representing almost a 30 percent increase over 3 years (Osendarp et al., 2021).

In the past, addressing food security was synonymous to addressing agricultural productivity, to confronting the issue of food availability. However, while great strides have been made in boosting global food production, there is now widespread agreement that this is not only insufficient to address all dimensions of food insecurity, but such an approach may actually be counterproductive as the uneven distribution in the world of what is produced persists (HLPE, 2020). Moreover, globalization, urbanization, economic development, and technological advancements have triggered changes in dietary patterns. These changes in the global nutrition landscape contribute to the 'double burden of malnutrition', whereby chronic undernutrition, overweight and obesity, as well as diet-related non-communicable diseases (NCDs) simultaneously manifest in the same population and in individuals alike (Hawkes et al., 2017; Wells et al., 2020).

Figure 1. Food systems conceptual framework.



Source: HLPE, 2017. Nutrition and Food Systems.

In this context, it has become relevant to expand the focus from increasing production to food system approaches that also consider food environments and consumer behaviours, to understand how to increase availability, accessibility and desirability of a variety of nutrient-rich foods. As shown in Figure 1, food environments are the link or interface that mediates people's food acquisition and consumption within the wider food system that includes agricultural production and supply (Turner et al., 2018). Food environments have been defined both in terms of spaces in which people make their decisions about acquiring, preparing and consuming food (HLPE, 2017), and in terms of food itself that is (or is not) made available, accessible, affordable and desirable (FAO, 2016). For most of the people, interaction with the food environment occurs through the food retail outlets, i.e. in the food retail environment.

In most of the LMICs, fresh food markets are the primary food outlets for low and middle-income groups (Gomez and Ricketts, 2013). The Committee on World Food Security (CFS, 2016) has defined these type of markets, which are embedded within territories, as Territorial Markets. These markets are key retail outlets for fresh products such as fruits and vegetables, but also for animal source foods and staple foods. Therefore, understanding the selling and purchasing dynamics in these markets is critical to designing systemic interventions aimed at improving diets and nutrition.

Given that territorial markets are still the most important food retail outlets in most LMICs, filling the existing gap in information and data on these markets has the potential to substantially contribute to supporting the local implementation of policies and interventions aimed at reducing child malnutrition.

The inclusion of seasonality in territorial markets assessment could further help with decision-making on early prevention strategies to prevent and mitigate food crises.

In 2021, FAO developed and implemented the '**Methodology to map territorial markets**' (FAO, 2021) for the collection of reliable and comparable data and information on both food retailing and purchasing that occurs in these markets. The methodology is used to identify existing bottlenecks at the food environment level that hinder the access, affordability and acquisition of nutritious and diversified foods. The innovative aspect of the methodology is that it considers all food groups (and the products within) that have the potential of making up a local food basket. Findings can be used to identify key opportunities to improve diets through increased access to and affordability of nutritious foods, with an emphasis on those that can be produced locally.

### **Application of the methodology in Malawi**

The methodology has already been implemented in six markets in Malawi, specifically with the goal of supporting the identification of suitable strategies for the prevention of child malnutrition (Box 1) looking at both the food supply and demand side.

#### **Box 1 - Link with preventive strategies to address child malnutrition**

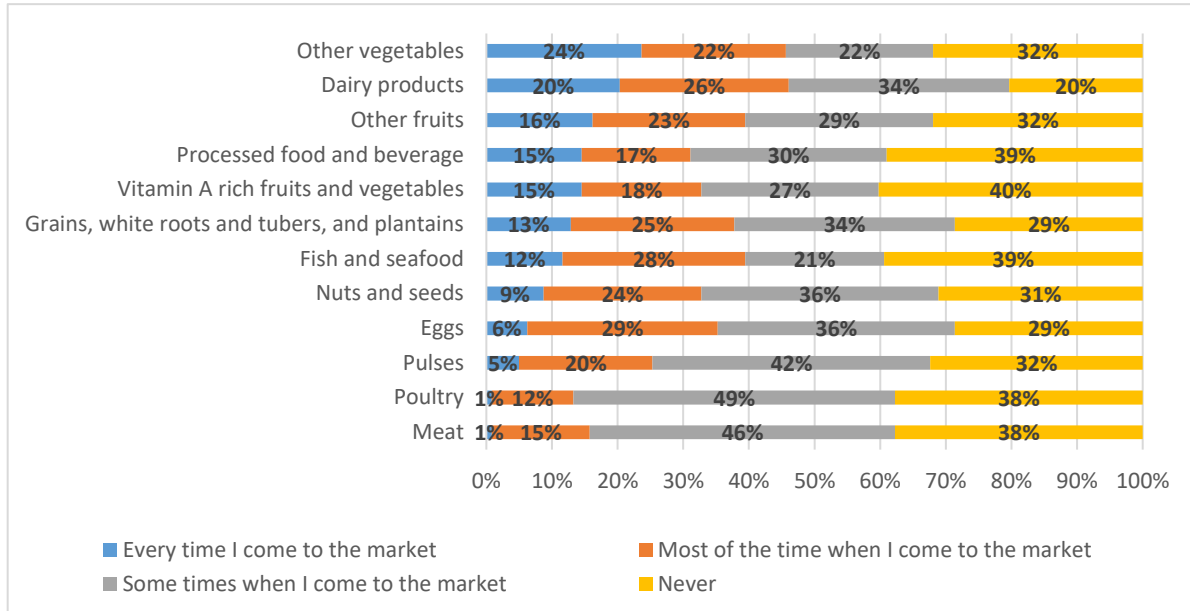
In June 2019, the UN Secretary General commissioned UN agencies working on nutrition (FAO, UNHCR, UNICEF, WFP and WHO) with preparing the first-ever Global Action Plan (GAP) on child wasting, as the most lethal form of malnutrition. The plan aimed to respond to the slow progress towards achieving the Sustainable Development Goal on reducing childhood wasting, and to growing calls for a more coordinated and streamlined UN approach to addressing this challenge. The GAP Framework identifies four outcomes to achieving the SDG target on child wasting and to improving early detection and treatment for those who need it: (i) reduced incidence of low birth weight; (ii) improved infant and young child feeding; (iii) improved child health; (iv) improved early detection and treatment of child wasting.

Food systems play a key role in the achievement of these outcomes alongside health, social protection, and WASH. So far, [twenty-two countries have developed and costed operational roadmaps](#) using a multi-sectoral approach with a focus on the most vulnerable communities and individuals. Impactful interventions in agriculture and food systems include the strengthening of food supply chains that aim to improve the availability and affordability of healthy diets; improving storage capacity and transport infrastructure for nutritious foods and the management of post-harvest loss as well as reducing food contamination hazards. Improvements in the design and delivery of these interventions require a systematic understanding of the challenges and opportunities offered by the territorial markets.

More recently, a [joint statement by a consortium of experts](#) is calling for governments, donors and others to step up to protect current and future generations from the devastating effects of malnutrition, as well as to prevent acute food insecurity in the current global food crises.

The consumer survey included in the methodology provided information on the purchasing habits of a subgroup of buyers with children under the age of two (Figure 2 and 3). The food groups more frequently bought for infants and young children are 'Other vegetables' and 'Dairy products' followed by 'Other

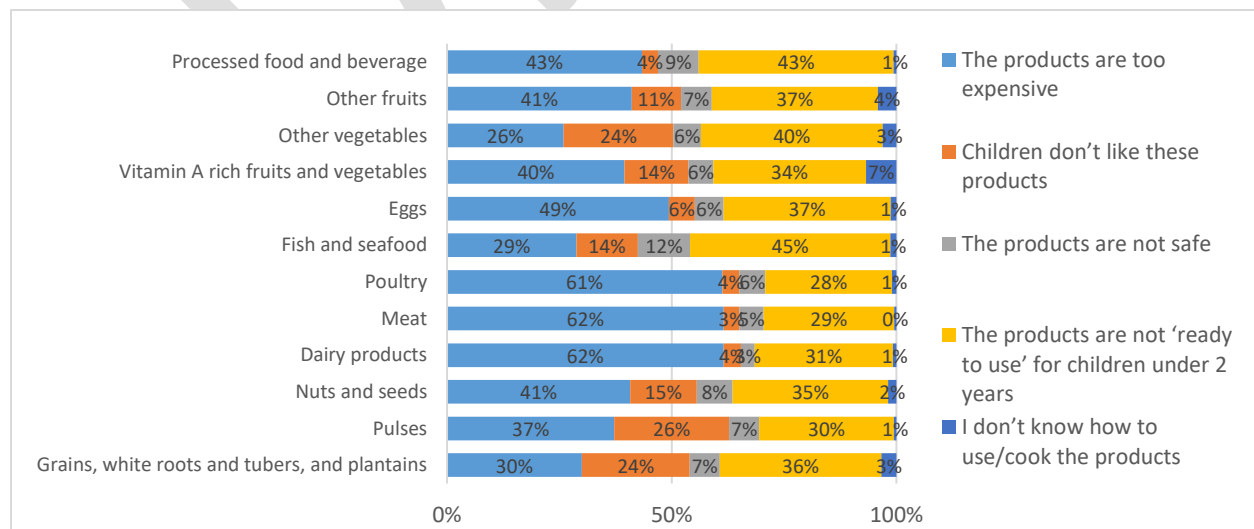
fruits', 'Processed foods and beverages' and 'Vitamin A-rich fruits and vegetables'. 'Fish and seafood' are the most frequently purchased food group among the protein source groups, while 'Eggs' and 'Pulses', 'Poultry' and 'Meat' show the lowest frequency of purchase of all food groups.



**Figure 2.** Frequency of products purchase for consumers with children under 2 years

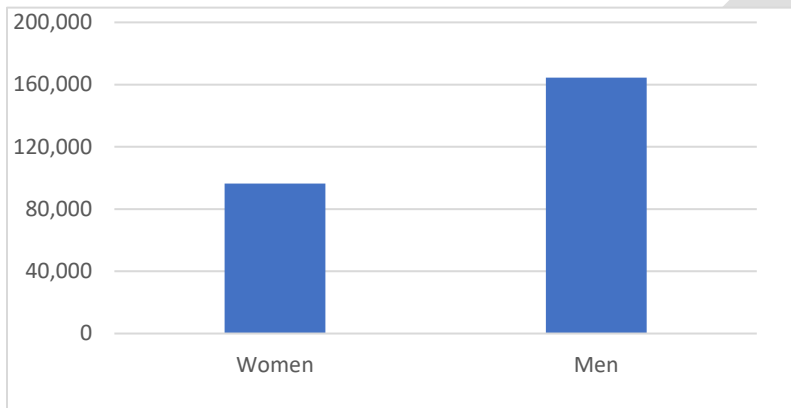
When investigating the reasons why each food groups is not purchased more frequently for children under two years of age, findings suggested that the *price* is a main purchasing barrier across most food groups, in particular of terrestrial animal source food. However, the *not readiness to use* was identified as a main limiting factor for food groups including fish, staple crops and other vegetables, suggesting a potential opportunity for food processors and food retailers to develop food products that are specifically designed for children.

**Figure 3:** Reasons for not buying the following food categories for children under the age of two

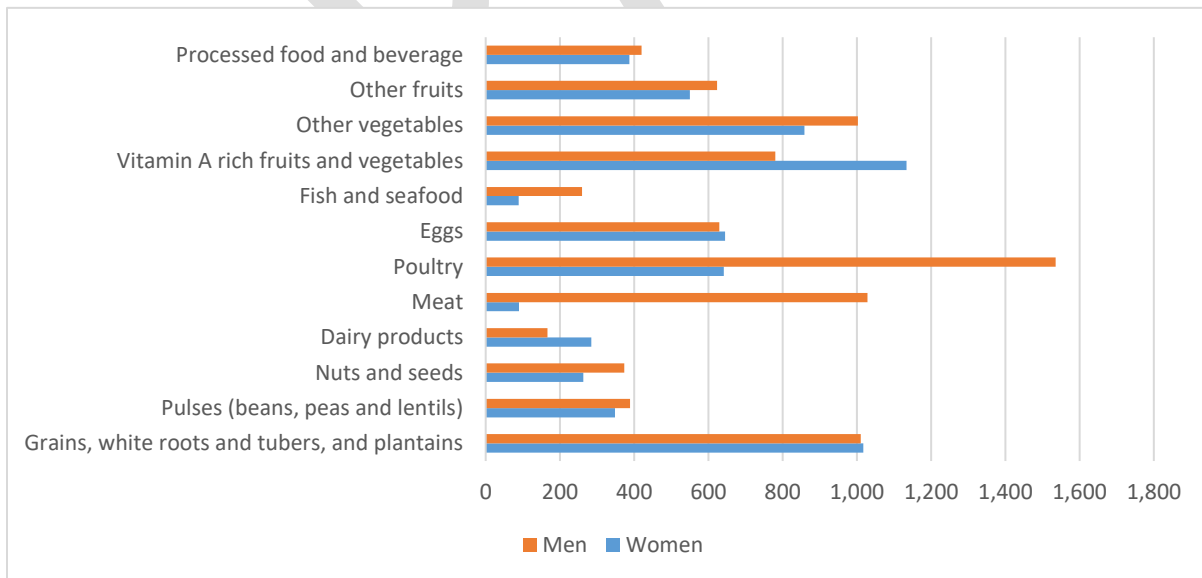


The food retailer survey provides also gender-disaggregated information to support interventions that aim at empowering women retailers. Findings indicate that even though the majority of retailers are women, there is still a huge gender gap in terms of net take-home income (Figure 4) and in terms of volumes of products sold in a month, especially for the most profitable food groups (Figure 5). In fact, even when a product is sold in majority by female retailers, in most cases, men tend to have higher volumes of sells in proportion, indicating that women have businesses that are definitely smaller than those managed by men offering the same product. Moreover women tend to be segregated in lower profitable food groups compared to men, which were reported to be the majority of retailers for animal products (except dairy products), usually more expensive than plant based products (*data not shown*).

**Figure 4.** Average net take-home income, by gender (MWK/month)



**Figure 5.** Volumes of products sold in a typical month (kg), by gender



Crossing the data and information collected from consumers with those collected from retailers, systemic strategies can be designed to improve the food retailing environment and to make healthy and diversified food accessible, available and desirable. In the case of Malawi, supporting women retailers and processors

in the development of food products specifically designed for children not only has the potential to fill the unmet consumers' demand but also to contribute to women's economic empowerment, catalyzing an overall shift toward sustainable and inclusive food systems.

Systemic interventions for healthy diets need to consider territorial markets as critical food retailing outlets, as their improvement has the potential to make diverse and nutritious food available and accessible to consumers, especially to the most vulnerable population, while also providing incentives for market actors to scale-up their businesses, thus contributing to the overall bottom-up economic development of local realities. In other words, by valuing territorial markets as the cornerstone of the food system in emerging economies, market-based interventions have a chance to create both food and market systems that will simultaneously be competitive, inclusive, and resilient and work for both economic and nutritional outcomes.

## References

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

FAO. 2016. Influencing food environments for healthy diets. Rome

FAO. 2021. Mapping of territorial markets - Methodology and guidelines for participatory data collection. Rome

Food and Agriculture Organization. The Importance of Ukraine and the Russian Federation for Global Agricultural Markets and the Risks Associated with the Current Conflict (FAO, 2022).

FAO, IFAD, UNICEF, WFP, and WHO. 2021. The state of Food Security and Nutrition in the World: Transforming Food Systems for Food Security, Improved Nutrition and Affordable Healthy Diets for All. Rome, 2021.

Gómez, M. I., & Ricketts, K. D. 2013. Food value chain transformations in developing countries: Selected hypotheses on nutritional implications. *Food Policy*, 42, 139-150

Hawkes, Corinna; Harris, Jody; and Gillespie, Stuart. 2017. Changing diets: Urbanization and the nutrition transition. In 2017 Global Food Policy Report. Chapter 4. Pp 34-41. Washington, DC: International Food Policy Research Institute (IFPRI). [https://doi.org/10.2499/9780896292529\\_04](https://doi.org/10.2499/9780896292529_04)

HLPE. 2017. Nutrition and food systems. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome.

HLPE. 2020. Food security and nutrition: building a global narrative towards 2030. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome.

Laborde, D., Herforth, A., Headey, D. & de Pee, S. *Nature Food* 2, 473–475 (2021).

Osendarp, S., Akuoku, J.K., Black, R.E. et al. The COVID-19 crisis will exacerbate maternal and child undernutrition and child mortality in low- and middle-income countries. *Nat Food* 2, 476–484 (2021).  
<https://doi.org/10.1038/s43016-021-00319-4>

Turner, C., Aggarwal, A., Walls, H., Herforth, A., Drewnowski, A., Coates, J., ... & Kadiyala, S. (2018). Concepts and critical perspectives for food environment research: A global framework with implications for action in low-and middle-income countries. *Global food security*, 18, 93-101.

Wells, J. C., Sawaya, A. L., Wibaek, R., Mwangome, M., Poullas, M. S., Yajnik, C. S., & Demaio, A. (2020). The double burden of malnutrition: aetiological pathways and consequences for health. *The Lancet*, 395(10217), 75-88.

DRAFT