

## THE DETERIORATION OF GLOBAL FOOD SECURITY

*This chapter analyses the deterioration of the global food security situation in recent years and its specific impact on cities. It highlights the need to implement urgent measures to ensure access to food for vulnerable people in urban areas. In a context characterised by climate and geopolitical instability, there is a need to reflect on the increasing risks to urban food systems.*



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Over the past two years, a combination of factors – including the increasing effects of climate change on agricultural systems, the disruptions caused by the COVID-19 pandemic and the war in Ukraine – have created a perfect storm that has triggered a rapid rise in food prices, pushing millions of city dwellers into poverty and hunger. As a result, the trend of worsening global food security observed since 2014 is being consolidated, which affects both rural and urban areas, where the poorest are particularly vulnerable to food price rises. Against this backdrop, states and cities alike must urgently put in place measures both to ensure access to food for the most vulnerable and to improve their resilience to food system disruptions.

### **A worrying picture: the causes of worsening global food security**

The first decade of the 21st century saw a notable overall improvement in global food security. But since 2014 this trend has been reversed, with more and more people suffering from moderate and

severe malnutrition each year. In 2021 the situation worsened considerably when, according to a report by the Food and Agriculture Organization of the United Nations, around 2.3 billion people (almost 30% of the world's population) were moderately or severely food insecure, nearly **10% higher than 2019**.

The reasons for this deterioration are complex and involve several factors, some of which are structural, while others are conjunctural. The main structural problem currently affecting the functioning of food systems is probably the global environmental change our planet is undergoing, a

**DESPITE THE GENERAL IMPROVEMENT IN WORLD FOOD SECURITY IN THE FIRST DECADE OF THE 21ST CENTURY, SINCE 2014 THERE HAS BEEN A CLEAR REVERSAL OF THIS TREND, BOTH IN RURAL AND URBAN CONTEXTS.**

consequence of highly complex phenomena such as climate change, the disruption to phosphorous and nitrogen cycles and biodiversity loss (Rockström et al., 2020). The impacts of climate change on food systems are already tangible and particularly affect food-insecure countries. For example, a series of climate catastrophes over the course of 2022 worsened the already-fragile food situation in countries such as India and Pakistan. In **India**, a severe drought in spring 2022 caused reduced harvests, worsening the food security of millions of people. In **Pakistan**, the floods

that affected a third of the country's territory pushed the number of people going hungry up by almost 1.5 million.

Since 2020, two further crises have broken out that are profoundly affecting global food security: the COVID-19 pandemic and Russia's invasion of Ukraine. The economic repercussions of the pandemic, and of the measures taken to deal with it, **have increased food prices** (FAO, 2022), raising the cost of accessing a healthy diet around the world. The war in Ukraine has also added to the upward trend in food prices that was already discernible by the end of 2021, above all by provoking temporary restrictions on grain supply and the rise in international energy prices. This is reflected in the prices of crucial inputs, such as fuel for both food production and transportation, and inorganic fertilisers, which are mainly produced using natural gas.

As a result, global food prices have soared, reaching their highest point in a decade in the first half of 2022, pushing millions of people into poverty and hunger. According to the FAO Food Price Index, in 2022 **the price of maize rose** by 47% and wheat by 42%, compared to the previous year. These increases affect individuals and households in very different ways, and heavily impact people who spend a higher percentage of their salary on

food. Indeed, by the end of 2022 the **FAO and the World Food Programme (WFP)** were already warning that the acute food insecurity generated by these price hikes would worsen substantially over the course of 2023 in at least 19 countries, the most worrying cases being Afghanistan, Ethiopia, Nigeria, South Sudan, Somalia and Yemen.

### **The urban dimension of food security**

This crisis of rising food prices has a strong urban dimension, as it affects city dwellers' chances of accessing available food. According to the definition coined at the 1996 World Food Summit, a situation of food security requires sufficient food of appropriate quality to be *available*, and for this food to be *accessible* to the entire population at all times. In urban settings, which are often characterised by the abundance and variety of food, availability is less of a problem than access – some of the population cannot afford to buy sufficient quantities of adequate, healthy and nutritious food, mainly because of price.

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Thus, while the FAO reports that most of the world's hungry are found in the rural areas of the poorest countries, urban hunger is also a widespread phenomenon with several specific features connected to the realities of urban life. For example, many poor urban households rely on insecure and low-paid jobs in the informal sector, leaving them more vulnerable to economic shocks (Ruel et al., 2017). With mothers and primary caregivers more likely to work outside the home for longer hours, children in cities are exposed to specific risks that, combined with the lack of family and institutional care networks, can affect the quality of childcare and child nutrition (ibid.).

With most of the world's population living in cities, awareness has grown of the importance of addressing food security in urban contexts, in terms of both economic and physical access to food (Sonnino, 2016). In relation to economic access, rising food prices can leave the urban poor helpless, as they depend entirely upon the market for their food, whose costs often take up a large share (50–75%) of their income.

In terms of physical access, meanwhile, concern has grown over recent years about cities' dependence on imported food. Historically, food systems have

always had a strong local component, as food supply tended to depend on the availability of land around urban centres. Today, however, with the widespread use of fossil fuels at all stages of food production, distribution and consumption, these systems have become increasingly disconnected from regional biophysical conditions. To give just one example of this import dependency, the amount of food transported to cities has increased up to tenfold over the last 30 years (Rosenzweig et al., 2018). Global cities now source food from far away, using complex supply chains that are as fast and economically efficient as they are vulnerable to disruption, as both the pandemic and the war in Ukraine have shown.

**CITIES ARE CURRENTLY RETHINKING THEIR FOOD SECURITY AND IMPLEMENTING CONCRETE MEASURES THAT ABOVE ALL AIM TO SHORTEN SUPPLY CHAINS AND RECONNECT FOOD SYSTEMS WITH THEIR SURROUNDINGS.**

The disruptions caused by Russia's invasion of Ukraine in the Black Sea region have triggered food insecurity problems in a number of cities, particularly in the Middle East and Africa. At least **12% of the world's food calories** are exported through the Black Sea, including sunflower oil, maize and other crops like wheat (Harvey, 2022). In fact, 40% of the wheat that passes through the area is destined for the Middle East and Africa, regions whose large cities are heavily dependent on wheat imports.

The consequent **rise in bread prices** in cities like Cairo in 2022 raised fears of a repeat of the riots of 2010 (Butler, 2022). Both the pandemic and the war in Ukraine have therefore highlighted the vulnerabilities of global commodity supply chains, as well as the need for major cities to rethink their dependence on such a fragile global system.

**Cities' responses: measures to alleviate food insecurity and build urban resilience**

In response to this reality, and in the wider context of climate change, cities are currently rethinking their food security and implementing concrete measures that above all aim to shorten supply chains and reconnect food systems with their surroundings. According to "The Future We Don't Want" (2018), a report by the C40 network of large cities committed to fighting climate change, cities can increase their resilience and food security by, among other things, increasing food production in the city, providing space and infrastructure for local producers to sell their products, using their public food procurement capacity to support these regional supply networks, and taking action to reduce food waste. There is also much that cities can do to improve nutrition for vulnerable groups, like children. **UNICEF** gives the examples of vouchers and cash transfers to families and school

feeding programmes as effective measures that cities can implement, while recommending that these social protection measures ensure children's access to healthy, nutritious and varied diets.

However, there are limits to what cities can do to face these challenges, as the need for food imports often far exceeds the capacity of their territory or surroundings to provide food. What is more, when it comes to supporting their inhabitants in situations of food insecurity, it is states that often have the greatest capacity to respond. Indeed, academic evidence (Tarasuk, 2017) and the FAO (2022) agree on the importance of state social protection policies, in particular direct cash transfers to guarantee a minimum living income, in order to protect vulnerable populations in emergency situations. International aid, which must reach both urban and rural environments, remains critical in order to support countries in particularly vulnerable situations, such as Afghanistan, Ethiopia, Nigeria, South Sudan, Somalia and Yemen.

## References

- Butler, Sarah. "Egypt fixes price of bread as Ukraine war hits wheat supply". *The Guardian* (21 March 2022)
- Harvey, Fiona. "Ukraine war piles pressure on global food system already in crisis". *The Guardian* (9 March 2022)
- Rockström, J.; Edenhofer, O.; Gaertner, J.; DeClerck, F. "Planet-proofing the global food system". *Nature Food*, vol. 1, n.º. 1 (2020) p. 3-5.
- Ruel, Marie T.; Garrett, James. L. y Sivan, Yosef. "Food security and nutrition: Growing cities, new challenges". *IFPRI book chapters*, 2017, p. 24-33.
- Sonnino, Roberta. "The new geography of food security: exploring the potential of urban food strategies". *The Geographical Journal*, vol. 182, no.2 (2016), p. 190-200.
- Tarasuk, Valerie. *Implications of a basic income guarantee for household food insecurity*. Thunder Bay: Northern Policy Institute, 2017.

