

Trade and Food Security in the Organisation of Islamic Cooperation



About the paper

Countries in the Organisation of Islamic Cooperation (OIC) countries face unique challenges in ensuring food security amidst global uncertainties like climate change, geopolitical conflicts, and market volatilities. Trade can be a double-edged sword, offering opportunities to bolster food security but also exposing nations to global market fluctuations.

Key strategies for resilience include diversifying food import sources, reconsidering trade barriers, investing in transport infrastructure, and promoting regional cooperation. Additionally, global coordination, transparency in food markets, and addressing climate change are paramount. As the world evolves, proactive and strategic trade policies are vital for OIC countries to ensure a stable food supply for their populations.

Publisher: International Trade Centre

Title: Trade and Food Security in the Organisation of Islamic Cooperation

Publication date and place: Geneva, October 2023

Citation: International Trade Centre (2023). *Trade and Food Security in the Organisation of Islamic Cooperation*. ITC, Geneva.

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Acknowledgements

Upon request of the Islamic Centre for Development of Trade (ICDT), the International Trade Centre (ITC) developed this report on trade and food security in the Organisation of Islamic Cooperation (OIC). The report is meant as a resource for ICDT to better assess the current trade environment and provide recommendations to its members, in particular to government agencies.

Cecilia Heuser and Julia Spies are the main authors of the report. The authors thank Abdellatif Benzakri, Cailey Stevens and Arushi Vaishnav for their contributions, and Lucas Poffo Ouriques for the statistical analysis. The team worked under the leadership and supervision of Mondher Mimouni, Chief, Trade and Market Intelligence (ITC).

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Acronyms

Unless otherwise specified, all references to dollars (\$) are to United States dollars, and all references to tons are to metric tons.

AGC	Agricultural growth corridor
AMIS	Agricultural Market Information System
FAO	Food and Agriculture Organization
GDP	Gross domestic product
HHI	Herfindahl-Hirschman Index
ICDT	Islamic Centre for Development of Trade
IISD	International Institute of Sustainable Development
ITC	International Trade Centre
LDC	Least developed country
LPI	Logistic Performance Index
MC12	the 12 th Ministerial Conference of the World Trade Organization
MRL	Maximum residue level
NDC	Nacala Development Corridor
NTM	Non-tariff measure
OIC	Organisation of Islamic Cooperation
PPP	Public private partnership
SAGCOT	Southern Agricultural Growth Corridor
SDI	Spatial development initiatives
UNCTAD	United Nations Conference on Trade and Development
UNDESA	United Nations Department of Economic and Social Affairs
WTO	World Trade Organization

Executive summary

Recent global events, from the COVID-19 pandemic to geopolitical conflicts and the looming shadow of climate change, have underscored the need for robust food security strategies. Trade offers a chance to tackle this challenge, but it also exposes countries to global market volatilities. The stakes are high, especially for countries historically reliant on food imports.

Food security and trade in the OIC

The Organization of Islamic Cooperation (OIC) stands at a crossroads. Populations in the OIC region are more affected by food insecurity than populations in most other regions. With a diverse membership spanning various economic and geographical contexts, the OIC faces the monumental challenge of ensuring stable, affordable, and nutritious food for its populations.

Imports contribute to a quarter of their food supply. The role of trade in the OIC's fight against hunger is therefore undeniable. Attention must be put on the design of trade policy and other support measures so that they ensure a sufficient, affordable and uninterrupted access to essential foods.

Roadblocks to trade: tariffs and non-tariff measures (NTMs)

Trade barriers, both tariffs and NTMs, can significantly sway the cost and availability of food. OIC members continue to apply a diverse array of tariffs on food imports. For instance, essential sectors like cereals, vegetable oils, and sweeteners face non-negligible import tariffs, even in countries that depend on the imports of those. Reducing tariffs and streamlining NTMs, alongside addressing cumbersome customs procedures, can make food trade more efficient and affordable.

A double-edged sword: export restrictions

Among NTMs, export restrictions have recently gained prominence. While they might offer a temporary reprieve from domestic price surges, they can deter local food production and amplify global price pressures. OIC countries must weigh the potential adverse effects of these restrictions on both local and international markets.

The backbone of trade: infrastructure

Efficient logistics and robust infrastructure are pivotal for effective trade. The OIC region presents a mosaic of logistics performances. While some members are global trading hubs with state-of-the-art infrastructure, others grapple with outdated systems, leading to higher trade costs. Investments in transport infrastructure, such as food corridors, can be game-changers, bridging the gap between surplus regions and areas with deficits. Generating environments conducive to investment is key.

A key to resilience: diversification

As OIC countries dependent on Russian and Ukrainian grain have painfully experienced, relying on a limited number of suppliers for essential food imports is risky. By strategically broadening their sources of food imports, OIC countries can shield themselves from supply disruptions due to unforeseen global events.

Strength in unity: regional cooperation

Intra-OIC trade holds untapped potential. Strengthening regional trade agreements and food corridors can help stabilize food supplies within the region. Shared best practices, joint investments, and collaborative strategies can address common challenges, fostering a united front against food insecurity.

A global call to action

While the OIC can chart its path, the role of the international community is undeniable. Addressing the global challenges of food security, such as transparency in food markets and adaptation to climate change, requires a symphony of efforts, from local initiatives to worldwide coordination.

For the OIC, the journey to food security is paved with challenges but offers immense opportunities. By leveraging the power of trade, diversifying import sources, rethinking trade barriers, and promoting regional unity, the OIC can usher in increased food security. As the world continues to evolve, proactive, strategic, and collaborative trade policies will be the cornerstone of a hunger-free OIC.

Section 1

The importance of trade for food security in the OIC

Food security is a multi-dimensional concept, defined as the assurance that all people, at all times, have physical, social and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life.¹

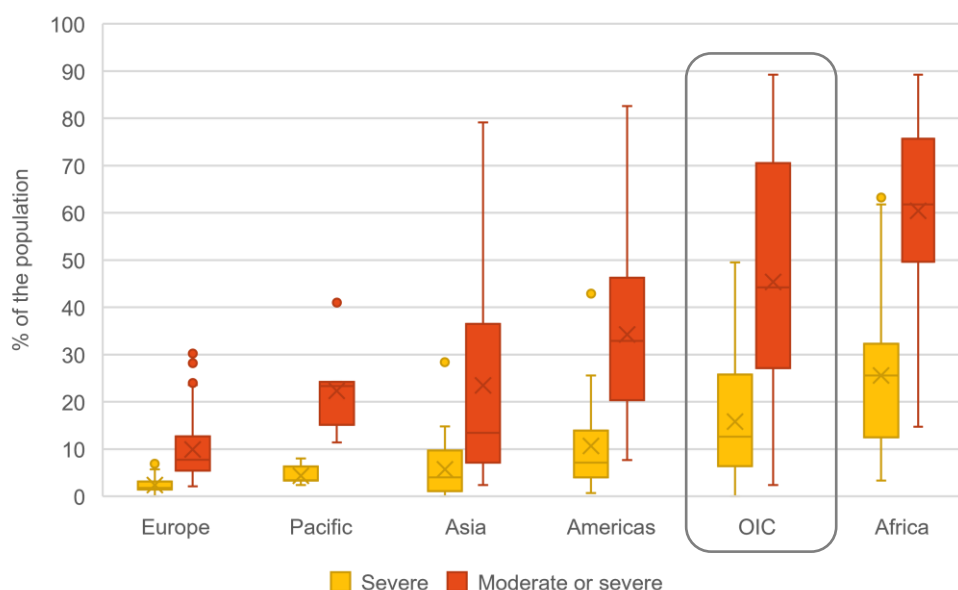
If any of these pillar falters, food insecurity exists. The consequences of food insecurity for individuals and countries can be dire. At the individual level, it can lead to malnutrition, stunted growth in children, and increased susceptibility to diseases, and diminished educational and economic outcomes. For countries, food insecurity can exacerbate social inequalities, lead to increased migration and displacement, and even result in social unrest and conflict. Regions plagued by food insecurity experience diminished productivity, economic decline, and with it, a perpetuation of the cycle of poverty and hunger.

In brief, food insecurity has both immediate and long-lasting detrimental effects on development. Addressing food insecurity is therefore not only a moral imperative, but also essential to stability, growth and development.

OIC countries experience rising food insecurity, affecting 45% of the population

Between 2020 and 2022, on average 45% of the population of OIC countries experienced moderate or severe food insecurity (Figure 1). Out of the 42 major food crises identified in 2022, 20 took place in an OIC member country.²

Figure 1: Prevalence of food insecurity, average 2020-2022, selected regions



Note: The prevalence of food insecurity is the percentage of people that live in households classified as food insecure. The middle line of the box represents the median, the x the mean, the bottom of the box the first quartile, and the top the third quartile. The lines extend to the minimum and maximum values. The dots are outliers.

Source: ITC calculations based on FAO (2023a).

¹ This definition was adopted at the 1996 World Food Summit FAO (1996). The notion of *social* access to food was added to the definition later. For a detailed overview of the evolution of the concept of food security, please see FAO (2003).

² World Food Programme (2023).

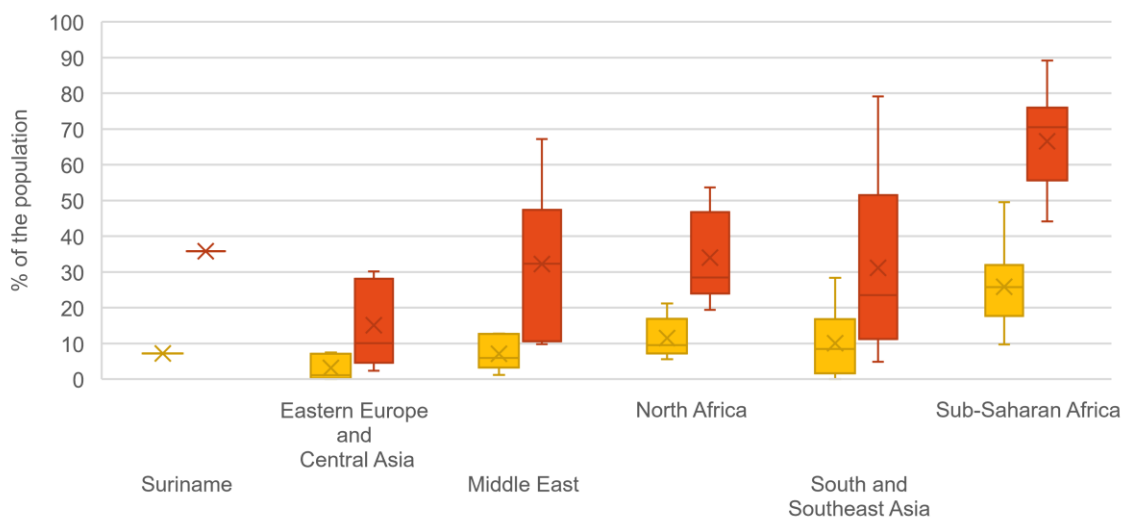
The events of recent years, in particular the COVID-19 pandemic, the conflict in Ukraine, the associated challenges to the trade of goods, and the increasing food and energy prices, disturbed global food supply chains significantly and may partially explain the elevated food insecurity rates observed in OIC countries.

However, additional determinants must be at play, considering that food insecurity has been on the rise in OIC countries for the last decade, and beyond.³ Between 2014 and 2016 the share of the OIC population that experienced moderate or severe food insecurity was 36% on average. The observed increase to 45% between 2020 and 2022 translates into an additional 201 million food insecure people in the region.⁴

With a 45% prevalence, food insecurity is more pervasive in OIC countries than in most regions, compared to the 10% of Europe, 22% of the Pacific, 23% of Asia, and 34% of the Americas—with Africa being the only region with a higher prevalence, at 60% (Figure 1). In addition, note that there is a wide range of food insecurity contexts across OIC countries, with less than 0.5% severe food insecurity in countries such as Azerbaijan or Indonesia, but 43% and 50% of the population affected in Guinea and Somalia, respectively.

The wide range of food security experiences within the OIC can be associated with its vast geographical membership, spanning several continents, climates, and connectivity levels. A disaggregated view of the food security situation within the organisation reveals subregional differences (Figure 2).⁵ On average, OIC countries in Eastern Europe and Central Asia are in a relatively favourable situation, with very low severe food insecurity, and less than 12% of the population facing moderate food insecurity. OIC countries in the Middle East, North Africa, and South and Southeast Asia, while having severe food insecurity rates below the global average, still confront significant challenges with over 20% moderate food insecurity. OIC members in Sub-Saharan Africa have an alarmingly high average incidence of both moderate and severe food insecurity.

Figure 2: Prevalence of food insecurity within the OIC, average 2020-2022



Note: The prevalence of food insecurity is the percentage of people that live in households classified as food insecure. The middle line of the box represents the median, the x the mean, the bottom of the box the first quartile, and the top the third quartile. The lines extend to the minimum and maximum values. The dots are outliers. Suriname is listed separately, as data for Guyana, the only other OIC member country in the Americas, is not available for 2020-2022.

Source: ITC calculations based on FAO (2023a).

³ With the exception of Europe, all other regions also experienced an upward trend in the last decade. For an overview of the evolution of regional food insecurity prevalence rates since 2014, see Figure A. 1.

⁴ Population estimates from UNDESA (2022).

⁵ For a detailed list of the countries in each group, see Table A. 1

Food trade can help or hinder food security

Food security is determined by four main pillars: availability, access, utilization, and stability. *Availability* refers to the presence of adequate food supplies. *Access* pertains to the ability of individuals and communities to obtain the food they need, whether in terms of affordability, market access, socioeconomic status, or others. *Utilization* is about the use of food that is consumed, and it can be affected by the quality of the food, health conditions, sanitation and, importantly, the diversity of diets. Lastly, *stability* emphasizes the importance of having access to food at all times, without the risk of interruptions due to economic shocks, such as prices or unemployment, climatic events, conflict, or others.

While offering potential solutions to food security concerns, international trade, can also contribute to their exacerbation, affecting all pillars of food security, as follows:

- the *availability*, or supply, of food can be increased via imports, but decreased via exports,
- international prices of food can drive local prices of food, determining *access* to it,
- food imports can differ from locally produced varieties, contributing to the diversity of diets (*utilization*) but profitable exportable cash crops may crowd out other local foods, reducing the variety of food available, and
- trade can be the source of shocks to *stability*, or a force to counterbalance them. For example, sudden export bans from usual food suppliers can temporarily threaten the availability of food, or droughts that hit local food production can be offset by imports.

These effects can occur in the short term, as seen with immediate changes in supplied or demanded quantities in reaction to shocks in prices, or in the long term, such as changes in the land use or production structure of a country.

Trade supplies almost a quarter of the food available in OIC countries

The extent to which trade can affect food security through the channels mentioned above depends primarily on how important trade is for the domestic supply of food. In any given year, the domestic supply of food is defined as the local production of food, plus the food made available through imports, minus the food exported, plus or minus the food from stock variations.

OIC countries are, on average, net importers of food: imports minus exports represent 24% of their domestic supply of food (Figure 3). This is consistent with what is observed for Africa and Asia, where net imports represent 15% and 26% of the domestic supply of food, respectively. Conversely, Europe and the Pacific are net food exporters, while net food imports only represent 4% of the domestic food supply in the Americas.⁶

Also in this case, the diversity within OIC is significant (Figure 4). Only OIC countries in the Caribbean are net food exporters.⁷ All other groups of OIC countries are, on average, net food importers—albeit with significant differences between them. While OIC countries in the Middle East and Northern Africa source over half and 32% of their domestic supply of food from net imports, respectively, OIC members in other regions rely on net food imports for less than 17% of their total domestic food supply.

The importance of trade in the food supply of OIC countries is evidence of how trade can aid food security, by compensating for local production shortcomings, be they temporary, such as those originating in drought or conflict, or long-term, for instance due to arid climate conditions or scarce agricultural resources.

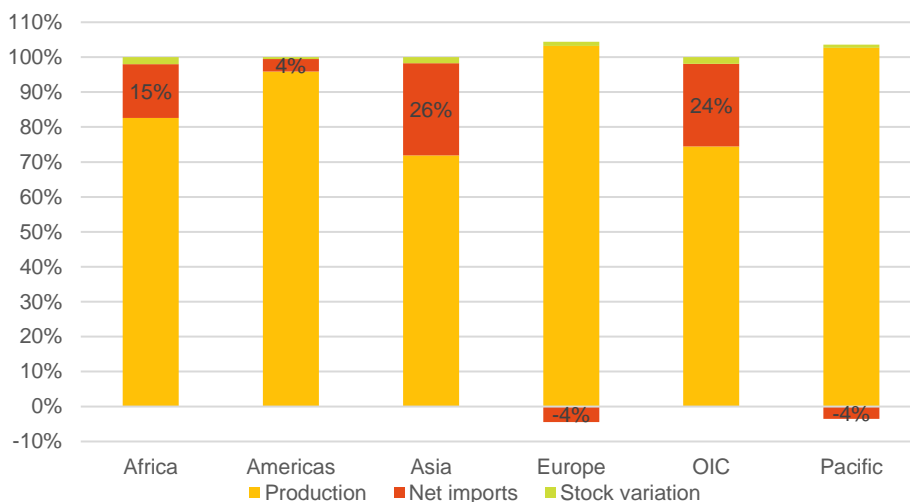
⁶ This pattern may seem surprising, but bear in mind that intra-regional trade is considered in each case. For example, intra-European exports and imports represent a significant part of the trade observed for Europe.

⁷ The countries in the Caribbean that are members of the OIC are Guyana and Suriname.

However, this reliance on trade can make OIC countries vulnerable to external shocks. Escalating global crises, such as the COVID-19 pandemic, regional conflicts, and mounting cost-of-living pressures, have put this predicament in the spotlight.⁸ Moreover, the looming challenges of climate change threaten to intensify food insecurity concerns among OIC nations.

Consequently, it is increasingly important for OIC countries to better understand their dependence on international food trade and devise strategic interventions that leverage trade for food security, ensuring greater resilience amidst an evolving and uncertain global landscape. Supporting that endeavour, the next section analyses the trends in OIC’s food imports and identifies specific patterns of dependence.

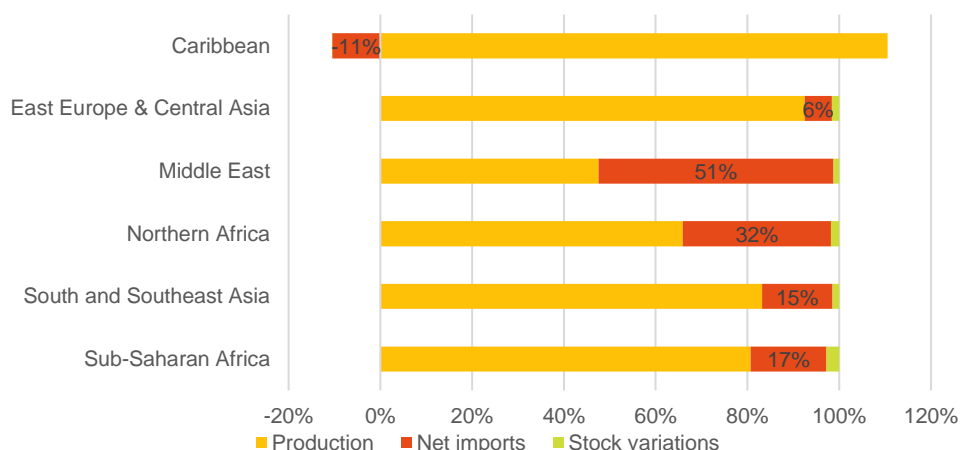
Figure 3: Composition of the domestic supply of food, average 2016-2020, selected regions



Note: Domestic supply is defined as production plus net imports minus stock variations. Net imports are defined as imports minus exports. Five-year averages are weighted, with larger weights attributed to later years.

Source: ITC calculations based on FAO (2023a).

Figure 4: Composition of the domestic supply of food within the OIC, average 2016-2020



Note: Domestic supply is defined as production plus imports minus exports minus stock variations. Net imports are defined as imports minus exports. Five-year averages are weighted, with larger weights attributed to later years.

Source: ITC calculations based on FAO (2023a).

⁸ For a detailed analysis of the impact of the conflict in Ukraine on the agricultural trade of OIC countries, see ITC (2022).

Section 2

Trends and patterns of food trade in OIC countries

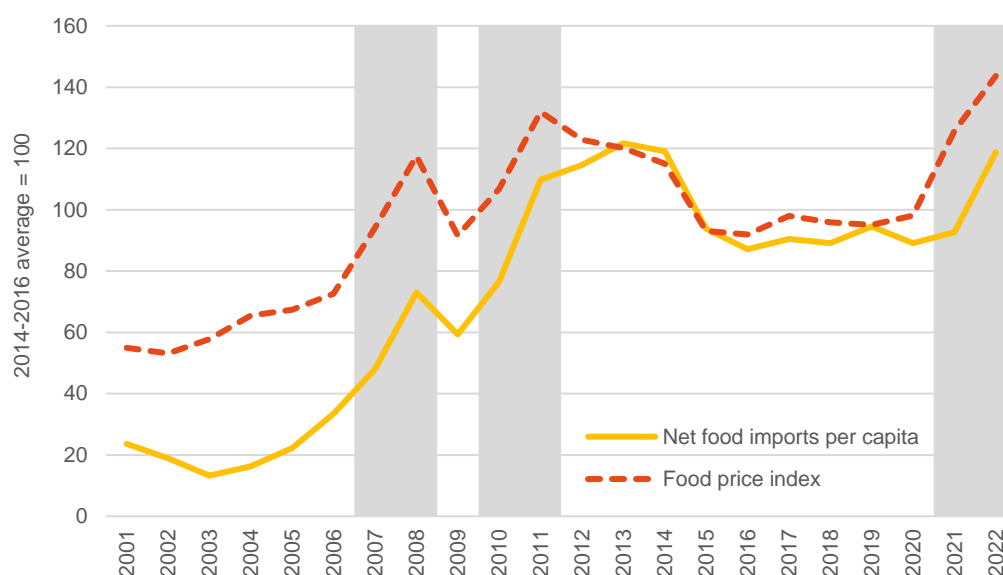
As discussed in Section 1, net imports play a crucial role in the domestic supply of food in OIC countries. As beneficial as that can be for food security by supplementing local production, it also makes OIC countries dependent on food imports for food security, and as such, vulnerable to fluctuations in international markets.

To better understand the extent of exposure to such fluctuations, this section explores the evolution of OIC net food imports and international prices in recent years, and it identifies for which food products and partners import dependence is the strongest.

Food prices outpaced OIC food imports in recent years

Since 2001, the net food imports per capita of the OIC have quintupled, while the international price of food has less than tripled (Figure 5). This indicates that, on average, the net quantities of food the OIC imported per capita have increased in this period.

Figure 5: OIC net food imports per capita and the price of food, 2001-2022



Note: Net imports are defined as imports minus exports. Areas shaded in grey correspond to an increase in the international price of food larger than 10%.

Source: ITC calculations based on ITC (2023a), FAO (2023b) and UNDESA (2022).

However, the evolution of net per capita food imports of the OIC and international food prices since 2001 has three distinct periods (Figure 6). Up to 2012, net per capita food imports grew 15% each year, while prices increased by 8% each year. This indicates that in that period, despite the increasing food prices, OIC countries were able, on average, to increase the net quantity of food they imported per capita.

From 2013 to 2019, per capita OIC net imports of food either stagnated or decreased, at a rate of -3% per year. However, during the same period the price of food registered a -4% decrease each year. This signals that, despite the decreasing values observed in the period, the net per capita quantity of food being imported was still, on average, on the rise.

The years since then reveal an incipient change in the pattern. Already in 2020, prices increased slightly more than imports. This trend accelerated markedly in 2021 and 2022, driven by the post-COVID-19 rebound in activity, and later by the disruptions to food and energy markets associated with the conflict in Ukraine. During this period, the average yearly growth rate was 8% for net per capita food imports and 15% for food prices. This indicates that food imports did not manage to keep up with prices during these years: the per capita quantities of food imported by the OIC were, on average, smaller.

Figure 6: Growth rates of OIC net food imports per capita and the price of food, selected periods

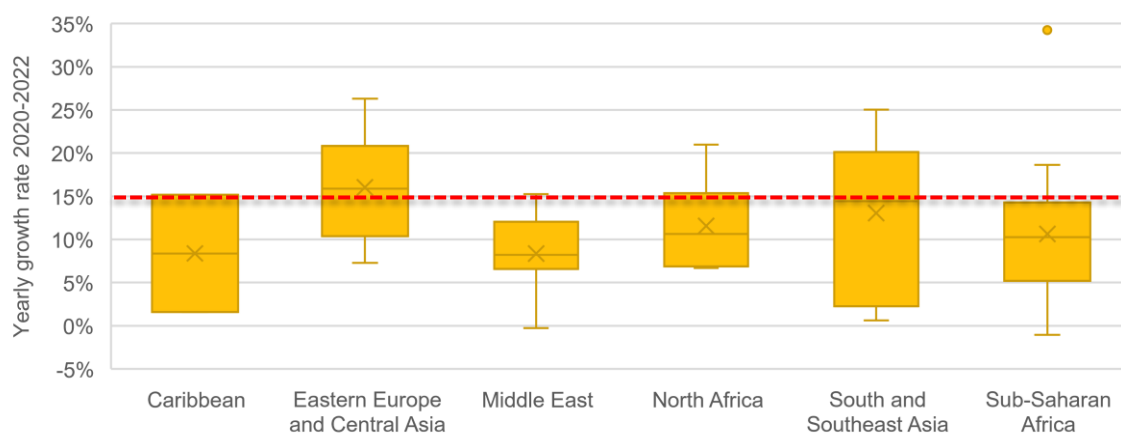
Note: Net imports are defined as imports minus exports. The growth rate shown in the figure is the equivalent yearly growth rate for each period.

Source: ITC calculations based on ITC (2023a) and FAO (2023b).

Over the past decades, there have been other spikes in international food prices—most notably in 2007-2008 and 2010-2011 (Figure 5, grey areas). These spikes had a significant impact, although in those instances food import values still grew faster than food prices. For specific food products and countries, the sharp increase in prices led to scarcity, and eventually social uprisings and riots in several OIC countries, including Bangladesh, Burkina Faso, Mauritania, Senegal, and Yemen, among others.

This underscores the severity of the current situation, the importance of continuing to monitor its evolution, and devising targeted short- and long-term support measures for the countries and products most vulnerable to such shocks.

The recent surge in international prices impacted net food imports across most regions within the OIC (Figure 7). Only in Eastern Europe and Central Asia did net per capita food imports grow faster than prices. The majority of the countries in all other regions, all those below the red line in Figure 7, experienced increases in net per capita food imports that were lower than those of prices. This suggests that, on average, the volume of food imported per individual declined in all of them. This was the case for all OIC member countries in the Middle East and most of the ones in North Africa and Sub-Saharan Africa as well, the regions in which net food imports contribute the most to the domestic supply of food (Figure 4).

Figure 7: Growth rates of OIC net food imports per capita, average 2020-2022, by subregion

Note: Net imports are defined as imports minus exports. The dotted red line represents the equivalent yearly increase in international food prices for the period 2020-2022.

Source: ITC calculations based on ITC (2023a) and FAO (2023b).

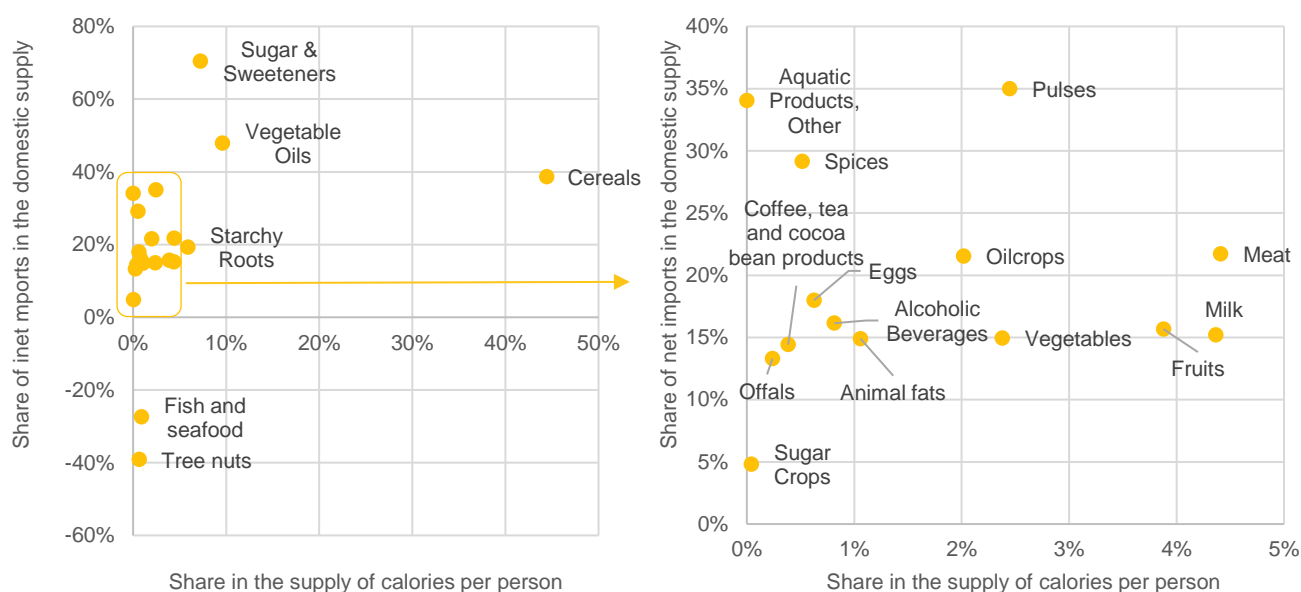
Food security in the OIC relies heavily on imports of cereals, vegetable oils and sugar

Fluctuations in the net imports of food can impact food security to different extents depending on the products they affect. To better assess this, it is important to consider not only what part of the local supply is sourced from imports, but also how that product contributes to nutrition and, consequently, to food security.

We can consider that food security is import dependent when, in sectors that contribute significantly to nutrition, large shares of the supply are imported. This is explored in Figure 8, which shows the share of each sector in the supply of calories per capita and the share of the local supply that comes from net imports.⁹ For example, 29% of the supply of spices in OIC countries is imported. While this might suggest that the supply of spices is import dependent, spices only contribute to less than 1% of the calories per person. Therefore, despite the importance of net imports in the supply of spices, fluctuations in the imports of spices are unlikely to affect food security in OIC countries. Conversely, starchy roots have a much lower share of imported food in their supply at 19% but account for 6% of per capita calories available. Disruptions in the net imports of starchy roots could affect food security in OIC countries. Based on this criterion, sectors located to the northwest of Figure 8 are the most import dependent for food security in the OIC.

The sectors that stand out as import dependent for food security are cereals, vegetable oils and sugars and sweeteners. Over one third of the domestic supply of cereals in the OIC is sourced from imports, and it represents 44% of the calories per capita available, making net imports of cereal critical for food security in the OIC. Vegetable oils represent 10% of the calories available, and 48% of the supply is imported. Sugar and sweeteners have 7% of the calories, and imports are over 70%. For fish and seafood, and tree nuts, the OIC is on average a net exporter.

Figure 8: Net import share in food supply and share in calories per person, by sector



Note: Average from 2016 to 2022. Food supply is the sum of food produced, net imports, and changes in food stocks. Net imports are defined as imports minus exports. The definition of sectors corresponds to those of FAO (2023a).

Source: ITC calculations based on FAO (2022b).

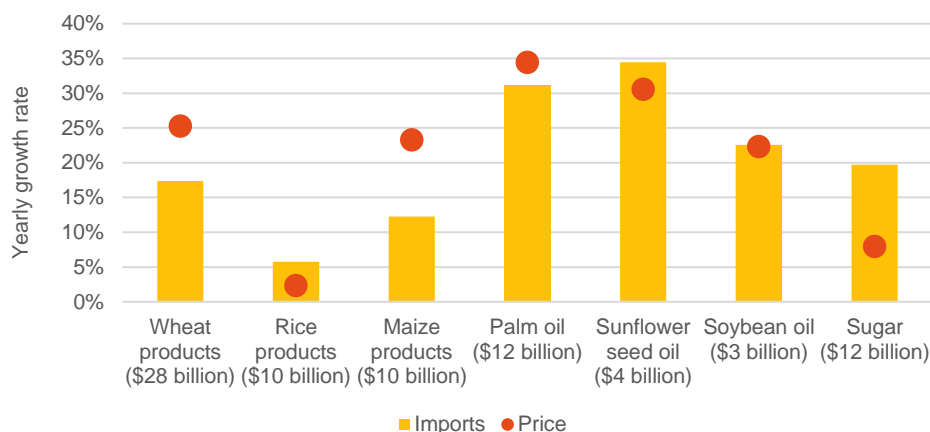
A deeper look into each of these three key sectors shows that for cereals the top three products in terms of net imports and food security are wheat products, with 70% of their supply from imports and 32% of calories available, rice products, that source 49% from imports and represent 20% of calories, and maize products,

⁹ Calory availability does not reflect the full spectrum of nutrition needed for food security. Additional aspects to be considered include access, diversity of diets, cultural preferences, etc.

that are 40% imported and contribute 8% of calories. For vegetable oils, the main imports for food security are palm oil, soybean oil and sunflower seed oil; and raw sugar in the case of sugar and sweeteners.¹⁰¹¹

Not all food imports key for food security in the OIC were impacted equally by the recent surge in food prices. Over the past three years, the prices of rice and sugar saw a smaller increase compared to the average shown in Figure 6, with rises of 2% and 8%, respectively (Figure 9). In contrast, the price increase for all other critical products surpassed the average, ranging from a 22% price increase for soybean oil to a 34% price rise for palm oil. Notably, among these essential food items, the imports of wheat products, maize products, and palm oil lagged behind their respective price hikes, signalling a strain on food security.

Figure 9: Growth rates of key OIC food imports and their prices, 2020-2022



Note: The growth rate shown in the figure is the equivalent yearly growth rate for the period. Net imports are defined as imports minus exports. The current OIC imports of each product are indicated under each name using their average from 2018 to 2022.

Source: ITC calculations based on ITC (2023a) and World Bank (2023).

Naturally, the differences outlined in Figure 9 also mean that countries across the OIC were differentially affected by the food price increases of the past years. For example, Côte d'Ivoire, Gabon, Indonesia and Malaysia, all net exporters of palm oil and only moderately wheat importers, were less affected than countries such as Brunei Darussalam, a strong net importer of cereals, Mauritania, that is a net importer of palm oil, or Djibouti, heavily dependent on imports across all key food products.¹²

A limited number of suppliers for key OIC food imports increases vulnerabilities

As mentioned earlier, trade can also introduce vulnerabilities through the reliance on a limited number of suppliers for essential food items. On average, OIC countries source their food from 93 different suppliers.¹³ For comparison, LDCs (least developed countries) import food from 74 suppliers, other developing countries from 113, and developed countries from 92.

Furthermore, when considering the “number of equivalent food suppliers”—a metric that reflects the concentration of food suppliers rather than just their count—OIC countries have 29.¹⁴ This is higher than the

¹⁰ Note that while OIC as a group is a net exporter of palm oil, on average OIC countries are net importers of that product.

¹¹ For a detailed view of the cereals and the vegetable oils sectors, see Figure A. 3.

¹² For a country-by-country view of per capita imports in the key food products, see Figure A. 4, Figure A. 5, and Figure A. 6.

¹³ On average between 2018 and 2022, 93 suppliers represented 99% of the food imports of OIC countries.

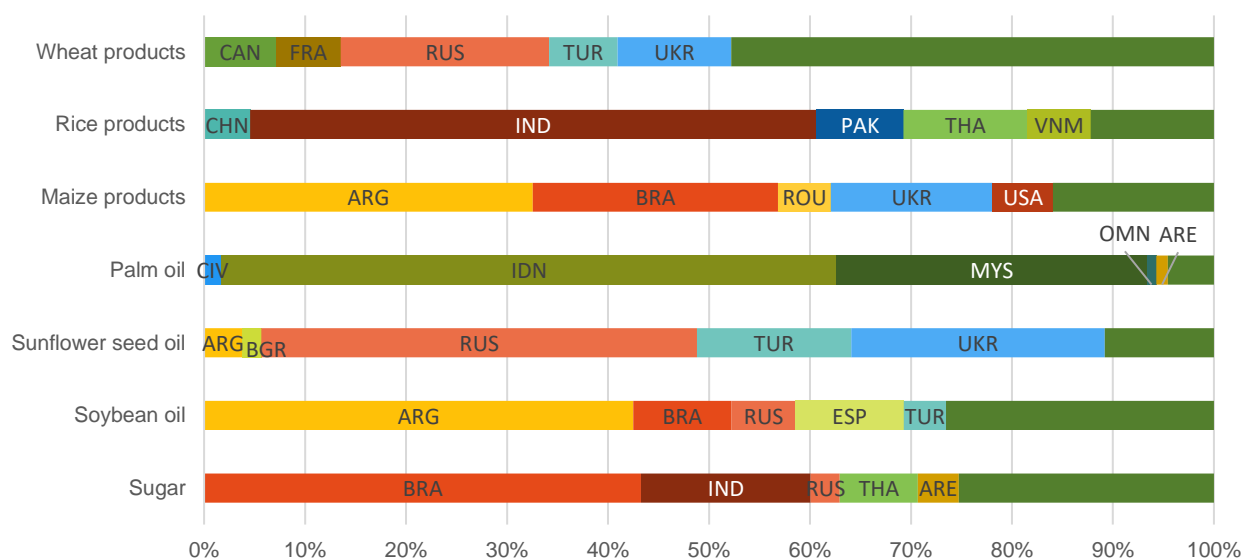
¹⁴ The number of equivalent suppliers is a measure of diversification of suppliers. It is computed as the inverse of the Herfindahl-Hirschman index (HHI) that measures the concentration of the import basket with respect to origins. That inverse is interpreted as a normalized number of suppliers—the number of equally weighted suppliers that would generate the same level of concentration as the one that is observed.

22, 22 and 28 that LDCs, other developing countries, and developed countries have, respectively. This suggests that, on average, the food supply to OIC countries is slightly more diversified than to other regions.

However, when examining specific products, the narrative changes. OIC countries tend to rely on fewer equivalent suppliers for the key food products previously identified as crucial for food security, compared to other country groups. For instance, OIC countries have only 3 equivalent suppliers for rice products, whereas developed countries have 10. Similarly, OIC countries source wheat products from 12 equivalent suppliers, as compared to 17 for developed countries. This means that for products like wheat, rice, maize, palm oil, sunflower seed oil, soybean oil, and sugar, the import supply is more concentrated in OIC countries than in developed ones, and often more so than in most other countries.¹⁵

Figure 10 further explores the concentration of suppliers for essential food products in the OIC by examining the import shares of the top five suppliers.¹⁶ For all key food products, except wheat, the top five suppliers account for 75% or more of the imports. While not necessarily critical, the reliance on a limited number of suppliers, even at the lower levels observed for wheat products, can have implications for food security in times of global disruptions or crises, such as those experienced since 2020.

Figure 10: Top five suppliers of key OIC food imports, average 2018-2022



Source: ITC calculations based on ITC (2023a).

Opportunities for supplier diversification

Many global food markets, especially those deemed crucial for food security within the OIC, are concentrated in a handful of countries in terms of production and exports. It was previously observed that, on average, the source of OIC food imports is not more concentrated than that of other countries. However, when it comes to essential products for food security, the OIC relies on a narrower range of suppliers compared to others, signalling space for diversification. While centralizing the supply of these vital goods can offer efficiency benefits, the associated risks to food security in the event of disruptions calls for a deliberate strategy of supplier diversification. To support the identification of promising new suppliers, this report relies on the ITC export potential methodology.

The export potential methodology quantifies potential values of exports for each exporter-importer-product combination taking into account a broad range of determinants of the supply capacities in the exporting

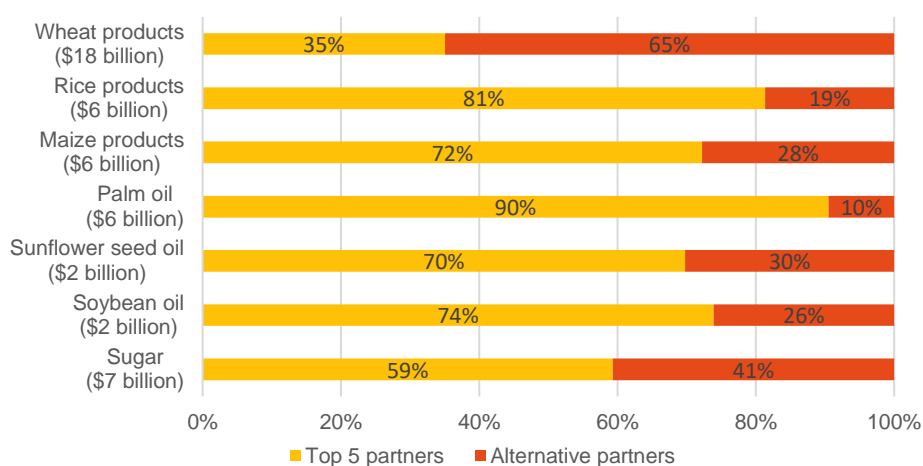
¹⁵ For a full list of the number of equivalent food suppliers for OICs for key food products, see Table A. 2.

¹⁶ Note that the data used in Figure 10 is an average from 2018 to 2022 and thus only partially reflects any recent shifts in the composition of food trade associated with the conflict in Ukraine.

country, the demand conditions in the target market and the ease of trade between the exporter and the importer. The supply and demand indicators also capture the capacities of, and conditions faced by competing exporters.¹⁷ Results are computed on a time horizon of three to four years to account for future developments and provide space for governments and companies to take action and materialize the opportunities that are identified. The findings discussed in this section are therefore estimates of the export potential by 2027. Importantly, the difference between the export potential and actual exports is interpreted as an opportunity for export growth, referred to as *unrealized export potential*.

This methodology projects a global export potential for food to OIC countries of up to \$320 billion by 2027, compared to the current \$199 billion food imports of the OIC. More importantly, the unrealized potential shows that imports of the seven products identified as key for food security could increase by as much as \$48 billion by 2027, from the present \$77 billion. Naturally, a large part of the unrealized import potential identified for these products originates in the partners that are already the primary suppliers to the OIC, (Figure 11). For example, 81% of the unrealized export potential of rice products to the OIC is from India, Thailand, Pakistan, Türkiye, Canada or France, listed in Figure 10 as the top five suppliers of rice products to the OIC.

Figure 11: Unrealized export potential into OIC, key food products



Source: ITC calculations based on ITC (2023d).

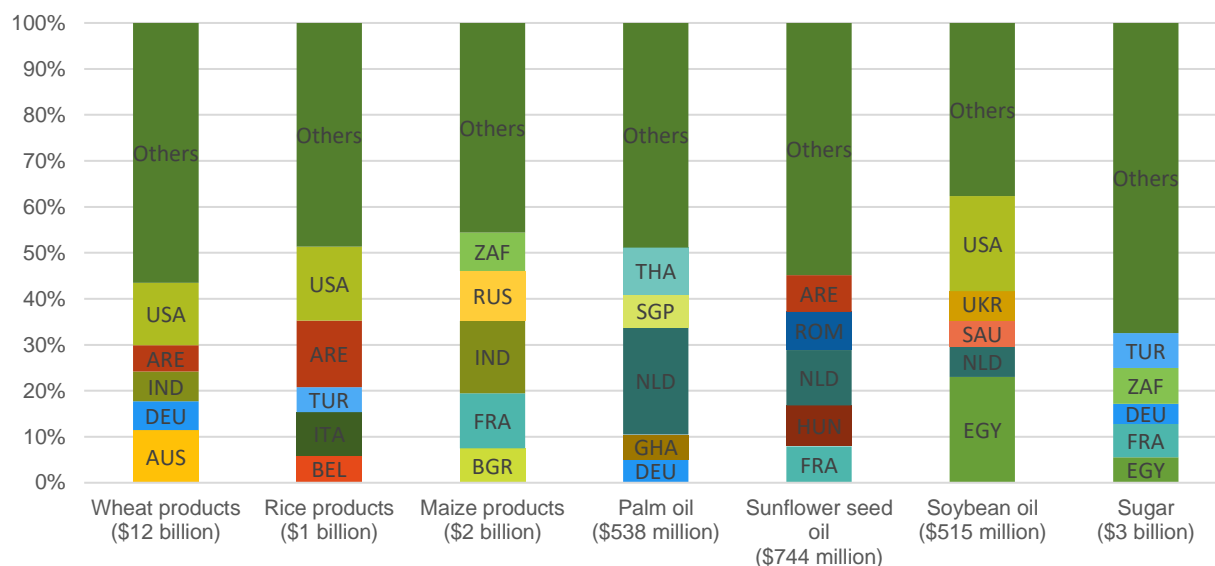
Nonetheless, Figure 11 also indicates that for all key food imports, substantial unrealized potential remains from suppliers beyond the top five. Continuing the example for rice products, it was earlier pointed out that OIC's current imports stand at \$10 billion (Figure 9), and that by 2027 an additional \$6 in unrealized imports could be possible (Figure 11). Four-fifths of this potential stems from OIC's current five main partners, that already concentrate close to that same share of imports (Figure 10). The remaining one-fifth of untapped potential for rice products, which amounts to over \$1 billion, could be sourced from alternative, in some cases smaller, suppliers. Among them, the ones with the most potential are listed in Figure 12, and include Belgium, Italy, Türkiye, United Arab Emirates and the United States of America—some of them producers, some of them only processors of rice products.

In the event of unforeseen disruptions in global rice markets, established supply channels to alternative partners would prove invaluable. This is a timely example, considering the ban India recently imposed, in

¹⁷ Some of the elements considered in constructing the supply, demand and ease of trade indicators are the share of the exporter in the global market for the product, the expected GDP growth of the exporter by 2027 relative to other exporters of the product, the tariffs on the product faced by the exporter globally relative to the ones faced by other exporters, the current imports of the product in the market, the expected population and GDP growth of the market by 2027, the sensitivity of import demand to GDP and population growth, the tariffs on the product faced by the exporter in that market relative to the ones faced by other exporters, the distance between exporter and importer, and a revealed measure of the ease of trade between the exporter and importer, among others. For a detailed explanation of the methodology, see the ITC Export Potential Map, <https://exportpotential.intracen.org/en/>.

July 2023, on exports of non-basmati rice, which triggered fears of scarcity and price surges around the globe.¹⁸

Figure 12: Alternative partners with unrealized potential into OIC, key food products



Source: ITC calculations based on ITC (2023d).

The case of wheat similarly illustrates the importance of established diversified suppliers in the face of unexpected shocks. The list of main partners presented in Figure 10, largely based on pre-conflict data, showed the importance of the Russian Federation and Ukraine in the supply of wheat to OIC countries. Figure 13 shows alternatives for expansion of sourcing away from the current largest providers, for example from the United States of America, Australia, India and others. In the hasty re-shuffling of markets that followed the start of the war and sanctions, sourcing of wheat in some OIC countries began to shift in the direction of the alternative suppliers suggested in Figure 13. For example, in 2022 Indonesia experienced a 13% fall in the quantity of wheat and meslin it imported.¹⁹ In addition to the drop, the origin composition of the wheat imported changed that year, shifting away from Ukraine and the Russian Federation, among others, and markedly increasing the import shares coming from Australia and India, as well as from Brazil and Argentina.

The turmoil experienced in the global wheat and maize markets in 2022, though seemingly extraordinary, is not an isolated incident. Historical data indicates recurrent disturbances in global food markets, especially concerning the seven crucial food products mentioned previously. This is exemplified by the global wheat and rice crises of 2007-2008 and 2010-2011. Additionally, the increasing frequency of severe weather events, such as the crop-devastating droughts induced by "La Niña" in Argentina and Brazil in recent years, are anticipated to become more common due to climate change, exerting further pressure on global food markets. This outlook underscores the importance of formulating sourcing strategies that are contingent upon a diverse range of suppliers.

Lastly, it is of note that 22% (\$37 billion) of the unrealized food export potential to the OIC originates in other OIC members. Well over half (63%) of this unrealized potential can be traced to growth projections for the region, rather than to currently existing trade frictions. Efforts within the organisation to guide investments to support the expected growth of members and to facilitate intra-regional trade can be beneficial for food security in addition to efforts to diversify global suppliers.

¹⁸ Jadhav, et al. (2023).

¹⁹ The comparison is with respect to the weighted average of the preceding five years, with later years carrying higher weights.

the 1990s, the number of people in the UK who are aged 65 and over has increased from 10.5 million to 13.5 million, and the number of people aged 75 and over has increased from 4.5 million to 6.5 million (Office for National Statistics 2002). The number of people aged 85 and over has increased from 1.5 million to 2.5 million.

There is a growing awareness of the need to address the needs of the elderly population. The Department of Health (2000) has published a strategy for the care of the elderly, which sets out a vision for the future of elderly care. The strategy is based on the following principles: (1) to ensure that elderly people are treated as individuals; (2) to ensure that elderly people are treated with respect and dignity; (3) to ensure that elderly people are treated as equal citizens; (4) to ensure that elderly people are treated as active members of society; (5) to ensure that elderly people are treated as equal partners in their care.

The strategy also sets out a number of key objectives for the future of elderly care. These include: (1) to ensure that elderly people have access to the services they need; (2) to ensure that elderly people are treated with respect and dignity; (3) to ensure that elderly people are treated as equal citizens; (4) to ensure that elderly people are treated as active members of society; (5) to ensure that elderly people are treated as equal partners in their care.

The strategy also sets out a number of key actions for the future of elderly care. These include: (1) to ensure that elderly people have access to the services they need; (2) to ensure that elderly people are treated with respect and dignity; (3) to ensure that elderly people are treated as equal citizens; (4) to ensure that elderly people are treated as active members of society; (5) to ensure that elderly people are treated as equal partners in their care.

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Section 3

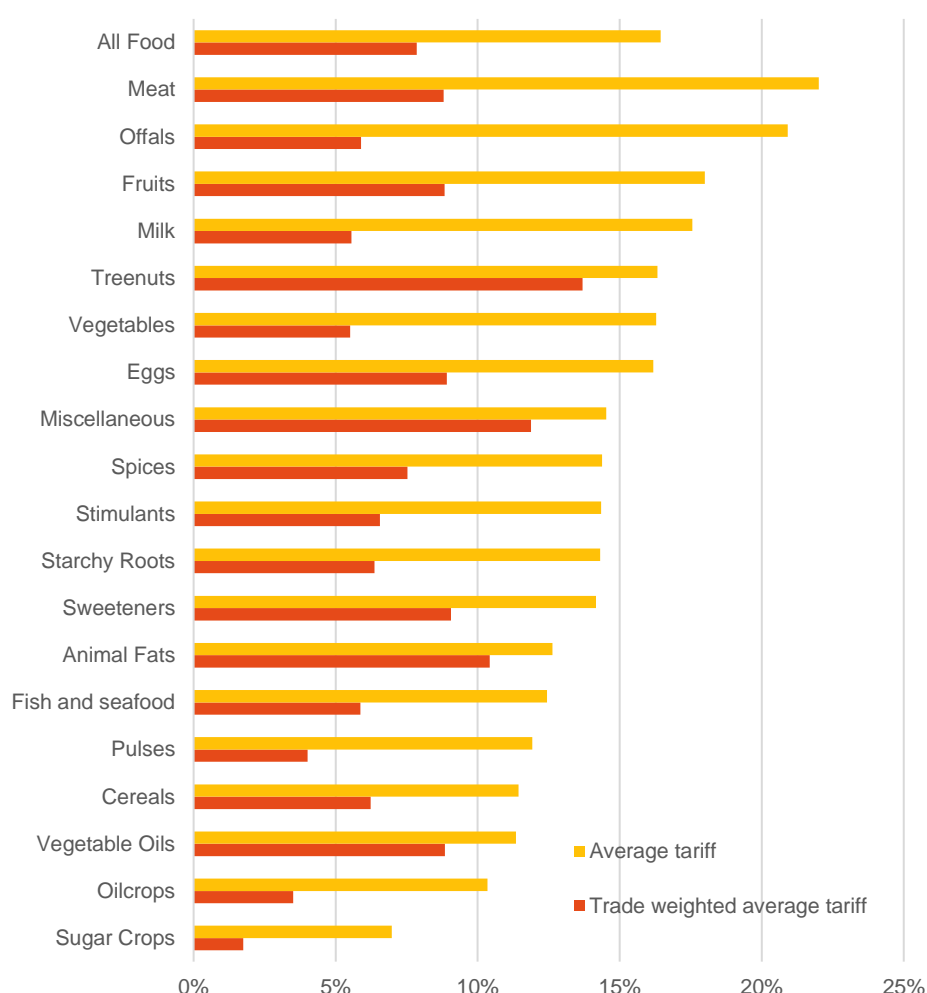
Food trade costs in OIC countries

Trade costs can have a significant impact on trade, and therefore on food security in countries that rely on imports to feed their populations. Removing tariffs, streamlining non-tariff measures, or facilitating imports could partially offset recent price increases and lay the groundwork for long-term solutions to food insecurity.

OIC tariffs on food products are still significant

Average tariffs levied on food items in OIC countries are still substantial and could be revised in face of critical situations. Trade-weighted average tariffs are generally lower than simple average tariffs, indicating that the main importers of food items charge lower duties to make food products more affordable for their populations. Nevertheless, some of the items accounting for a high share of the per person calory intake still face non-negligeable import duties, for example vegetable oils and sweeteners with a 9% or cereals with a 6% trade-weighted average tariff rate.

Figure 13: Average OIC tariffs on food products, by sector



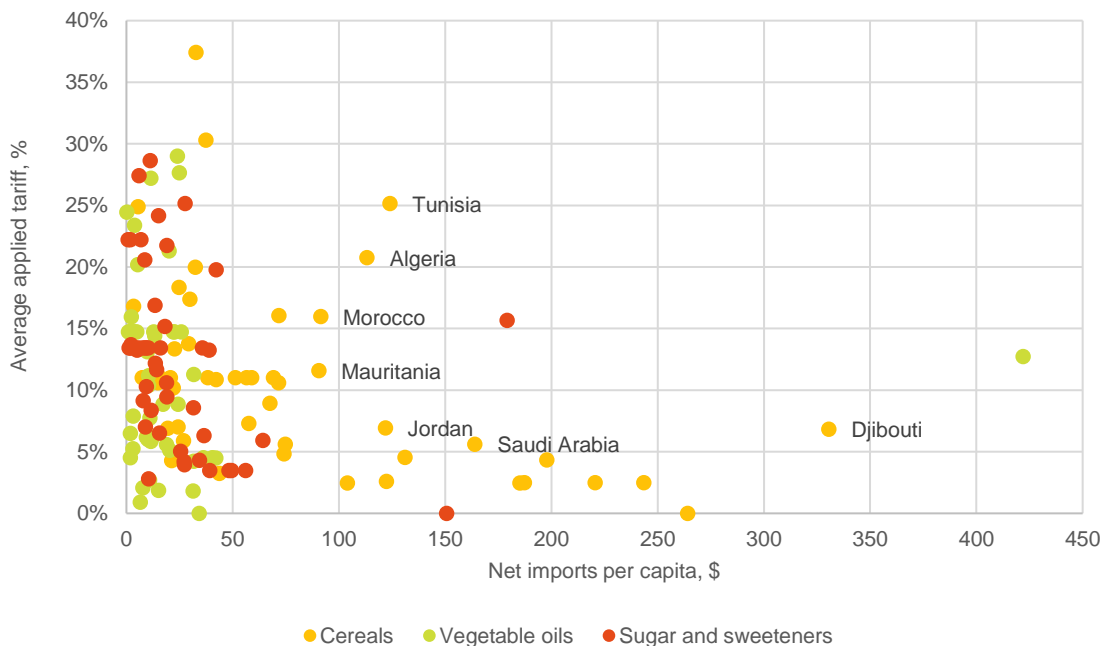
Note: Data on tariffs for Somalia, Iraq and Turkmenistan are not available.

Source: ITC calculations based on ITC (2023b).

Figure 14 shows the average tariffs and the net per capita imports of sectors that contribute the most to the calory intake in countries with limited domestic food resources. Djibouti, for example, has the region's largest trade deficit for cereals, vegetable oils and sweeteners but levies a 7%, 12% and 15% average tariff on the

imports of these products, respectively. Northern African countries that were hit hard when the war broke out due to their dependency on cereal imports from the Russian Federation and Ukraine, charge duties of up to 25% on average for such essential items. The highest average tariffs are imposed by Türkiye and Iran with more than 30%. Although these countries' trade deficits are more moderate with -\$37 and -\$33 per person, better market access could still contribute to overcoming domestic production shortages and make food generally more affordable.

Figure 14: Average tariffs by OIC country, main food sectors



Note: Data on tariffs for Somalia, Iraq and Turkmenistan are not available. Countries labeled are above the OIC average for net imports per capita and applied tariff.

Source: ITC calculations based on ITC (2023b).

Box 1: The role of export restrictions in food security

When global food prices surge or supplies dwindle, countries often resort to limiting food exports through methods like export taxes, quotas, or outright bans. These measures aim to stabilize domestic markets. In the short run, such restrictions can curb domestic price hikes. However, over time, they can deter local producers from increasing production, leading to reduced local food supply and higher prices.

Moreover, these export restrictions can exacerbate global food supply issues, making international markets more volatile and driving up global prices. The impact on global prices varies based on the number of countries implementing these restrictions, their significance in global food markets, and the sensitivity of global demand to prices. Particularly, countries that are net food importers can be severely affected.

The 2007-2008 global food price crisis saw many countries, including major grain exporters like Argentina, Kazakhstan, Russia, and Ukraine, restrict exports. In the subsequent 2010-2011 crisis, Russia and Ukraine continued to impose bans and quotas on grain exports. Even during the early stages of the COVID-19 pandemic, despite stable world food markets, several countries still applied export restrictions.

While these restrictions were not the primary cause of price surges, they did contribute to them. A notable exception was the 2007-2008 rice price spike, largely driven by export restrictions.¹

Recognizing these challenges, the international community emphasized the need for transparency, free trade flows, and coordinated action. Among steps in this direction, the Agricultural Market Information System (AMIS) was established in 2011 to promote transparency in food markets and coordinate policy responses during uncertain times.²

However, following the outbreak of the conflict in Ukraine in early 2022, many countries imposed trade measures against Belarus and the Russian Federation as sanctions. The Russian Federation retaliated with its own trade measures. This led to a cascade of trade measures by other countries, aiming to shield their domestic markets. Altogether, over 25 countries implemented restrictive export measures impacting food sectors.³

Countries directly involved in the conflict or sanctions, like Belarus, Canada, the European Union, Ukraine, the Russian Federation, the United Kingdom, and the United States of America adopted various trade measures affecting food. For instance, Ukraine restricted initially exports on cereals and meat, while Canada and the European Union suspended levies on imports from Ukraine. The Russian Federation restricted exports on agricultural products and imposed embargoes on food imports from sanction-supporting countries. Belarus limited exports on several food items.

Countries not directly involved also took action. Brazil, the Dominican Republic, and El Salvador, among others, liberalized food imports. Others, like Algeria, Azerbaijan, Hungary, India, Lebanon, Malaysia, and Serbia, restricted food exports to stabilize local markets and control prices.

While only eight OIC member countries imposed food trade restrictions themselves, all of them felt the repercussions of the measures adopted globally, primarily through the increased pressure on international food prices.³

The events of recent years rekindled multi-lateral discussions on export restrictions. In 2022, the Ministerial declaration on emergency response to food insecurity, part of the MC12 “Geneva package”, highlighted the necessity for uninterrupted agrifood trade and emphasized the importance of minimizing trade distortions. However, with countries still inclined to enact export restrictions in response to economic disruptions or to the intensifying impacts of climate change, this debate will remain a central topic in the policy arena.

¹ See Anania (2013) for a thorough review of the effects of export restrictions in the 2007-2008 and 2010-2011 crises.

² <https://www.amis-outlook.org>

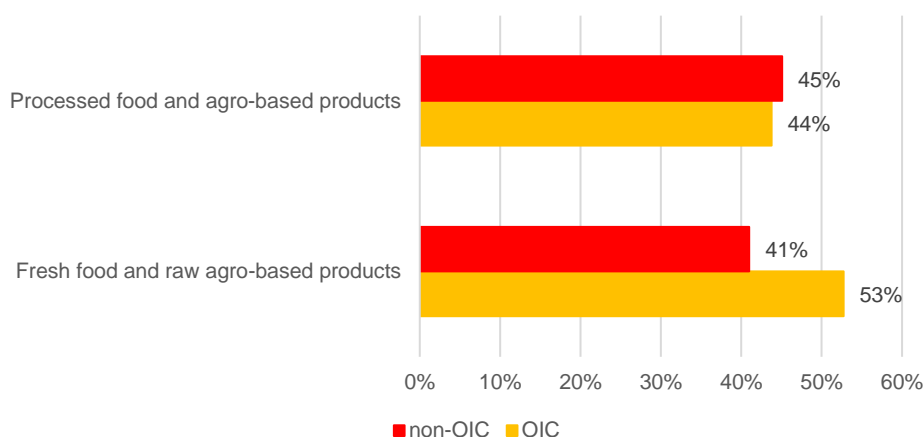
³ ITC (2023b).

⁴ The OIC countries that enacted export restrictions on food or agricultural products at some point since early 2022 were Albania, Algeria, Azerbaijan, Egypt, Kyrgyzstan, Lebanon, Malaysia, and Türkiye.

Non-tariff measures also hinder food trade

Beyond further cutting remaining tariffs, OIC countries can also facilitate food trade by addressing burdensome non-tariff measures (NTMs). In the context of the ITC business surveys implemented in 23 OIC countries, 48% of companies operating in the fresh or processed food sectors stated that they face obstacles in the import process, slightly more than in non-OIC countries (43%). Almost all of the regulations perceived as difficult are applied domestically, showing that measures to help the private sector comply with them will be to the direct benefit of local traders and populations. Even when exporting, in 30% of the cases the burdensome NTM is applied in the home country. Again, this share is higher than in other world regions where the business survey has been rolled out to date.

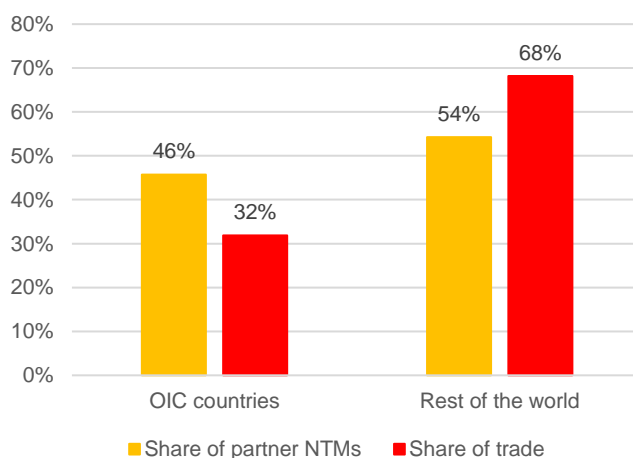
Figure 15: NTM affectedness when importing



Source: Based on ITC Business Surveys (<https://ntmsurvey.intracen.org>).

A high number of reports about burdensome measures is not per se problematic, if trade flows are also high. Figure 16 plots the share of NTM cases against the share of exports, by partner region. Where the share of reported NTMs is higher than the share of exports, the market is relatively difficult to access. For OIC countries, about a third (32%) of the trade is intra-regional, but the region accounts for almost half (46%) of the NTM cases reported by OIC-based companies. The number of NTMs is therefore high compared to the level of trade that takes place within the region, a sign that intra-regional food trade is disproportionately cumbersome.

Figure 16: Share of NTMs versus share of trade, by partner region



Source: Based on ITC Business Surveys (<https://ntmsurvey.intracen.org>).

Sanitary and phytosanitary measures are the most frequently reported burdensome NTMs in trade in agro-based products. They relate to packaging and labelling requirements but also to regulations that concern product characteristics, such as their quality and performance, and the maximum residue level (MRL). But the regulation itself is hardly at the origin of the problem. In fact, the process of compliance is often the reason why a regulation becomes an actual barrier. The survey documents that in the OIC region, domestic procedures that cause problems include delays, unexpected payments and inappropriate behaviour of officials.

An importer from Jordan—a country with one of the largest trade deficits for cereals in the OIC region—reports that despite possessing a valid sanitary certificate for his maize cargo, the Ministry of Health requested additional analyses that caused delays in and more than doubled the costs of the importing process. A rice importer from Benin notes that extra charges apply when products do not leave the port rapidly and that the amount of these charges changes frequently. In Bangladesh, a flour importer complained about arbitrary decisions and unexpected payments in the import clearance process.

Kazakhstan, by contrast, is one of the very few OIC member states with a significant surplus in cereal trade and could thus help improve the food security elsewhere. Yet, the export process is hindered by procedural obstacles. One company, for instance, mentioned that obtaining an export license for wheat takes a full week. Another one mentioned long distances between customs and the phytosanitary control centre and administrative hurdles.

Although these examples are anecdotal, they show forcefully that many of the problems traders face can be solved at home through additional coordination between institutions, more transparency about procedures and fees, and in general a streamlining of processes to reduce unnecessary compliance costs that further entrench open market policies.

Transport infrastructure is diverse, but on average underdeveloped

The logistics sector has an important role in facilitating trade, reducing transport costs, and stimulating economic growth as it ensures the efficient movement of goods, services, and information from their place of origin to the area of consumption.²⁰ Conversely, poor logistics, infrastructure, and underdeveloped operational processes can be a significant obstacle to global trade.

While some countries in the OIC are state-of-the-art global transport hubs, others face significant infrastructural challenges. In many African OIC members, inefficient cargo handling pushes up the time spent in ports and thus transport costs.²¹ Land freight however remains the biggest challenge: the African rail network has hardly developed away from the colonial extractive model linking mines to ports and is thus inadequate to transport most goods from their production sites to the harbour. Roads, the main mode of transportation in these countries, are scarce and not strategically located. Several OIC members are furthermore landlocked, aggravating the situation.

Intra-OIC trade that involves large trading nations on the one hand, and countries with small volumes on the other hand, is thus burdened by imbalances in cargo occupancy that require costly transshipments. These differences across OIC countries reflect in the World Bank's Logistics Performance Index. The index captures six pillars of transport costs:

- The efficiency of customs and border clearance
- The quality of trade and transport infrastructure
- The ease of arranging competitively priced shipments
- The competence and quality of logistics services

²⁰ Martí, et al. (2014).

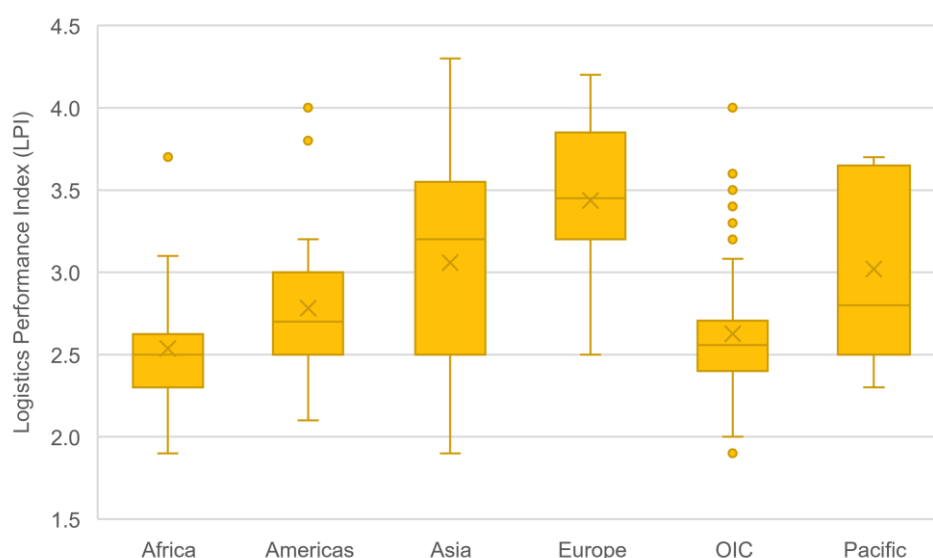
²¹ UNCTAD (2023).

- The ability to track and trace consignments
- The frequency with which shipments reach consignees within scheduled or expected delivery times

LPI scores of OIC member states are lower than other regional averages, with exceptions

On average, OIC member states have a lower LPI score (2.6) than other regions, on par with Africa. While Figure 17 shows that most OIC countries perform poorly in terms of logistics, there are notable exceptions: five Middle Eastern countries—the United Arab Emirates, Bahrain, Qatar, Oman and Kuwait—, and Malaysia score around the European average, and therefore much higher than their OIC partners. The United Arab Emirates ranks top among OIC countries in all six pillars, with scores of 4 or above in Logistics Competence and Quality, Infrastructure, Tracking and Tracing, and Timeliness. Only Bahrain performs similarly well in terms of timeliness.

Figure 17: Logistics Performance Index scores, by region



Note: Ranking from 1=low to 5=high. The middle line of each box represents the median Logistics Performance Index value in each region, the x in each box represents the mean. The bottom line of each box represents the first quartile value per region. The top line of each box represents the third quartile. The vertical lines extend from the ends of the box to the minimum and maximum values. The dots are outliers.

Source: Authors' calculations based on the Logistics Performance Index of the World Bank.

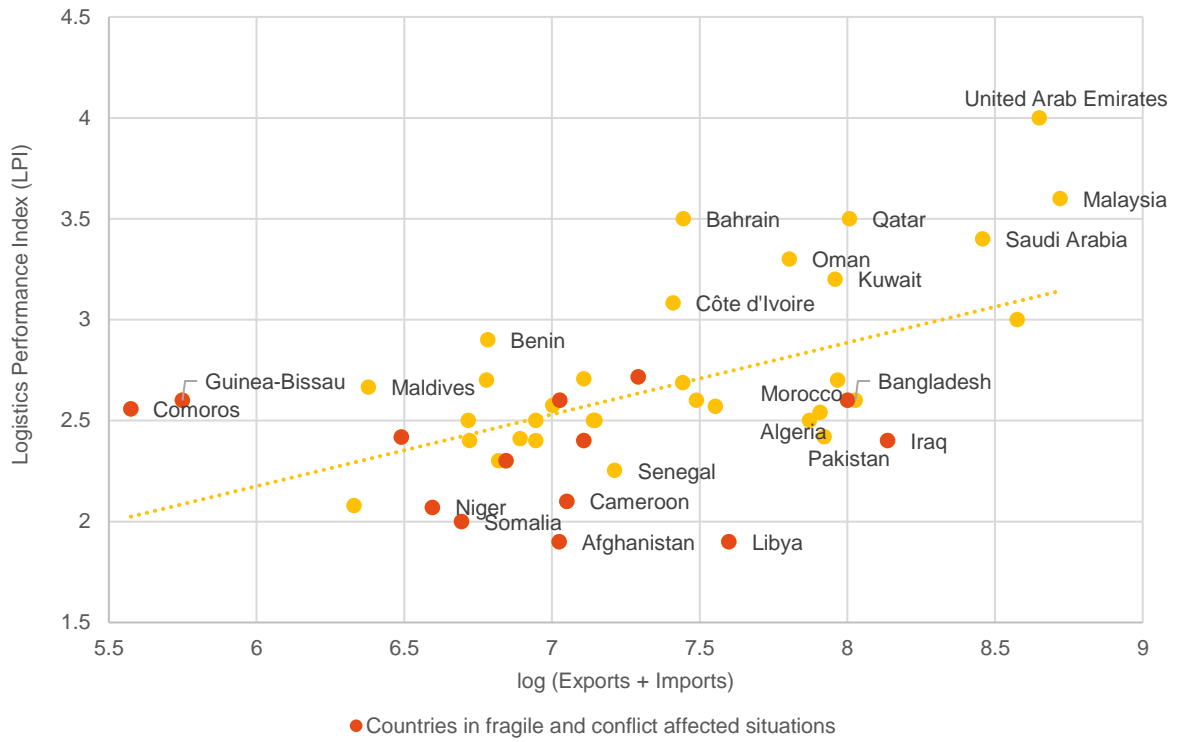
For most OIC countries, improvements are required across all dimensions, especially regarding the efficiency of customs and border management clearance (with an OIC average of 2.4) and the quality of trade- and transport-related infrastructure where the OIC average is with 2.5 below the average of any other region.

Trade levels and LPI scores are linked

The heterogeneity of OIC LPI scores directly links to their trade levels. Countries with more trade tend to have better transport and logistics than countries that only trade very little (Figure 18). This implies that on the one hand, infrastructural investments, such as those undertaken in the context of the India-Middle Eastern food corridor, will lower trade costs and hence, foster the cross-shipment of food from countries with a production surplus to those with a deficit. On the other hand, it also means that any other measure that is meant to increase intra-regional trade, such as the full implementation of existing or the signature of new trade agreements, will incentivize these investments.

Other factors besides trade levels, such as the geographical location or the existence of an armed conflict or political unrest, also affect a country's logistics performance. Amongst the six lowest ranking OIC members, five are plagued by conflict.

Figure 18. Logistics Performance Index scores and trade levels, by country



Note: LPI rankings from 1=low to 5=high.

Source: Authors' calculations based on the Logistics Performance Index of the World Bank and ITC (2023a).

Box 2: Can the India-Middle East Food Corridor improve food security in the OIC region?*

Food corridors, also known as agricultural growth corridors (AGCs) or agricultural growth poles (agropoles) are development programs that combine simultaneous investments in multiple sectors, such as infrastructure, agriculture, and services, with policy reforms to promote agricultural transformation. AGCs aim to avoid the pitfalls of development programs that focus on only one sector, which can be hampered by weak infrastructure in supporting industries such as transport and marketing. Thus, AGCs often focus on both backward (services, inputs) and forward (processing, packaging, logistics) linkages to ensure that agricultural products can reach markets efficiently. A defining characteristic of AGCs, and development corridors in general, is coordinating public and private funding through public private partnerships (PPPs). AGCs have gained prominence in Africa in the last 15 years but build on spatial development initiatives (SDIs) that have been used in developing countries for a long time. The International Institute for Sustainable Development (IISD) estimates that there are currently 36 agropoles and nine AGCs in various states of development across Africa.

If executed properly, AGCs promise to increase trade and investment, facilitate market access—especially for smallholder farmers—reduce rural poverty, generate employment, increase incomes, boost production and productivity, create economies of scale, improve food security, facilitate technology transfer, and promote inclusive sustainable growth. The India-Middle East Food Corridor illustrates the potential benefits of AGCs in many ways. The signature initiative of the corridor—which will connect India, the United Arab Emirates (UAE), and Israel—is the construction of mega-processing facilities in India (i.e., food parks) that will use climate-sensitive agritech and renewable energy technologies to improve crop yields and address food insecurity in South Asia and the Middle East. Smallholder farmers will be able to participate in the corridor via an agriculture trading platform that allows them to sell directly to companies in the UAE and have their products processed at the food parks. The UAE's Ministry of Economy estimates that the food corridor will benefit 2 million farmers and create 200,000 jobs.

The India-Middle East Food Corridor builds on previous agreements and cooperation between the UAE, India, and Israel. In 2017, India and the UAE signed several comprehensive strategic partnerships aimed at improving food processing, maritime transport, logistics, and warehousing, and in 2019, the UAE committed to invest \$7 billion in the establishment of an India-UAE food corridor. Israel has played a pivotal role in modernizing Indian agriculture, having established 29 agricultural centres of excellence in India that trained nearly 150,000 farmers in 2019. Indian and Israeli companies have also worked together to develop irrigation systems that will benefit smallholder farmers and help address the challenges posed by climate change. In 2022, the UAE signed comprehensive economic partnership agreements with India and Israel that would reduce tariffs on 90% and 96% of traded goods, respectively. These new trade agreements will further support the development of the India-Middle East Food Corridor.

Although the India-Middle East Food Corridor holds great potential for sustainable economic development, AGCs have had mixed results in Africa where they have been plagued by underinvestment, implementation challenges, and weak institutional environments. AGCs have also been criticized for depleting natural resources and negatively impacting smallholder farmers who lose their competitive advantage and land access to agroindustry.

For example, investments in the Beira Corridor, which links Zambia, Malawi, Zimbabwe, and Mozambique, remain below expectations, and the participation of agroindustry has raised issues of accountability, equity, and land tenure. Similarly, the agricultural development policy of the Nacala Development Corridor (NDC) in Mozambique, Malawi, and Zambia was criticized by environmental groups for being a land grab by large-scale agroindustry. In Tanzania, the Southern Agricultural Growth Corridor (SAGCOT) successfully organized the private sector and shaped PPPs but was hampered by a weak institutional environment. Agropoles in Cameroon have suffered from a lack of investment in market access and distribution channels, and other agropoles across Africa are yet to be fully operational due to lack of funding.

The experience of different AGCs in Africa demonstrates that transparency and participation of local actors—including smallholder farmers, civil society, and marginalized groups—at all stages of the process is key.

*The discussion on food corridors is based on Bruntrup (2019), Picard, et al (2017), Tanchum (2022), Stein and Kalina (2019) and ISPC (2016).

Section 4

Policy discussion

Food security remains a paramount concern for countries worldwide, and for countries that have historically been food importers, like many OIC countries, the stakes are particularly high. With a diverse membership that spans various economic and geographical contexts, the OIC faces unique challenges in ensuring that its member states can provide stable, affordable, and nutritious food to their populations.

Trade can bolster food security within OIC nations, but it can simultaneously heighten their susceptibility to global food market volatilities. Policy measures aimed at enhancing food security and resilience in the region must reconcile these dual aspects. The abundance of recent global uncertainties, with events like the COVID-19 pandemic, geopolitical conflicts, climate change, and rising living costs, underscores the need for policies that not merely respond to immediate crises but strategically prepare for unforeseen challenges and also tackle the root causes of vulnerabilities.

This report suggests that, in coordination with other essential policies—such as stockholding systems, biofuel policies, enhancement of agricultural productivity, support of climate change adaptation and mitigation, and access to finance—, OIC countries could consider the following strategic trade policies to significantly enhance food security across the OIC.²²

Tapping into alternative sources of food supplies

Diversify providers

Part of the food vulnerabilities OIC countries face is rooted in their reliance on a limited number of suppliers for essential food imports. This concentration increases the risk of supply disruptions due to geopolitical events, natural disasters, or other unforeseen circumstances.

To mitigate this, OIC countries could seek to broaden their sources of food imports through trade support measures that specifically target less traditional suppliers.

Strengthen regional cooperation and regional agrifood value chains

Although most OIC members are net food importers, intra-OIC trade could contribute more to enhancing food security in the region. A deeper OIC integration can provide alternative food sources and larger markets.

The concept of food corridors, such as the India-Middle East food corridor, offers a blueprint for facilitating the movement of food from surplus regions to areas with deficits. By establishing dedicated trade routes, equipped with the necessary infrastructure and governed by favourable policies, OIC countries can ensure a more stable and efficient food supply chain.

Improving market access for food security

Reconsider tariffs on food products and facilitate food imports

Trade barriers, both in the form of tariffs and NTMs, can significantly impact the cost and availability of food. While tariffs can directly increase the cost of imported food items, NTMs, such as cumbersome customs procedures or stringent standards, can indirectly raise prices by increasing the cost of trade.

OIC members continue to apply an extensive array of tariffs on food imports. Key sectors vital for food security in the organisation, such as cereals, vegetable oils, and sweeteners, are still subject to considerable import tariffs.

²² For a detailed overview of options for stockholding systems, as well as alternative means to address food insecurity in the OIC at the global, regional and sub-regional levels, please see United Nations (2022b).

OIC countries could consider a comprehensive review of their tariff structures on food items, contemplate interim or permanent alleviations where suitable, and device flexible mechanisms that enable swift actions on food tariffs in the event of escalating prices or external disturbances.

Similarly, countries in the OIC region could critically review and streamline food import procedures to avoid unnecessary delays, unusually high fees and arbitrary behaviour, all of which makes compliance with regulation challenging.

By making imports more efficient and affordable, OIC countries can ensure a more stable food supply for their populations.

Avoid export restrictions and other distortions on food trade

While export restrictions might curb domestic price surges, they can also deter local food production and amplify global price pressures.

OIC nations should consider the potential adverse effects of these restrictions on both local and international markets and advocate for the unhindered trade of food in multilateral discussions.

Support investment in transport infrastructure

Efficient logistics and robust infrastructure are the backbones of effective trade. Moreover, efficient cargo handling and streamlined procedures can reduce delays and make food imports more predictable.

The OIC region encompasses countries with very divergent logistics performances. While big trading hubs benefit from modern transport technology and thus lower trade costs, countries with small turnovers suffer from inadequate infrastructure and consequently, higher trade costs.

The interdependence between transport prices and trade is an important factor to consider if trade is meant to alleviate food insecurity. On the one hand, direct investments into transport infrastructure, as for example in the context of food corridors, are crucial to lower prices and hence increase trade. On the other hand, new trade agreements or other measures that stimulate bilateral trade can incentivize these investments and reduce transport costs, thereby pushing trade to new levels.

Therefore, to foster the development of transport infrastructure that effectively facilitates food trade, OIC countries could not only prioritize investments in this sector but also deliberate on the institutional frameworks that are most conducive to such endeavours.

Finding global solutions to address food insecurity

The policy alternatives explored up to this point emphasize measures that OIC countries can undertake individually or within the organisation to tackle their food security challenges. However, the role of the international community in improving the link between trade and food security in the OIC region is vital. Leveraging trade for food security requires concerted action from the countries themselves, but also regional and global coordination on multiple issues, for example to avoid the unnecessary use of export restrictions that can have a disproportionate negative effect on net food importing countries.

Promote transparency and multi-stakeholder engagement

Transparency in food markets and trade policies can foster trust and predictability. Initiatives such as the AMIS can offer valuable insights and coordination during uncertain times. Furthermore, such platforms can help engage a broad range of stakeholders, including smallholder farmers, mitigating widespread concerns and enhancing the efficacy of policy implementation.

Address the climate challenge

The increasing frequency of severe weather events, exacerbated by climate change, poses a significant threat to global food markets. While OIC countries can initiate measures, such as prioritizing investments in climate-resilient agricultural practices and diversifying their food sources to mitigate these risks, the

overarching issue of the impact of climate change requires global coordination and the continued proactive engagement of OIC in international fora.

For OIC countries, enhancing food security requires a multi-faceted approach that leverages the power of trade. By diversifying import sources, rethinking trade barriers, investing in infrastructure, and promoting regional cooperation, OIC member states can build a more resilient and secure food system. As the global landscape continues to evolve, proactive and strategic trade policies will be instrumental in ensuring that OIC countries can provide for their populations.

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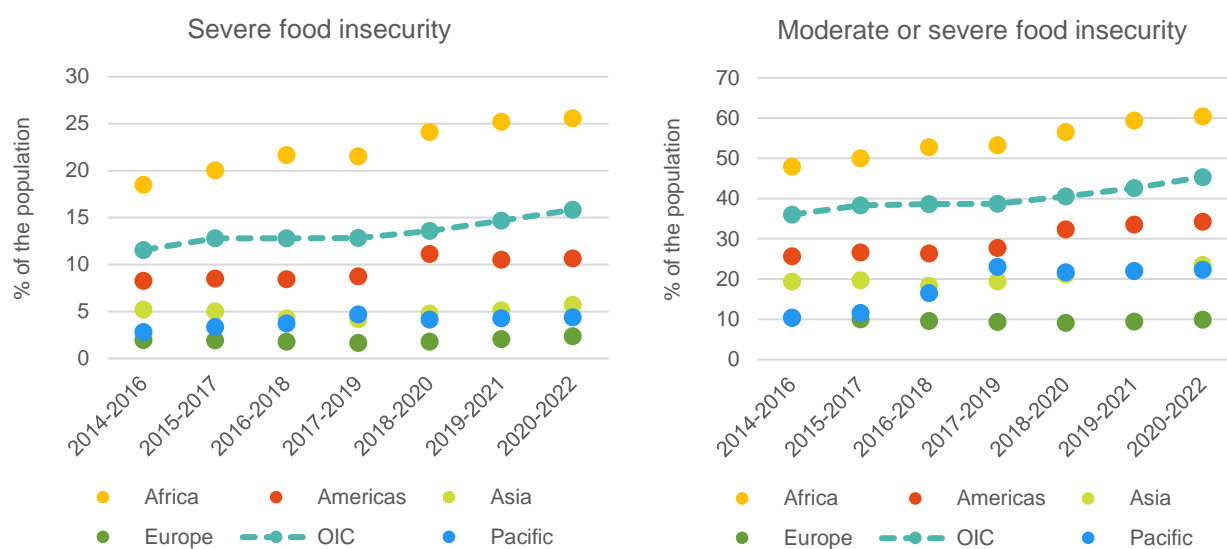
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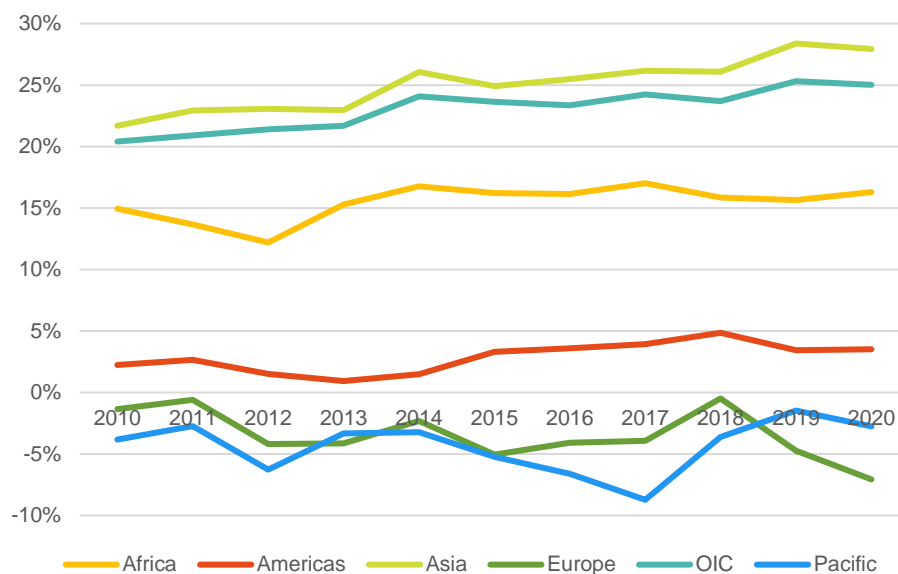
Appendices

Table A. 1: OIC country members, by region

Caribbean	Eastern Europe and Central Asia	Middle East	South and Southeast Asia	Sub-Saharan Africa
Guyana Suriname	Albania Azerbaijan Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	Bahrain Iran, Islamic Republic of Iraq Jordan Kuwait Lebanon Oman Palestine, State of Qatar Saudi Arabia Syrian Arab Republic Türkiye United Arab Emirates Yemen	Afghanistan Bangladesh Brunei Darussalam Indonesia Malaysia Maldives Pakistan	Benin Burkina Faso Cameroon Côte d'Ivoire Chad Comoros Djibouti Gabon Gambia, The Guinea Guinea-Bissau Mali Mozambique Niger Nigeria Senegal Sierra Leone Somalia Sudan Togo Uganda
North Africa				
Algeria Egypt Libya Mauritania Morocco Tunisia				

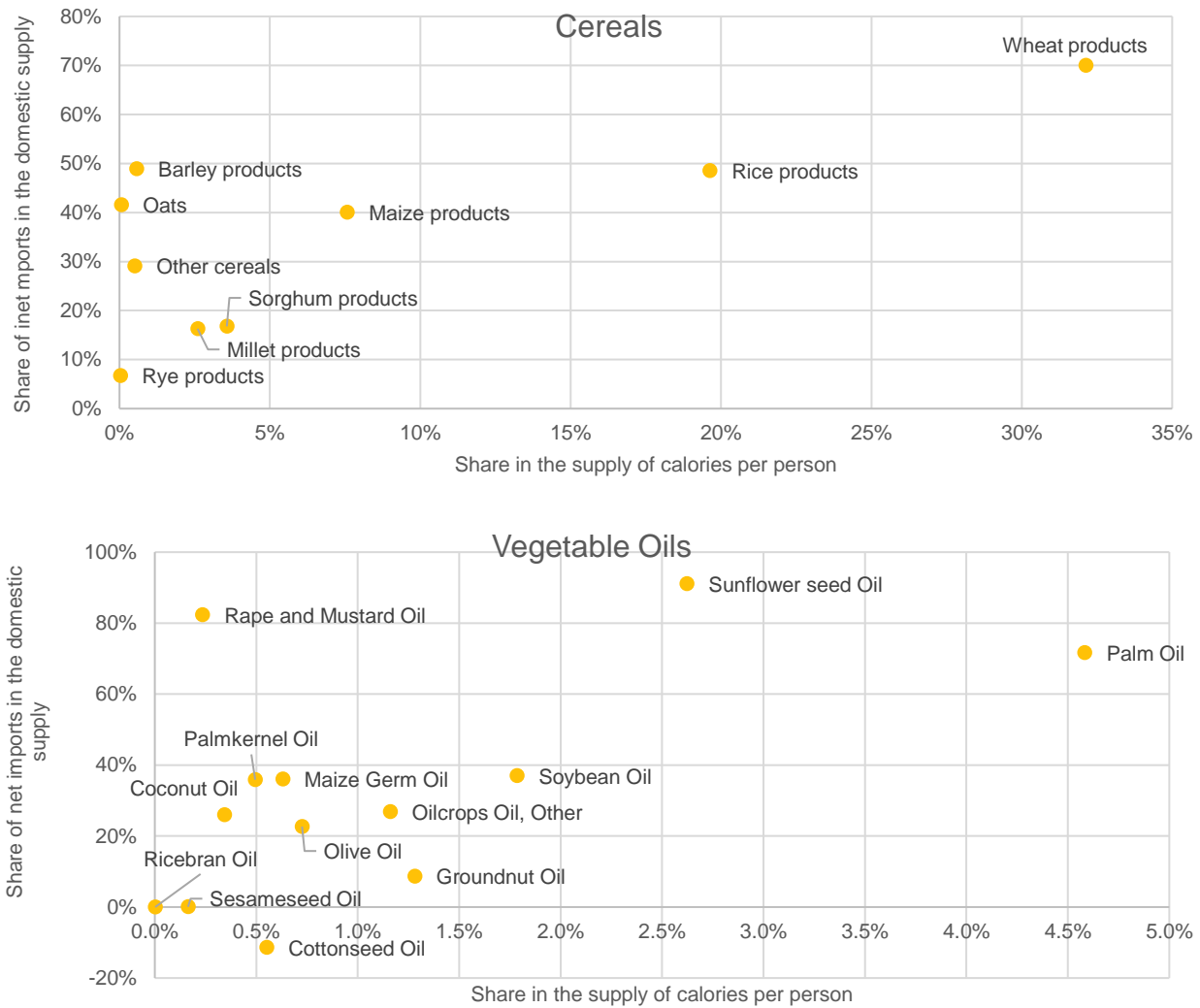
Figure A. 1: Prevalence of food insecurity, 3-year regional average since 2014

Note: The prevalence of food insecurity is the percentage of people that live in households classified as food insecure.
Source: ITC calculations based on FAO (2023a).

Figure A. 2: Trade share in the domestic supply of food, 2010-2020, selected regions

Note: The domestic supply is defined as production plus imports minus exports minus variations in stock. The share of trade in the domestic supply of food is then (imports of food – exports of food)/ domestic supply of food.
Source: ITC calculations based on FAO (2023a).

Figure A. 3: Net import share in food supply and share in calories per person, selected sectors



Note: Average from 2016 to 202. Food supply is the sum of food produced, net imports, and changes in food stocks. Net imports are defined as imports minus exports. The definition of sectors corresponds to those of FAO (2023a).

Source: ITC calculations based on FAO (2022b).

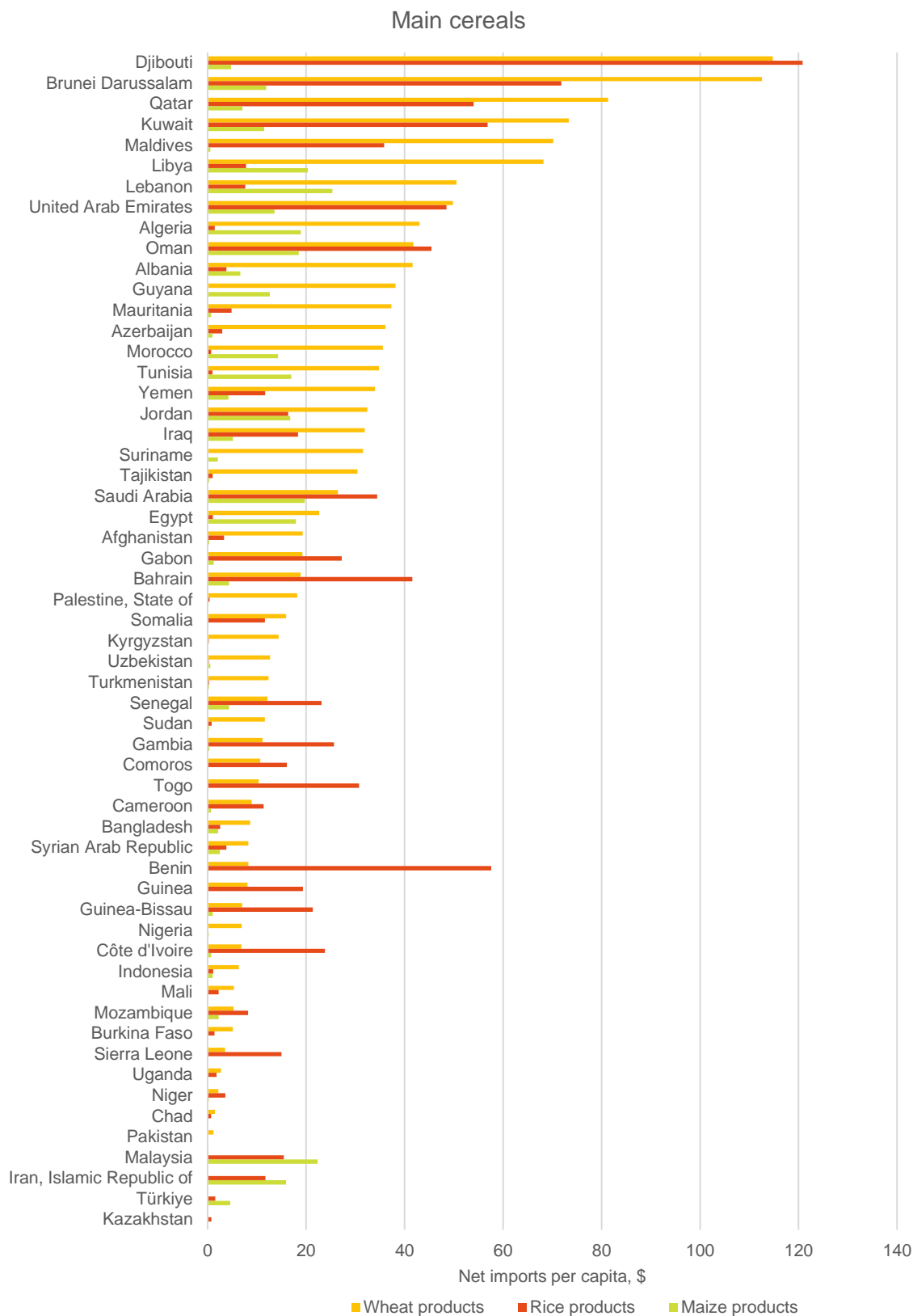
Table A. 2: Number of equivalent food supplier for key food products, by country group

	Developed countries	Other Developing countries	LDCs	OIC
All Food	28	22	22	29
Wheat products	17	15	15	12
Rice products	10	6	3	3
Maize products	8	5	6	5
Palm oil	4	2	2	2
Sunflower seed oil	6	3	4	4
Soybean oil	11	4	3	5

Note: The number of equivalent food suppliers is an indicator of the diversification of supply. It is computed as the inverse of the Herfindahl-Hirschmann indicator of concentration of the suppliers, and it shows the number of equally weighted suppliers that would generate the same level of concentration as the one that is observed.

Source: ITC calculations based on ITC (2023a).

Figure A. 4: Net imports per capita in OIC countries, main cereals



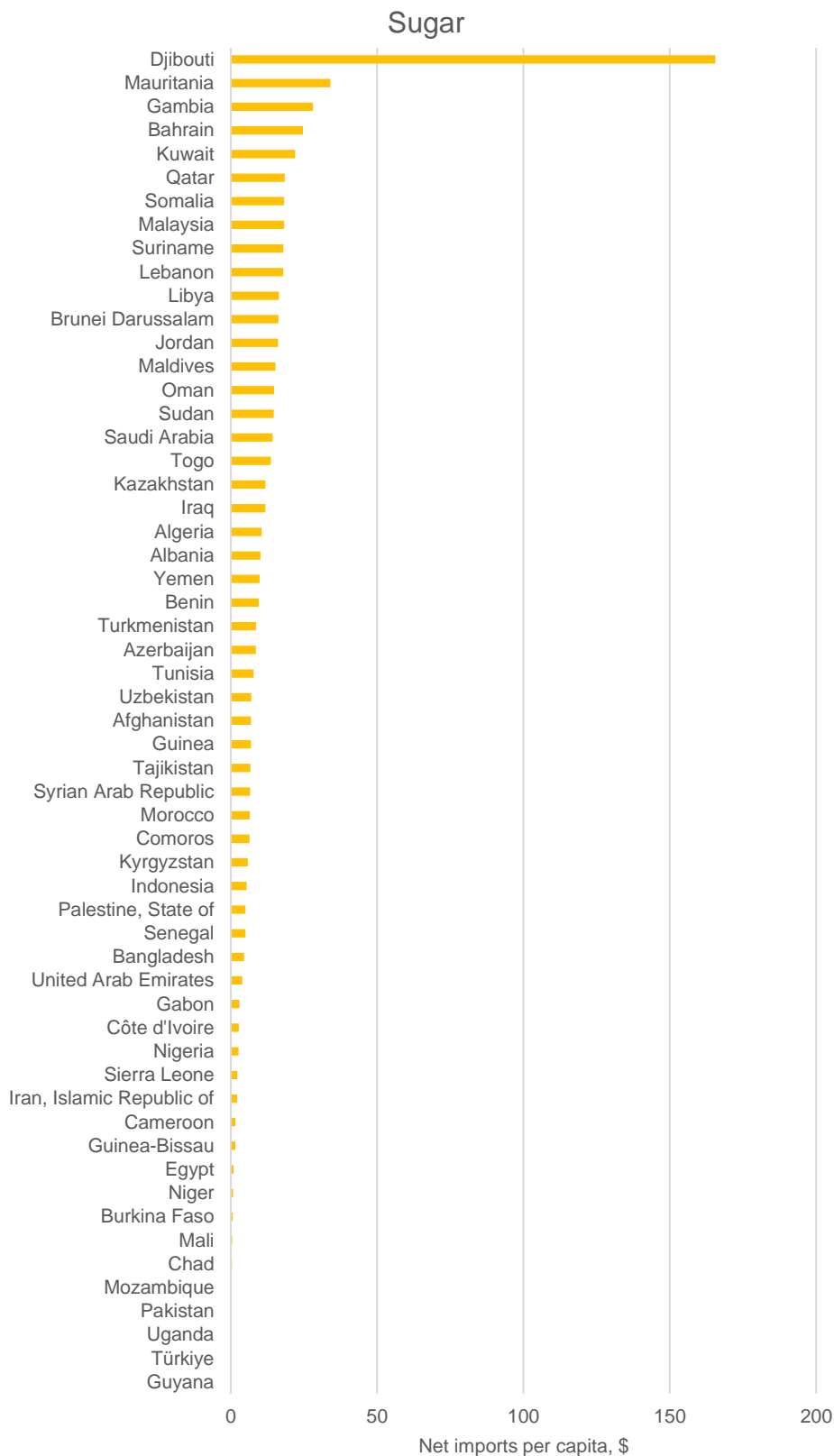
Source: ITC calculations based on ITC (2023a), FAO (2023b) and UN DESA (2022). Net exporters not included.

Figure A. 5: Net imports per capita in OIC countries, main vegetable oils



Source: ITC calculations based on ITC (2023a), FAO (2023b) and UN DESA (2022). Net exporters not included.

Figure A. 6: Net imports per capita in OIC countries, sugar



Source: ITC calculations based on ITC (2023a), FAO (2023b) and UN DESA (2022). Net exporters not included.