The 2022 edition of The State of Agricultural Commodity Markets (SOCO 2022) discusses how trade policies, based on both multilateral and regional approaches, can address today’s challenges for sustainable development. Trade policies in food and agriculture should aim to safeguard global food security, contribute towards tackling the trade-offs between economic and environmental objectives, and strengthen the resilience of the global agrifood system to shocks, such as conflicts, pandemics and extreme weather events. The report discusses the geography of trade, analysing food and agricultural trade and its patterns across countries and regions, its drivers and the trade policy environment. Comparative advantage, trade policies and trade costs shape the patterns of trade in food and agriculture. When comparative advantage plays out in the global market, trade benefits all countries. Lowering tariff barriers and reducing trade costs can promote trade and economic growth. Both multilateral and regional trade agreements (RTAs) can facilitate this process, while keeping in mind that the gains from trade are distributed unevenly. When global environmental impacts, such as greenhouse gas (GHG) emissions, are considered, a multilateral approach to trade can help expand the reach of mitigation measures.

Suggested action by the Committee

The Committee is invited to take note of and discuss the content of this document and the findings of the 2022 edition of SOCO, and to consider the following points for further action:

- Note the trends and evolution of food and agricultural trade and recognize its important role in contributing to world food security and strengthening resilience to shocks, such as conflicts, pandemics and extreme weather events;

- Underline the need for trade policies to foster well-functioning, transparent and open global markets, especially in times of uncertainty and crisis, and stress the importance of improving agricultural productivity and reducing trade costs to make trade an avenue for growth.
I. INTRODUCTION

1. The establishment of the World Trade Organization (WTO) in 1995 and the explicit inclusion of agriculture into the international trade system rules, together with a plethora of RTAs led to increasing the volume of food and agricultural trade twofold. Lower import tariffs worldwide increased the integration of emerging economies and developing countries into the global market and promoted economic growth.

2. At the same time, the increasingly globalized food and agricultural markets raised concerns about the potential impacts of trade on the environment and societies. International trade in food and agriculture is also seen as depleting natural resources, driving deforestation and biodiversity loss, accelerating changes in lifestyles and diets, and widening inequality.

3. Today, the trade policy environment is characterized by a deadlock in multilateral trade negotiations under the WTO, with the attention of countries shifting toward extensive RTAs that are deeper and aim to improve market access by reducing tariffs, but also to promote cooperation in domestic policies and regulations and harmonize non-tariff measures. Large RTAs contribute to further deepening economic integration among the signatories.

4. The 2022 edition of The State of Agricultural Commodity Markets (SOCO 2022), entitled "The Geography of Food and Agricultural Trade: Policy approaches for sustainable development", examines how trade policies based on multilateral and regional efforts can address today’s challenges for sustainable development. Trade policies in food and agriculture should be conducive to food security and nutrition, contribute to tackling the trade-offs between economic and environmental objectives, and strengthen the resilience of the global agrifood system to shocks, such as conflicts, pandemics and extreme weather events.

II. THE GEOGRAPHY OF FOOD AND AGRICULTURAL TRADE

5. This report looks at different policy options for sustainable growth by providing a systematic framework to assess the geography of food and agricultural trade, analysing food and agricultural trade and its patterns across countries and regions, its drivers and the trade policy environment.

6. Looking at the geography of trade offers a number of valuable insights into analysing sustainable growth. First, by mapping the food and agricultural trade, one can better understand the evolution of trends such as globalization and regional integration and their relationship with economic growth. These trends can also shape the resilience of global food and agricultural markets to shocks, such as the conflict between the Russian Federation and Ukraine, and their implications for food security.
7. Second, the geography of trade highlights the significant gaps that exist across countries. Global wealth has grown but the share of low-income countries in this wealth has changed little. The agricultural productivity gap is also enormous. Relative differences in agricultural technology and productivity contribute to determining comparative advantage in food and agriculture and shape trade patterns. At the same time, trade costs – which are also shaped by geography – are significant and can partly insulate low-income countries, limiting opportunities for growth and development.

8. Third, looking at trade through a geographical lens reveals the uneven distribution of natural resources. Land and water are key factors of production and also contribute to shaping comparative advantage. Although trade helps regions with low resource endowments, such as water-stressed countries, to ensure food security, it can also affect the environment. With food being consumed far from where it has been produced, trade can generate environmental externalities across the world. Production for exports can add pressure to depleted natural resources and affect forests and biodiversity.

9. The analysis of the geography of food and agricultural trade sheds light on the trade-offs between different sustainable development objectives and helps discuss a complex policy environment. Multilateralism, as reflected by the WTO Doha Round of negotiations, has stalled; and deeper regional trade blocs are on the rise. Both approaches aim at promoting trade integration and economic growth, while addressing trade’s impacts on the environment. Within these approaches, SOCO 2022 discusses the effectiveness of trade policies in addressing today’s global challenges.

III. GLOBALIZATION AND REGIONALIZATION

10. Food and agricultural trade expanded rapidly in the new millennium, as more countries increased their participation in global food and agricultural trade and the landscape and geography of trade has changed. Emerging economies have become important players and low-income countries are better integrated into global markets. This process of globalization, catalysed by trade liberalization at multilateral and regional levels, has lost steam since the financial crisis in 2008 but has resulted in important changes in the structure of the global market.

11. The structure of the global network of food and agricultural trade became less concentrated and more decentralized between 1995 and 2019. In 1995, a few but large players dominated the global market. Over time, together with the expansion of trade and the emergence of new players, the number of these trade hubs increased while the dominance of the individual hubs weakened. These structural changes reflect a relatively even playing field and characterize a global food market conducive to economic growth. For example, today, low- and middle-income countries are more likely to trade with high-income economies than two decades ago. This is important as trade facilitates the diffusion of technology and knowledge and promotes productivity and growth.

12. However, within the global market, regions continue to play an important role. Regionalization of food and agricultural trade – the tendency of countries to trade more within a region than with countries outside the region – was more pronounced in 2019 than in 1995. Countries form different trade clusters, which may be regional or expand to include countries across regions and within which they tend to trade more. Such clusters are often shaped by geographic proximity and economic integration forged by trade agreements. Large traders in these clusters connect with smaller countries improving their integration in markets. Many of these clusters are relatively stable, such as a cluster including countries in North and Latin America and the Caribbean. Others, however, tend to be less stable and countries appear to trade more with partners outside the continent.

13. As countries increased the number of their trade partners, the global food and agricultural market became denser. This strengthened its buffer capacity and resilience to shocks relative to the beginning of the 21st century. However, few countries still account for most of the value traded and only some countries source a large variety of food and agricultural products from many different exporters. Most countries’ imports are concentrated on a few products from a limited number of trade
partners, making them vulnerable to shocks occurring in the exporter markets. For example, the Russian Federation and Ukraine are key suppliers to a number of countries, many belonging to the group of Low-Income Food-Deficit Countries (LIFDCs) that are highly dependent on imported foodstuffs. To improve their resilience, countries relying on imports of specific products from few trade partners should aim at diversifying the products imported and increase the number of trade partners.

IV. THE FUNDAMENTAL DRIVERS OF TRADE IN FOOD AND AGRICULTURE

14. Many factors can influence trade in food and agricultural products, but the most influential factor is comparative advantage – the ability to produce a particular good at a lower opportunity cost than a trading partner. The principle of comparative advantage implies that all countries become better off as a result of trade, but other drivers such as trade policies and trade costs shape global food and agricultural trade patterns.

15. The productivity gap in agriculture is huge. On average, the top 10 percent of the richest countries produce about 70 times as much agricultural value added per worker as countries in the bottom 10 percent of the income distribution. Many middle-low and low-income countries face significant constraints in technology adoption and access to modern inputs. Additionally, in low-income countries, market failures can inhibit technology adoption. Many other factors, including small average farm size and limited access to insurance, credit and education, especially for women, plague agricultural productivity in low-income countries.

16. Relative differences in productivity but also the uneven distribution of natural resources lead to food price differences across countries and determine the influence of comparative advantage in the global market. On average, the higher the heterogeneity in relative productivities across countries, the stronger the influence of comparative advantage, and the more the trade.

17. Nevertheless, this is not always the case. Trade policies affect the relationship between comparative advantage and trade. For example, export subsidies, which were eliminated for agricultural products by the 2015 WTO Ministerial Conference in Nairobi, could potentially reverse the relationship between comparative advantage and trade, causing goods that would have otherwise been imported, to be exported. Trade costs also inhibit the influence of comparative advantage. Trade is costly, and distance increases transport costs. There are also other costs related to insurance, export and import procedures and time delays at the border. On average, a food product faces eight different non-tariff measures and standards, and compliance significantly increases the cost of trade. In low-income countries, trade costs could amount to up to 400 percent in ad valorem equivalent. Such high costs inhibit trade integration.

18. For example, in sub-Saharan Africa, the weak influence of comparative advantage and high trade costs result in a low intensity of intra-regional trade. Countries in the region trade more with countries outside the region than among themselves. High trade costs could also result in a country not trading as much as it would if trade costs were lower. Especially, for low-income countries that are characterized by relatively low agricultural productivity, high trade costs and less trade could result in an expanded agricultural sector, relative to other sectors of the economy, necessary to meet the population’s food subsistence needs. This could hinder the structural transformation of the economy. Policies should not only aim to improve agricultural productivity but also to reduce trade costs in order to reap the benefits of trade. For instance, measures taken to increase integration in Africa through the establishment of the African Continental Free Trade Area (AfCFTA) will be important for economic growth and development in the region.

19. Lower trade costs will make a country more open to trade and let comparative advantage play out, resulting in gains from trade. However, in countries with low agricultural productivity, it could also entail losses especially by those smallholder farmers that are not able to increase their efficiency and compete in more open markets. For this reason, complementary policies will be needed to
improve access to technology and modern inputs, as well as to facilitate the reallocation of labour to other sectors through labour markets.

V. THE ENVIRONMENTAL IMPACTS OF FOOD AND AGRICULTURAL TRADE

20. Endowments in natural resource endowments, such as land and water, contribute to shaping comparative advantage in food and agriculture. For countries with low natural resource endowments and where climate conditions are not favourable to agricultural production, trade can ensure food security and nutrition in terms of both quantity and diversity of food at levels above what domestic production could sustain. Globally, trade and comparative advantage strengthen the efficiency of natural resources use.

21. Trade helps allocate the production of food and agricultural products to countries with relatively higher resource use efficiency. For example, a study estimates that food and agricultural trade could generate between 40-60 m$^3$ of annual water savings per capita.

22. Although open global food and agricultural markets can help alleviate pressure on natural resources, production for exports can generate negative environmental externalities, such as unsustainable freshwater withdrawals, pollution, biodiversity loss, deforestation and greenhouse gas (GHG) emissions. For example, production of cattle, soybeans and palm oil — all products with sustained global demand — were estimated to have accounted for 40 percent of tropical deforestation between 2000 and 2010.

23. Often, these negative environmental impacts arise due to local conditions and a poorly regulated environment. This means that trade policies, on their own, cannot easily address environmental externalities. Multilateral trade rules, such as the WTO framework, together with national regulation, can address the trade-off between economic and environmental objectives. The scope of trade agreements is also evolving to include environmental provisions. Between 1957 and 2019, out of 318 agreements that were created, 131 included at least one environment-related provision and 71 agreements incorporated provisions that displayed the interaction between the environment and agriculture. These provide incentives to producers to adopt sustainable practices in order to gain and maintain access to markets.

24. In general, a number of studies suggest that environmental provisions in RTAs have a positive effect in tackling environmental externalities generated by trade when these are due to local conditions. Deeper trade agreements foster policy convergence in signatory countries on many issues, including the environment. These often establish specific mechanisms to discuss and oversee the implementation of environment-related commitments. Trade agreements can foster the adoption of sustainable practices among trade partners, when environmental provisions are legally binding and trade between signatories is equipped by well-developed institutions, such as dispute settlement procedures and environmental impact assessments.

VI. MULTILATERAL AND REGIONAL TRADE POLICIES FOR SUSTAINABLE GROWTH

25. Since the beginning of the new millennium, globalization and regionalization have evolved in parallel, with each process complementing the other. Today’s trade policy environment in food and agriculture, as shaped by WTO, has discouraged unfair practices, reduced uncertainty, and facilitated coordination between countries. This multilateral framework is also complemented by a multitude of RTAs. Both multilateral and regional liberalization have contributed to expanding global trade.

26. Although WTO members agreed on eliminating agricultural export subsidies following the Nairobi Ministerial Conference in 2015 and established the Trade Facilitation Agreement, which entered into force in February 2017, among others, several areas related to agriculture, such as the
treatment of public food stockholding and domestic agricultural support, contributed to stalling multilateral reform. At the same time, the number of RTAs in force has rapidly increased from less than 25 in 1990 to more than 350 in 2022. This has raised concerns on whether discrimination in the global market has increased, leading to the fragmentation of global trade in competing blocs.

27. RTAs create trade between the signatories but could result in trade diversion from non-signatories. For their signatories, deeper trade agreements improve market access through preferential tariffs and reduce trade costs through domestic regulation convergence and standards’ harmonization. This can promote regional value chains and spur growth.

28. Although, on average, RTAs can generate gains globally, some countries may lose. Low-income countries with limited capacity to negotiate and implement complex trade provisions, may be left out of the trade integration process. Multilateral trade liberalization can result in higher gains globally and can be the most efficient way to promote market access and economic growth for all.

29. Although comparative advantage appears to be more conducive multilaterally, it would be difficult to address the trade-off between economic and environmental objectives in the same way. Environmental externalities generated by trade, when localized, can be addressed by trade policies complemented by regulation at the national or regional level.

30. Unilateral or even regional actions will not be effective when such externalities are global, such as climate change. A multilateral agreement will be necessary, but it may be challenging to achieve consensus mainly due to diverging views of countries on the impact of greenhouse emissions and their cost to society. Nevertheless, global environmental externalities can only be effectively tackled multilaterally with trade rules helping expand the reach of policies that take into account the social costs of externalities.