



TRADE POLICY BRIEFS

FAO SUPPORT TO THE WTO NEGOTIATIONS AT THE 12TH MINISTERIAL CONFERENCE

HOW CAN TRADE AND TRADE POLICIES HELP SHAPE ADAPTATION TO CLIMATE CHANGE?

KEY MESSAGES

- Climate change is affecting agriculture unevenly across regions and countries.
- Agricultural trade supports adaptation to climate change by contributing to ensuring adequate food supplies worldwide and promoting more diverse and better diets for improved food security and nutrition.
- Trade policies can play an important role in shaping adaptation to climate change.

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The impact of climate change on agriculture

Climate change has significant implications for agriculture and food security. Higher average temperatures, changes in precipitation, and an increase in the frequency and intensity of extreme weather events are expected to increasingly affect crop and livestock production.

The impact is projected to be uneven across regions and countries. In low-latitude regions, where most developing and least developed countries are located, agricultural production is already being adversely affected by climate change, specifically, by a higher frequency of droughts and floods. For many developing countries, climate change could exacerbate the food security challenges they are already facing. Regions with temperate climates, on the other hand, could experience positive impacts, with warmer weather benefitting some crops (FAO, 2018; IPCC, 2020).

Trade and climate change

Global markets facilitate the transfer of food from surplus to deficit regions and, thus, promote food security and nutrition. Trade flows between countries are shaped by comparative advantage – the ability of a country to produce food at lesser cost. As self-sufficiency in many foods can be very costly for a country and is not always possible due to agro-ecological conditions, trade can contribute towards ensuring adequate food supplies and promoting *more diverse and better diets for improved food security and nutrition*.

Climate change affects the comparative advantage of agricultural production, and thus impacts trade. Regions that experience agricultural production declines due to climate change are likely to increase imports of agricultural products. By contrast, temperate regions, where production is projected to increase, would export more.

Several modelling exercises, including one carried out for FAO, expect a stronger role of trade in contributing to food security and nutrition in the context of climate change, and suggest that climate change would result in adjustments in the net trade positions of countries and regions (Nelson *et al.*, 2014; FAO, 2018).

Trade as a climate change adaptation instrument

The adaptive role of trade would be manifested in both the long and the short terms. In the long term, as average temperatures increase across regions – the slow-onset impact of climate change – trade can contribute towards allocating agricultural production in an efficient manner. For countries negatively affected by global warming, supplying their own food needs could become prohibitively expensive.

In the short term, trade can address the rapid-onset impacts of climate change, such as weather-induced production shortfalls. Countries that experience droughts or floods can resort to the international market and import food to cover the climate-induced production shortfall or nutrient gap.

Trade policies to strengthen the adaptive role of trade

Trade policies can play an important role in shaping adaptation to climate change and in promoting food security. Sound, transparent, predictable, and WTO rules-based policies can support and foster climate change adaptation efforts.

With climate change affecting the production of food in many countries and regions around the world, lower trade barriers

can facilitate trade flows and, most importantly, enhance the buffer capacity of international markets in times of weather-induced production shocks.

For example, export restrictions can contribute to international price instability, particularly if they are imposed when world prices are rising. Export bans by major exporters can render the world market unreliable as a source of food, harming net food importers and traditional trading partners.

Complementary measures and the policy mix

Pursuing stronger integration in global food markets does not mean that countries where agriculture will face aggravating conditions due to climate change have to rely only on imports to meet most of their food needs. Countries will have to employ a range of measures to promote adaptation such as boosting agricultural investments and strengthening extension and training services. This should contribute to positive food security and nutritional outcomes and enhance agriculture's comparative advantage. Promoting sustainable productivity growth and resilience, together with more transparent and better-functioning international agricultural markets, will allow countries in the most vulnerable areas to effectively adapt to climate change (FAO, 2018).

Actions to address key challenges:

- ▶ Promote trade as a mechanism for addressing climate change impacts and fostering food security and nutrition for all.
- ▶ Implement sound, transparent, predictable, and WTO rules-based trade policies to support climate change adaptation efforts and contribute towards global market stability and more efficient trade.
- ▶ Strengthen agriculture's comparative advantage through policies and investments that aim to increase productivity and resilience sustainably.

References

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