



OECD–FAO Agricultural Outlook 2025–2034

Key messages

1. Rising incomes, especially in middle-income economies, are expected to increase the daily per capita caloric intake of meat, dairy, fish, and other animal products by 6% over the next decade. However, in low-income countries, daily intake of these nutrient-rich foods will remain low at just 143 kcal by 2034, well below the 300 kcal included in the Healthy Diet Basket used by FAO.
2. Global agricultural and fish production is expected to increase by 14% over the next decade, mainly enabled by productivity improvements, particularly in middle income countries. However, this increased production, along with ongoing structural changes in the sector, is associated with expanded animal herds and cropland areas. Despite reductions in emissions intensity from productivity growth, this results in a 6% increase in direct agricultural greenhouse gas (GHG) emissions.
3. However, scenario analysis suggests options to eliminate undernourishment and to reduce direct agricultural GHG emissions by 7% below current levels by 2034. Achieving these dual outcomes would require a 15% agricultural productivity increase complemented by widespread adoption of emission-reduction technologies, while attaining a production level sufficient to eradicate undernourishment globally.
4. As demand for food and feed grows, with production often located far from consumption areas, the *Outlook* projects that 22% of all kcal will cross international borders over the next ten years. To ensure the efficient movement of agricultural and fish products, multilateral cooperation and a rules-based agricultural trade system are crucial. These frameworks will not only enhance food security but also improve sustainability and resilience in the face of potential supply disruptions.
5. Real agricultural commodity prices are projected to decline in the medium term as the overall productivity of the agricultural sector increases, putting pressure on individual farmers, and especially smallholders, at the lower end of the productivity scale to continue to raise their own productivity. Sustained improvements in efficiency, adoption of innovative technologies, better access to inputs, knowledge, and markets, and effective business risk management practices are critical for maintaining farm incomes and livelihoods.

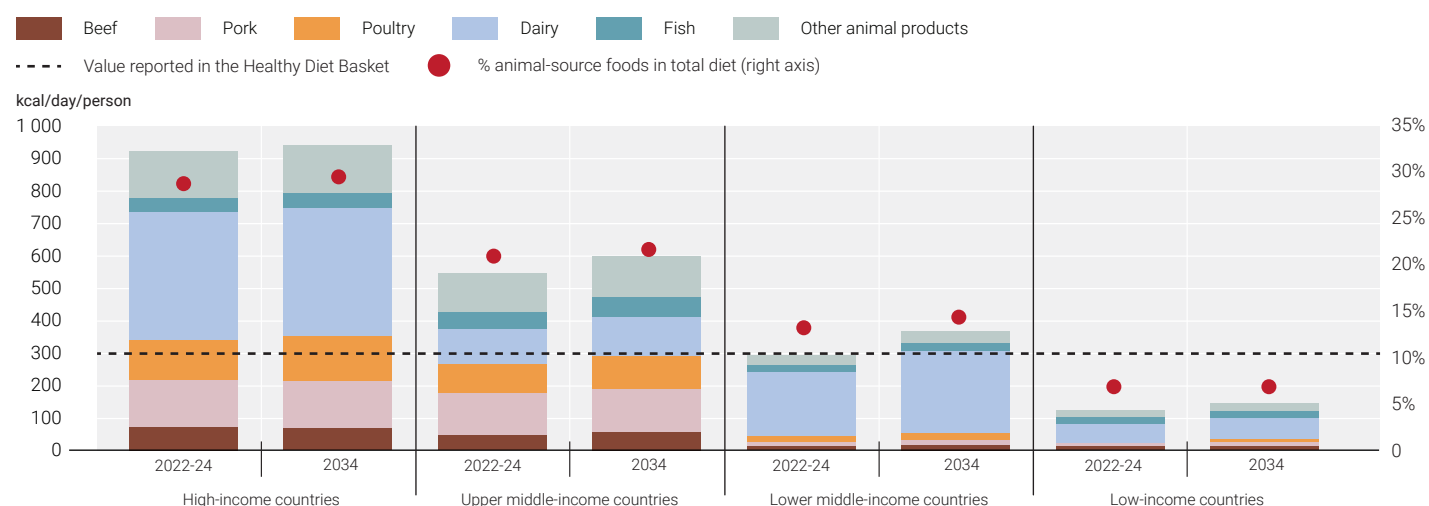
Executive summary

The *OECD–FAO Agricultural Outlook 2025-2034* examines the evolving landscape of global agriculture in the face of economic, political and environmental challenges and provides a comprehensive assessment of the ten-year prospects for agricultural commodity and fish markets at national, regional, and global levels. Jointly produced by the OECD and FAO, in collaboration with their Members and international commodity organisations, the *Outlook* serves as a forward-looking reference to support evidence-based decision making by governments, agribusinesses, investors, researchers, and civil society.

Total consumption of agricultural and fish commodities is projected to grow by 13% from current levels by 2034 in constant prices. Nearly all the increase is expected to occur in low- and middle-income countries, reflecting expanding and increasingly affluent populations in these regions. However, while half of the consumption growth in middle income countries is attributed to per-capita increases, three quarter of the growth in low-income countries is based on population growth.

Rising disposable incomes and urbanisation, particularly in middle-income countries, are expected to lead to shifts in dietary patterns toward more diverse and nutritious foods, including livestock and fish products. According to the *Outlook*, the share of total kcal in diets contributed by livestock and fish products is projected to rise by 6% globally by 2034. In lower-middle-income countries, a more pronounced 25% growth will bring the average daily per capita intake of nutrient-rich food in these regions to 364 kcal, surpassing the 300 kcal included in the Healthy Diet Basket used by the FAO to compute the cost and affordability of a healthy diet. However, average indicators do not reflect persisting distributional inequalities within and across countries. Despite significant progress, many individuals in lower-middle-income countries will continue to face challenges in accessing adequate nutrition, putting the achievement of the SDG target of improved global nutrition by 2030 at risk. In low-income countries, the situation is more severe, as average daily per capita intake of nutrient-rich animal foods is expected to remain at 143 kcal, just below half the kcal identified in the Healthy Diet Basket. This enduring nutritional gap highlights important structural barriers, including limited access to affordable protein-rich foods (see Figure 1).

Figure 1. Animal source foods in total food intake



Note: Estimates are based on historical time series from the FAOSTAT Food Balance Sheets database which are extended with the Outlook database. The category 'Other animal products' includes sheep meat, eggs and other products not covered in the Outlook are extrapolated by trends.

Source: OECD/FAO (2025), "OECD-FAO Agricultural Outlook"; OECD Agriculture statistics (database), <http://data-explorer.oecd.org/s/1hc>.

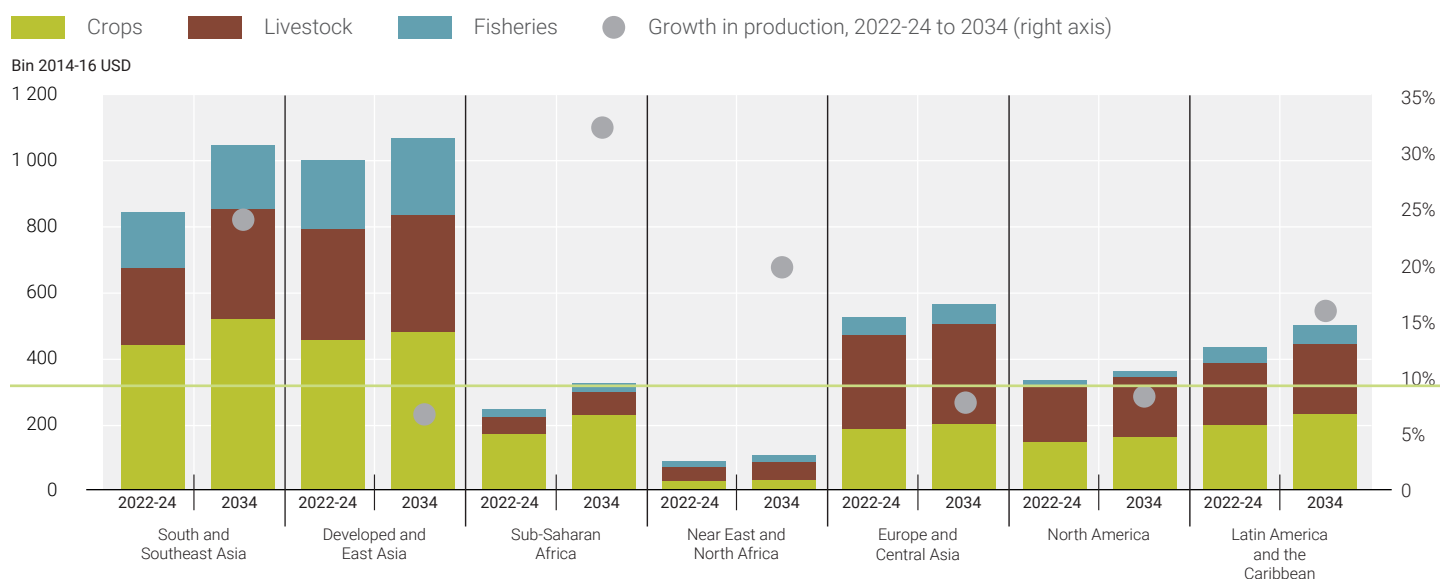
To support growing demand, global agricultural and fish production is projected to expand by 14% in constant prices over the next decade, with middle-income countries expected to remain the principal sources of global agricultural expansion. These structural shifts in production will be driven by a combination of gradual adoption of innovative and improved technologies, capital investments and more intensive use of fertilisers, feeds and other inputs in middle-income countries. Agricultural production growth will be primarily based on productivity gains, but expansion of cropping area and livestock herds are also expected, particularly in Africa and South Asia, where limitations on access to modern farming technologies persist (see Figure 2).

As the projected production growth in the livestock and crop sectors is not fully offset by the assumed productivity improvements, direct agricultural greenhouse gas (GHG) emissions are projected to increase by 6% by 2034. The relationship between agricultural growth and emissions will continue to evolve depending on the adoption of more efficient production methods and changing patterns of land use and input utilisation. With the expected productivity improvements, the carbon intensity of agricultural production is projected to decline across all regions over the coming decade (see Figure 3).

A scenario analysis conducted in the *Outlook* suggests that by 2034, undernourishment could be eliminated and direct agricultural GHG emissions lowered by 7% from current levels. Achieving these outcomes simultaneously would hinge on a 10% increase in food production and a 15% improvement in agricultural productivity, supported by the widespread adoption of currently available emissions-reducing technologies. Innovations such as precision farming, improved nutrient and water management, feed enhancements in livestock systems, and low-cost scalable practices such as crop rotations, intercropping and compost-based nutrient management represent some of the pathways that could support such emission reductions. The pace and extent of technology implementation, infrastructure development, and knowledge transfer will influence how these outcomes may unfold in practice.

The *Outlook* highlights that trade flows between net-exporting and net-importing regions are expected to increase as agricultural production and consumption become more geographically separated based on different comparative advantages and production capacities as well as food and feed demand developments. As a result, international trade will remain indispensable to the global agri-food sector. By 2034, 22% of kcal consumed globally are expected to be traded across borders. Twenty years ago, this share was 17% but has remained stable at around 22% over the last ten years. Multilateral cooperation and a rules-based agricultural trade are essential to facilitating these trade flows, balancing food deficits and surpluses across countries, stabilising prices and enhancing food security, nutrition and environmental sustainability.

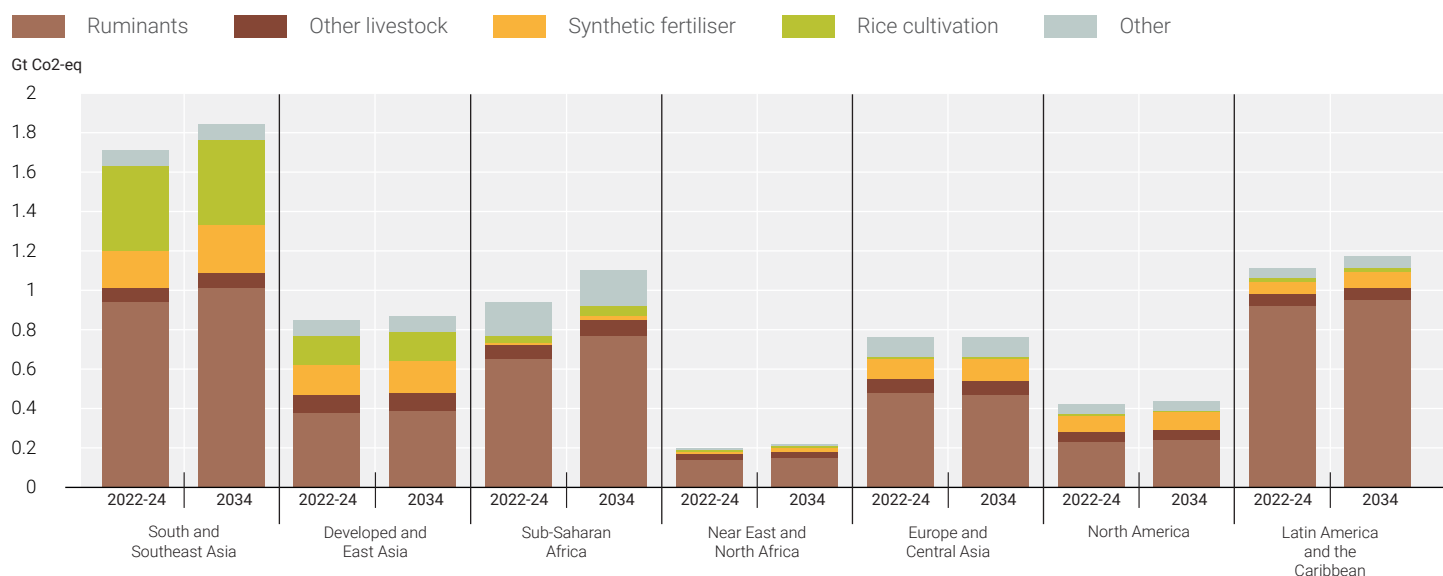
Figure 2. Trends in global agricultural production



Note: Values are measured at constant USD of the period 2014-16.

Source: OECD/FAO (2025), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database), <http://data-explorer.oecd.org/s/1hc>.

Figure 3. Direct GHG emissions from crop and livestock production by activity

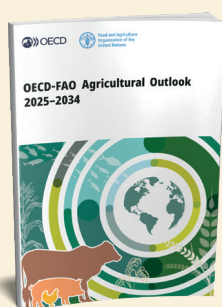


Note: Estimates are based on historical time series from the FAOSTAT Climate Change: Agrifood systems emissions databases which are extended with the Outlook database. CO₂ equivalents are calculated using the global warming potential of each gas as reported in the IPCC Sixth Assessment Report (AR6). Emission types that are not related to any Outlook variable (organic soil cultivation and burning savannahs) are kept constant at their latest available value. The category “other” includes direct GHG emissions from burning crop residues, burning savanna, crop residues, and cultivation of organic soils.

Source: FAOSTAT Emissions-Agriculture Database, <http://www.fao.org/faostat/en/#data/GT>, accessed December 2024; OECD/FAO (2025), “OECD-FAO Agricultural Outlook”, OECD Agriculture statistics (database), <http://data-explorer.oecd.org/s/1hc>.

The medium-term projection anticipates a modest decline in average annual real agricultural commodity prices, reflecting ongoing average productivity improvements that lower production costs. Consequently, individual farmers, especially smallholders who are often the most vulnerable to market shocks and have limited capacity to adopt innovative technologies, face growing pressure to improve their individual productivity. Sustained improvements in agricultural efficiency, adoption of innovative technologies, and better access to inputs, knowledge, and markets, as well as locally tailored and effective business risk management practices are therefore critical for maintaining farm incomes and livelihoods. The course of actual prices will also reflect volatility associated with the impacts of weather shocks, supply chain disruptions and geopolitical tensions.

The baseline projections presented in this *Outlook* are based on the available historical data and assumptions derived from them about economic, political, cultural, climatic and technological developments over the coming decade, which are all subject to uncertainties. As such, the likely impacts of recent developments, including shifts in trade policy and heightened economic uncertainty, have not been incorporated. Should these uncertainties persist or intensify, they may affect global agricultural markets in the medium-term through macroeconomic channels such as inflation, exchange rates, and global growth trajectories.



For enquiries or further information contact:

Holger Matthey
EST-Projections@fao.org
Markets and Trade Division
Economic and Social Development
**Food and Agriculture Organization
of the United Nations**
Rome, Italy

or visit our website:
www.fao.org/markets-and-trade

Stephan Hubertus Gay
TAD.Contact@oecd.org
Trade and Agriculture Directorate
**Organisation for Economic Co-operation
and Development**
Paris, France

or visit our website:
www.agri-outlook.org



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