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**OECD-FAO Agricultural Outlook 2022-2031: Medium-term prospects and challenges for global agriculture**

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The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.



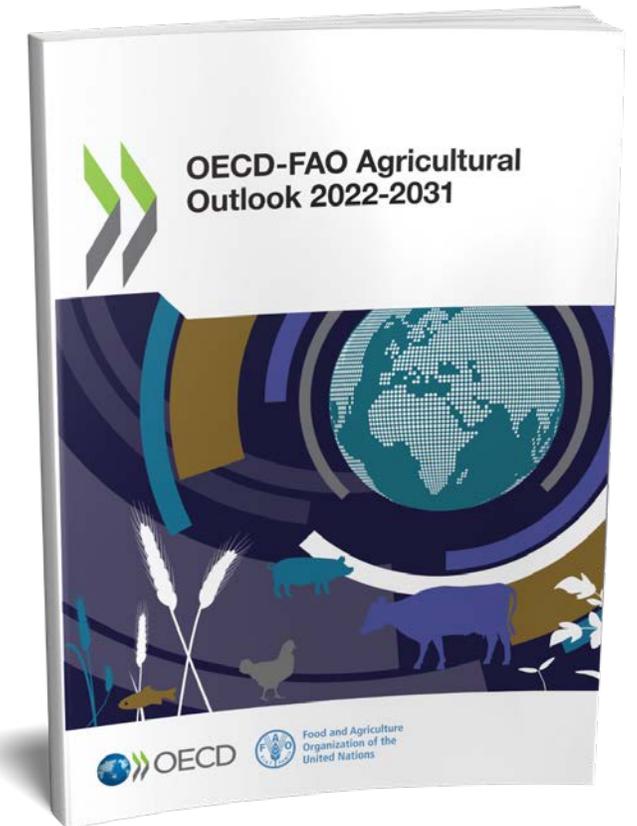
# OECD-FAO Agricultural Outlook 2022-2031

*Medium-term prospects  
and challenges for global agriculture*

# Introduction of medium-term outlook

## Plausible and consistent baseline scenario

- Evolution of agricultural and fish markets at national, regional and global levels for 2022 to 2031.
- Specific assumptions:
  - macroeconomic conditions,
  - agriculture and trade policy settings,
  - weather conditions,
  - longer-term productivity trends,
  - international market developments.
- Ongoing COVID-19 pandemic and the outbreak of the war in Ukraine in late February 2022.

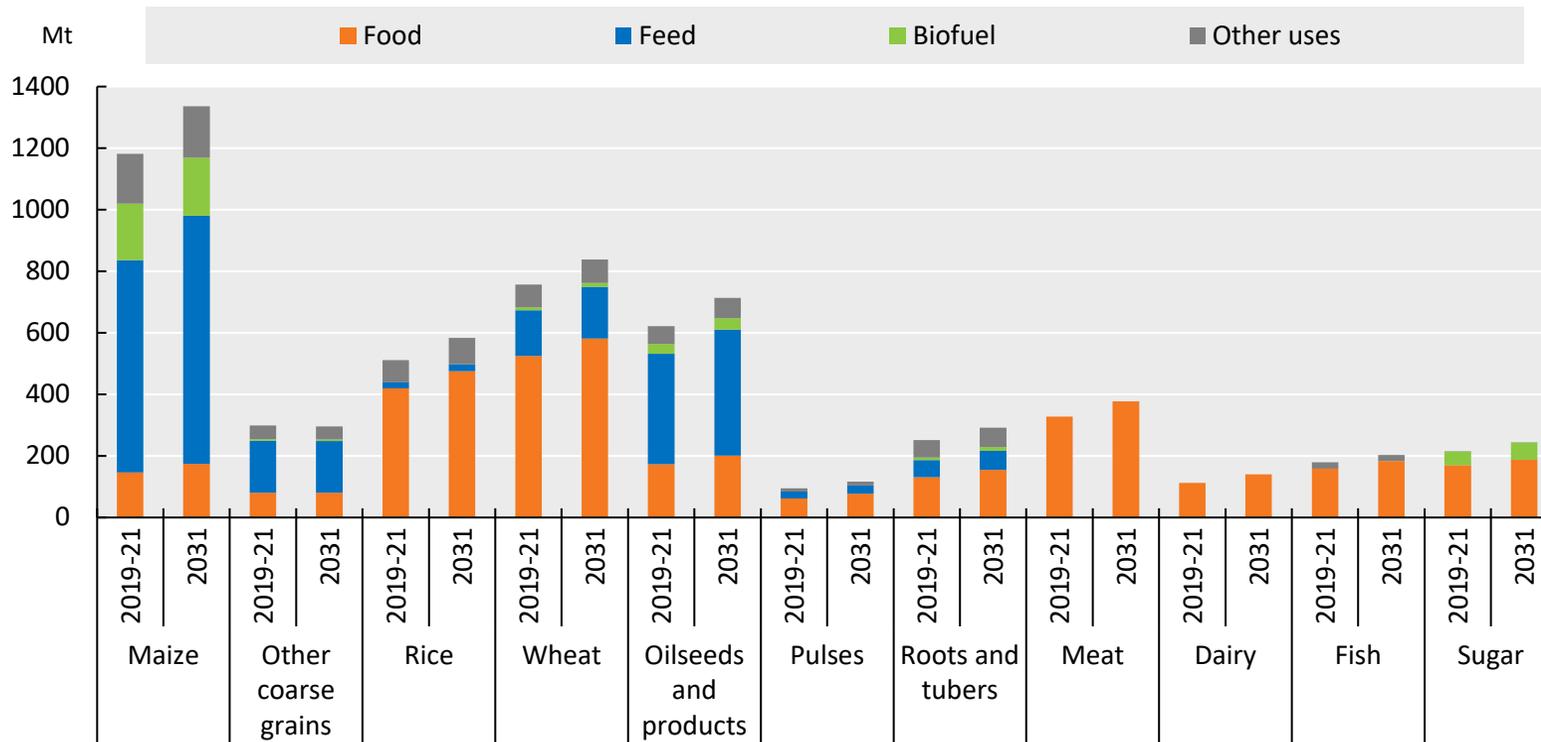


# Macroeconomic and policy assumptions

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- Population growth slows down to 0.9% p. a., strong regional differences remain.
- Global per capita income is expected to grow by 2.4% in 2022, 2.0% in 2023 and about 1.8% p.a. for the remaining years of the Outlook.
- At 3.4% p.a. on average for the coming decade, consumer price inflation in industrialised countries is projected to be significantly higher than in the previous decade.
- Crude oil prices are projected to increase from \$71/barrel in 2021 to \$100/barrel in 2022, before gradually returning to \$89/barrel in 2031.
- The projections of the Outlook do not take into account the planned reform of the European Union (EU) Common Agricultural Policy (CAP).
- The free trade agreements considered in the Outlook are those ratified by the end of December 2021.
- The Outlook only accounts for the impact of the war in Ukraine in marketing year 2022/23, where exports of cereals are expected to be only about half of normal levels.
- The medium-term impacts cannot be assessed based on currently available data.

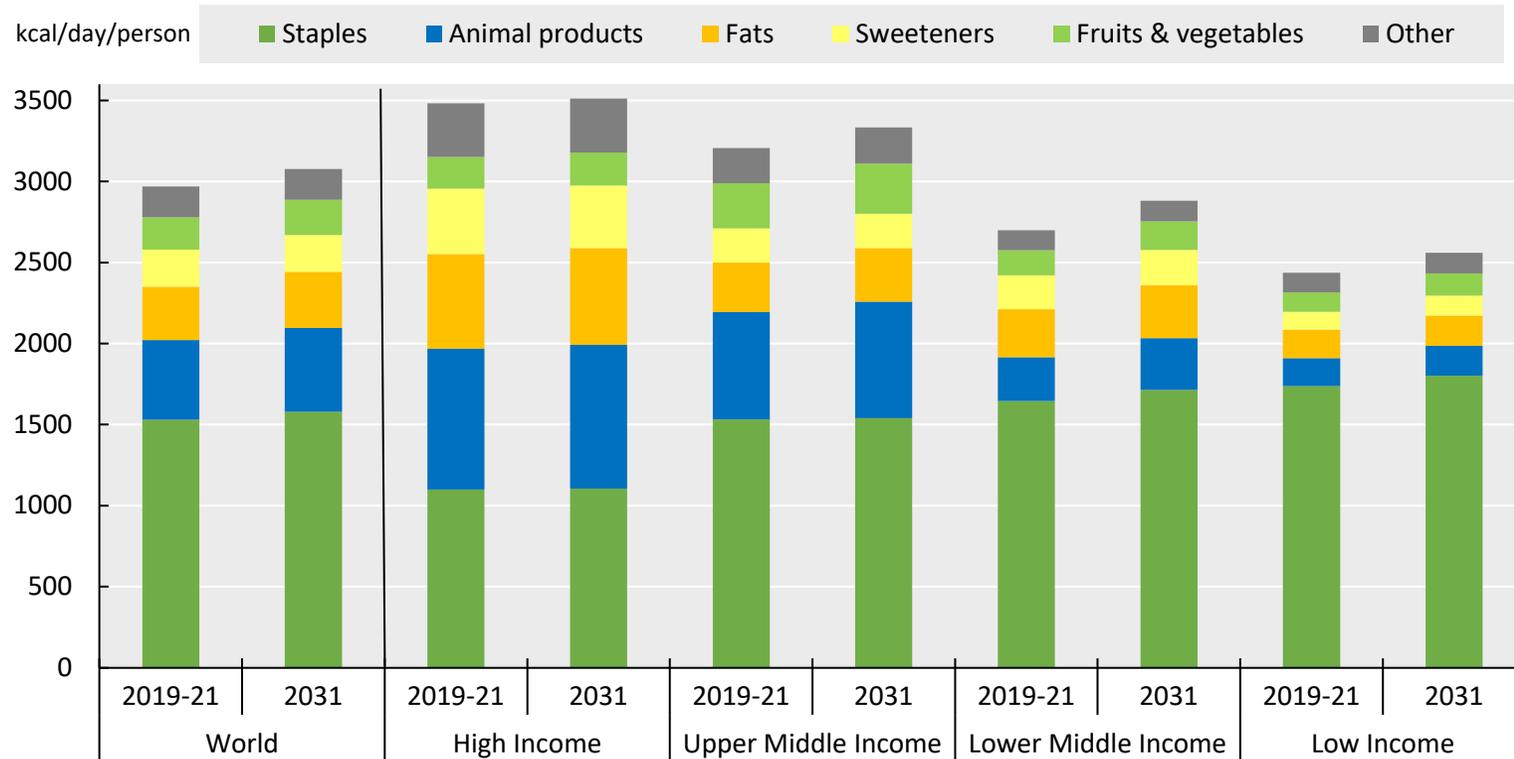
# Global use of major commodities



- Agricultural commodities used mainly for food, feed, fuel and industrial applications.
- Slow down to 1.1% p.a. vs. 2% p.a. during last decade.
- Shares of different uses are not projected to change significantly, as no major shift in consumption is expected.

Crushing of oilseeds is not reported as the uses of 'vegetable oil' and 'protein meal' are included in the total; dairy refers to all dairy products in milk solid equivalent units; sugar biofuel use refers to sugarcane and sugarbeet, converted into sugar equivalent units.

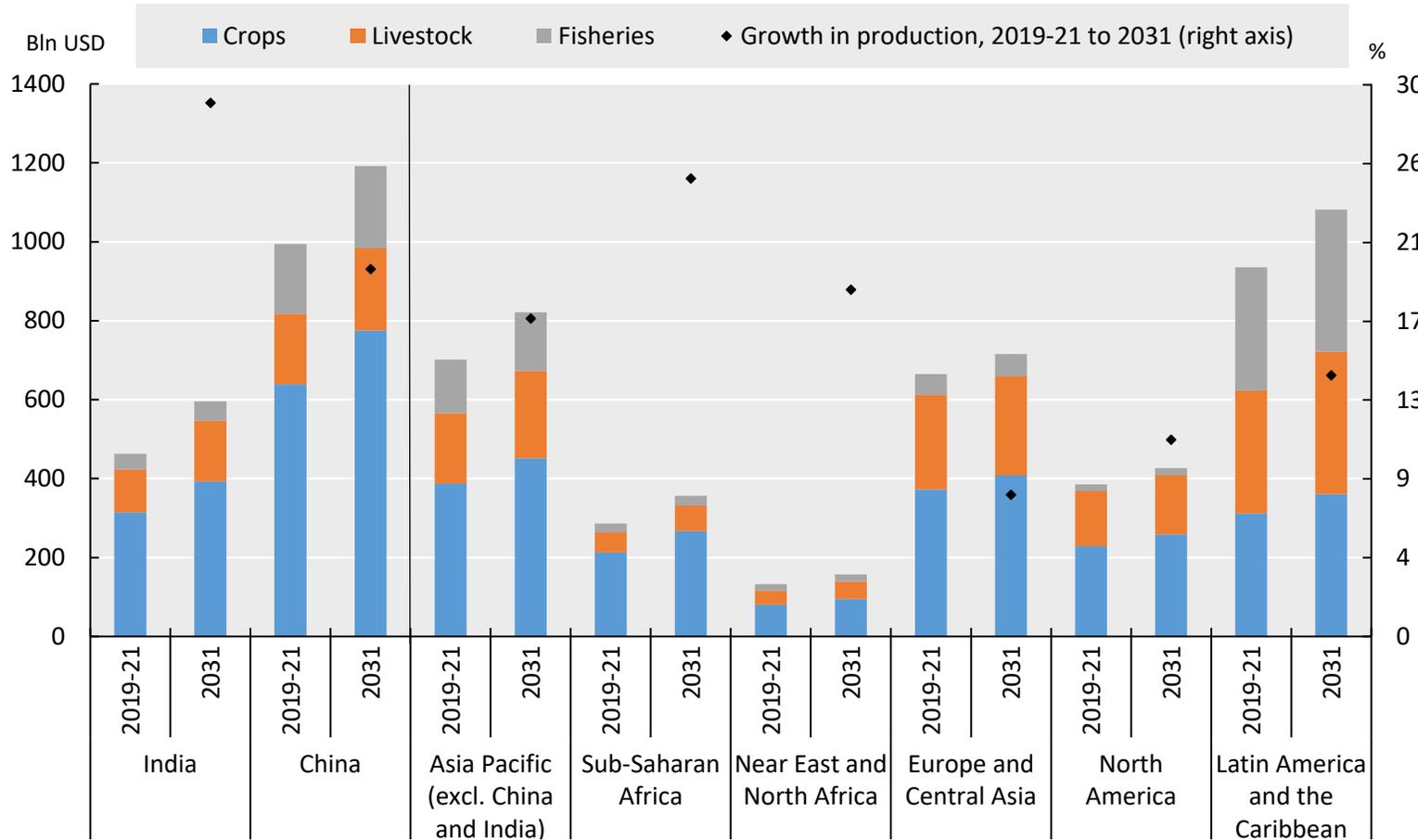
# Per-capita calorie availability



- Per capita food consumption will level off in high-income countries due to ageing population and more sedentary lifestyles.
- Consumers in middle-income countries are expected to increase their food intake and diversify their diets:
  - High income growth and the strong preference to consume more meat in upper-middle income countries.
  - Staples and fats will account for more than half of the expected calorie increase in lower-middle income countries.
- Diets in low-income countries will remain largely unchanged and mainly based on staples.

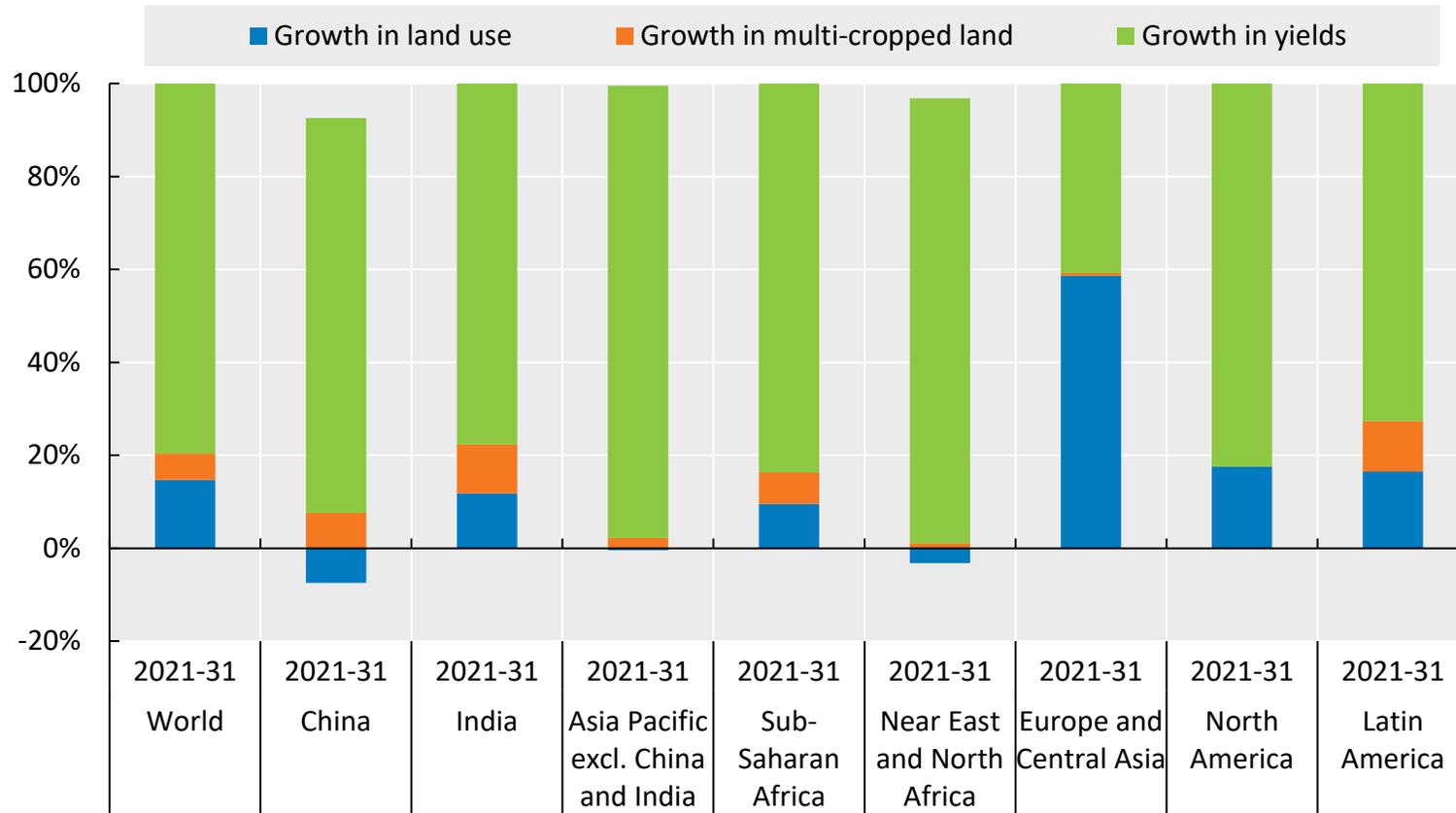
Estimates are based on historical time series from the FAOSTAT Food Balance Sheets database which are extended with the Outlook database. Products not covered in the Outlook are extended by trends.

# Global agricultural production



- Global agricultural production is projected to grow by 17% by 2031.
- Low- and middle-income countries to drive the growth in global output.
- Production growth is strong in China and India where together they account for about half of global growth.
- In NENA and SSA, despite high rates, production growth lags behind population growth.
- Productivity increasing investments, mobilization of production resources and a more intense use of agricultural inputs are going to support and an expansion in production.

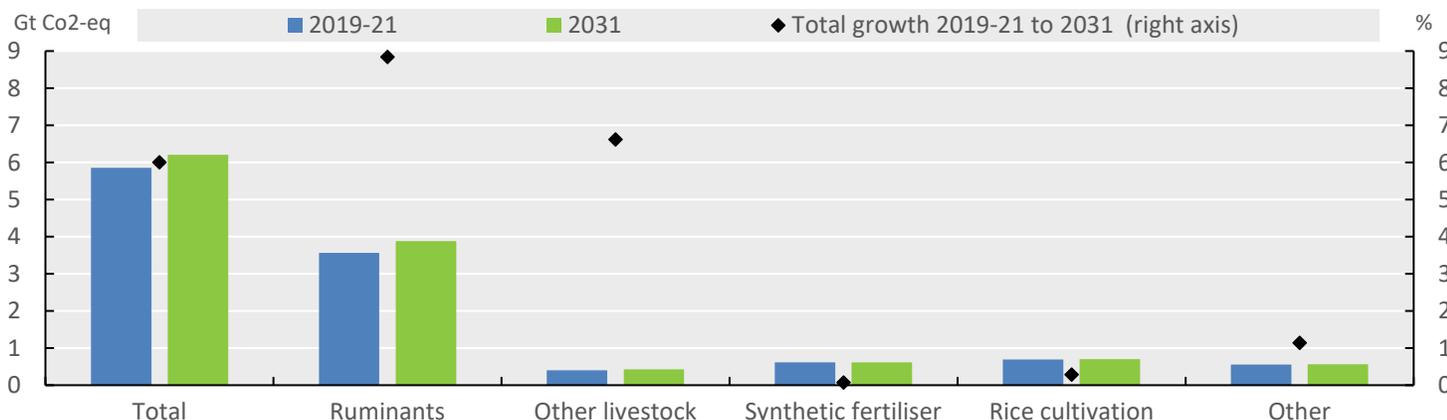
# Sources of growth in crop production



- Globally, yield growth is expected to account for most of the overall expansion in crop production over the next ten years.
- Growth rates in yields differ between regions and countries depending on the different technologies used and the agro-climatic context.
- Growth in land use is projected to increase mainly in Asian countries, and in Latin America.
- The increase in cropping intensity will be facilitated by innovative crop rotations, more widespread adoption of short season varieties, and no-till farming techniques.

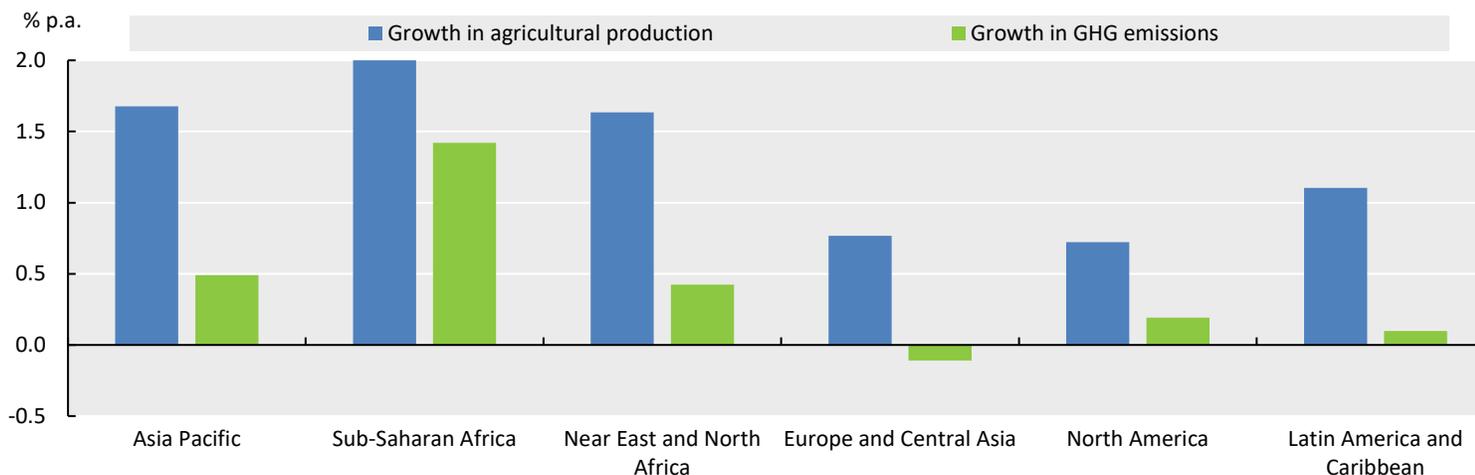
# GHG emissions from agriculture

Direct GHG emission from crop and livestock production, by activity



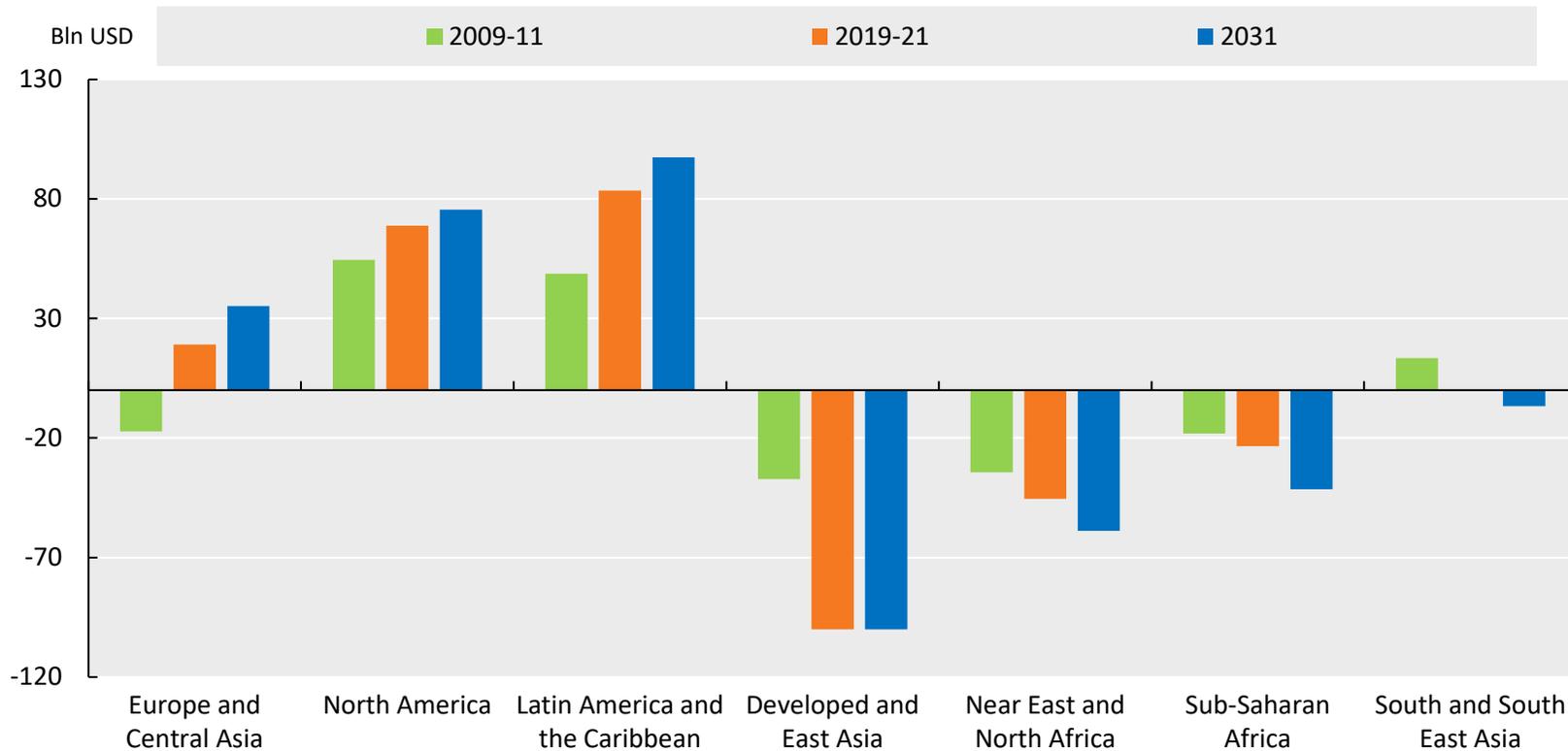
- Direct agricultural GHG emissions are projected to grow by 6% by 2030, assuming on-trend technological progress and no changes in policies.
- Livestock will account for 90% of this increase.
- Growth in agricultural production is expected to exceed the growth in direct GHG emissions from agriculture.
- Further reductions in the carbon intensity of agricultural production could be achieved by large-scale adoption of emission reducing technologies and agricultural practices.

Annual change in agricultural production and direct GHG emissions, 2022 to 2031



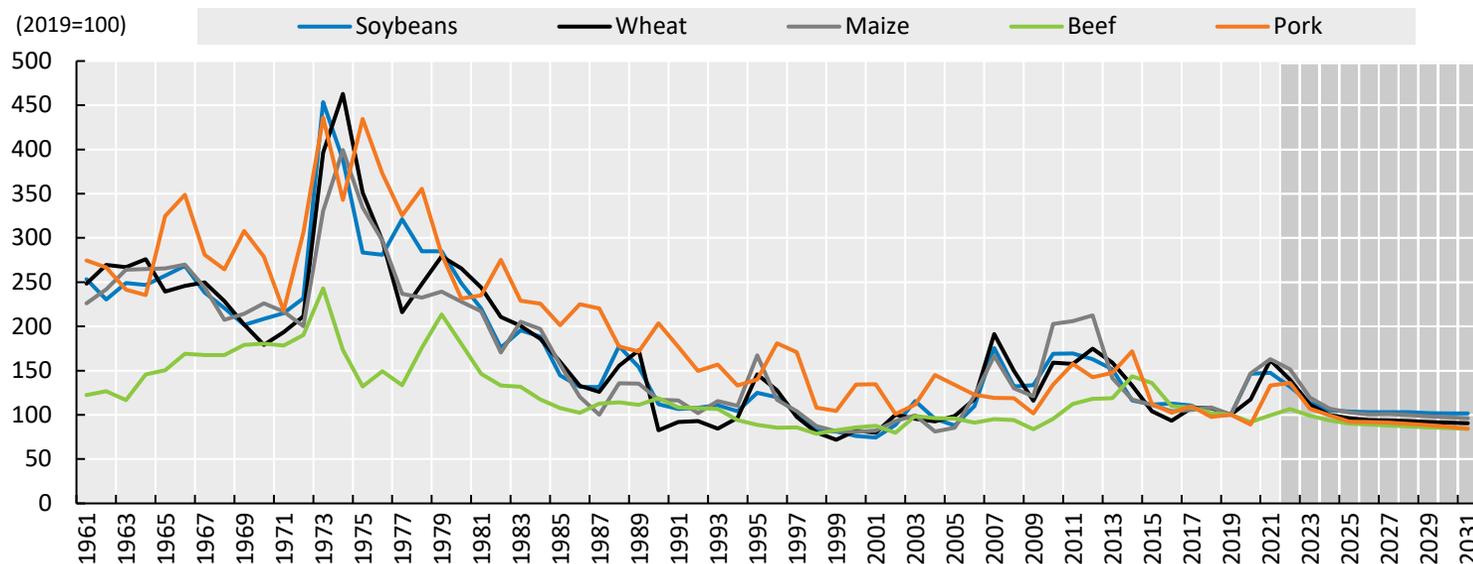
# Regional net trade of basic agricultural commodities

Net trade, in constant 2014-16 USD



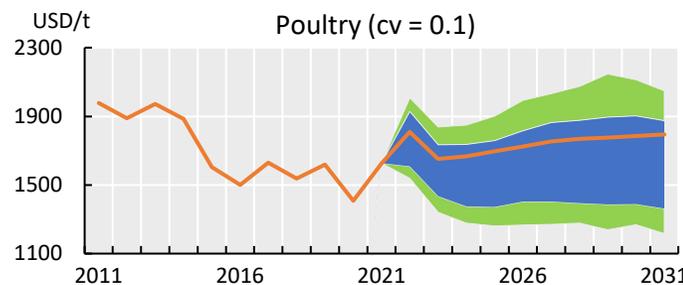
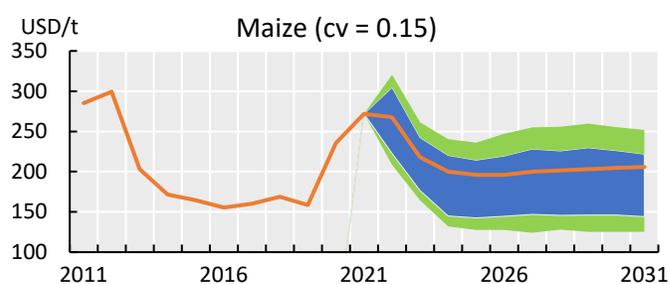
- Traditional exporters increase trade surpluses, while countries with a rising population and natural resource constraints will see an increase in imports.
- In the Americas net exports are projected to increase by 17% by 2031.
- Net imports from Developed and East Asia are projected to stabilise, with China as main region's importer.
- Net importers such as Pakistan, Iran and Asian least developed countries are expected to increase their net imports mainly due to population growth.

# Real prices of main commodities



- The increase of agricultural prices in real terms through much of 2020 and 2021 was due to tight global supplies and increased production costs in particular due to COVID-19-related supply chain disruptions.
- While prices of the commodities in the Outlook may remain high in the 2022-23 marketing year, they are expected to subsequently resume their long standing declining trend in real terms.

90% interval      75% interval      Baseline



- A simulation of potential future price ranges illustrates the uncertainties (lower graphs).