2. Regional briefs

This chapter describes key trends and emerging issues facing the agricultural sector in the six FAO regions, i.e. Asia and Pacific, Sub-Saharan Africa, Near East and North Africa, Europe and Central Asia, North America, and Latin America and the Caribbean. For each region, it provides background on key regional characteristics (e.g. population, per capita income, agro-ecological conditions and natural resources endowment) and highlights medium-terms projections for production, consumption, and trade for the period 2020-29.

2.7. Regional outlook: Latin America and the Caribbean

Background

Latin America and the Caribbean[1] region comprise about 8.5% of the global population and will add another 60 million people by 2029. Its urban population will grow by 66 million people, pushing the rate of urbanisation to 83%, which is the highest among developing regions. Most of the region's poor dwell in urban locations. The region's farm structures are highly diverse: large, commercial export-oriented farms dominate agriculture in the Southern Cone, particularly in Argentina and Brazil, but there are also some 15 million smallholder and family farms responsible for much of the region's food production.

Considerable economic uncertainty has impacted the region. Per capita incomes grew only at a rate of 0.1% in the last decade, with exchange rate volatility, particularly in Argentina. Incomes in the region are assumed to resume growth at 1.8% p.a. to an average of USD 12 000 per capita. The average share of food in household expenditures is estimated to be around 15% in 2017-19, implying considerable impacts of macro instability and food prices on welfare.[2]

Abundant in land and water, the region accounts for 13% of global production of agricultural and fish commodities and 25% of exports of such products, underscoring the importance to the region of trade openness at a global level. Export demand will therefore be the critical source of growth for the sector over the medium term.

Despite the importance of exports, the primary agriculture and fish sectors now play a modest role in the economy accounting for about 5% of Gross Domestic Product. As for other regions, this share is anticipated to decline further over the medium term.

Production

Agricultural and fish production in the Latin America and Caribbean region is projected to expand by 14% over the next ten years. Almost two thirds of this growth (65%) can be attributed to growth in crop production, about 28% is due to the livestock sector, and the remaining 7% originates from the expansion of fish output.

Intensive growth will be important to crop production expansion. Cropland use is projected to grow by 3% while crop area harvested will grow by 6%, due to an increase in multiple harvests per year. Total area harvested in the region will increase by 9 Mha, with nearly 54% and 19% coming from higher soybean from maize cultivation respectively. The region will remain the largest producer of soybeans with its global production share rising to over 54% by 2029. Average yields are expected to rise over the next ten years, and will account for most output growth in cereals, pulses, roots and tubers and sugarcane. Increased yields will account for 75% of the increase in production of maize, and over 50% for soybeans.

Livestock production growth will be based largely on intensive growth, with higher use of feed grains in production. Pasture area is expected to decline marginally by 2029, with the regions share of global pasture remaining at 17%. Bovine meat expansion will follow rising bovine numbers in Brazil and Argentina, as the herd expansion cycle is projected to remain strong. Low feed grain prices will support poultry and pork production, given feed-intensive production processes.

Fish production will recover from a contraction over the past ten years, with more than half of output growth attributable to the development of aquaculture in several countries across the region. Consumption of fish will also rise by 0.8 kg/capita, but at a slower pace than historical trends.

GHG emissions are projected to grow marginally by 4% p.a. over the next decade with an increase of 5% from animal sources. Emissions from crop sources are expected to remain unchanged by 2029.

Consumption

Per capita calorie intake is projected to rise to 3100 kcal/day, a rise of 78 kcal/day from the base period 2017-19, with over 60% of the increase coming from vegetal products, including cereals and vegetable oil. Calorie intake of sugar will decline following a longer-term decline in the region's sugar consumption. But the region will remain the largest consumers of sugar in the world, with an intake of 39 kg/capita per year, well above the global average of 24 kg/capita per year. Initiatives across the region have sought to address the rising prevalence of overweight and obesity.

Per capita protein intake may rise to 87 g/day, an increase over the period of 2.8 g/day. Almost 60% of the increase will come from animal products, with the largest increase due to higher consumption of milk products. For its middle-income profile, the region is a large meat consumer at almost 60 kg/yr, which is almost double world levels. However, per capita meat consumption is projected to rise by only 2.4% over the next decade, as consumers increase their intake of protein from other sources.

Increasing intensification of the livestock sector is expected to lead to a 35% increase in feed use over the period. Most of that increase will come from maize, whose feed use will expand by almost 50%, but protein meal is also projected to expand by 35%.

A high share of sugarcane production will continue to be directed to ethanol production, consuming up to 58% of sugarcane production as the Renovabio program in Brazil is expected to sustain the country's major role in ethanol markets. Ethanol production will expand by 8.3 bln L, accounting for 45% of global growth over the next ten years. A major uncertainty facing the sector will be how global energy markets evolve.

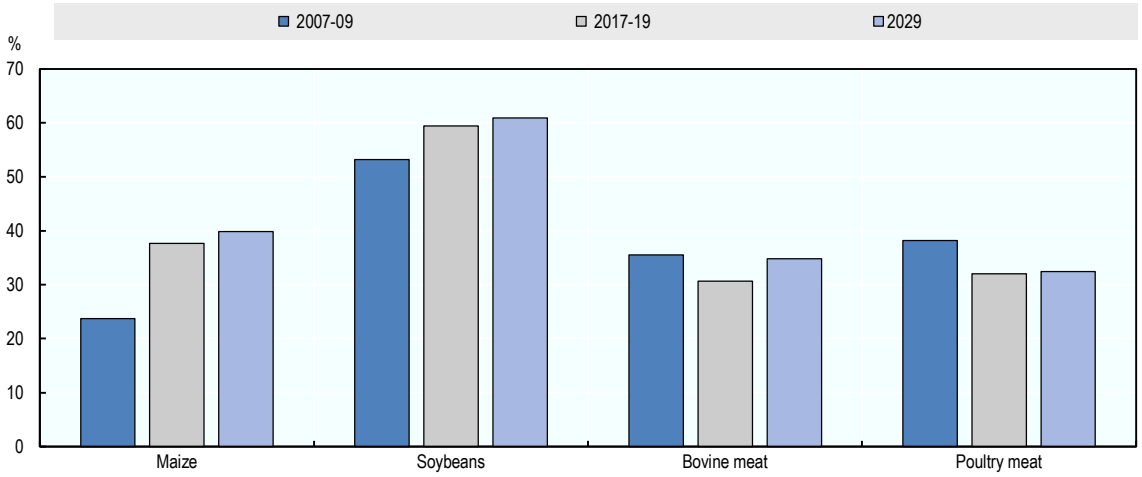
Trade

Trade is key to the success of the agriculture and fish sectors, with the share of output traded increasing each year – reaching over 28% by 2029 for these sectors. For the two main exporters, Argentina's share of output exported may rise to 52% and that of Brazil's to 34%. Paraguay's share of output exported will be higher at almost 70%. However, many countries in the region are net importers of the commodities covered in this *Outlook*, such as Mexico and Peru.[3] These data do not include fruit and vegetable trade, and countries such as Costa Rica and Ecuador export a large share of their fruit and vegetable production.

The region's expansion in supplies will allow it to remain an important global exporter of maize, soybean, beef, poultry and sugar. The market shares of the region for key commodities will rise over the medium term. By 2029, the region will account for 60% of global soybean and protein meal exports, 40% of global maize exports, 39% of sugar exports and 35% of bovine meat and poultry meat exports.

The status of global openness to trade will have important consequences for the sector. Trade agreements, and in particular trade relations between China and the United States, will play an important role in affecting the region's trade profile. A finalised EU-Mercusor Free Trade Agreement would support further growth in the agriculture and fish sectors of the region.

Figure 2.1. Trends in export shares of the Latin America and the Caribbean



Source: OECD/FAO (2020), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-outl-data-en.

StatLink https://doi.org/10.1787/888934142007

Figure 2.2. Change in area harvested and land use in Latin America and the Caribbean

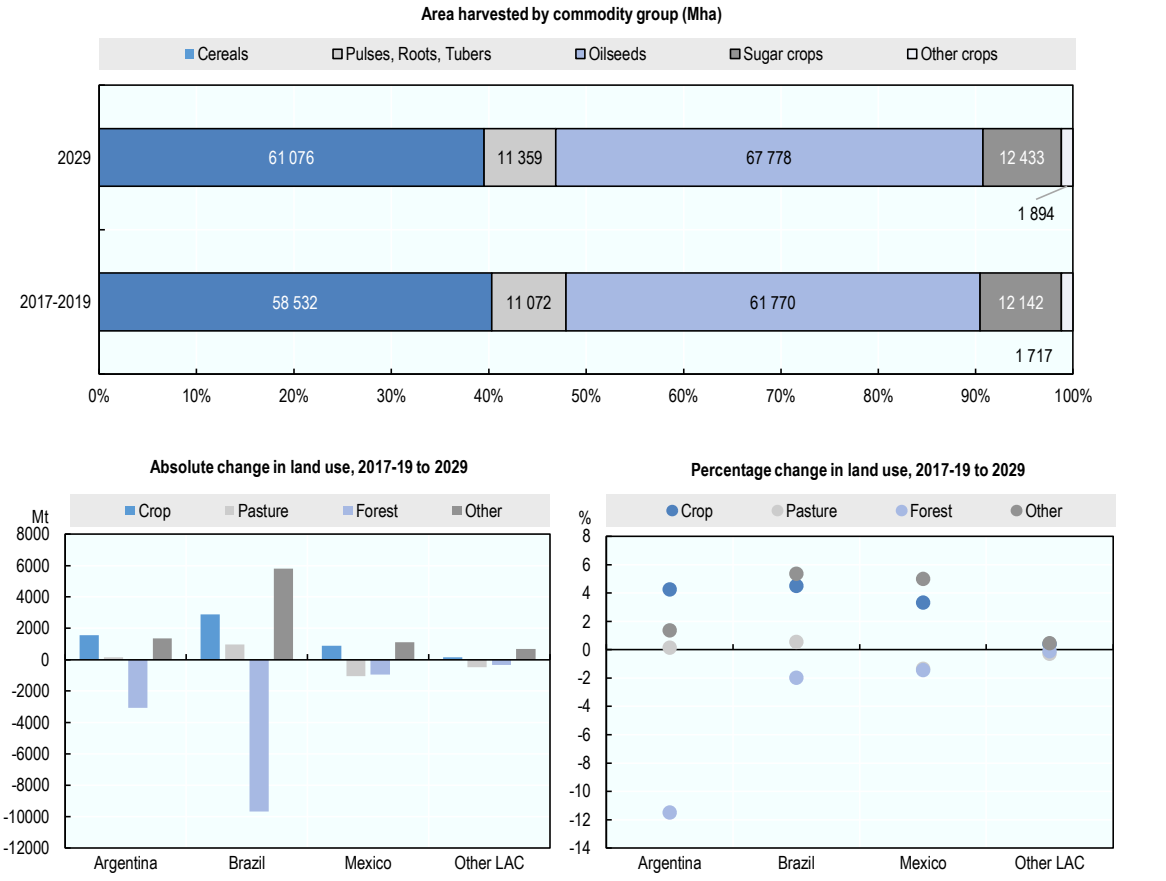
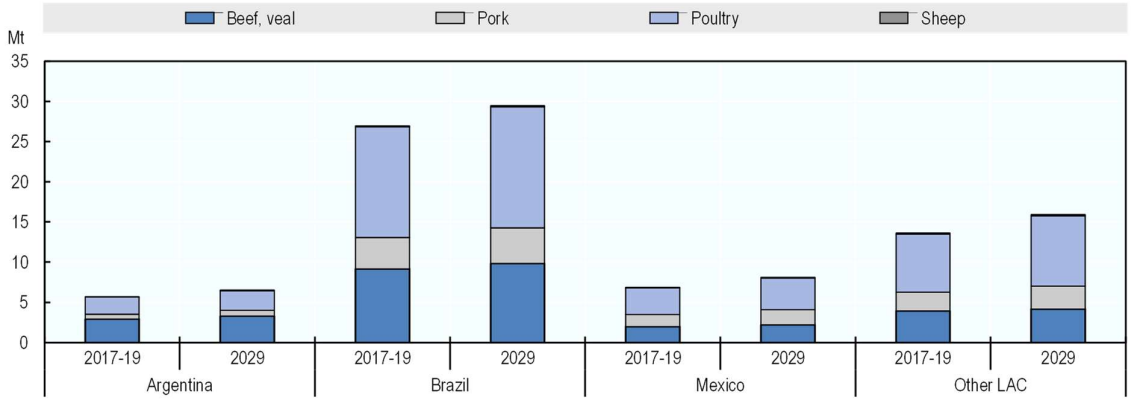
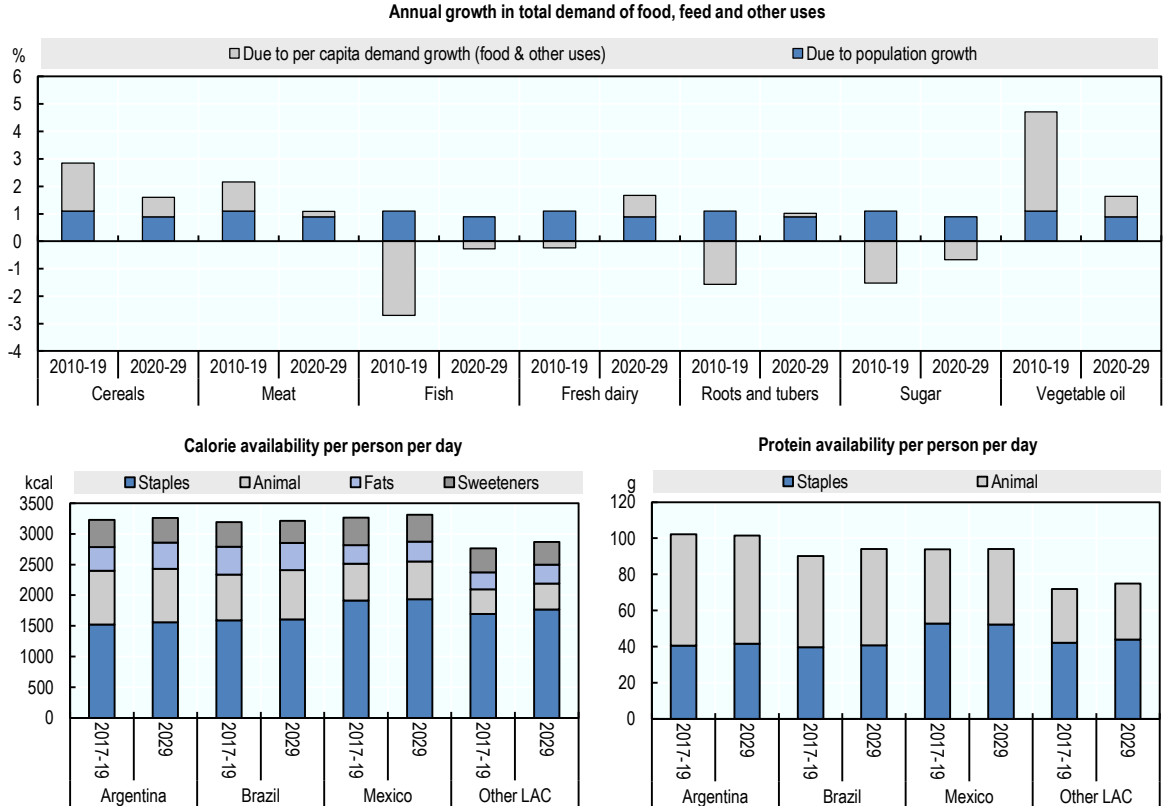


Figure 2.3. Livestock production in Latin America and the Caribbean



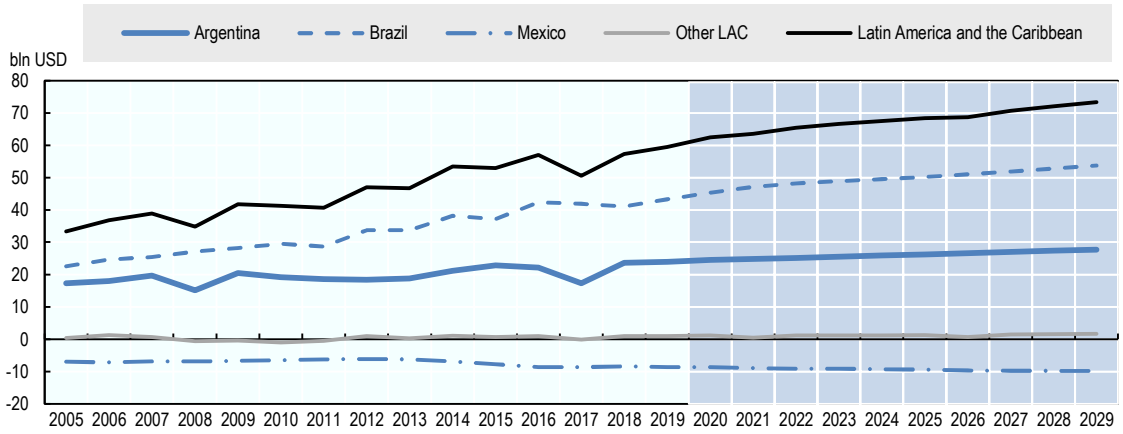
Source: OECD/FAO (2020), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-outl-data-en.

Figure 2.4. Demand for key commodities and food availability in Latin America and the Caribbean



Note: Upper panel - population growth is calculated by assuming per capita demand remains constant at the level of the year preceding the decade. Lower panel – Fats: butter and oils. Animal: egg, fish, meat and dairy except for butter. Staples: cereals, pulses and roots.

Figure 2.5. Agricultural trade balances in Latin America and the Caribbean



Note: Net trade (exports minus imports) of commodities covered in the *OECD-FAO Agricultural Outlook*, measured at constant 2004-06 USD.
Source: OECD/FAO (2020), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-outl-data-en.

StatLink https://doi.org/10.1787/888934142026

Table 2.1. Regional Indicators: Latin America and Caribbean Region

	Average			%	Growth [2]	
	2007-09	2017-19 (base)	2029	Base to 2029	2010-19	2020-29
Macro assumptions						
Population	577 518	643 959	703 584	9.26	1.06	0.78
Per capita GDP[1] (kUSD PPP)	9.59	10.25	12.15	18.50	0.09	1.81
Production (bln USD)						
Net value of agricultural and fisheries[3]	303.6	352.8	401.8	13.88	1.38	1.17
Net value of crop production[3]	95.8	131.7	157.4	19.53	3.17	1.44
Net value of other not incl. crop production[3]	74.7	80.5	88.7	10.16	-0.19	1.09
Net value of livestock production[3]	96.1	108.6	121.5	11.82	1.12	0.97
Net value of fish production[3]	37.0	32.0	34.2	7.01	-0.21	0.89
Quantity produced (kt)						
Cereals	171 881	253 450	308 351	21.66	3.57	1.62
Pulses	6 752	8 028	8 818	9.85	2.61	1.18
Roots and tubers	14 842	14 015	15 545	10.92	-0.51	1.00
Oilseeds[4]	123 817	189 096	230 364	21.82	4.35	1.47
Meat	44 022	53 135	59 999	12.92	1.54	1.01
Dairy[5]	7 156	7 959	9 582	20.39	0.10	1.76
Fish	17 952	15 529	16 623	7.05	-0.21	0.89
Sugar	53 213	51 207	61 329	19.77	-1.00	0.96
Vegetable oil	19 210	27 446	33 536	22.19	3.32	1.77
Biofuel production (Mn L)						
Biodiesel	1 937	8 686	10 586	21.88	6.53	1.84
Ethanol	27 513	37 163	44 767	20.46	4.21	1.29
Land use (kha)						
Total agricultural land use	694 485	706 480	711 534	0.72	0.15	0.06
Total land use for crop production[6]	159 766	167 231	172 708	3.27	0.40	0.25
Total pasture land use[7]	534 719	539 249	538 827	-0.08	0.07	0.00
GHG emissions (Mt CO2-eq)						
Total	885	922	962	4.32	0.29	0.30
Crop	109	129	130	0.15	0.64	0.27
Animal	775	792	832	5.00	0.23	0.30
Demand and food security						
Daily per capita caloric availability[8] (kcal)	2 918	3 035	3 096	2.01	0.34	0.22
Daily per capita protein availability[8](g)	84	85	85	0.84	-0.32	0.10
Per capita food availability (kg)						
Staples[9]	162.5	166.1	170.0	2.33	0.21	0.17
Meat	53.9	60.8	62.2	2.29	0.69	0.22
Dairy[5]	12.8	12.8	13.9	8.38	-0.71	0.96
Fish	9.6	10.6	11.4	6.97	1.33	0.63
Sugar	45.8	39.4	36.9	-6.40	-1.75	-0.52
Vegetable oil	17.7	19.2	20.2	5.22	0.57	0.48
Trade (bln USD)						
Net trade[3]	38.5	55.8	73.3	31.44	4.12	1.72
Net value of exports[3]	64.6	91.9	112.8	22.75	3.76	1.47
Net value of imports[3]	26.1	36.1	39.4	9.31	3.21	1.02

	Average			%	Growth [2]	
	2007-09	2017-19 (base)	2029	Base to 2029	2010-19	2020-29
Self-sufficiency ratio[10]						
Cereals	94.0	105.7	109.0	3.13	0.79	0.28
Meat	112.2	109.4	110.8	1.32	-0.14	0.01
Sugar	203.5	205.4	235.1	14.47	-0.19	0.60
Vegetable oil	146.5	132.0	137.1	3.88	0.54	0.30

Notes: 1. Per capita GDP expressed in thousands of real USD. 2. Least square growth rates (see glossary). 3. Net value of agricultural and fisheries output follows FAOSTAT methodology, based on the set of commodities represented in the Aglink-Cosimo model valued at average international reference prices for 2004-06. Projections for not included crops have been made on the basis of longer term trends. 4. Oilseeds represents soybeans and other oilseeds. 5. Dairy includes butter, cheese, milk powders and fresh dairy products, expressed in milk solid equivalent units. 6. Crop Land use area accounts for multiple harvests of arable crops. 7. Pasture land use represents land available for grazing by ruminant animals. 8. Daily per capita calories represent availability, not intake. 9. Staples represents cereals, oilseeds, pulses, roots and tubers. 10. Self-sufficiency ratio calculated as Production / (Production + Imports - Exports).
Source: OECD/FAO (2020), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-outl-data-en.

Notes

[1] Other LAC: Chile, Colombia, Paraguay, Peru and South and Central America and the Caribbean. For mentioned regions, see Summary table for regional grouping of countries.

[2] This estimate is made based on the GTAP (2011) database, using estimates for food expenditures and GDP.

[3] This analysis is based on USD constant 2004-06 international reference prices for commodities. The data include values for commodities covered in the *Outlook.*