Regional brief: Latin America and the Caribbean

The *Outlook's* regional briefs highlight broad trends for the regions defined by the FAO in the implementation of its global workplan. Recognising the diversity across the regions, the intention is not to compare results across regions. Instead, these briefs illustrate some of the latest regional developments, highlighting responses to global challenges and emerging trends within them and relating these to the main messages of the *Outlook* publication. The assessments generally compare the end point of the *Outlook's* projection (2030) to the base period of 2018-20. These briefs acknowledge that the impact of the COVID-19 pandemic, which is still playing out globally, and the response to it differs across the regions. The briefs do not contain a specific quantitative assessment of the pandemic's impact, but they reflect the latest available macro-economic projections and the extent to which the actions imposed to curb the spread of COVID-19 influenced this environment. Consequently, the trends and issues presented in this chapter are those which are expected to underpin the *Outlook* as economies re-emerge from the unexpected shock of the novel corona virus, assuming that its effects on food production, consumption and trade will gradually moderate.

Background

The Latin America and Caribbean[1] region comprises about 8.5% of the global population and will add another 58 million people by 2030. The region has urbanised rapidly and by 2030, 84% of the population is expected to reside in urban settings. This makes it the most urbanised amongst developing regions. This rapid urbanisation implies the most of the region's poor dwell in urban locations, but the incidence of poverty in rural areas remains persistently high. 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.

Even prior to COVID-19, the region was affected by considerable economic uncertainty, which has only been heightened by the pandemic. On a per capita basis, incomes grew by only 0.2% over the past decade. Exchange rates, particularly in Argentina, were exceptionally volatile, in many cases around a rapidly depreciating trend in nominal terms. The region has been particularly hard hit by the pandemic and in 2020, per capita GDP declined by 8.4%. As in many other developing regions, exchange rates depreciated sharply. In countries such as Argentina, whose economy already faced structural challenges prior to the pandemic, the income contraction was even sharper. After initially making good progress in decreasing the prevalence of undernourishment in the region, it had started to increase again post 2015. The combined impact of economic recession, deteriorating financial conditions and value chain disruptions could have accelerated this trend, pushing a further 16 million people into extreme poverty in 2020 and thereby exacerbating food insecurity. The year-on-year increase in the prevalence of moderate to severe food insecurity in the Latin America and Caribbean region was larger than any other region in 2020. From a

substantially reduced base, per capita GDP in the region is expected to recover by an annual average of 1.5% over the coming decade. This will enable average income levels to rise to USD 10 100 per capita by 2030, 22% below the global average. The average share of food in household expenditures is estimated to be around 13% in the period 2018-2020, implying that macro instability and food prices may have considerable impact on access to food in the region.[2]

Abundant in land and water, the region accounts for 13% of the global production value of agricultural and fish commodities and 17% of the net export value of such products. This share is set to increase further over the coming decade, underscoring the importance to the region of trade openness at a global level. Export demand will be the critical source of growth for the sector over the medium term.

Despite the importance of exports, the primary agriculture and fish sectors account for about 5% of Gross Domestic Product. This share could increase in the short term, given agricultures greater resilience to the imposition of economic restrictions resulting from the pandemic and the expanded role of its agricultural exports at a time when several countries outside the region constrained exports to ensure domestic supply. As for other regions, this share is anticipated to decline marginally in Latin America and Caribbean 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. Just under 60% of this growth is attributed to crop production, while about 37% is due to expansion of the livestock sector. Merely 3% originates from the development of fish output.

Despite the region's land abundance, intensification will be important to crop production expansion. Crop land use is projected to grow by 3%, while crop area harvested will grow by 5%, due to rising prevalence of double cropping. Of this 7.7 Mha growth in harvested area by 2030, nearly 53% and 23% are attributable to additional cultivation of soybeans and maize respectively. The region will remain the largest producer of soybeans, with its global production share exceeding 54% by 2030, a minor increase from the base period. Average yields are expected to rise over the next ten years by around 10% for most major commodities and will account for a substantial share of production growth.

Livestock production growth will benefit from productivity gains and further intensification, with increased use of feed grains in production. Poultry production will account for almost 70% of growth in meat production by 2030, with bovine and pork production constituting 17% and 14% respectively. Despite short term increases in the early years of the outlook, feed grain prices will be favourable over the medium term, supporting expansion of poultry and pork production, both of which rely on intensive use of feed in production systems. Bovine meat expansion will essentially result from productivity gains and increased carcass weights, with herd numbers remaining almost unchanged by 2030.

Fish production will recover from a contraction over the past ten years to register growth of 5% by 2030. Output growth is almost exclusively attributable to the development of aquaculture in several countries across the region. Captured fisheries are expected to be volatile over the projection period, influenced by El Niño effects, which tend to affect fish (mainly anchoveta) used for the production fishmeal and fish oil.

GHG emissions are projected to grow marginally by 0.1% p.a. over the next decade. The bulk of this increase accrues from crop production, where emissions will increase by 4.4% over the ten-year period. Emissions from animal sources will remain fairly stable.

Consumption

Following a decline in 2020 & 2021 owing to the impact of the pandemic on purchasing power, per capita calorie intake is projected to rise in the medium term to reach 3074 kcal/day by 2030, a gain of 50 kcal/day from the base period 2018-20. Almost 57% of this increase is attributed to vegetal products, mainly cereals and vegetable oil. Sugar consumption will decline, in line with a longer term trend of reducing sugar intake in the region. Despite the decline, Latin America and the Caribbean will remain the largest sugar-consuming region in the world on a per capita basis. Initiatives such as improved labelling legislation have been imposed across the region in an effort to address the rising prevalence of overweight and obesity.

Per capita protein intake is expected to rise to 89 g/day by 2030, an increase over the period of 2.6 g/day. Animal products will contribute the bulk of the increase at almost 56%, with rising consumption of dairy products contributing the most to this increase. For its middle-income profile, the region's meat consumption is already high at almost 61 kg/year, almost double the average world level. However, per capita meat consumption is projected to rise by only 3.8% over the next decade, as consumers increase their intake of protein from other sources. Consumption of fish will rise by only 0.2 kg/capita, merely half of the growth observed over the past decade.

Increasing intensification of the livestock sector is expected to lead to an 18% increase in feed use over the period. Most of that increase will come from maize, whose feed use will expand by 21%, but protein meal is also projected to expand by 18%. This implies that maize and protein meal will constitute more than 85% of additional feed use between them.

The share of sugarcane output directed to ethanol production is set to decline marginally by 2030, a reversal of the trend observed over the past decade on the back of slowing demand growth globally. Nevertheless, ethanol production from the region is still expected to increase 4% by 2030 relative to the base period, to contribute 26% of global growth in ethanol production. Brazil, with its Renovabio program, is the biggest ethanol producer in the region and will remain an important contributor to the global market. The evolution of global energy and transportation sectors will remain a major uncertainty facing the region's biofuel sector.

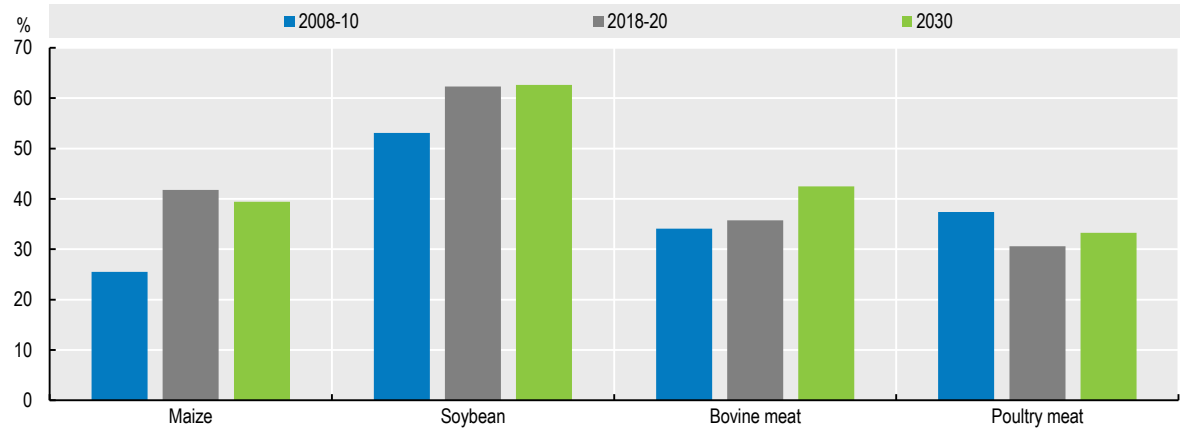
Trade

Trade is key to the success of the region's agriculture and fish sectors, making it less vulnerable to exogenous shocks and economic risks within the region. The share of output traded in the global market has also increased consistently in the past. Over the coming decade, the net value of exports from the region is projected to expand by 31%, which is only just more than half of the rate achieved over the past ten years. This reflects a significant slowdown in export growth from both Brazil and Argentina, which are the biggest exporters in the region. With exports of fruit and vegetables from countries such as Costa Rica and Ecuador remaining strong, the share of net export value in the Latin America and Caribbean region's agriculture and fish production value is set to reach 50% by 2030.

The region's expansion in supplies will allow it to remain an important global exporter of maize, soybean, beef, poultry, fish meal, fish oil, sugar and ethanol. With the exception of maize which declines and soybeans which stabilises, the region will grow its share in the global market for all of the aforementioned commodities. By 2030, it will account for 63% of global soybean exports, 56% of global sugar exports, 44% of global fish meal exports, 42% of global beef exports and 33% of global poultry and fish oil exports.

The extent 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. The finalisation of the EU-Mercosur Free Trade Agreement could expand trade opportunities and thereby support further growth in the agriculture and fish sectors of the region. While the benefits to the region of a trade orientated global market is clear, improved integration and expanded trade within the region will diversify market opportunities and therefore further bolster the sectors resilience.

Figure 1. Trends in export market shares of the Latin America and the Caribbean



Source: OECD/FAO (2021), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-outl-data-en.

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Figure 2. Change in area harvested and land use in Latin America and the Caribbean

Source: OECD/FAO (2021), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-outl-data-en.

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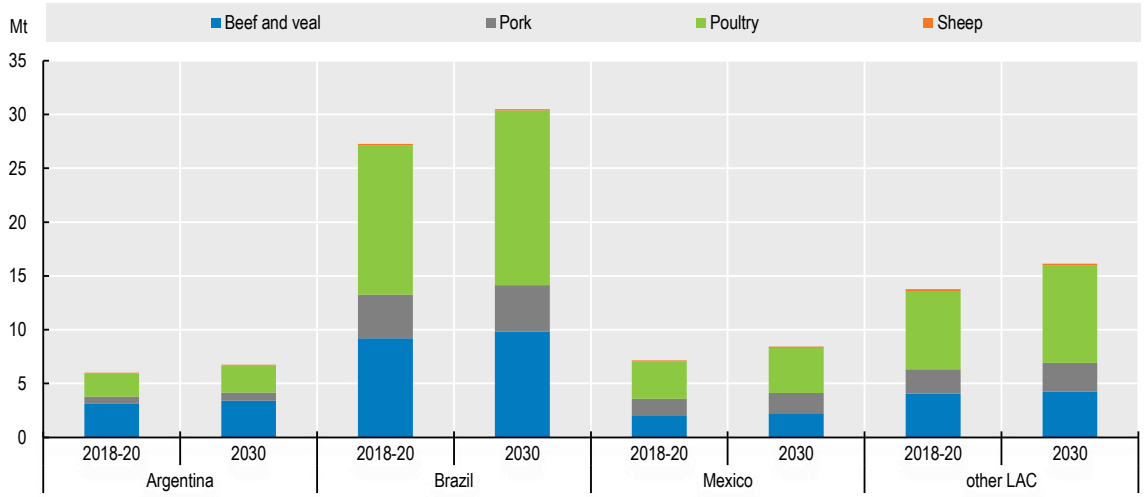
Figure 3. Livestock production in Latin America and the Caribbean



Source: OECD/FAO (2021), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-outl-data-en.

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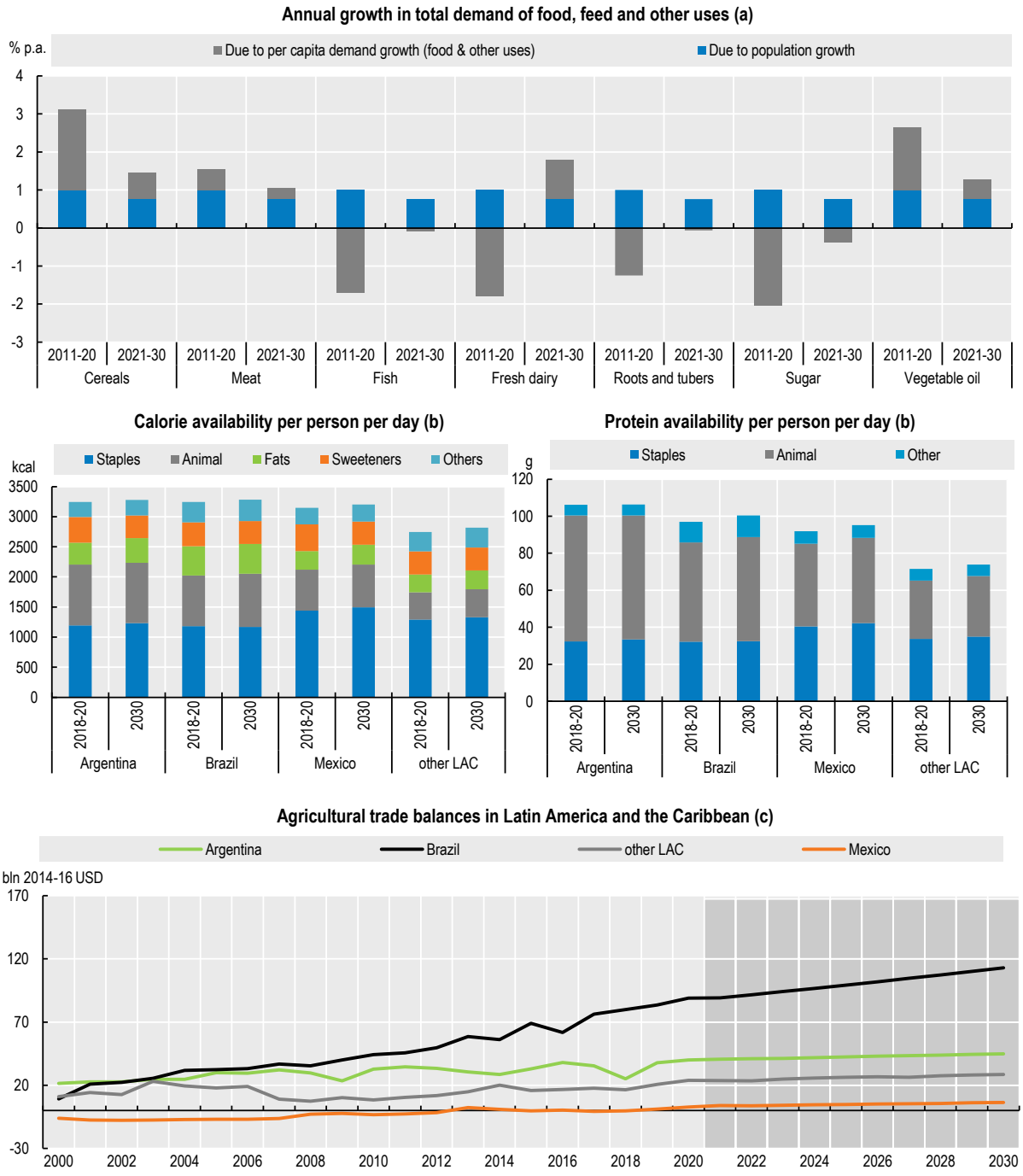
Figure 4. Demand for key commodities and food availability in Latin America and the Caribbean



Notes: Estimates are based on historical time series from the FAOSTAT Food Balance Sheets and trade indices databases and include products not covered by the *Outlook*. a) Population growth is calculated by assuming per capita demand constant at the level of the year preceding the decade. b) Fats: butter and oils; Animal: egg, fish, meat and dairy except for butter; Staples: cereals, oilseeds, pulses and roots. c) Include processed products, fisheries (not covered in the FAOSTAT trade index) based on outlook data.

Source: FAO (2021). FAOSTAT Value of Agricultural Production Database, http://www.fao.org/faostat/en/#data/QV; OECD/FAO (2021), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-outl-data-en.

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Table 1. Regional Indicators: Latin America and Caribbean Region

	Average			%	Growth [2]	
	2008-10	2018-20 (base)	2030	Base to 2030	2011-20	2021-30
Macro assumptions						
Population ('000)	583 047	646 387	704 425	8.98	1.00	0.76
Per capita GDP[1] (kUSD)	9.16	9.18	10.10	10.01	-0.97	1.48
Production (bln USD)						
Net value of agricultural and fisheries[3]	437.5	530.1	603.4	13.82	1.74	1.26
Net value of crop production[3]	233.1	297.0	340.6	14.68	2.13	1.34
Net value of livestock production[3]	157.9	187.3	214.5	14.53	1.61	1.24
Net value of fish production[3]	46.6	45.9	48.4	5.41	-0.06	0.77
Quantity produced (kt)						
Cereals	174 515	276 504	316 084	14.31	3.88	1.47
Pulses	6 851	8 293	9 470	14.19	2.87	1.39
Roots and tubers	14 572	14 026	15 143	7.96	-0.35	0.81
Oilseeds[4]	5 179	6 091	6 714	10.23	2.15	1.20
Meat	45 072	54 202	61 837	14.09	1.69	1.21
Dairy[5]	8 893	9 812	11 688	19.12	0.38	1.65
Fish	16 589	16 376	17 270	5.46	-0.04	0.76
Sugar	55 170	55 457	63 685	14.84	-0.35	1.40
Vegetable oil	19 774	28 103	32 225	14.67	3.24	1.39
Biofuel production (mln L)						
Biodiesel	3352.36	8798.36	9415.10	7.01	5.28	1.05
Ethanol	29 634	38 512	40 075	4.06	4.57	1.26
Land use (kha)						
Total agricultural land use	693 627	712 729	718 220	0.77	0.27	0.07
Total land use for crop production[6]	159 841	174 147	179 781	3.24	1.00	0.28
Total pasture land use[7]	533 786	538 582	538 439	-0.03	0.05	0.00
GHG Emissions (Mt CO2-eq)						
Total	878	935	941	0.66	0.67	0.06
Crop	97	116	121	4.35	1.67	0.27
Animal	756	788	789	0.05	0.47	0.03
Demand and food security						
Daily per capita caloric availability[8] (kcal)	2 919	3 024	3 074	1.66	0.29	0.25
Daily per capita protein availability[8](g)	80.7	86.3	88.8	3.0	0.60	0.33
Per capita food availability (kg)						
Staples[9]	159.7	161.6	165.7	2.50	0.03	0.22
Meat	56.5	61.1	63.2	3.40	0.62	0.32
Dairy[5]	15.5	15.8	17.1	8.18	-0.36	0.80
Fish	8	9	9	3.40	0.73	0.44
Sugar	45	38	37	-3.50	-2.01	-0.37
Vegetable oil	18	19	21	7.19	0.40	0.73
Trade (bln USD)						
Net trade[3]	80.7	140.0	192.9	37.81	..	..
Net value of exports[3]	150.9	232.9	304.1	30.56	4.72	2.11
Net value of imports[3]	70.2	92.9	111.2	19.64	3.15	1.79
Self-sufficiency ratio[10]						
Cereals	98.3	108.9	108	-0.6	0.88	0.05
Meat	110.8	111.6	112.7	1.05	0.15	0.17
Sugar	210.4	230.9	244	5.9	0.77	0.81
Vegetable oil	129.1	131.3	132.8	1.1	0.5	0.13

Notes: 1. Per capita GDP in constant 2010 US dollars. 2. Least square growth rates (see glossary). 3. Net value of agricultural and fisheries data follows FAOSTAT methodology, based on the set of commodities represented in the Aglink-Cosimo model valued at average international reference prices for 2014-16. 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) * 100.

Source: OECD/FAO (2021), "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] Source OECD-FAO interpolated for 2018-20 from the database of the Global Trade Analysis Project (GTAP) 2011, using food expenditure and GDP data used in this *Outlook*.