

# Regional outlook: 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 work plan. Recognising the regional diversity, 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*. The assessments generally compare the end point of the *Outlook's* projection (2031) to the base period of 2019-21. This year, the large and diverse Asia Pacific region has been disaggregated into two separate briefs: Developed and East Asia, and South and Southeast Asia.

The impact of the COVID-19 pandemic, which is still playing out globally, and the response to it, differs across regions. While the briefs do not contain a specific quantitative assessment of the pandemic's impact, 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. Similarly, the impact of Russia's war against Ukraine may affect the various regions in the short term, but the briefs do not provide any quantitative analysis as to this impact. Consequently, the trends and issues presented in this chapter are those which are expected to underpin the *Outlook* as economies re-emerge from these recent unexpected shocks and assume that the effects on food, feed and fuel production, consumption and trade will gradually moderate.

## **Background**

### *Strong potential to expand production but poverty is a brake on food consumption*

The Latin America and Caribbean<sup>1</sup> region is home to about 8.5% of the global population, growing at 0.7% p.a., which will add another 57 million people by 2031. As the most urbanised amongst developing regions, 84% of the population is expected to reside in urban settings by 2031. While this also implies that most of the region's poor dwell in urban locations, the incidence of poverty in rural areas remains persistently high. Highly diverse farm structures range from large, commercial export-oriented farms dominating agriculture in the Southern Cone, particularly in Argentina and Brazil, to some 15 million smallholder and family farms responsible for much of the region's food production (OECD/FAO, 2019<sub>[13]</sub>).

For some time the region has been affected by considerable economic uncertainty, which has been heightened further by the COVID-19 pandemic.<sup>2</sup> On a per capita basis, incomes contracted by 1.8% per annum over the past decade. Given pre-existing structural challenges, the effects of COVID-19 were particularly severe in the region and per capita GDP declined by 7.3% in 2020. Despite a strong rebound of 5.3% in 2021, absolute income per capita is only projected to surpass pre-pandemic levels by 2023. Given the extent of differing pre-existing challenges within the region, the pandemic induced recession was also greater in some countries. For instance, in Argentina, the exchange rate had already been on a steep depreciating trend prior to 2020, but the depreciation accelerated through the pandemic and real

GDP per capita contracted by almost 11%. The recovery in Argentina is also more prolonged, and while per capita income will surpass 2019 levels by 2022, it remains lower than that of a decade earlier.

Following good initial progress to reduce it, the prevalence of undernourishment in the region started to increase again post 2014. The combined impact of economic recession, deteriorating financial conditions and value chain disruptions accelerated this trend and 2020 represented the biggest year-on-year increase in undernourishment and food insecurity since the initiation of the upward trend. Between 2014 and 2020, the number of hungry people increased by 79%, and in 2020 those in moderate or severe food insecurity constituted 41% of the population. The Economic Commission for Latin America and the Caribbean suggests that the pandemic pushed the extreme poverty rate in the region to 13.8% in 2021, having increased to 13.1% in 2020. Compared to 2019, this has left 13 million additional people in extreme poverty over a two-year period, significantly exacerbating food insecurity.

In the medium term, per capita GDP in the region is expected to rise by an annual average of 1.6% to reach USD 10 190 per capita by 2031, which is 23% below the global average and only 3% higher than its level in 2014. The share of food in household expenditures is estimated to be around 14% on average for 2019-2021. Macroeconomic instability and food prices may have considerable impact on food security in the region in the coming decade.<sup>3</sup>

Abundant in land and water, the region accounts for 13% of the global production of agricultural and fish commodities and 17% of the net export value of these 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 over the medium term. Export growth has been aided by increased competitiveness, with total factor productivity growing by 40% from 2000 to 2019.<sup>4</sup> Despite falling labour input, output growth has been underpinned by rising material inputs, notably fertiliser which doubled over the period 2000 to 2019. These inputs will face challenges of higher costs early in the *Outlook* period, and may constrain growth. Despite the region's significant export orientation, intra-regional trade is low and there are some countries in the region such as Panama and El Salvador which are net importers

Despite the importance of exports, the agriculture and fish sectors account for about 10% of GDP. This share increased in 2020 due to agriculture's resilience and exemption from lockdown restrictions. It could rise further in the short-term if supply constraints from Russia's war against Ukraine result in prolonged higher prices in export markets, which would induce higher production. However, this share of agriculture and fish in GDP is anticipated to decline marginally in Latin America and Caribbean over the medium term. The agricultural and fish sectors also face some challenges, having been increasingly affected by adverse climate events and recently high transport, energy and fertiliser costs.

Despite being the biggest net exporter amongst the regions in the *Outlook*, the Latin America and Caribbean region still faces major challenges in reducing food insecurity. Much of this emanates from income distributional issues and resultant affordability constraints, and not the availability of food in the region. Export led growth has made the sector less vulnerable to macro-economic instability within the region, but implies that volatility in the global market and a renewed focus on domestic supply chains in many parts of the world following the pandemic could affect its growth prospects. Export growth from the region is projected to slow relative to the recent past, in line with slower production growth, but also weakening global import demand. The region also faces challenges associated with increased concentration of exports by destination, exposing export demand to higher market risks.

## **Production**

### *Good prospects for higher productivity for crops and livestock*

Agricultural and fish production in the region is projected to expand by 14% over the next ten years. Around 64% of this growth emanates from crop production, about 28% from the livestock sector and the remaining 8% originates from fish.

Intensification is expected to play an important role in expanded crop production, despite the region's land abundance. With more double cropping, the harvested area is set to expand by 6.7%, with a concomitant increase in cropland use of only 3.4% by 2031. Among the 12.4 Mha growth in harvested area by 2031, nearly 3.2 Mt and 2.6 Mt, respectively, are attributable to additional cultivation of soybeans and maize. The region will remain the largest producer of soybeans in the world, accounting for 53% of global production by 2031. This implies that any weather related supply reductions from the region, can impact significantly on world prices. Assuming more favourable weather conditions, the region has ample potential to increase production to fill possible supply constraints with a prolonged war. The region's contribution to global cereal production is smaller, but its share of maize production is set to rise to almost 18% by 2031.

Productivity gains have contributed greatly to crop production growth in the past. For major crops such as maize and soybeans, yields improved by 23% and 13%, respectively, over the past decade. This trend is expected to continue, with average yield gains of around 10% projected by 2031 for most major crop commodities. This enables continued improvement in the net value of crop production per hectare of land, which is already the second highest amongst the regions in this *Outlook* and set to rise by a further 1.2% p.a. over the coming decade. The region is an intensive user of fertiliser, second only to the Developed and East Asia region, and imports large quantities, suggesting that sharp increases in fertiliser costs, exacerbated by the war could potentially constrain yield growth and output in the short term.

Livestock production growth will also benefit from productivity gains and further intensification, with increased use of feed grains. Poultry production will account for more than 55% of growth in meat production by 2031, with bovine and pork production accounting for 29% and 16%, respectively. Despite short-term pressure in the early years of the *Outlook*, meat to feed grain price ratios will be favourable over the medium-term, boosting the expansion of poultry and pork production, both of which rely on intensive use of feed in production. Bovine meat expansion will result from productivity gains, increased carcass weights, and 3% expansion of herd numbers by 2031 to yield growth of 10.8%.

Fish production will recover from a modest contraction over the past ten years to register growth of 12% by 2031. The development of aquaculture in several countries across the region is the predominant driver of fish output, contributing more than 60% of additional production by 2031. 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 3.2% over the ten-year period, compared to an increase of 2.3% from livestock production. However, relative to the net value of agricultural production, emissions per unit value of output are set to decline albeit at a slower rate than in the past.

## **Consumption**

### *Consumers are slowly changing dietary patterns*

Following a short-term decline, influenced by the impact of the pandemic on purchasing power and the prolonged recovery, average per capita calorie intake is projected to rise in the medium term to reach 3077 kcal/day by 2031. This means an increase of 60 kcal/day from 2019-21 levels and is mainly attributed to animal products. The rise in calories obtained from plant-based foods is limited by a large decline of sweeteners (-28kcal) and possibly pointing to increasing health awareness amongst consumers. 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 school feeding programs and front-of-package labelling legislation have been imposed across the region in an effort to address the double challenge of rising prevalence of overweight and obesity, but also persistent challenges of food insecurity and nutritional

quality. Food quality amongst low-income segments of the population tends to be affected by persistent poverty challenges.

Per capita protein intake is expected to rise to 89 g/day by 2031, an increase over the period of 3.1g/day. Animal products will contribute the bulk of the increase at over 70%, with higher consumption of dairy products contributing the majority. For its middle-income demographic 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 3.3% over the next decade, as consumers increase their intake of protein from other sources. Consumption of fish, which on a per capita basis is only about half the world average, will rise by only 1 kg/capita to 10kg, comparable to the past decade.

Increasing intensification of the livestock sector is expected to support a 15% increase in feed use by 2031. Two thirds of that increase will come from maize, whose feed use will expand by 18%, but protein meal is also projected to expand by 13%, which will account for 19% of additional feed use by 2031. As such, maize and protein meal together will contribute over 75% of additional feed use.

Despite a fairly constant share of sugarcane use, ethanol production from the region is set to increase 6% by 2031 relative to the base period, contributing 15% of global growth in ethanol production. Brazil, with its Renovabio programme, is the biggest ethanol producer in the region and will remain an important supplier to the global market. While high crude oil prices should boost demand for biofuels in the short-term, the evolution of global energy and transportation sectors in the medium-term will remain a major uncertainty facing the region's biofuel sector.

## **Trade**

### *Open trade orientation is crucial for the region's agri-food sector*

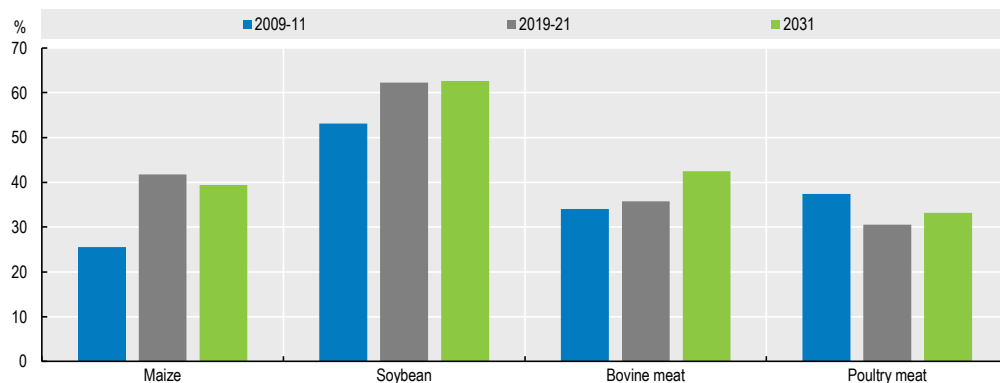
As a major agricultural surplus producer, exports have been a key component driving agricultural growth, reducing the sector's vulnerability to exogenous shocks and economic risks within the region. The rate of export growth has enabled the share of exports in total agricultural production to increase consistently, along with the region's contribution to global trade. Over the past decade its trade surplus almost doubled and its share in global exports grew to 17%. By 2031, the region is expected to increase its trade surplus by a further 28% to account for 18% of global exports. The deceleration in export growth reflects a slowdown in Brazil, which contributes more than half of the region's exports. Nevertheless, while slower than the 6% p.a. achieved over the past decade, Brazil's export growth is still expected to remain above 2% p.a. and, combined with strong growth in fruit and vegetable exports from Mexico, Costa Rica and Ecuador, the share of net export value in the region's agriculture and fish production should approach 50% by 2031.

Robust supply growth will enable the region to consolidate its position as a major exporter of maize, soybean, beef, poultry, fish meal, fish oil, sugar and ethanol. With the exception of fishmeal, ethanol, and sugar, the region will increase its share in the global market for all of the aforementioned commodities. By 2031, it will account for 61% of global exports of soybeans, 59% of sugar, 45% of fish meal, 43% of maize, 40% of beef and fish oils, 32% of poultry and 25% of ethanol.

Given the importance of the region in the global market, the extent of openness to trade will have significant consequences for the sector. The pandemic and associated restrictions resulted in multiple bottlenecks in global trade systems, adding costs and highlighting risks in global supply chains. The extent to which this influences trade will be crucial for the region. At the same time, the ability to respond to supply constraints from the Black Sea region while the war persists could enable it to increase market share in the short-term. The EU-Mercosur Free Trade agreement and the Regional Comprehensive Economic Partnership could further expand trade opportunities, but trade relations outside of the region, such as those between China and the United States can also play a role. While the benefits to the region of a trade orientated global market are clear, improved internal market integration and functioning of SMEs, cooperatives and family

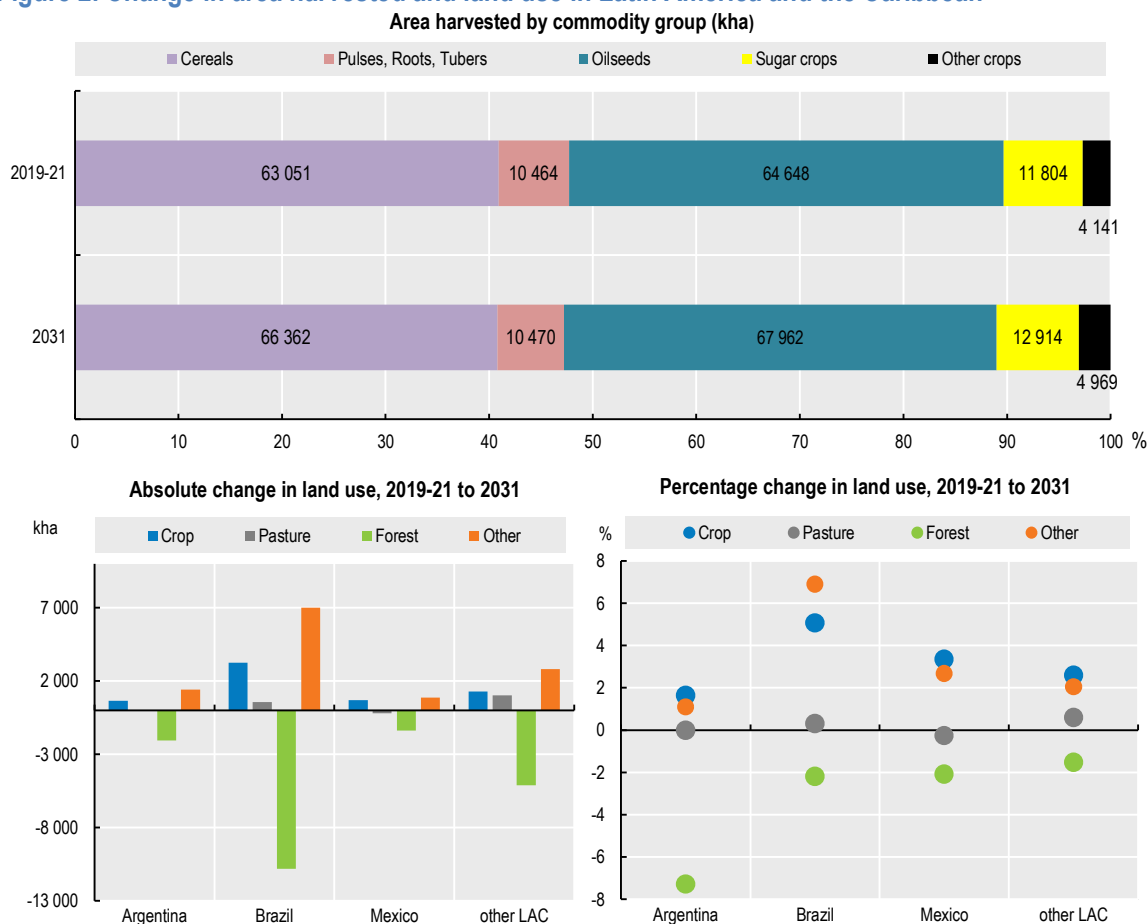
farms would expand trade within the region, thus diversifying market opportunities and bolstering the sector’s resilience.

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



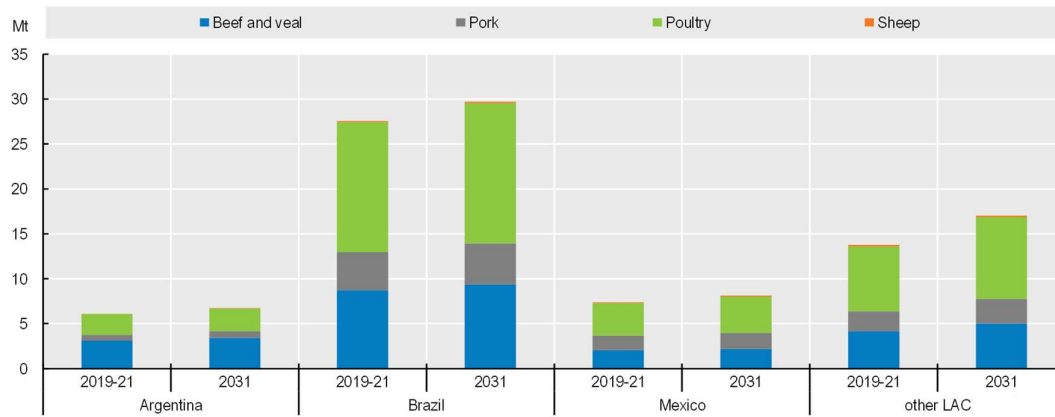
Source: OECD/FAO (2022), “OECD-FAO Agricultural Outlook”, OECD Agriculture statistics (database), <http://dx.doi.org/10.1787/agr-outl-data-en>  
StatLink 2 <https://stat.link/eaqlnx>

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



Source: OECD/FAO (2022), “OECD-FAO Agricultural Outlook”, OECD Agriculture statistics (database), <http://dx.doi.org/10.1787/agr-outl-data-en>  
StatLink 2 <https://stat.link/pqcvt0>

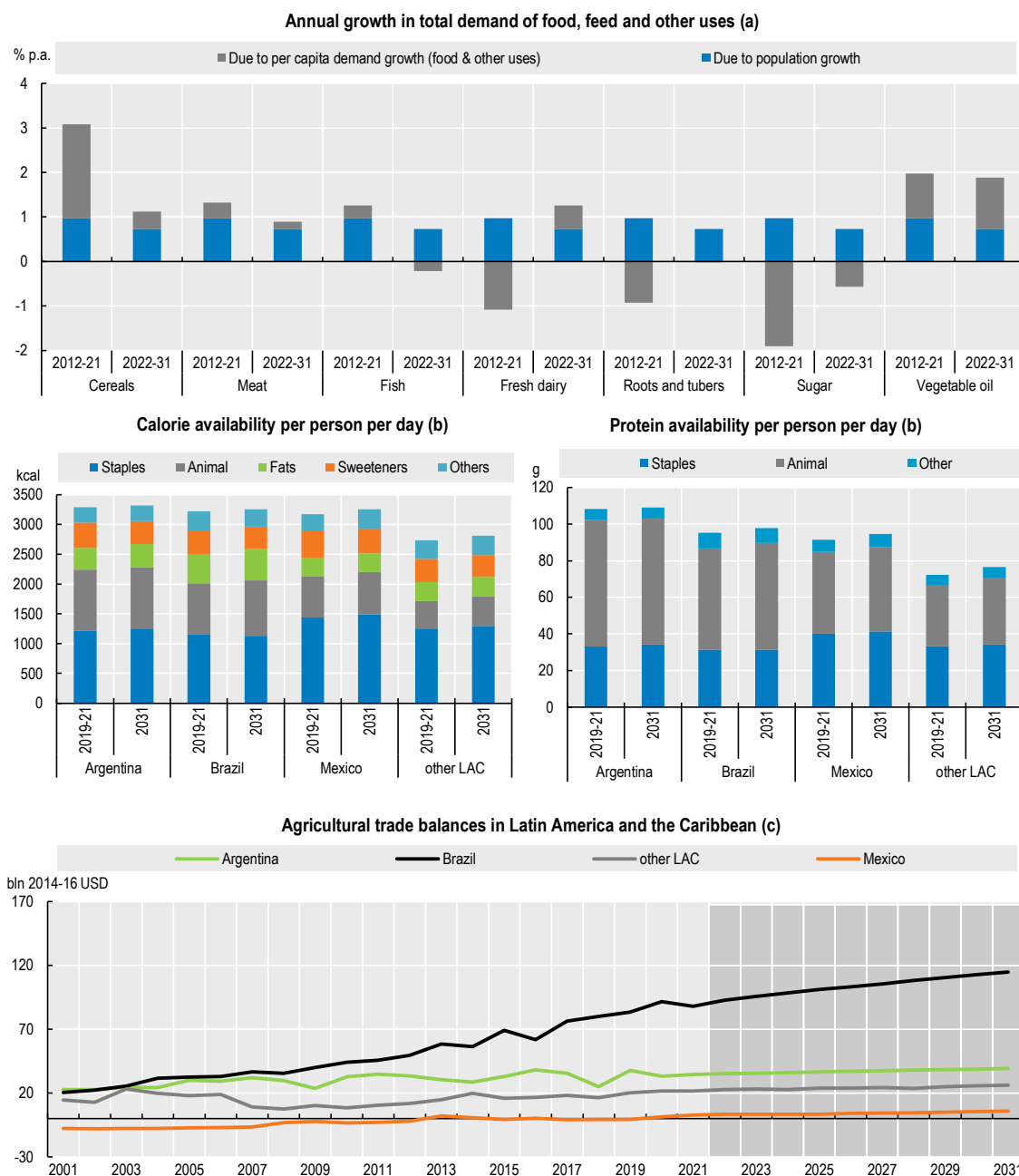
Figure 3. Livestock production in Latin America and the Caribbean



Source: OECD/FAO (2022), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database), <http://dx.doi.org/10.1787/agr-outl-data-en>

StatLink 2 <https://stat.link/mpj34t>

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 (2022). FAOSTAT Value of Agricultural Production Database, <http://www.fao.org/faostat/en/#data/QV>; OECD/FAO (2022), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database), <http://dx.doi.org/10.1787/agr-outl-data-en>.

Table 1. Regional Indicators: Latin America and Caribbean Region

	Average			%	Growth <sup>2</sup>	
	2009-11	2019-21 (base)	2031		Base to 2031	2012-21
<b>Macro assumptions</b>						
Population ('000)	589 712	652 217	708 787	8.67	0.97	0.73
Per capita GDP <sup>1</sup> (kUSD)	9.32	8.66	10.19	17.66	-1.81	1.58
<b>Production (bln 2014-16 USD)</b>						
Net value of agricultural and fisheries <sup>3</sup>	435.9	538.5	614.3	14.08	2.23	1.08
Net value of crop production <sup>3</sup>	240.1	311.8	360.7	15.70	2.38	1.30
Net value of livestock production <sup>3</sup>	148.8	180.9	202.4	11.92	2.03	0.77
Net value of fish production <sup>3</sup>	47.0	45.9	51.2	11.62	2.09	0.80
<b>Quantity produced (kt)</b>						
<i>Cereals</i>	186 644	274 962	318 628	15.88	3.34	1.19
<i>Pulses</i>	6 748	7 640	8 431	10.35	1.20	1.00
<i>Roots and tubers</i>	14 623	14 050	15 013	6.86	-0.03	0.63
<i>Oilseeds<sup>4</sup></i>	5 097	6 181	6 933	12.16	2.94	0.80
<i>Meat</i>	46 101	54 816	61 613	12.40	1.60	0.91
<i>Dairy<sup>5</sup></i>	8 938	9 994	11 706	17.13	0.00	1.42
<i>Fish</i>	16 674	16 255	18 151	11.66	2.10	0.80
<i>Sugar</i>	54 971	56 905	63 649	11.85	-0.98	1.65
<i>Vegetable oil</i>	20 879	27 337	31 421	14.94	2.36	1.30
<b>Biofuel production (mln L)</b>						
<i>Biodiesel</i>	4673.03	8896.96	10834.98	21.78	5.28	1.65
<i>Ethanol</i>	27 592	36 656	38 948	6.25	3.29	0.91
<b>Land use (kha)</b>						
Total agricultural land use	672 957	672 201	679 465	1.08	0.01	0.09
Total land use for crop production <sup>6</sup>	160 482	172 019	177 866	3.40	0.80	0.28
Total pasture land use <sup>7</sup>	512 475	500 182	501 599	0.28	-0.25	0.03
<b>GHG Emissions (Mt CO2-eq)</b>						
Total	1 009	1 069	1 095	2.37	0.66	0.10
Crop	100	117	121	3.18	1.58	0.23
Animal	886	923	944	2.26	0.58	0.07
<b>Demand and food security</b>						
Daily per capita caloric availability <sup>8</sup> (kcal)	2 946	3 017	3 077	2.00	-0.04	0.33
Daily per capita protein availability <sup>8</sup> (g)	81.7	86.0	89.1	3.6	0.2	0.3
<b>Per capita food availability (kg/year)</b>						
<i>Staples<sup>9</sup></i>	159.5	157.5	161.5	2.54	-0.19	0.25
<i>Meat</i>	57.6	61.4	63.4	3.30	0.48	0.22
<i>Dairy<sup>5</sup></i>	15.8	15.9	17.2	8.26	-0.75	0.69
<i>Fish</i>	8	9	10	5.74	-0.01	0.34
<i>Sugar</i>	45	38	36	-5.41	-1.68	-0.56
<i>Vegetable oil</i>	18	18	20	14.55	-1.18	1.31
<b>Trade (bln 2014-16 USD)</b>						
Net trade <sup>3</sup>	81	145	186	27.89	..	..
Value of exports <sup>3</sup>	151	240	298	24.30	4.26	1.88
Value of imports <sup>3</sup>	71	94	112	18.75	3.20	1.52
<b>Self-sufficiency ratio<sup>10</sup></b>						
<i>Cereals</i>	102.1	107.3	108.9	1.42	0.57	0.09
<i>Meat</i>	110.2	111.8	111.2	-0.57	0.28	0.01
<i>Sugar</i>	215.7	227.9	248.6	9.09	-0.02	1.39
<i>Vegetable oil</i>	127.7	131.5	124.2	-5.57	0.29	-0.52



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 2004-06. Projections for not included crops have been made on the basis of longer-term trends. 4. Oilseeds represent 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/protein represent availability per capita per day, not intake. 9. Staples represent cereals, oilseeds, pulses, roots and tubers. 10. Self-sufficiency ratio calculated as  $\text{Production} / (\text{Production} + \text{Imports} - \text{Exports}) * 100$ .

Sources: FAO (2022). FAOSTAT Food Balance Sheets and trade indices databases, <http://www.fao.org/faostat/en/#data> ; OECD/FAO (2022), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database), <http://dx.doi.org/10.1787/agr-outl-data-en>.

<sup>1</sup> 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.

<sup>2</sup> See also “The Outlook for Agriculture and Rural Development in the Americas: A Perspective on Latin America and the Caribbean 2021-2022”. ECLAC, FAO, IICA. [https://repositorio.cepal.org/bitstream/handle/11362/47209/1/ECLAC-FAO21-22\\_en.pdf](https://repositorio.cepal.org/bitstream/handle/11362/47209/1/ECLAC-FAO21-22_en.pdf)

<sup>3</sup> Source OECD-FAO interpolated for 2019-21 from the database of the Global Trade Analysis Project (GTAP) 2011, using food expenditure and GDP data used in this *Outlook*.

<sup>4</sup> (Fuglie, 2015<sub>[12]</sub>)(updated to 2019, USDA)