BANANAS AND MAJOR TROPICAL FRUITS IN LATIN AMERICA AND THE CARIBBEAN

The significance of the region to world supply

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This special feature represents an introductory background note to the medium-term outlook for bananas and major tropical fruits in Latin America and the Caribbean, which will be published in July 2019 in the forthcoming edition of the OECD-FAO Agricultural Outlook 2019-2028.

Latin America and the Caribbean constitutes the world's most important exporting region for bananas and the four major tropical fruits – mangoes, pineapples, avocados and papayas – thereby playing a vital role in global fruit supply. Abundantly endowed with land that features highly favourable agro-climatic conditions for the cultivation of tropical products, the region ranks as the second leading producer of bananas and tropical fruits globally, behind Asia. The most prolifically produced and traded fruits in the region in the following order are bananas, pineapples, mangoes, avocados and papayas. On average, approximately 25 percent of total global banana and major tropical fruit production originates in Latin America and the Caribbean, with an annual production volume of roughly 54 million tonnes between 2016 and 2018 (threeyear average). 1 With a total combined annual per capita consumption of 55 kg of bananas and major tropical fruits, the region also ranks as one of the major consumers of these fruits globally.

More importantly, shipments of bananas and major tropical fruits from suppliers in Latin America and the Caribbean make up about 75 percent of world exports, with a total annual average volume of 25 million tonnes over the three-year period from 2016 to 2018. Of these, an estimated 80 percent are destined for developed country markets, primarily the United States of America and the European Union (EU). Estimates point to a total combined export value of around USD 11 billion for bananas and major tropical fruits from Latin America and the Caribbean

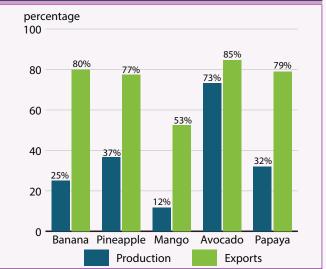
in 2016-2018, of which bananas and avocados accounted for some USD 6 billion and USD 3.5 billion, respectively.²

This article examines the key characteristics of exports of bananas and the four major tropical fruits from Latin America and the Caribbean and their role in world fruit supply, and discusses some of the obstacles and opportunities for growth in production and trade.

BANANAS AND PINEAPPLES – HIGH VOLUME MARKETS

Bananas rank as the most prolifically produced and exported fruit in Latin America and the Caribbean. Over 2016-2018, the total production volume of bananas in the region stood at an estimated 30 million tonnes per year, while total exports reached an annual average of 13 million tonnes, representing 80 percent of world banana shipments. Trade statistics reported an average export revenue of USD 5.6 billion per year for the banana industry

Figure 1. Latin America and the Caribbean volume share in total global production and exports 2016-2018



 $^{^{\}rm 2}$ As indicated by reported export values from the region.

¹ All figures presented in this article refer to annual average values for the triennium 2016-2018.

in Latin America and the Caribbean over the same period.

Meanwhile, pineapple production in the region stood at an estimated annual average of 9.9 million tonnes, of which around 2.3 million tonnes were exported annually. As such, Latin America and the Caribbean account for approximately three-quarters of global pineapple exports. The two leading producers of pineapples, Costa Rica and Brazil, together accounted for an average production volume of 5.3 million tonnes over the 2016-2018 period. Nearly two-thirds of pineapple supplies from Costa Rica are destined for export markets, primarily the United States of America and the EU, while Brazil's production is almost exclusively destined for the domestic market. Total reported revenue from pineapple exports from the region averaged approximately USD 850 million over 2016-2018.

Given their high production and export volumes, bananas and pineapples play an important role in the region's food security, as well as in the generation of foreign exchange earnings for the exporting nations. Furthermore, by hosting the majority of the world's leading exporting countries of bananas and pineapples, the Latin America and the Caribbean region maintains a firm position as the world's largest exporter of both products and acts as a key determinant of their global supply.

Ecuador ranks firmly as the world's largest exporter of bananas, accounting for an estimated share of 36 percent of world exports over 2016-2018. Total shipments from Ecuador reached a record high of 6.6 million tonnes in 2018, supported by favourable weather and successful investments in production expansion and yield-improving technologies. Banana supplies from Ecuador are primarily destined to the EU and the Russian Federation, which purchased, respectively, about 1.9 million tonnes and 1.5 million tonnes of Ecuadorian bananas on average between 2016 and 2018. Shipments from Ecuador to the EU continued to benefit from the scheduled tariff reductions under the EU-Andean agreements in 2018, which facilitated entries of Ecuadorian bananas into the EU market at a reduced tariff of EUR 96/tonne throughout the year, compared to the standard tariff of EUR 114/ tonne. The pace of shipments to the Russian Federation, meanwhile, remained subdued by the depreciation of the Russian rouble against the US dollar, as banana transactions are typically denominated in US dollars. Another key destination of Ecuadorian bananas is the United States of America, which imported an average of 780 000 tonnes per year over the same period. Total annual revenues from banana exports in Ecuador averaged USD 2.9 billion between 2016 and 2018.

Guatemala ranked as the second leading exporter of bananas in the world between 2016 and 2018, with an

average annual export volume of 2.3 million tonnes. The country mainly focuses on the cultivation of Cavendish bananas, the predominant variety in global trade. Banana production in Guatemala benefited strongly from comparatively lower net returns for sugar cane and coffee in 2018, which led to an expansion in harvested area for the relatively more lucrative banana crops. Supplies from Guatemala are chiefly destined for the United States of America, which received on average 80 percent of its shipments between 2016 and 2018. Bananas are Guatemala's leading agricultural export product, generating an annual average revenue of USD 770 million over the period 2016-2018 and accounting for 14 percent of the value of the country's total agricultural export earnings.

Banana exports from Costa Rica averaged 2.2 million tonnes per year between 2016 and 2018, placing the country third among the world's leading suppliers of bananas, ahead of the Philippines. Approximately half of Costa Rica's banana exports go to the EU, with the United States of America ranking as the second leading destination, importing an annual average volume of 800 000 tonnes over 2016-2018. Costa Rica's total revenues from banana exports averaged USD 890 million per year over the same period. The country also ranks firmly as the world's largest producer and exporter of pineapples, with an annual average production volume of 3 million tonnes and an average export volume of 2 million tonnes between 2016 and 2018. Total reported export revenues of pineapples in Costa Rica amounted to an average of USD 715 million per year over 2016-2018. Supplies were almost exclusively destined to the United States of America and the EU, with each accounting for an equal share of approximately 45 percent of the country's total shipments.

Figure 2. Relative importance of bananas and tropical fruits in total agricultural export earnings (USD billion, average 2016-2018) Costa Rica (34%) Ecuador (30%) Guatemala Mexico Peru (10%) 35 28 21 billion Bananas and Tot. agricultural tropical fruits export earnings

Costa Rica's total export revenues from bananas and pineapples account for about 34 percent of the country's total value of agricultural exports.

While Peru plays a comparatively small role in banana exports, supplying an average of some 200 000 tonnes per year over the 2016-2018 period, its role in world supply is nevertheless noteworthy, owing to its position as a key exporter of organic bananas. Given the higher unit values of organic bananas, Peru's revenues from banana exports amounted to an annual average of some USD 160 million over 2016-2018.

AVOCADOS, MANGOES AND PAPAYAS – INCREASING VOLUMES ON ACCOUNT OF SOARING GLOBAL DEMAND

With avocado being indigenous to the region, production of the tropical fruit in Latin America and the Caribbean accounts for roughly 70 percent of global output, which reached an annual average of 4.3 million tonnes over the 2016-2018 period. Avocado continues to be a highly demanded tropical fruit in import markets, particularly in the United States of America and the EU, where annual per capita availability in 2018 reached 3.1 kg and 1.2 kg, respectively. World import demand for avocados – largely met by supplies from Latin America and the Caribbean – increased at an estimated annual average growth rate of 14 percent between 2009 and 2018, slightly outpacing growth in supply over the same period. Total exports of avocados from Latin America and the Caribbean averaged 1.6 million tonnes per year over 2016-2018, valued at about USD 3.5 billion. The principal importer of avocados from the region is the United States of America, which procured a reported annual average of 930 000 tonnes over 2016-2018. The region also plays a significant role in supplying avocados to the EU, with shipments originating from Peru, Chile, Mexico, Colombia, Brazil and the Dominican Republic. The claimed health benefits of avocados – particularly in relation to their high content of healthy fats – coupled with their unique taste, have also spurred fast growth in demand for the fruit in burgeoning import markets, most prominently in China and Japan.

Production of mangoes in Latin America and the Caribbean reached an estimated annual average of 6 million tonnes during 2016-2018, supported by investments in yield-improving technologies and area expansion. Mexico and Brazil are by far the largest producers in the region, with average volumes of 2 million tonnes and 1.5 million tonnes per year, respectively. In both countries, production primarily caters for the domestic market, as mangoes are a popular fruit in local diets and

typically benefit from affordable domestic prices. However, in response to mounting international demand, exports from the region have experienced considerable growth over the past decade, expanding at an annual average rate of 4 percent between 2009 and 2018, though in absolute terms they remained at a relatively low level of approximately 760 000 tonnes per year over 2016-2018. Nevertheless, globally the region ranks as the largest supplier of mangoes, accounting for roughly 50 percent of annual world shipments.

World production of papayas averaged 4 million tonnes per year over the 2016-2018 period, with Brazil, Mexico and the Dominican Republic the leading countries, producing around 1 million tonnes each. In world trade, papayas have a relatively niche market, with exports averaging just 200 000 tonnes per year during 2016-2018, of which about 170 000 tonnes originated from Latin America and the Caribbean. Similar to mangoes, papayas are a widely popular fruit in the region and a staple ingredient in local diets. International trade of papayas is rendered difficult by the fruit's perishability and limited suitability for long-distance transportation. In addition, a prolonged outbreak of salmonella contamination, which has been affecting supplies from key producing areas in Mexico since mid-2017, and which resulted in largescale rejections of shipments on phytosanitary grounds, has further hampered the international trade potential of this fruit.

Regarding world supplies of avocados, mangoes and papayas, Mexico plays a pivotal role as a leading producer and exporter, in particular as a key supplier to the United States of America - the largest import market. On average, Mexico exported annually 1 million tonnes of avocados over 2016-2018, at a value of roughly USD 2.5 billion. The country also ranks as the leading exporter of mangoes and papayas, with annual shipments averaging, respectively, 390 000 tonnes and 160 000 tonnes during the same period. Mexico's total export revenues from bananas and major tropical fruits averaged USD 3.3 billion per year over 2016-2018.

The United States of America is the largest market for major tropical fruits from Mexico, having purchased on average some 820 000 tonnes of avocados, 350 000 tonnes of mangoes and 160 000 tonnes of papayas per year from the Central American country during 2016-2018. Approximately 75 percent of domestically available avocados in the United States of America, 65 percent of mangoes and 80 percent of papayas, originate from Mexico. United States of America wholesale prices of these three fruits, which reflect the intricate supply and demand situation of each commodity, have

displayed high levels of both seasonal and supply shockinduced volatility. Shortages in supply, so far mostly caused by seasonal production fluctuations, adverse weather conditions and phytosanitary concerns, have induced rapid and significant upward price swings for all three fruits, and especially avocados.

Opportunities and challenges

In view of flourishing global demand for fruits, especially tropical varieties, there appears to be an ample opportunity for a demand-driven expansion in global trade of bananas and major tropical fruits. Trade volumes of bananas, the world's number one traded fruit, have reached high levels – leading to near saturated consumption levels in key import regions – and are accordingly expected to display only moderate growth in the medium term. Meanwhile, global production and trade of major tropical fruits are seen facing strong growth prospects, on account of rising incomes and changing consumer preferences in many domestic and import markets, as well as improvements in international transport links and freight technology.

As the world's largest exporting region, Latin America and the Caribbean is particularly well positioned to benefit from the foreseen growth in international demand for tropical fruits. The region's geographic location, not only with regard to its large share of land in the tropical belt, but also its proximity to the United States of America – the largest market for major tropical fruits – should translate into robust prospects for export-led production growth. Established industry structures and solid infrastructure, particularly in the largest exporting countries, make it comparatively easier for producers in many parts of the region to operate at economies of scale and thereby to compete strongly with other exporting regions in world markets.

On the downside, the effects of climate change and adverse, and at times highly damaging, weather conditions, loom heavily over the region's production potential, particularly in the Caribbean, where small island states are especially vulnerable to the destructive effects of increasingly frequent tropical storms. Another non-trivial threat is posed by the increasing prevalence of plant pests and diseases, with industrialized production systems as present in the cultivation of bananas and pineapples being considerably more susceptible to rapid and widespread outbreaks. In particular, the risk of the Fusarium Wilt Tropical Race 4 fungus in banana cultivation – so far confined to plantations in Asia, the Middle East and Africa – is of worrying concern to producers in the Latin America and the Caribbean region.

Trade flows from the region are similarly susceptible to a number of obstacles, which may encumber further growth. Phytosanitary-related restrictions, trade disputes and protectionist measures represent a threat to smooth trade flows and growth potential, thereby obstructing export earnings for local producers and adequate supply in import markets. These factors threaten to fuel unnecessary price volatility, which can have damaging effects on both producers in the region and consumers in import markets. Furthermore, the effect of trade on development hinges on a fair inclusion of smallholder producers and equitable wage levels for workers employed in these industries. To highlight just two examples: some 200 000 rural families are reported to be directly involved in, and benefiting from, banana production in Guatemala, while around 80 percent of avocado production in Mexico is carried out by smallholder farmers. Ensuring remunerative prices and fair wages, improving smallholders' productivity and their bargaining power, enhancing resilience to climatic disasters and other shocks, and linking remote producing locations to markets, are critical to ensuring inclusive growth and sustainable rural development. Another important factor is the creation of an enabling environment through conducive policies and programmes in order to strengthen the positive results generated by the production and trade of bananas and major tropical fruits in the region.