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BANANA

Market Review 2021



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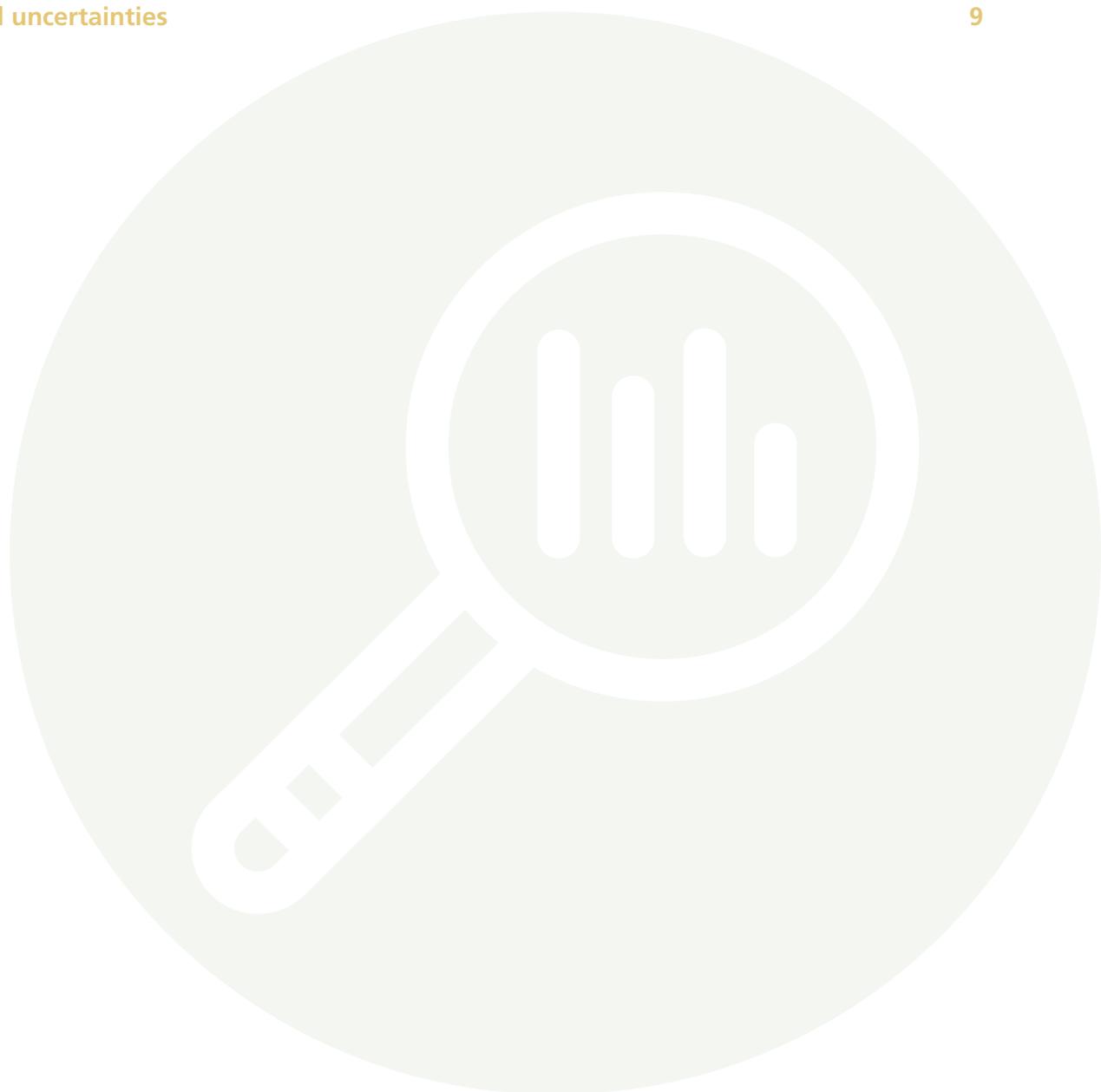
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NOTE ON METHODOLOGY

This report describes full-year results on developments in global banana trade in 2021 and represents an update to the *Banana Market Preliminary Results 2021*. The analysis contained herein is based on data on trade quantities that were compiled from the following sources: country responses to the 2022 questionnaire of the FAO Intergovernmental Sub-Group on Bananas; data from the UN Comtrade database and Trade Data Monitor Inc.; communications with national sources and industry partners in trading countries; and secondary data and information from desk research. The findings incorporate revised data and information as available up to the end of May 2022. Detailed tables on global trade in bananas as well as further information on data sources and any deviations from the underlying methodology can be found in the *Banana Statistical Compendium*. All data in this report should be considered as provisional. FAO is continuously monitoring global trade flows of bananas and will update these results should revisions of officially reported data be released.

FOREWORD

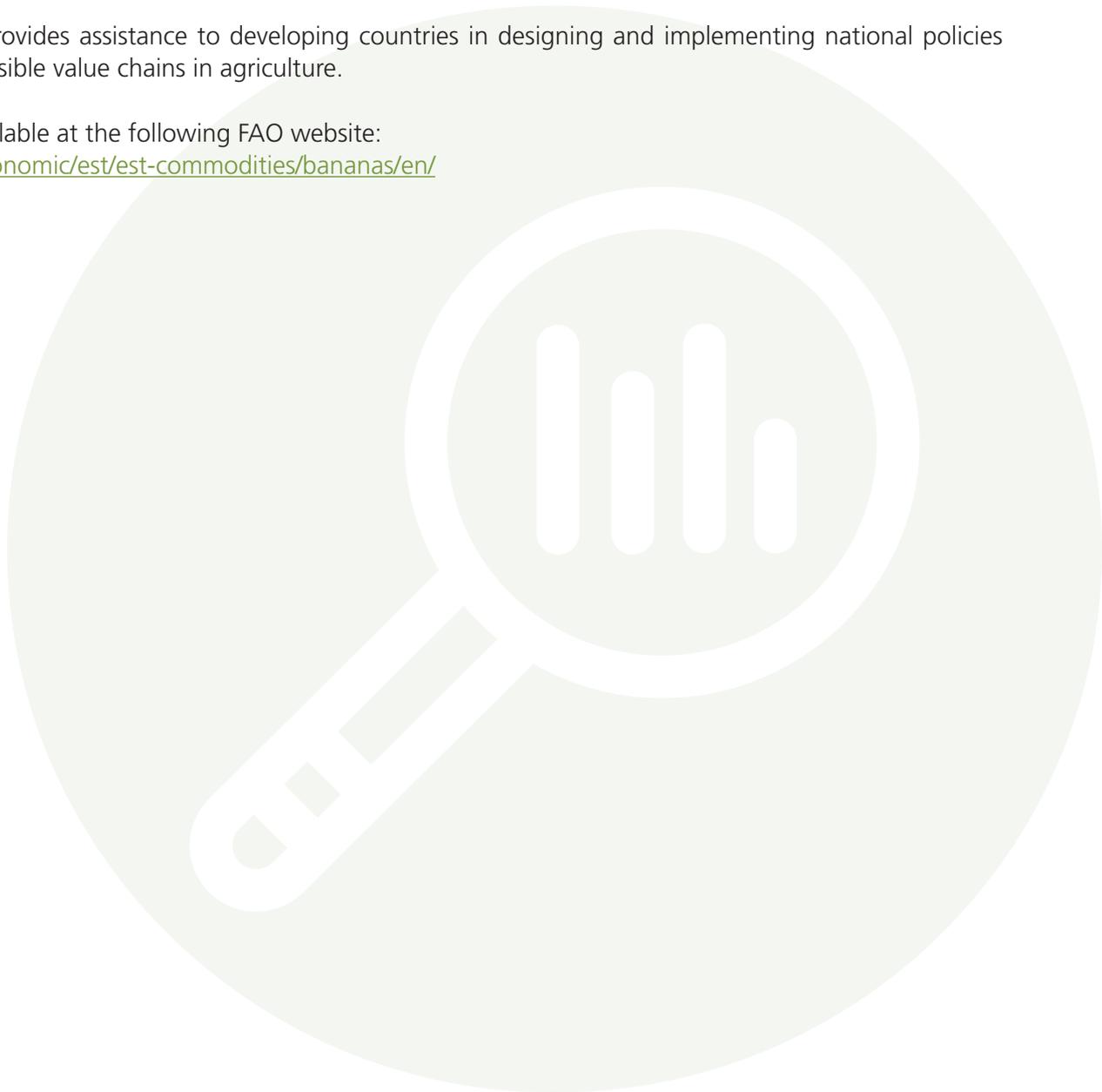
The *Banana Market Review* is issued on an annual basis to Members and Observers of the Sub-Group on Bananas of the Intergovernmental Group on Bananas and Tropical Fruits, which is a subsidiary body of the Committee on Commodity Problems (CCP).

It is prepared by the Team on Responsible Global Value Chains, Markets and Trade Division, Food and Agriculture Organization of the United Nations (FAO), Rome. The Team on Responsible Global Value Chains provides research and analyses on global value chains for agricultural commodities, and economic data and analyses on tropical fruits. Regular publications include market reviews, outlook appraisals and projections for bananas and tropical fruits.

The team also provides assistance to developing countries in designing and implementing national policies regarding responsible value chains in agriculture.

The report is available at the following FAO website:

www.fao.org/economic/est/est-commodities/bananas/en/



DEVELOPMENTS AT A GLANCE

- Global exports of bananas declined by 7.8 percent in quantity terms in 2021, the first significant disruption of the fast-paced growth experienced until 2019.
- Full year data indicate that global export quantities fell by some 1.7 million tonnes from their 2020 levels, to approximately 20.5 million tonnes in 2021.
- Amid constraints arising from the continuing COVID 19 pandemic, several factors affected global trade in bananas on both the supply and demand side in 2021:
 - Difficulties stemming from substantially higher costs for inputs such as fertilizers as well as for packaging materials
 - Shortages in refrigerated containers alongside substantial rises in global transportation costs
 - Production shortages caused by adverse weather conditions
 - Concerns surrounding the spread of plant diseases
 - More stringent limitations on maximum residue levels in some major markets
 - Slightly lower import demand in several import markets
- These difficulties exerted pressure on prices and margins along the value chain and affected the ability of producers and exporters to supply bananas in adequate quantities and meet the quality standards expected in export markets.
- In the majority of the leading import markets, and notably in the European Union and the United States of America, prices accordingly displayed a tendency to increase.



Developments in global banana trade

Global trade in bananas in 2021 was affected by several factors on both the supply and demand sides, including the continuing COVID-19 pandemic, weather related shocks, concerns surrounding the worsening spread of plant diseases, more stringent regulations on maximum residue levels in some major markets as well as slightly lower demand in several import markets. Consequently, full year trade data indicate that global export quantities fell by some 1.7 million tonnes in 2021, which marks one of the largest annual drops in global banana shipments recorded thus far.

In view of the ongoing pandemic, the persisting necessity to apply elevated sanitary measures and physical distancing to protect workers from COVID-19 continued to cause additional costs to producers and operators along the supply chain. Industry sources further reported severe difficulties stemming from substantially higher costs for inputs such as fertilizers, whose prices rose by some 30-45 percent, as well as for packaging materials that are vital to industry operations.¹ Shortages in refrigerated containers experienced throughout most of the year alongside substantial rises in global transportation costs posed additional obstacles to export growth and reduced margins along the value chain.

In response to these challenges, banana producers and exporters from seven exporting countries signed a Regional Agreement for Shared Responsibility in October 2021. This agreement was designed to urge retailers in the key import markets of the European Union, the United Kingdom of Great Britain and Northern Ireland and the United States of America to adjust their prices upward to the benefit of producers and exporters to account for the rising costs of inputs as well as the higher costs associated with strengthening

the sustainability of the banana industry.² According to news from November 2021, three companies operating in the North American markets subsequently agreed to raise their prices accordingly, with other market players expected to follow suit.³

Further key developments of concern in 2021 were the introduction of new maximum residue levels in importing markets, which led to higher reject rates for exports, as produce not meeting these new requirements could not be imported, and the alarming discovery of the Banana Fusarium Wilt Tropical Race 4 (TR4) disease in Peru in April 2021. The plethora of simultaneous difficulties experienced by the sector in 2021 significantly impeded producers' ability to remain operational and especially affected smallholder farmers. Similar to the situation observed in 2020, these pressures continued to hamper particularly exports from Asia. However, in 2021 shipments from Latin America were also affected.

Against these relatively bleak developments in banana trade in 2021 overall, anecdotal evidence suggests that organic bananas continued to witness high demand throughout the year, as consumers in key import markets, notably in the European Union and the United States, displayed a higher propensity to spend on organic produce.⁴ Continuous declines in the average unit prices for organic bananas, which industry sources reported to have fallen by some 20 percent in recent years, were quoted as further reason for the globally rising demand. However, precise data on global trade in organic bananas continue to be unavailable, as most countries do not report these separately in their customs declarations, rendering a reliable assessment of this category difficult at this stage.

² *The signatories to this agreement are, namely, Ecuador, Colombia, Costa Rica, Dominican Republic, Guatemala, Honduras and Panama. On average, these supplying countries account for approximately three quarters of global exports combined.*

³ *www.ecuadortimes.net/international-markets-begin-to-review-the-price-of-a-box-of-bananas-based-on-global-cost-increases/*

⁴ *See, for example: www.freshplaza.com/article/9364152/global-overview-bananas/; www.freshplaza.com/article/9246323/40-50-sales-increase-during-the-lockdown/*

¹ *www.freshplaza.com/article/9364152/global-overview-bananas/; www.elcomercio.com/actualidad/negocios/ecuador-reduce-venta-banano-precio-exportaciones.html*



Exports

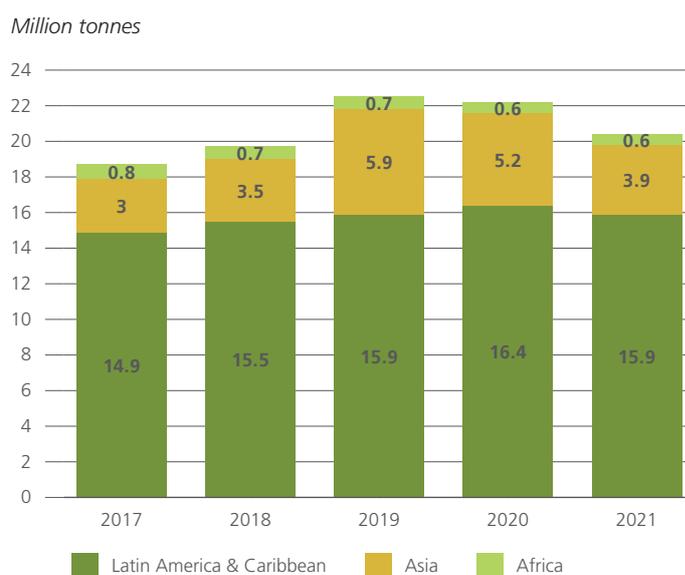
Available full year data indicate that global exports of bananas, excluding plantain, experienced a decline of 7.8 percent in 2021, the first significant disruption of the fast paced growth experienced in previous years until 2019. Total export quantities thereby fell to approximately 20.5 million tonnes in 2021, with almost all leading global suppliers of bananas contributing to this decline. Higher costs for inputs such as fertilizers reportedly affected producers' ability to supply bananas in adequate quantities and to the quality standards expected in export markets in all regions, while shortages in reefer containers for transport and substantially higher shipping costs impeded exporters' capacity to supply to international markets.

As such, exports from **Latin America and the Caribbean (LAC)**, the world's leading exporting region, declined by about 3 percent in 2021, to a total of 15.9 million tonnes – some 500 000 tonnes lower than their 2020 level. Ecuador, the largest exporter of bananas globally, registered a 3.2 percent decline in shipments, to approximately 6.8 million tonnes. Industry sources reported that, in addition to the above-mentioned obstacles, the banana industry in Ecuador was affected by higher expenditures stemming from the necessity to maintain stringent TR4 mitigation measures in view of the outbreaks of TR4 in neighbouring Colombia and Peru. The introduction of security measures to combat the introduction of illegal substances into banana containers as well as new maximum residue level regulations in some key destination markets such as the United States reportedly posed further obstacles. These challenges may explain why export data obtained from the Central Bank of Ecuador for the period January to December 2021 show a particularly large decline of 23 percent year on year in shipments from Ecuador to the United States, one of the leading destinations for bananas from Ecuador.

Shipments from **Costa Rica**, the second largest exporter from the region and third leading exporter to the European Union (EU-27), declined by 2.1 percent in 2021, to 2.3 million tonnes. Costa Rica had seen a fast expansion in banana exports in 2020 following a recovery from the adverse weather conditions of the previous years, but in 2021, it faced difficulty as well as the need to maintain stringent and costly

TR4 mitigation measures. Data provided by the Costa Rican Corporación Bananera Nacional, S.A. in May 2022 indicate a decrease in banana plantation area for export of 2 percent in 2021. In addition, retail prices for bananas in most of the EU-27, as reported in euros, displayed a tendency to decline in 2021, which put elevated pressure on the margins of the Costa Rican banana value chain.

Figure 1. World banana exports by region, 2017–2021



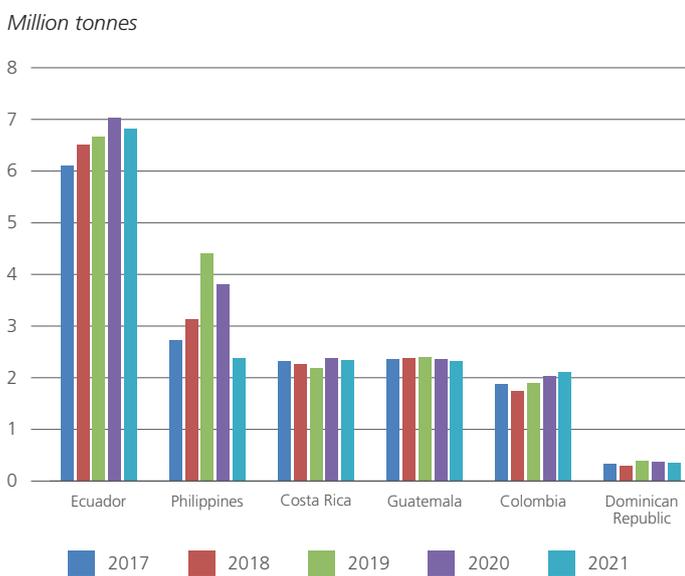
Source: FAO data, compiled from several sources as indicated in the note on methodology.

Exports from **Guatemala**, the third largest exporter from the LAC region, similarly registered a decline of 2.1 percent in 2021, to 2.3 million tonnes. Aside from COVID 19 related difficulties, shipments from the country were hampered by production shortages caused by back to back Hurricanes Eta and Iota that had passed through Central America in November 2020. The aftermath of these two hurricanes, which had caused severe flooding, landslides and damage in several countries in the region, also continued to cause substantial disruption to banana supplies from Honduras, which fell by 51 percent in 2021, to 210 000 tonnes, as the banana cultivation area and production capacity remained heavily impeded. Reports by the Honduran Ministry of Agriculture and Livestock elaborated that the two Hurricanes Eta and Iota in the fall of 2020 had resulted in the flooding of 200 000 hectares of banana plantations, leading to the destruction of approximately 40 percent of plants.



Similarly, hurricane damage and severe flooding in critical production areas in southern Mexico caused by Hurricane Dolores in June 2021 and Hurricane Nora in August 2021 adversely affected Mexican banana supplies. Full year data indicate that shipments from Mexico declined by 5 percent in 2021, to 513 000 tonnes. While Mexico continues to be a comparatively small exporter in global banana markets, the country emerged as the second leading supplier of organic bananas to the United States in recent years, behind Ecuador.

Figure 2. World banana exports by leading origins, 2017–2021



Source: FAO data, compiled from several sources as indicated in the note on methodology.

Exports from **Colombia**, the fourth leading supplier of bananas in the LAC region, stood at 2.1 million tonnes following growth of 3.4 percent in 2021. The country successfully implemented disease mitigation strategies pertaining to the impact of COVID 19 and the containment of the TR4 outbreak and was thereby able to increase export quantities. Data on exports by destination disseminated by the Colombia National Customs Office for 2021 show large year on year expansions in shipments of bananas from Colombia to the United States, Germany, Poland and France, while shipments to some other destinations (including Italy, the Netherlands and Spain) showed large declines.

Exports from the **Caribbean**, meanwhile, fell to 360 000 tonnes, a decline of 7.5 percent compared to 2020. A reduction of 6.4 percent in shipments from the Dominican Republic, which accounts on average for some 95 percent of banana supplies from the Caribbean, was the key reason behind this fall. While preliminary monthly data available up to July 2021 had shown rising exports from the Dominican Republic over this period, the steep global increases in input prices and transport costs hindered growth during the remainder of the year. The Dominican Republic specializes in the production and sale of organic bananas, which are more costly to produce than conventional bananas but face similar pressure on margins from the increasing presence of multinationals and low-cost retailers in the global marketplace. Bananas are an important source of revenue for the Dominican Republic, with approximately 50 000 producers engaged in their cultivation. The majority of these are smallholders, who faced difficulty to remain operational amid the dramatically risen input and transport costs in 2021. To strengthen the country's banana sector, the Dominican Association of Banana Producers was constituted in August 2021, with the aim to support the sustainable development and export competitiveness of the sector through technical assistance, training and information services.⁵ The country was also one of the seven signatories to the Regional Agreement for Shared Responsibility in October 2021, which aims to urge retailers in import markets to adjust their prices upward to strengthen the sustainability of the banana industry.

According to full year data and information, banana exports from **Asia** suffered a 24 percent decline in 2021, to 3.9 million tonnes. This marked another drastic fall in shipments from the region, which had already seen a 12 percent decline on account of COVID 19-related difficulties and the impact of TR4 in 2020. In previous years, some 90 percent of Asian banana exports originated in the Philippines, which ranks as the second leading global banana exporter behind Ecuador, but this share fell to some 60 percent in 2021. Industry information conveys that banana supplies from the Philippines continued to be affected by severe production difficulties arising from the combined impact of COVID 19 and the spread of TR4,

⁵ www.diariolibre.com/economia/constituyen-la-asociacion-dominicana-de-productores-de-platanos-IH28496385

which were worsened by hurricane damage and the high costs of inputs seen in 2021. This reportedly had a particularly detrimental effect on small scale banana producers in the country, who struggled to procure the necessary agricultural inputs to meet the quality requirements of export markets. Importers from China and Japan, the two major destinations for bananas from the Philippines, reportedly reduced their orders from smaller producers substantially due to quality concerns. Full year data and information accordingly indicate an estimated decline of 37 percent in the quantity of Philippine banana exports for 2021, to 2.4 million tonnes. Strong import demand from China and from some emerging importers in the Middle East, meanwhile, continued to drive investments into banana plantations in Viet Nam, Cambodia, and India, three rising banana exporters from the region. All three registered double-digit growth in exports in 2021, shipping some 300 000 to 350 000 tonnes each.

Conversely, **Africa's** exports⁶ registered an estimated expansion of 3.2 percent in terms of quantity in 2021 and thereby experienced a strong recovery from the COVID-19 induced difficulties and related 22-percent decline seen in 2020. The leading exporter from the region, Côte d'Ivoire, meanwhile, saw 3.6 percent growth in exports, to 340 000 tonnes. Shipments from Côte d'Ivoire primarily go to the European Union, mainly France, which typically receives 50 to 60 percent of quantities every year. In November 2020, Côte d'Ivoire had signed an Economic Partnership Agreement with the United Kingdom, which encompasses tariff free trade of bananas between the two partners. Full year export data for 2021 showed an increase of 41 percent in exports from Côte d'Ivoire to the United Kingdom, to approximately 20 000 tonnes. Shipments from Cameroon, the second leading exporter from the region, also registered higher imports from the United Kingdom, which procured some 25 percent more bananas from Cameroon in 2021 than in the previous year, according to data from United Kingdom HM Customs. Overall, exports from Cameroon are estimated to have grown by 3.9 percent in 2021, to close to 190 000 tonnes.

Imports

Available full year data suggest that global net import quantities of bananas declined by 2.7 percent in 2021, a reduction of some 550 000 tonnes from the previous year, to approximately 19.5 million tonnes. This decline strongly contrasts with the relatively rapid expansion in global banana imports observed in pre pandemic years and reflects several factors, including globally experienced strains on supply chains as well as stagnating or declining demand in several import markets.

While procurements by the two leading importers, the European Union and the United States, declined comparatively moderately, imports fell at more rapid pace in some other key import markets, notably the Russian Federation and the United Kingdom, which jointly account for some 12 percent of global import quantities. Similarly, imports from a number of emerging banana markets declined substantially, with marked falls in Saudi Arabia, Turkey, which has been seeing fast growth in domestic banana production, Iran (Islamic Republic of) and Iraq. On the other hand, imports by China and Japan, respectively the third and fifth largest importers of bananas globally, expanded at a comparatively fast rate in response to strong domestic demand.

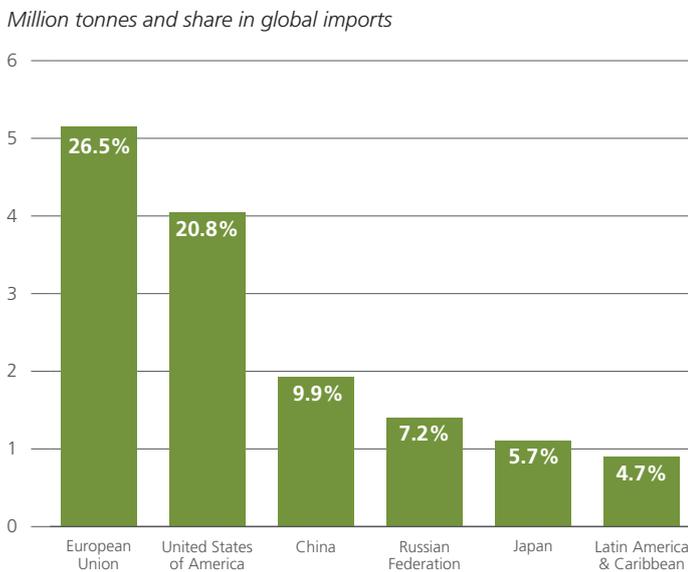
Net imports by the **European Union (EU-27)**, the largest importer of bananas globally, declined by 2.5 percent in 2021, to approximately 5.1 million tonnes in 2021. Despite this decline, import quantities stayed at a very high level in absolute terms as demand continued to be supported by COVID 19 related health concerns and higher consumer awareness of the importance of healthy eating. Similar to the situation observed in 2020, bananas ranked among the most popular fruit choices in 2021, as consumers aimed to increase their intake of fresh fruits and vegetables. Since bananas tend to be predominantly consumed at home, the repeated and prolonged lockdowns implemented in many EU 27 countries, especially throughout the first half of the year, were probably another reason that contributed to a comparatively steady performance. While precise data are currently not available, industry sources further described significantly higher demand for organic bananas in major EU 27 markets. For example, imports from the Dominican Republic, a key

⁶ Data in this market review exclude intra-African trade.



supplier of organic bananas, rose by 24 percent in Germany and by 37 percent in the Netherlands over the full year of 2021.

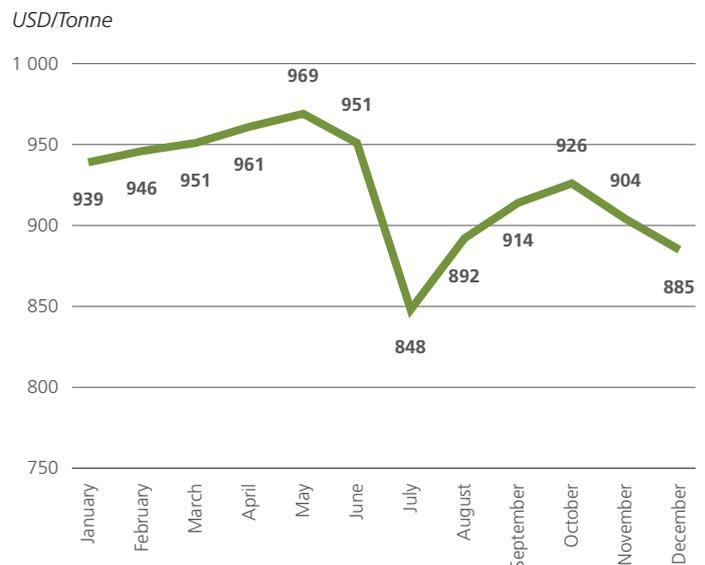
Figure 3. Distribution of global net imports by market, 2021



Source: FAO data, compiled from several sources as indicated in the note on methodology.

However, despite the relatively stable overall performance of banana imports into the European Union in 2021, industry sources reported severe difficulties for importers arising from the higher costs along global supply chains as well as from the depreciation of the Euro against the US dollar in the second half of the year, since bananas are mostly sold in US dollars at the export stage. Against this background of lower exports, rising costs and relatively stable demand, import prices in the European Union displayed a tendency to increase in 2021, averaging USD 924 per tonne, some 3 percent higher than in 2020, with a seasonal trough in July 2021 when competition from summer fruits was once again high (Fig. 4).

Figure 4. European Union Monthly Indicative Import Unit Values 2021



Source: FAO data, compiled from several sources as indicated in the note on methodology.

European banana production was reported to have grown to 638 386 tonnes in 2021, an approximate 7 percent expansion from 2020.⁷ On average, over 90 percent of EU banana production takes place in Spain and France, namely in the Canaries and the French West Indies. In 2021, banana production in Spain witnessed an increase of 7 percent from the previous year, while quantities produced in France grew by 10 percent. Both European banana suppliers accordingly witnessed year on year growth in their shipments of approximately 25 percent in 2021, predominantly to recipients within the European Union. At an average unit value of EUR 600/tonne in 2021, banana supplies from France competed fairly well against larger global exporters, while those from Spain remained relatively expensive at EUR 950/tonne.⁸

Net imports into the **United States of America** remained almost unchanged in 2021, at 4.1 million tonnes. Although this marked a relatively small contraction of only 0.7 percent, in absolute terms quantities still ranged some 130 000 tonnes below

⁷ Data provided by the European Commission in March 2022.

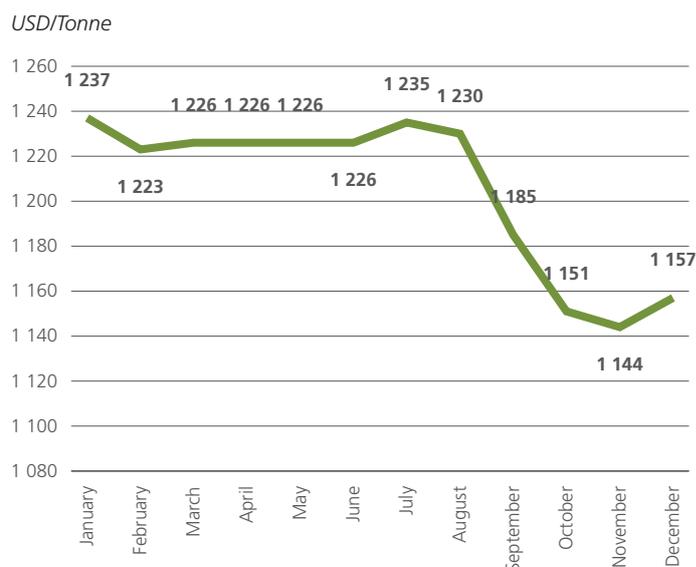
⁸ Data refer to the estimated average unit value of green bananas based on average selling prices at the stage of delivery at the first port of unloading, as reported by the European Commission in March 2022.

their pre-pandemic three-year average (2017-2019). While demand remained stable, import quantities by the United States were negatively affected by lower production in Costa Rica, its second largest supplier of bananas, and Honduras, which resulted in a reduction in combined imports from both countries of 220 000 tonnes in 2021. Although the United States simultaneously increased procurements from competing suppliers, notably Panama, Colombia, Guatemala, Mexico and Ecuador, the overall growth potential remained subdued. The situation was aggravated by the fact that banana import prices in the United States remained at a high level in 2021, despite displaying a strong tendency to decline on account of high supplies from August onwards (Fig. 5), averaging USD 1 210 per tonne for the full year – some 20 percent higher than their 10 year average. Likewise, United States wholesale and retail prices displayed a slight tendency to rise throughout the year, respectively averaging some 5 percent and 3 percent higher than in 2020.

Net imports by **China** grew by 5.2 percent in 2021, to 1.9 million tonnes. This enabled China to consolidate further its position as the third largest importer of bananas globally in 2021, reaching a quantity share of 10 percent of global imports. Available information suggests that Chinese imports were supported by ample domestic demand, as the economy was less affected by the spread of COVID 19 and experienced a recovery from the slowdown seen in 2020. On average, China typically procures some 50 to 75 percent of its total banana imports from the Philippines, but this share dropped to 45 percent in 2021 due to the production difficulties experienced in the Philippines. As smaller producers in the Philippines struggled to meet the quality expectations of the Chinese import market, traders reportedly reduced or even cancelled their orders from Philippine smallholders. In response to this, China considerably raised imports from Viet Nam and Cambodia, where an upsurge in Chinese owned banana plantations has been seen in recent years. Imports from these two countries amounted to approximately 700 000 tonnes combined over the full year 2021, a rise of nearly 200 000 tonnes from the previous year. Meanwhile, Chinese procurements from Ecuador, which had seen fast expansion before the pandemic, registered a reported 35 percent year on year decline, to 220 000 tonnes, due to the supply

issues experienced in Ecuador and the substantial increases in global costs of transport, which rendered shipments over this long distance costly. At an average unit price of USD 633 in 2021, imports from Ecuador were approximately 40 percent more expensive than bananas originating in Viet Nam.

Figure 5. United States of America Monthly Import Prices, 2021

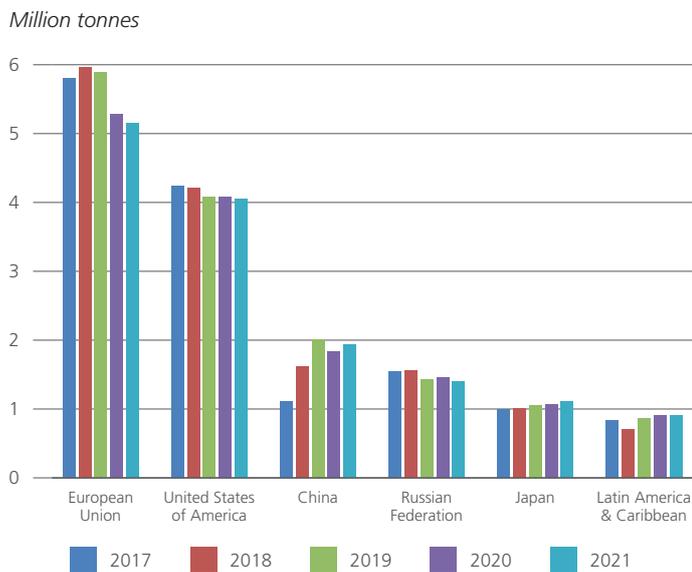


Source: FAO data, compiled from several sources as indicated in the note on methodology.

Preliminary data indicate that net imports by the **Russian Federation** dropped to approximately 1.4 million tonnes in 2021, a decline of 3.6 percent from 2020. The Russian Federation imports bananas almost exclusively from Ecuador via previously agreed contracts, which are settled in US dollars. In 2021, growth opportunities continued to be limited by the relative weakness of the Russian rouble against the US dollar. The supply difficulties experienced in Ecuador posed additional obstacle to higher imports. According to data obtained from the Federal Customs Service of Russia, imports by the Russian Federation from Ecuador declined by some 4.2 percent over the full year of 2021.



Figure 6. World banana imports by destination, 2017–2021



Source: FAO data, compiled from several sources as indicated in the note on methodology. European Union excluding the United Kingdom from February 2020.

Net imports by **Japan** grew by 3.8 percent in 2021, to 1.1 million tonnes, due to higher consumer demand for nutritious fruits amid elevated COVID 19 health concerns and a prolonged state of emergency and stay home orders in the country that lasted throughout most of the year. Both factors reportedly triggered a higher consumption of fruits at home, with bananas a popular choice due their nutritional value and convenience. Japan typically sources some 80 to 85 percent of its banana imports from the Philippines, primarily from larger scale plantations. This meant that import quantities by Japan from the Philippines remained comparatively unaffected by the production difficulties experienced in the Philippines in 2021, which affected mostly Philippine smallholder farmers. Over the full year of 2021, imports by Japan from the Philippines accordingly registered approximately 5 percent year on year growth, to reportedly 840 000 tonnes. Imports from Ecuador, Mexico, and Guatemala, three emerging origins of banana imports into Japan, meanwhile jointly amounted to some 230 000 tonnes in 2021.

Market access to the European Union

Market access for bananas to the European Union is regulated by the terms and conditions of the Geneva Agreement on Trade in Bananas, which was agreed between the European Union and Latin American banana-exporting countries in December 2009 and entered into force on 1 May 2012. By this agreement, the European Union committed to a gradual reduction of the Most Favoured Nations (MFN) tariff in eight steps, from the previous level of EUR 176/tonne to EUR 114/tonne in 2019 at the latest. Accordingly, the MFN tariff stood at EUR 114/tonne in 2020 (Table 1).

A number of bilateral trade agreements concluded between the European Union and Latin American banana producing countries in 2013 furthermore ensure preferential tariff duties on most of the imports from this region. Bananas imported from Central America (except for Belize), Colombia and Peru paid a reduced rate of 75 EUR/tonne in 2020 under the Central America Agreement and the European Union-Andean agreements. The African, Caribbean and Pacific (ACP) banana suppliers, meanwhile, benefit from duty- and quota-free access to the European Union market under the Economic Partnership Agreement (EPA), which came into effect on 1 January 2008.⁹ The most significant development in trade policy in recent years was the accession of Ecuador to the European Union-Andean agreements, with effect from 1 January 2017. Under this provision, the tariff on banana imports from Ecuador, previously the only major supplier paying the MFN tariff, stood at a rate of EUR 76/tonne in 2020, i.e. one euro above the rate paid by its main competitors Costa Rica and Colombia.

Annual data from the European Union show a distinct increase in total banana imports following the implementation of the Geneva Agreement on Trade in Bananas in 2012 and the conclusion of the bilateral trade agreements with Andean and Central American banana producers in 2013 (Fig. 7). This can be assessed

⁹ All current banana suppliers in the ACP have concluded negotiations on either a full or interim EPA: Belize, Cameroon, Côte d'Ivoire, Dominica, Dominican Republic, Ghana, Grenada, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, and Suriname.

Table 1. European Union’s preferential tariff reduction schedules under the banana agreements

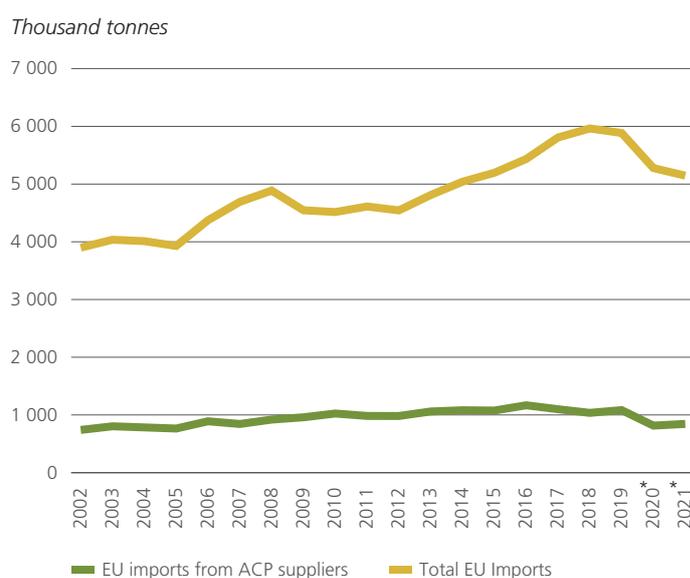
	MFN (GATB)	ACP (EPA)	Central America and Andean countries (except Ecuador)	Ecuador
2010	148	0	148	148
2011	143	0	143	143
2012	136	0	136	136
2013	132	0	124	132
2014	132	0	117	132
2015	132	0	110	132
2016	127	0	103	127
2017	122	0	96	97
2018	117	0	89	90
2019	114	0	82	83
2020	114	0	75	76
2021	114	0	75	76
2022	114	0	75	76

Source: WTO Tariff Database.

most meaningfully for the period up to 2019, since developments thereafter may have also been altered by the effects of COVID-19 and the withdrawal of the United Kingdom from the European Union, as further investigated in detail in the Banana Market Review 2020.

Between 2012 and 2019, total European Union imports of banana grew at an average annual rate of 4 percent, while imports originating in ACP producing countries experienced an average annual growth of only 0.9 percent (Fig. 7). This compares with average annual growth of 4.1 percent for imports from ACP suppliers for the period of 2004 to 2011, when total European Union imports expanded on average by only 2.2 percent per annum. Further, following Ecuador’s accession to the European Union-Andean agreements on 1 January 2017, European Union banana imports from ACP suppliers displayed declines in 2017 and 2018, and also remained below their 2016 peak in 2019 (Fig. 7). In 2021, while European Union imports of bananas from Central American and Andean suppliers declined by 2.6 percent, those from ACP suppliers grew by 3.7 percent (Fig. 8). This was on account of steady or increasing procurements from Côte d’Ivoire, Cameroon and Ghana, the three leading producers of bananas for export from Africa, as well as a 10 percent increase in imports from the Dominican Republic, a key supplier of organic bananas to the European Union.

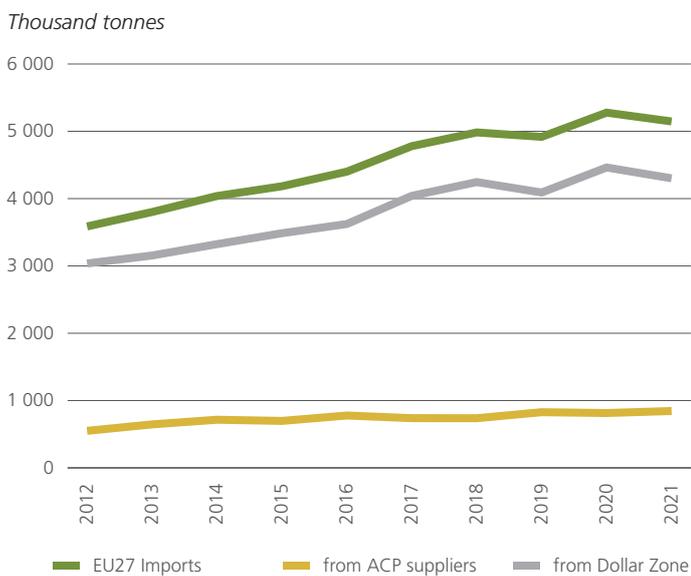
Figure 7. Evolution of European Union Banana Imports



Source: FAO data, compiled from several sources as indicated in the note on methodology. European Union excluding the United Kingdom from February 2020.



Figure 8. European Union (EU-27) Banana Imports, 2012–2021



Source: FAO data, compiled from several sources as indicated in the note on methodology. European Union excluding the United Kingdom from February 2020.

some 47 percent of production costs, more than the costs for direct and indirect labour.¹⁰

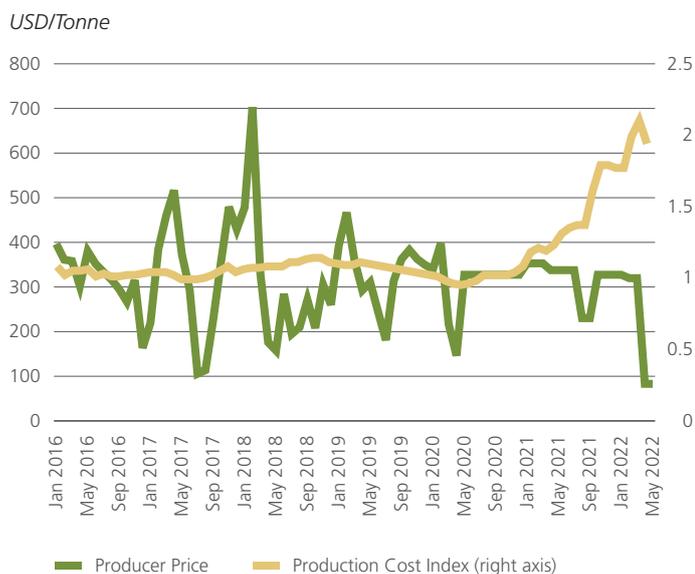
Figure 9 shows the results of a preliminary analysis of recent developments in producer margins in banana production in Ecuador, the leading exporter of bananas globally and main exporter to Ukraine and the Russian Federation. Monthly producer prices for the period January 2016 to May 2022 are plotted against an index of producer costs, which was constructed using the cost shares stated above. The results imply a dramatic collapse in producer margins that started in early 2021 and has deteriorated significantly since the beginning of the war, on the back of not only strongly rising costs but also a sharp fall in prices, as further described below. With prices of fertilizers and other energy-intensive products at high levels as a consequence of the conflict, low producer margins will restrain supplies and the higher prices of these inputs will translate into higher food prices. Data on price developments in banana import and wholesale markets over the first four months of 2022 already point into this direction.

Constraints and uncertainties

The difficult operating environment for bananas has of late been further complicated by the war in Ukraine, which has exacerbated already previously mounting pressures on global energy and fertilizer markets as well as supply chains. The cultivation of bananas, much like the rest of agricultural production, absorbs high amounts of energy directly, through fuel, gas and electricity use, and indirectly, by using agri-chemicals such as fertilisers, pesticides and lubricants. Expenditures on fertilizers and pesticides weigh particularly heavily in the production of bananas because of their very high intensity of use. Industry information provided by Ecuador's Association of Banana Exporters (AEBE) in 2013 indicates that expenditures on agrochemicals, other inputs and transport account on average for

¹⁰ Production cost shares for commercially traded bananas in Ecuador were estimated by the Asociación de Exportadores de Banano del Ecuador (Ecuador's Association of Banana Exporters) in 2013 as follows: direct and indirect labour costs 38 percent; agrochemicals and other inputs 40 percent; transport 7 percent; and the remainder for materials, general services, equipment et al.

Figure 9. Evolution of producer margins in banana production in Ecuador, January 2016 to May 2022



Source: Monthly producer price data for the period January 2016 to March 2022 provided by the Ministerio de Agricultura y Ganadería, Ecuador. The time series was extended to May 2022 based on industry information that prices dropped to USD 1.20 -1.50/box from April 2022.

Note: The cost index in the figure was constructed by applying the fertilizer price index as provided by the World Bank to the assumed 40 percent share for agrochemicals, and an index of the West Texas Intermediate oil price to the 7 percent transportation share. The remaining costs with a 53 percent share were assumed not to have changed over the period. Further research is needed to find monthly series on these other costs, e.g. on direct and indirect labour costs, to extrapolate these inputs appropriately.

Critically, the conflict has also resulted in the discontinuation of important trade relations amid the economic sanctions imposed on the Russian Federation and has caused severe disruptions to transport routes to Ukraine. The repercussions of these developments for global banana markets have been immediate and drastic. The Russian Federation ranks as the fourth largest importer of bananas globally, procuring some 1.4 to 1.5 million tonnes from world markets annually. These quantities translate into some 6 to 7 percent of global banana shipments that are now facing considerable obstacles to reach their destination market. This situation has had particularly dire consequences for Ecuador, from where some 98 percent of Russian banana imports originate. Prior to the war, Ecuador supplied some 20 to 25 percent of its yearly banana exports to Russia, and some 3 percent to Ukraine. In turn, Ecuador imported approximately one third of the fertilizers used in its agricultural production from the Russian Federation. Industry sources from Ecuador

report that the sudden loss of both export markets and lack of alternative destinations has resulted in large quantities of bananas going to waste, a plummeting of prices from \$6.25 to around \$1.20-1.50 per box, and a dramatic number of bankruptcies among producers, mostly small producers selling through spot markets.

Beyond the impact of COVID-19 and the ongoing war in Ukraine, several significant threats to global production, trade and consumption of bananas are present. The prolonged lockdowns currently implemented in some Asian countries indicate that the threat of supply chains disruptions and economic repercussions stemming from COVID-19 mitigation measures continues to be present. The likely recessions that some analysts are predicting for key global economies threaten to hinder demand, especially for consumers in poorer economic strata who need to spend a higher proportion of their income on food. Should the current crises be resolved by next year, it would be possible that the growth prospects would return to their previous trajectories. However, the effects of global warming are resulting in a higher occurrence of droughts, floods, hurricanes and other natural disasters, which render the production of bananas increasingly difficult and costly.

In the face of rising temperatures, more rapid and more severe spreads of plant pests and diseases are additionally being observed, as for example is the case with the plant fungus Banana Fusarium Wilt. The currently expanding strain of the disease, described as Tropical Race 4 (TR4), poses particularly high risks to global banana supplies, as it can affect a much broader range of banana and plantain cultivars than other strains of Fusarium wilt. Furthermore, despite some recent breakthroughs in the engineering of resistant varieties, no effective fungicide or other eradication method is currently available. According to official information, TR4 is currently confirmed in 23 countries, predominantly in South and Southeast Asia, but also in the Middle East, Africa and Latin America, with Colombia reporting the first infection in August 2019 and Peru in April 2021. A recently conducted assessment of the potential economic impact of the TR4 disease on global banana production and trade showed that a further spread of TR4 would, inter alia, entail considerable loss of income and employment in the banana sector in the affected countries, as well as significantly higher consumer costs in importing



countries, at varying degrees contingent on the actual spread of the disease.¹¹

Governments and producer organizations of producing countries have a key role to play in mitigating the possible impacts stemming from these various risks, particularly in view of their potential repercussions for smallholder banana farmers and workers employed in the industry. Close co-ordination of the capacity-development and extension activities of all concerned national institutions will be beneficial to the development of proper policies, regulations and strategic measures that address these challenges in a comprehensive way. Especially with regard to containing a further spread of TR4 and managing the disease where it has already emerged, transparent collaboration among all stakeholders of the banana sector will also be critical. FAO is monitoring global developments closely and has implemented an emergency project under its Technical Cooperation Programme to help countries in Latin America and the Caribbean to contain the spread of Fusarium wilt. It is also assisting Andean countries in developing a technical cooperation programme. Under the umbrella of the multi stakeholder World Banana Forum, FAO has further established the [TR4 Global Network](#), a neutral platform for information exchange and global collaboration that supports collective actions worldwide to fight the disease.

¹¹ *An alternative simulation was run in 2019 to assess the potential economic impact of the Banana Fusarium Wilt Tropical Race 4 disease on global banana production and trade. The results of this scenario were published in the November 2019 issue of FAO's biannual publication Food Outlook (www.fao.org/3/CA6911EN/CA6911EN.pdf).*





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