

TROPICAL FRUITS PESTS AND DISEASES: GLOBAL PROSPECTS FOR PRODUCTION AND TRADE OF BANANAS AND TROPICAL FRUITS

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Bananas and tropical fruits constitute increasingly important commodities to the food security of producing countries. Predominantly cultivated within the tropical zones, these fruits first and foremost provide ready sources of vital calories and nutrients to the growing consumption needs of developing nations. Beyond domestic markets, international trade in tropical fruits has been gaining in importance as a source of export earnings for many producing countries. Rapidly growing demand in burgeoning import markets has largely supported high export unit values for the majority of tropical fruits, making this group an attractive choice in export diversification away from lower-valued agricultural products.

Against this backdrop, world production and trade of tropical fruits have risen rapidly over the past decade. Productivity increases, improvements in post-harvest management, as well as improved transport links, and cold-chain technologies have facilitated significant expansion on the supply side. Preliminary estimates for 2017 indicate that global production of bananas reached 116 million tonnes, after recovering from some weather-induced production decline in 2016. Global aggregate production of major and minor tropical fruits meanwhile is estimated to have reached 117 million tonnes in 2017. While growth in banana production was mainly achieved through increases in yields, the expansion in tropical fruit production resulted mainly from increases in harvested areas, particularly in the main production areas such as India. The pace of growth in global trade of bananas and tropical fruits has accelerated ahead of production over the past decade, with global exports of both commodity groups combined estimated to have reached approximately 25 million tonnes in 2017.

Global exports of bananas, excluding plantains, recovered from the weather- and disease-induced declines witnessed in 2015 and 2016, and reached an estimated quantity of 18.1 million tonnes in 2017. In the key import markets, the European Union (EU) and the United States of America (US), per capita consumption reached a peak of 12.6 kg and 13 kg, respectively, driven by the combination of a rising health awareness and low unit prices, which make bananas a popular choice among health conscious consumers. Adverse weather conditions in the EU, which disrupted the supply of several popular temperate fruits, were another factor driving import demand for bananas in 2016 and 2017. Rising incomes and population growth in emerging economies, particularly in Eastern Europe and China, are further contributing to higher import demand.

Global trade in major tropical fruits benefitted similarly strongly from fast growing import demand over the past decade, reaching an estimated 6.6 million tonnes in 2017. Weather-induced disruptions to supply continue to be among the key obstacles to growth. This was evident in 2015, when global exports of pineapple were hindered by a combination of flooding and drought in some of the main exporters, which negatively impacted overall global trade volumes of tropical fruits. Import demand in the US, the largest importing bloc, has seen a virtually steady upward trend over the past 5 years on the back of income growth and consumers' strengthening health consciousness. Import demand in the EU has been similarly on an upward trajectory, largely owing to the health and wellness trend, with the exception of 2015, when import volumes were affected by the shortage in pineapples.

Data from the first half of 2018 point to a significant expansion in world trade compared to 2017^[1]. On the back of expanding supplies, global export volumes of bananas and tropical fruits rose by 18% on average during the first six months of 2018, compared to the same period in 2017. World shipments of bananas, pineapples, and avocados each posted a double-digit growth rate from last year, while mango exports expanded by 7%. Exports of papayas, disrupted by heavy rains in Mexico—the largest global supplier—contracted by 18% compared to 2017. Growth in supplies of all the commodities, except papaya, was

generally on account of favourable weather and growing conditions in the key producing regions, as well as increases in harvested areas.

If the export supply conditions observed in the first half of 2018 continue, global aggregate shipments of bananas and the four major tropical fruits combined could reach close to 30 million tonnes by the end of the year. Estimates on production, meanwhile, indicate that global output of bananas and major tropical fruits combined could reach 235 million tonnes in 2018, which would represent a 2% increase from the previous year. Typically, about 10% to 15% of the global production of bananas and major tropical fruits are traded, with the remainder of production consumed domestically.

Whether such vibrant supply growth will continue remains uncertain. As a side effect of intensifying production methods, globalization, and changing climatic conditions; the spread of pests and diseases is cause for concern to producers and consumers of bananas and tropical fruits. Control and eradication of most types of pests and diseases have proven to be extremely challenging, and have imposed a significant economic burden on many producing areas. The varying costs associated with the application of preventative treatments, harvest losses in affected areas, and the challenges related with meeting stringent phytosanitary standards are among the key factors that threaten to undermine the stability of supply and the economic viability of tropical fruit exports.

Given the magnitude and complexity of the problem, accurate estimates of the global economic impact of tropical fruits pests and diseases remain virtually impossible to ascertain. Even at the local level in affected areas, precise and complete documentation of the physical and economic damage caused by pests and diseases is often not available, rendering adequate policy recommendations difficult to draft. Besides jeopardizing harvests and, thereby, income opportunities, pests and diseases raise the price of production because of the high costs of preventative measures and treatments of affected plantations. Regarding trade, of particular concern is the impact of diseases on trade relationships, particularly if importing countries react with import restrictions, tightened full term (SPS) measures or additional controls. Therefore, awareness and a thorough understanding of the potential implications are paramount to designing appropriate control and prevention measures that would facilitate a continued expansion of the global marketplace for bananas and tropical fruits.

Keywords: pests and diseases, trade, production

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1. Further analysis of 2018 developments in global trade of bananas and major tropical fruits is included in the November 2018 edition of the FAO Food Outlook, published on the FAO website: <http://www.fao.org/giews/reports/food-outlook/en/>