# 1 Coffee Production

Coffee is a ubiquitous beverage, with a global market exceeding 130 billion dollars [1]. The most significant producers (2023) are described below:

| Brazil | Vietnam | Indonesia | Colombia | Ethiopia | Uganda | India | Honduras | Mexico | Peru |
|---|---|---|---|---|---|---|---|---|---|
| 4.13MT | 1.93MT | 0.782MT | 0.745MT | 0.545MT | 0.433MT | 0.430MT | 0.356MT | 0.270MT | 0.239MT |
| 41% | 20% | 8% | 8% | 6% | 4% | 4% | 4% | 3% | 2% |

Table 1: Significant Producers

Successful plantations require high elevations, rich soil, temperate climates with lots of rainfall. Brazil's flat topography enables large-scale mechanized harvesting [2] contributing to its dominant production profile in arabica. Vietnam has excellent soil and a very long rainy season ideal for growing robusta varieties. Robusta thrives in hotter, more humid and lower elevation environments relative to arabia [6]. In Brazil, the harvest extends from April to September due to a geographical diversity. Vietnam's harvest extends from October to April.

## 1.1 Historical Coffee Prices

A screenshot of coffee production was taken from tradingeconomics.com [3]. Prices spikes in early 2010 were due to production shortfalls in Brazil and Columbia caused by extreme weather. The price increase in 2022 was due to covid-related shipping issues and a bean shortage. In 2024, extreme heat and prolonged drought impacted yields in Brazil [4], leading to a historic price spike. Prices were expected to remain high into 2025 conditional on the possibility of supply issues continuing. However, on May 7, 2025, barchart.com reported the supply situation has improved, although low rainfall continues to be an issue [5].


Figure 1: Coffee Annual Production Chart [3]

Current futures prices contracts remain elevated to 2028 (although substantially below recent highs), possibly due to expectation of reduced coffee exports and USD-foreign exchange rates [7].

# References

[1] Ngure, Godfrey M, and Kazuo N Watanabe. "Coffee Sustainability: Leveraging Collaborative Breeding for Variety Improvement." Frontiers in Sustainable Food Systems, vol. 8, 31 July 2024, https://doi.org/10.3389/fsufs.2024.1431849.

[2] Maletic, Marina. “Coffee Production and Export Statistics: New Data on Global Coffee Trade.” Craft Coffee Spot, 10 Aug. 2023, craftcoffeespot.com/coffee-production-and-export-statistics/.

[3] https://tradingeconomics.com/commodity/coffee

[4] FAO. “Adverse Climatic Conditions Drive Coffee Prices to Highest Level in Years.” Newsroom, FAO, 14 Mar. 2025, www.fao.org/newsroom/detail/adverse-climatic-conditions-drive-coffee-prices-to-highest-level-in-years/en.

[5] Asplund, Rich. “Coffee Prices Retreat on Expectations of a Bumper Brazil Coffee Crop.” Barchart.com, Barchart, 7 May 2025, www.barchart.com/story/news/32268753/coffee-prices-retreat-on-expectations-of-a-bumper-brazil-coffee-crop. Accessed 14 May 2025.

[6] Lewis, Kathryn. “The Rise of Robusta Coffee.” Global Coffee Report, 15 Jan. 2025, www.gcrmag.com/the-rise-of-robusta-coffee/.

[7] https://www.barchart.com/futures/quotes/kc*0/futures-prices