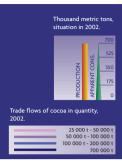
Commodity Atlas

COCOA





Production, consumption and trade of cocoa

The United Nations SITC (revision 2) defines cocoa as cocoa beans SITC code 072.1, cocoa powder SITC code 072.2, cocoa cake and paste SITC code 072.31, cocoa butter SITC code 072.32, chocolate and chocolate products SITC code 073.

Cocoa is a tropical commodity cultivated in hot and damp climates, with crop growing concentrated in a narrow band roughly 20 degrees north and south of the equator. Cocoa is best known as the principal ingredient in chocolate (90% of world output) and is among the major commodities exported by developing countries, with annual world trade currently totalling \$2.5 to \$3.5 billion. There are three varieties of cocoa trees: Forastero, which accounts for 90% of the cocoa beans produced in the world; Criollo, the source of "fine and flavour" beans; and Trinitario, a hybrid of Criollo and Forastero.

World market

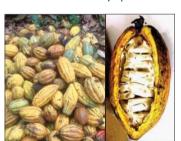
By and large, cocoa is grown on a small scale by farmers and family subsistence farming: growers typically have less than a hectare under cocoa. The main area of production is West Africa, where Côte d'Ivoire, Ghana, Nigeria and Cameroon account for around two thirds of world production and three quarters of world exports of cocoa beans. Côte d'Ivoire alone accounts for 40% to 45% of world cocoa bean production and 46% to 55% of world exports, and it depends on this commodity for about one third of its GDP. In the 1990s, spectacular growth in production rates was observed in Indonesia, which today ranks as one of the top cocoa producers, at the same level as Ghana. Other major producers are

Brazil, Ecuador, the Dominican Republic, Papua New Guinea, Malaysia, Colombia and Mexico, which together account for roughly 15% of world output. Weather conditions and diseases are the main factors affecting production. It has been estimated that up to 30% of world production is lost to diseases. The black pod, witches' broom and swollen shoot viruses are among the most common diseases affecting cocoa.



Although cocoa is largely produced in developing countries, it is consumed mainly in industrialized countries, plus Brazil and Mexico. Key buyers in the consuming countries are processors and chocolate manufacturers.







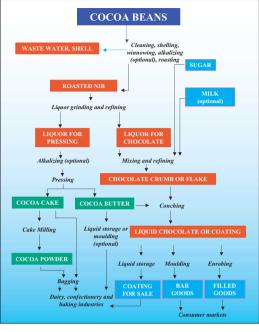
Top: Cocoa pods.
Bottom: Cocoa beans.

Processing chain

Four intermediate cocoa products are derived from cocoa beans: cocoa liquor, cocoa butter, cocoa cake and cocoa powder.

Industry structure

In recent years, economies of scale resulting from bulk transportation (in containers or in hold), along with the reshaping of cocoa markets in major producing countries, have created pressure for vertical integration and market concentration. For instance, the cocoa activities of Sifca, once the leading Ivoirian company, were taken over by Archer Daniels Midlands (ADM) in 2000. (Sifca's total turnover dropped by 80% between 1999 and 2003.) Today, five multinational companies - ADM. Barry-Callebaut, Cargill, Hamester and Blommer -

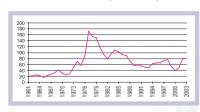


account for half of world cocoa grindings. Similarly, chocolate sales are dominated by a few large companies. Mars and Hershey account for roughly three quarters of sales in the world's leading consuming country, the United States, while Cadbury, Nestlé and Mars hold a similar share in the United Kingdom.

International Cocoa Organization (ICCO)

The ICCO was established in 1973 to administer the first International Cocoa Agreement (1972) and its successor Agreements of 1975, 1980, 1986, 1993 and 2001. The Sixth International Cocoa Agreement (2001) entered into force on October 1, 2003. Its goals include promoting international cocoperation in the world cocoa market, as well as contributing to the strengthening of the national cocoa economies of member countries and to balanced development of the world cocoa economy.

Annual average of cocoa prices, N.Y./London 3 month futures (US cents/lb.)



Price trend and instability

During the past four decades, cocoa prices have been quite unstable. The only exceptions were the early 1980s and 1990s, when world cocoa price volatility decreased somewhat. Cocoa prices are chiefly influenced by fundamental factors, but recent concerns about the cocoa crisis in Côte d'Ivoire have led to increasingly speculative positions, which tend to amplify price instability. International prices usually follow a long-term pattern linked to the cocoa cycles of 20 to 30 years. Since 1960, world cocoa prices have decreased sharply, while choco-

late prices have improved markedly. In France, for instance, cocoa bean prices accounted for 20% of the value of a chocolate bar in 1960 against 5% today.

Commodity Atlas

COCOA

Cocoa butter equivalent

Since 1973, there has been a heated international debate on the use of cocoa butter substitutes, and in particular on the use of fats derived from palm oil, illipe (borneo tallow or tengkawang), sal, shea, kokum gurgi, and mango kernel. In March 2000, the European Chocolate Directive 2000/ 36/EC authorized up to 5% of vegetable fats other than cocoa butter, the socalled cocoa butter equivalents (CBEs), in chocolate, Since the EU Directive came into force in August 2003 and as the chemical composition and physical properties of CBEs are very much like cocoa butter (making them quite difficult to quantify and to some extent to detect), it has been difficult so far to measure exactly the overall effects of this regulation, particularly in terms of potential loss in demand for cocoa beans. The evolution of the price differential between cocoa and CBEs will definitely influence substitution

To learn more

UNCTAD/INFOCOMM,
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International Cocoa
Organization www.icco.org

UNCTAD (forthcoming). Cocoa Market Structure (CD-ROM)

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