

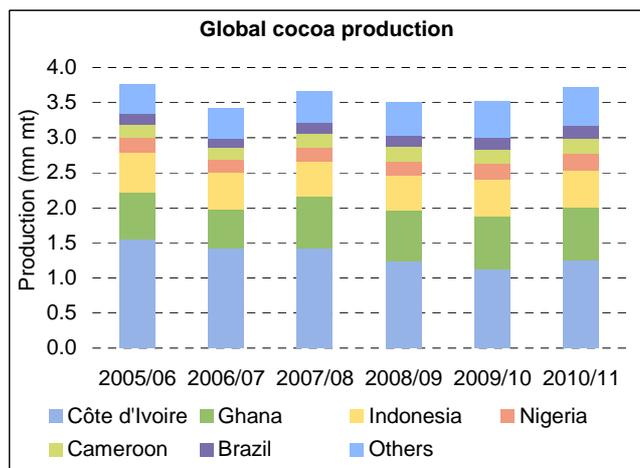


With commodity prices rising, production struggling to meet demand and increasing urbanisation in many cocoa producing countries, it is constructive to consider what a sustainable cocoa industry looks like. A sustainable agricultural system is one that not only meets consumer demand but also addresses the social, economic and environmental challenges facing producers.

Here we examine a broad framework of sustainability issues and the role of the World Cocoa Foundation (WCF) in addressing them.

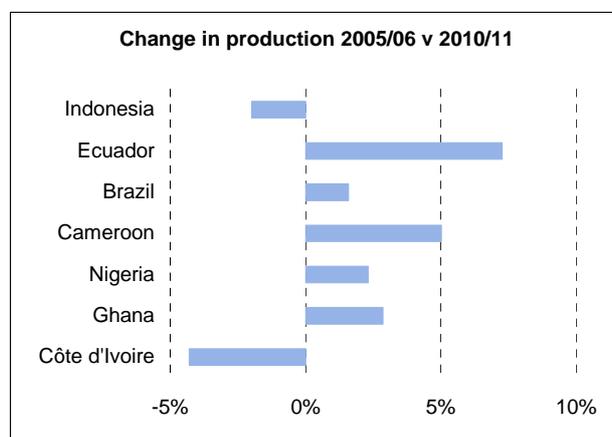
Cocoa supply

Production of cocoa significantly impacts the economies of some of the world's least developed countries, providing livelihood to 40-50 million people in Africa, Latin America, and Southeast Asia. In addition to widespread rural employment, cocoa also contributes significantly to government revenues and foreign exchange earnings.



Cocoa production is expected to reach 3.7 million tonnes in 2010/11, close to its peak level in 2005/06. Output is dominated by Côte d'Ivoire, which accounts for more than 30% of total output, while Ghana and Indonesia combined account for a further 35%.

Seven countries account for 90% of global production. Of these, production has fallen in **Côte d'Ivoire** over the past five years and is on a long-term downward trend due to limited investment, with ageing trees increasingly vulnerable to disease and adverse weather conditions. In **Ghana**, sustained investment has led to higher production. With little available land for area expansion, output growth has been achieved by increased productivity. **Indonesia** has the potential to further increase production because of land availability. However, growth has been hampered by pests and diseases and environmental concerns exist around land use.

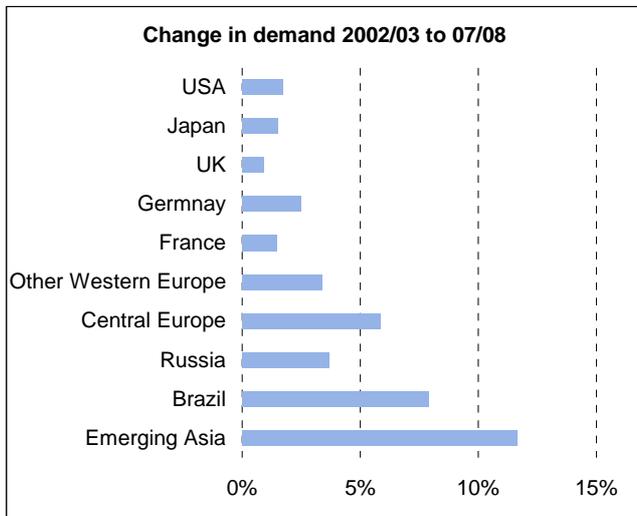


Among the others, **Cameroon** and **Nigeria** have expanded output, while **Ecuador** has increased production with its high-yielding CCN-51 variety. With rising labour costs and competition from alternative crops, **Brazilian** production growth has been limited.

Cocoa demand

Cocoa demand peaked at 3.7 million tonnes in 2007/08. It has since fallen owing to lower demand in the developed markets following recession. Prior to the recession, demand was growing at over 3% per annum. In 2008/09, demand fell by 5.7%. In the longer term, demand growth is expected to recover to pre-recession levels. While the developed markets

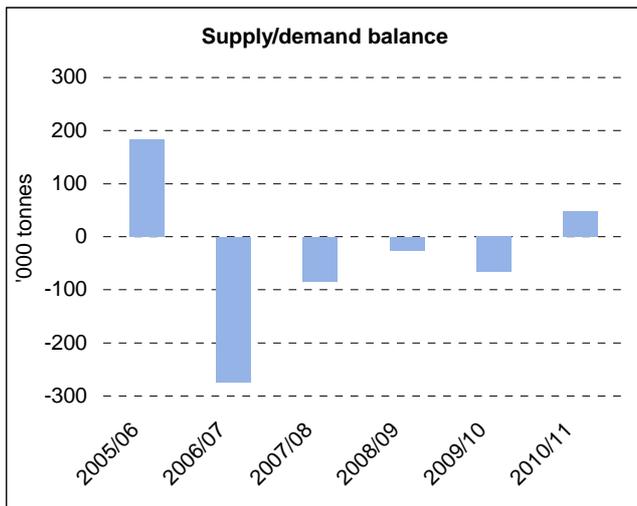
account for over 60% of demand, this proportion is falling as growth rates are low owing to near saturation. Stronger growth is being experienced in the emerging markets as incomes rise.



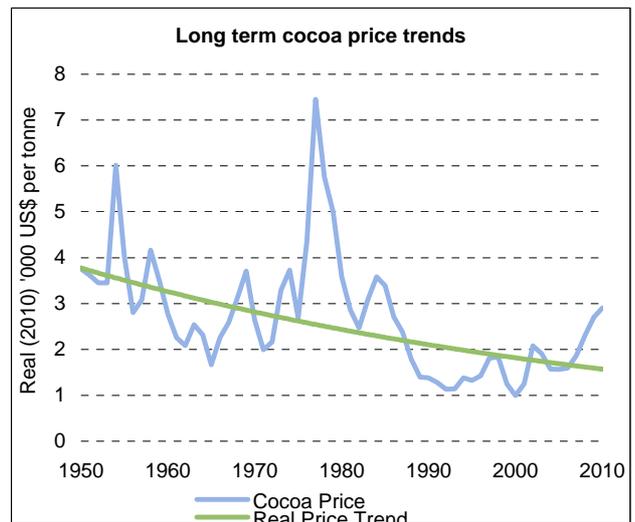
One important implication of this shift in demand is the growth of powder based products over cocoa based products (partly a result of the lower price of these products, but also increased demand for powder based beverages). This trend has been amplified by the recession.

Prices

The supply-demand balance reveals a market surplus in 2010/11 for the first time in five years. Looking ahead, the challenge for cocoa producers is to ensure sufficient production to meet rising demand.



The mechanism through which this occurs is price. Prices have risen in recent years and further encouraged production. However, if we consider a much longer time period, annual average prices have fallen in real terms by around 2% per annum. Price movements affect the entire supply chain, especially producers whose livelihood depends on cocoa income.



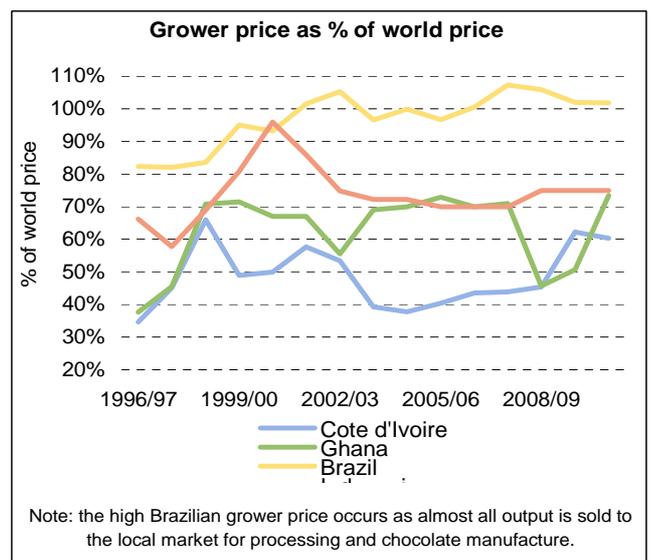
Key issues for cocoa farmers

A better understanding of the factors influencing production involves a more detailed assessment of those responsible.

Farmers face numerous challenges to successful market participation and achieving a sustainable livelihood through cocoa.

Marketing inefficiencies

An estimate of the level of marketing inefficiency can be made by comparing the grower price in different countries to that of the export or traded price. In West Africa, the percentage of the market price that farmers receive is often low in comparison to other regions of the world, historically ranging from 40 to 65% of the traded price. This can be due to a number of factors including: a lack of understanding of quality requirements, little access to market information, individual rather than group selling, high taxation and transport costs.



Note: the high Brazilian grower price occurs as almost all output is sold to the local market for processing and chocolate manufacture.

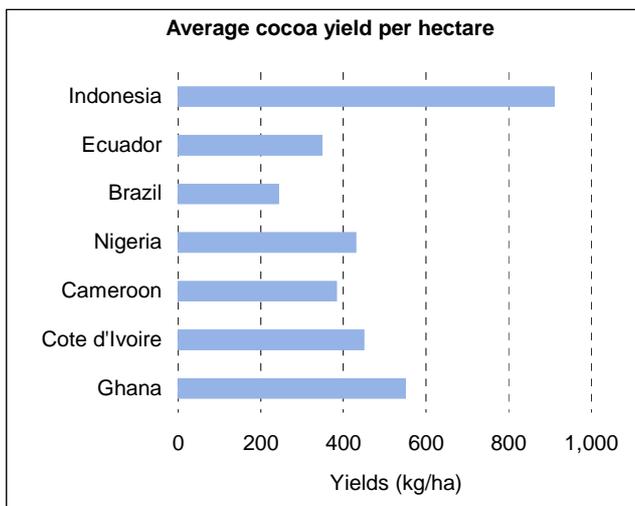
Participation in organised farmer groups ranges from an estimated 30% in Côte d'Ivoire to much lower levels in Nigeria and Ghana.

Low productivity

The returns to production (and hence farmer income) can be low due to low productivity. In many cases, farmers have limited knowledge of improved production techniques and farm management skills. Access to finance and availability of quality inputs and planting material can limit a farmer's ability to purchase inputs in a timely and cost effective manner. A majority of farms in West Africa have an ageing tree population and yields per hectare (under 500 kg/hectare) are lower than what is possible on more productive farms (1,000 kg/hectare). Worldwide, only about 30% of cultivated cocoa is from a breeding or selection programme.

Pests & disease

Pests and disease are a significant source of crop losses in all three cocoa-growing regions. Some estimates suggest that these losses could be as high as 30% to 40% of global production. The main fungal diseases are black pod, witches' broom, frosty pod rot, and vascular streak dieback. In West Africa, cocoa swollen shoot virus is also common. Pests include mirids in West Africa and cocoa pod borer in Southeast Asia. Often ill equipped to combat disease, farmers do not focus on rehabilitation but look for new areas to cultivate.



Limited access to quality education & healthcare

Education and healthcare are vital to the renewal of rural capacity and improving living standards for farmers. With the farmer population aging and urbanisation increasing, it is important to encourage younger people to pursue a career in farming. Education ensures productivity and innovation in rural cocoa communities. However, a lack of quality and relevant education leads to low school enrolment, completion rates, and low literacy rates.

Environmental concerns

The environmental impact of production varies considerably between countries, but issues range from the availability of land for new plantings (and avoiding deforestation) to differences in production

systems. In addition, soil fertility levels are declining in many countries. Improving productivity of currently cultivated land is crucial to rejuvenating cocoa lands.

At its best, by maintaining a shade canopy of diverse forest species, farmers can manage a very biologically diverse cocoa based land use system.

WCF framework

WCF, an international membership foundation whose members represent more than 80% of the cocoa trade, implements, manages and participates in programmes to help independent family farmers in 15 cocoa producing countries.

WCF's programmes are guided by three principles:

People: healthy and thriving cocoa-farming households and communities;

Planet: responsible, sound environmental stewardship; and

Profit: improved and more equitable economic returns to farmers.

Through partnerships with multi-lateral donors, international NGOs, local institutions, and government partners, WCF programmes work to improve livelihoods by adhering to these principles. Examples of WCF programmes are shown in the boxes below.

More than 420,000 farmers have been directly involved in WCF programme since 2000, and some have increased their incomes by as much as half. Increasing farmer income is an important driver of sustainability as it can also provide the building blocks for meeting social and environmental needs.

People

Living in rural, tropical, agricultural areas, cocoa-farming families and their communities face broader social, labour, health, and education issues which are often common to cocoa farmers and non-farmers alike. Building the capacity of individuals and communities to better understand and address these issues is essential to their long term viability.

WCF supports programmes that work towards healthy and thriving cocoa farming households and communities by:

- Educating adult farmers, youth and children about child labour issues.
- Incorporating information about farm safety into training on production practices.
- Assisting in strengthening farmer organisations.
- Improving the quality and relevance of education for young and young adults.
- Entrepreneur and leadership training.

- Dissemination information about HIV/AIDS, malaria and other health issues in farmer and youth training activities.
- Working with communities to shape the implementation of their education activities.

WCF Programme: *WCF ECHOES Alliance (Empowering Cocoa Households with Opportunities and Education Solutions) - Ghana, Côte d'Ivoire*

A public - private partnership supported with funding from USAID and WCF member companies

Goal: Fill the education gap with improved primary and secondary education and advanced agricultural and life skills training for youth and young adults.

Objectives: Enhance education by incorporating agriculture, leadership and business skills. WCF ECHOES empowers students and teachers in the local school system and young adults in the farming community.

Key Activities: Gender-integrated education through functional literacy, livelihoods and life skills training, social messaging, teacher training, and curriculum development.

Planet

Cocoa can help establish and sustain diverse plant, animal and insect ecologies across production areas. Many environmentally friendly practices can also be economically beneficial by reducing input costs.

WCF supports programmes that promote sound environmental stewardship by:

- Promoting efficient, responsible water use.
- Training farmers in soil fertility management techniques and integrated pest and disease management.
- Encouraging agroforestry and intercropping.

WCF Programme: *Latin America*

WCF supports a number of initiatives in Latin America, including research on frosty pod resistance cocoa genotypes through CATIE in Costa Rica, evaluation of cocoa germplasm for resistance to witches' broom disease with the University of West Indies, and strengthening farmers in post-harvest handling and marketing in Colombia and Jamaica.

WCF Programme: *Southeast Asia*

WCF programmes in Southeast Asia include capacity building in Vietnam, breeding and demonstration, production and post harvest training for cocoa and diversified crops in the Philippines, and supporting scientific exchanges in Philippines and Indonesia.

Profit

Cocoa can be an economic engine in rural areas, generating improved incomes and opportunities.

WCF supports programmes that work towards improved and more equitable returns for farmers by:

- Training farmers in improved production.
- Improving farmer access to high yielding, disease resistant varieties, through research and breeding programmes.
- Researching and developing better means of pest and disease control.
- Promoting diversification of income.
- Improving farmers' business skills.
- Educating farmer organisations about quality control and testing.
- Improving access to market.

WCF Programme: *WCF Cocoa Livelihoods Programme - Cameroon, Côte d'Ivoire, Ghana, Liberia, Nigeria*

Funded by the Bill and Melinda Gates Foundation and WCF member companies

Goal: Double the income of more than 165,000 cocoa producing households.

Objectives: Improve market efficiency and build capacity of farmers and farmer organisations; Improve production and quality of cocoa at the farm level; Improve farmers' competitiveness on diversified farms.

Key Activities: Professionalising farmer organisations (recording keeping, operating and cash budgets, leveraging resources), increasing access to inputs and improved planting material, providing financing mechanisms for improved access to credit, farmer business skills training, and business service centres.

Cocoa sustainability

While the WCF¹ is but one of the organisations addressing the issue of cocoa sustainability, its focus on people, planet, and profit addresses the core issues affecting the sector. Education that is relevant to agriculture communities results in tangible skills, improved learning by children and incentives for parents to keep their children in school. Education that increases agricultural productivity is commercially valuable but also serves to increase food security. Learning to use land better and incorporate environmentally responsible practices protects the ecosystem and is economically beneficial by reducing input costs. Improving productivity and diversifying income leads to higher disposable income and purchasing power; especially for food and items of primary necessity, a major contributor to food security and rural transformation.

¹ More information on WCF can be found at their website at www.worldcocoa.org.