

Understanding the cocoa chain

Enhancing the sustainability and viability of cocoa



Introduction

Various private and public endeavours currently aim to improve the sustainability of imported tropical commodities and to increase the viability of production, processing and trade. The anticipated increased demand for certified sustainable cocoa and the uncertainty about secure access has brought together key economic players in the Dutch economy with international private and public sectors. In addition, networks of companies, NGOs and governments have signed a letter of intent that reflects their strong commitment to enhance the sustainability of cocoa imports to the Netherlands.

By working with private and public partners across commodities, countries and value chains, Wageningen UR aims to enhance the relevance, validity, generalisation and uptake of research findings and experimental models.



The engagement of researchers in these endeavours in the cocoa chain has encouraged the search for a forward-looking research strategy. Despite decades of research, cocoa is often seen as an orphan crop, with a dedicated, international research programme absent. Yet, cocoa is critical to the livelihoods of an estimated 5.5 million smallholder producers and for those involved in their trade and processing, which explains why cocoa has been on the agenda of trade and development-oriented organisations.

Five main topics

We focus on the challenges at all stages of the commodity chain from the often economically and socially vulnerable smallholder farmers, and their connections and interdependencies. We look at service provision, business strategies and institutional arrangements in markets and value chains. Our work addresses both technical, natural and socio-economic dimensions.

The five main topics are:

1. Vulnerability and productivity
2. Service delivery and concerted action
3. Diversity and sustainability
4. Quality and new business models
5. Market transformation and transparency

We understand cocoa

Wageningen UR has over forty years of experience in tropical agriculture and commodity chains. We offer a holistic and a multidisciplinary approach to tackle different challenges related to sustainability issues from social, economic and environmental dimensions. From supply chain management to socio-economic knowledge and from pre-harvest processing knowledge to the impact of certification. We understand and we know the chain. We have experience in working for governments, NGOs, the private sector, certification institutes and public-private partnerships.

LEI Wageningen UR

LEI Wageningen UR is a leading social-economic research institute in international terms and an independent, strategic partner for government and companies. The unique data, models and knowledge of LEI support customers in policy and decision-making and ultimately contribute to a more sustainable world.

1. Vulnerability and productivity

There is a large diversity in cocoa production systems; in general they are vulnerable to risks related to external pressures. Pests and diseases easily cross the individual farm and national boundaries, as do extreme weather events, while sudden peaks and collapses in prices endanger investments in costly inputs such as fertilisers and training. Hence smallholder producers are vulnerable to agro-ecological as well as to social and economic conditions. As the majority of cocoa is produced by smallholders, it is they who deal with many of the risks in production, marketing and social organisation. However, certification schemes, traders and processors, are increasingly engaging with growers to ensure quality and secure supply, sharing risks and costs and bringing new dynamics into interaction between origin and consumer country governments.

Wageningen UR works on participatory developing tools to diagnose and improve production systems and value chains. Such tools fit with localised practices that aim to manage risks in farms, regions or the chain, as well as introduce new techniques and systems.

2. Service delivery and concerted action

The growing demand for sustainable cocoa production has induced a variety of initiatives to work with smallholder producers. These project-based collaborations contrast with the scale dimensions of the production systems and value chain interactions. For companies, certification schemes and NGOs it is difficult to upscale to reach the large numbers of farmers in remote and diverse regions.

Wageningen UR tries to assess how and to what extent certification and other forms of value chain governance impact on the institutional dimensions of producing, processing and trading cocoa. We are generating new knowledge about logistical and managerial dimensions of managing supply and information in value chains.

3. Diversity and sustainability

Certification and integration into international value chains encourages further specialisation of cocoa farmers. This is often at odds with their livelihood and farming strategies which seek diversification to manage and speak risks. However, ensuring quality in mainstream chocolate markets, now and in the future, depends on crossbreeding and developing fine flavour cocoa varieties that are currently mainly conserved through the sales of origin or specialty chocolates. Niche and speciality markets rely on a specified quality and flavour, based on the ability to trace bean origin. Yet, what are options to create functional linkages between different market segments, with the purpose

of maintaining a level of diversity required for responding to anticipated or unanticipated problems.

Based on Wageningen UR research, we can state that there can be trade-offs of strategies encouraging development of commodity production into more uniform and specialised activities, including trade-offs with food and nutritional security at farmer, national and global level.

4. Quality and new business models

The quality of cocoa and cocoa beans and of end-use of beans and their derivative products varies enormously. Supply chain management tends to be directed towards sourcing a consistent, secure and predictable quality. Industry has responded to public pressures and regulatory measures that make them accountable for the safety, health and sustainability of consumer products.

Wageningen UR works with the private sector on business models that focus on new products, optimising quality, improving existing products and increasing efficiency in production (for example energy, waste, environmental and social impacts).

5. Market transformation and transparency

Historically, the trade in tropical commodities has been subject to various public and private measures that have regulated prices, the competitive field, and terms of trade. The recent interest in traceability, largely triggered by consumer organisations and the media has been taken up by certification and standard setters. Current concerns about the distribution of value across the chain, has been stimulated by fair trade initiatives and civil society, shows the relevance of understanding how market transformation works and how it impacts coordination and negotiation among different actors, livelihoods and production systems.

Wageningen UR has worked with certification agencies, traders, and non-government organisations to research the effects of certification procedures on traded volumes and prices and the impact on the various players in the chain, the environment and society.

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