



**ICO Coffee Development Report 2019  
Overview**

**Background**

The Executive Director presents his compliments and has the pleasure of circulating to Members, observers and members of the Private Sector Consultative Board, the 'Overview' of the Coffee Development Report (CDR) 2019, the first issue of the new economic flagship publication of the ICO, "*Growing for Prosperity: Economic viability as the catalyst for a sustainable coffee sector*".

This year's report provides an in-depth analysis of the root causes and impact of the current coffee price crisis. It contains an independent assessment of possible actions to address the economic challenges and foster the long-term sustainability of the coffee sector. The report provides the analytical underpinning to the Structured Sector-Wide Dialogue, a process initiated by the ICO as part of the implementation of Resolution 465.

The Overview provides a preview of the key results and recommendations contained in the CDR. The full report will be officially launched on 1 October, International Coffee Day 2019, followed by a roadshow that entails presentations of the key messages in Member countries, at development institutions and in political forums with the aim of mobilizing resources and support for the implementation of the main recommendations.

The CDR will strengthen the Organization's role as the major and neutral source of coffee data and analytics and set the agenda in the global debate on issues related to the development of the coffee sector. The CDR responds to the ICO's mandate to be a leading source of information on the coffee sector in order to enhance market transparency, as set out in the International Coffee Agreement 2007 and also reiterated in the current Five-year Action Plan 2017-2021.



# Growing for Prosperity

Economic viability as the catalyst for a sustainable coffee sector



**INTERNATIONAL  
COFFEE  
ORGANIZATION**

# Coffee Development Report 2019 - Overview

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## Foreword

Women and men started drinking coffee many centuries ago and traces of “formal” cultivation and trading of coffee go back as far as the 15<sup>th</sup> Century. Nowadays, coffee is commercially produced in more than 50 countries and the world drinks over 3 billion cups a day, alone, with families, friends or colleagues, while sitting, standing or walking, at home or in coffee shops, and even in outer space.

Millions of coffee growers, mostly smallholder farmers, increased production by 50% over the past two decades. Coffee-producing countries still export the bulk of their produce, earning around USD 20 billion in exports a year. The annual income of the coffee sector as a whole is estimated to exceed USD 220 billion, more than 11 times the value of exports received by producing countries. At least 100 million families depend on coffee for their living. A substantial number of jobs and economic opportunities are created along the global coffee value chain. These range from input providers to farmers, traders, processors, roasters, distributors, marketers, packaging suppliers, baristas and even those who deal with the disposal and re-use or recycling of coffee waste. Coffee is a growth market. Globally, the number of consumers continues to rise and consumption is steadily growing at a healthy annual rate of 2.2%.

In spite of the positive market trends, significant differences exist among actors in the coffee value chain in terms of risks, income, access to resources and vulnerability to price volatility and climate change, hinder the sustainability of coffee. The drop in coffee prices by 30% over the last two years has had negative repercussions for the lives of many coffee farmers. How can we ensure equitable prosperity for all coffee stakeholders, and especially for millions of coffee farmers? They represent the weakest link in the value chain and often struggle to cover basic production costs at current price levels, especially taking into account increases in cost of inputs and logistics.

All those involved in the coffee sector agree on the need to take corrective actions in order to ensure greater prosperity for coffee farmers and their families, so that the growth in the sector is equitable and sustainable in the future. This Report seeks to tackle these complex issues. It has been produced using rigorous, factual, informed and independent analysis.

This first Coffee Development Report (CDR) marks the launch of a new series of flagship reports, which represent a significant upgrade in the ICO’s function as a global forum for discussion of coffee policies. The flagship reports will strengthen the Organization’s role as the major and neutral source of coffee data and analytics and set the agenda in the global debate on issues related to the development of the coffee sector. In this perspective, the CDR responds to the ICO’s mandate to be a leading source of information on the coffee sector in order to enhance market transparency, as set out in the International Coffee Agreement 2007 and also reiterated in the current Five-year Action Plan 2017-2021.

This first edition of the CDR is based on the analysis of ICO data and information from external sources and seeks to offer a framework to capture the complex nature of the coffee market. It builds on and complements other ICO studies that also shed light on the strong relations between the development of a sustainable and inclusive coffee sector and its economic viability. The Report also draws on the outcomes of the structured sector-wide dialogue launched by the ICO in 2018/19, in which 80 experts and 2,000 participants were involved in five consultative events organized by the ICO in Nairobi, at the United Nations in New York City, in Rome at the EXCO Development Expo and at the European Commission in Brussels.

By placing economic sustainability at the centre of attention, this year’s CDR responds to the concerns of ICO Members, as set out in Resolution 465 on Coffee Price Levels.

By virtue of a rigorous quantitative analysis, the relationship between coffee farming and socio-economic indicators such as poverty and food security is examined. The solutions identified seek to address low price levels and price volatility in order to meet the long-term sustainability goals set out in the United Nations 2030 Agenda

for Sustainable Development Agenda. At the heart of the UN Agenda is the concept that “No one should be left behind”, and surely the vision of the ICO is that this should not happen to coffee farmers, workers and their families and to all coffee stakeholders.

This effort, I hope, will inform the political debate and help mobilize the support of governments, financial institutions and international organizations in order to help the world coffee sector to grow sustainably, while reducing barriers to trade, fostering social, economic and environmental sustainability and generating prosperity for all those involved in the coffee value chain.

It is a great pleasure for me to present this Coffee Development Report 2019, which adds a new dimension to the analysis of the development of the world coffee sector. The report reaffirms the commitment of the ICO in supporting its Members and all coffee stakeholders to achieve inclusive and sustainable development and to meet all 17 Sustainable Development Goals. A key message of the report is that the sustainable and inclusive development of the coffee sector requires major shifts, through enhanced sector-level cooperation based on shared values and responsibilities and an alignment of actions, funding and schemes through pre-competitive action, public-private partnerships and investments.

Finally, I extend my personal compliments to the entire ICO team, including our international experts and external contributors, who accepted the challenge of initiating and blazing a new trail for the Organization by producing this timely report that should inspire all parties interested in promoting the sustainable development of the whole coffee sector.

José Sette

*Executive Director, ICO*

## Acknowledgements

The Coffee Development Report 2019 has been prepared by an ICO team under the overall guidance of José Sette, Executive Director of the International Coffee Organization (ICO).

The conceptualization, preparation and publishing of the Report, both Section A and B, were managed by Gerardo Pataconi, Head of Operations, with Christoph Sanger, ICO Senior Economist. The latter led the drafting and finalization of the whole report, together with Marcela Umaña, ICO Economist, who also developed and applied an econometric model contained in Section A and Technical Annex 2. Part B of the report was drafted by Jan Willem Molenaar and David Short, of Aidenvironment, with financial support from the German Federal Ministry for Economic Cooperation and Development (BMZ) through Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) GmbH, to which the ICO wants to express sincere thanks and appreciation.

A substantial contribution was also made by Atanu Goshray, Professor of Economics, Newcastle University, who drafted Section A Chapter II and Technical Annex I.

The team recognizes the valuable inputs from ICO staff Denis Seudieu, Chief Economist, as well as from Rebecca Pandolph, Chief, Statistics Section, and Nikita Sisaudia, Statistician, on data provision and analysis. The Report also benefitted from substantial comments provided by Maike Mollers and Jonas Dallinger, both of GIZ.

The report is based on the team's efforts, knowledge and skills and builds on the outcome of the Structured Sector-Wide dialogue hold by the ICO from March-June 2019 that integrated inputs by some 80 experts and around 2000 participants.

A special thanks to Sarah Friend, ICO Secretariat and Communications Officer, who coordinated the publishing of the Report, and for the support of Mirella Glass, ICO Translation and Documents Coordinator.

The team apologizes to any individuals or organizations inadvertently omitted from this list and expresses its gratitude to all who contributed to this Report, including those whose names may not appear here.

The team members wish to recognise the hard work of coffee farmers and their families who have inspired and motivated the preparation of this Report, as well as of all coffee stakeholders and coffee lovers.



## 1. Background

Coffee is one of the most important tropical commodities and provides economic benefits at each step of the global value chain that links growers to consumers. The coffee industry contributes to the economies of both exporting and importing countries. As a beverage, it brings joy to a growing number of consumers around the world. At origin, production of coffee provides a livelihood for up to 25 million farmers and their families. Additional economic benefits are accrued by actors along the global value chain, be they traders, roasters, retailers and their workforce or other stakeholders.

Over the past two decades, the global coffee sector has expanded significantly as demand for coffee increased by 65% (ICO, 2019a). The main driver of growth has been rising consumption in emerging economies and coffee-producing countries. Demand in traditional markets with already high per capita consumption has been reinvigorated by the growth of high-value market segments, such as specialty coffee, and as a result of product innovations that provide new flavours and more convenience to consumers.

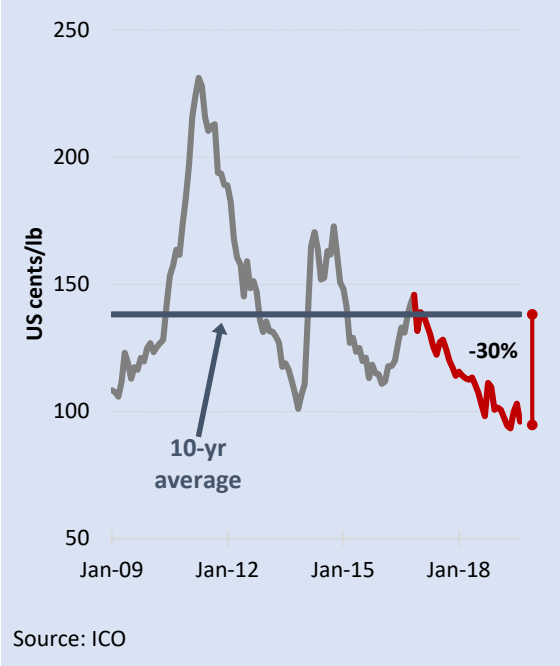
The value of unprocessed green coffee at origin amounted to more than USD 25 billion in 2017/18 (ICO, 2019a). The valuation of the whole coffee industry is several times higher and is estimated to surpass USD 200 billion globally (Samper, Giovannucci and Vieira, 2017).<sup>1</sup> Most of the value is created in coffee importing countries.

Despite the overall growth in the sector, coffee prices have experienced a continued downward trend since 2016, dropping 30% below the average of the last ten years (Figure 1). Coffee growers worldwide are struggling to cover their operating costs as input, compliance and transaction costs

continue to rise (ICO, 2019b, 2019c). Consequently, farm incomes decline and the livelihoods of coffee-producing households, the majority of which are led by smallholders<sup>2</sup> in low- and middle-income countries, are increasingly at risk. The slump in coffee prices has severe economic and social consequences for producing countries.

This situation poses a serious risk to the sustainability of the sector and to future coffee supply. If no action is taken, the coffee sector may not be able to make its critical contribution to achieving the Sustainable Development Goals (SDGs) of the United Nations. Instead, progress made previously could be jeopardized or reversed.

**Figure 1: ICO composite indicator prices dropped by 30%**



<sup>1</sup> The valuation depends on how widely the industry is defined. A recent estimate of the National Coffee Association estimates the US coffee industry alone at more than USD 250 billion <http://www.ncausa.org/Industry-Resources/Economic-Impact>.

<sup>2</sup> There is no single definition of smallholder farmers. However, in general terms, a smallholder farmer owns less than two hectares of land, relying chiefly on family labour and only rarely on occasional workers on a contractual basis for cultivation and harvest (FAO, 2015).

#### *Text box 1: Coffee prices*

Throughout this Report various coffee prices are quoted and used for analysis. Coffee prices fall broadly in two categories, spot prices and futures prices.

**International spot market prices:** ICO group indicators for Colombian Milds, Other Milds, Brazilian Naturals and Robustas (based on ex-dock quotations reported in main markets).

The group indicator prices are combined in a single measure, the ICO composite indicator which represents an 'average coffee price'.

**National spot market prices:** Prices paid to growers refer to farm-gate prices reported in local currency by ICO Member countries.

**Futures market prices:** Quotations from the New York (Arabica) and London (Robusta) exchange. The prices are the average of the 2<sup>nd</sup> and 3<sup>rd</sup> positions.

*Source: ICO document ICC-105-17 'Rules on Statistics – Indicator Prices'.*

## 2. Objectives and structure of the report

This report provides an in-depth analysis of the root causes and impact of the current coffee price crisis. It contains an independent assessment of possible actions to address the economic challenge and foster long-term sustainability of the coffee sector. In addition, the report introduces the concept of living income as a reference framework for the identification of priority solutions (Text box 2).

The report provides the analytical underpinning to the Structured Sector-Wide Dialogue, a process initiated by the ICO as part of the implementation of Resolution 465 (Text box 3).

The aim of the dialogue is to identify solutions and concrete actions to alleviate the short-term impact

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<sup>3</sup> The results of the consultative process are summarised in the interim report of the ICO Sector-wide Dialogue ([Document ED 2309/19](#)).

#### *Text box 2: The concept of a Living Income*

**Living Income** is defined as, "the net annual income required for a household in a particular place to afford a decent standard of living for all members of that household."

The concept was inspired by the living wage debate in the garment sector, where cost of living benchmarks have been calculated based on the Anker and Anker (2017) methodology. This methodology has been adapted and is being piloted in multiple smallholder-dominated agricultural sectors around the world. In the coffee sector, initial steps are being taken by various stakeholders to conduct living income benchmarks (for example, in Uganda). Once the cost of a basic but decent living in a coffee growing region is calculated, it can be compared against the actual income that coffee smallholders earn in that region. As a holistic, household-based concept, living income allows for the identification of solutions that strengthen the profitability of a farming business from diversified sources whether coffee or other crops, livestock, and off-farm income-generating activities. The concept is increasingly recognized by donors, industry, civil society, and researchers as a credible and practical framework to address the incomes of smallholder farmers.

*Source: Anker, R. & Anker, M. (2017). Living Wages Around the World: Manual for Measurement. Cheltenham: Edward Elgar Publishing.*

of low prices on producers and to achieve a sustainable coffee sector in the long-term. The sector-wide dialogue initially comprised a series of five global consultation events with contributions from more than 80 coffee sector and development experts as well as participation of over 2,000 stakeholders.<sup>3</sup>

**The report is structured in two main sections:**

**Section A assesses market fundamentals as well as other factors determining price levels and volatility.** The current coffee price crisis is

contextualized within a wider framework that links the commodity price cycle with development indicators at farm, regional and country level. Market opportunities for farmers that result from the overall growth of the coffee sector are assessed in relation to more equitable growth. The comparison of the ongoing 'coffee price crisis' with previous down-cycles in the markets highlights important differences that define the scope for potential action.

**Section B analyses concrete actions** that coffee stakeholders, both public and private, can take to address the impact of the coffee price crisis in the short-term, as well as actions in the medium- and long-term that can effect transformational change towards a global sector that is competitive, fair, inclusive and environmentally friendly, thereby contributing to providing growers with a living income and achieving the SDGs. By considering trade-offs and barriers to implementation this report prioritizes solutions that are effective and scalable. The section closes by articulating stakeholder roles and responsibilities.

### 3. Main findings

**Coffee is economically important but the cyclical nature of the market is a challenge for farmers and producing countries.** Coffee is a source of income for more than 12 million farms worldwide, a quarter of which are operated by women. It provides direct employment to more than 25 million families in producing countries. Coffee remains an export commodity. With 70% of production exported, coffee provides vital foreign exchange earnings. However, export dependency exposes farmers, many of whom are vulnerable smallholders, and governments in producing countries to significant market risks. Volatile markets are challenging, in particular to the 20% of coffee producing countries that are ranked *low* in the Human Development Index (HDI < 0.5), as defined by the United Nations Development Programme (UNDP).

#### *Text box 3: Resolution 465*

At its 122<sup>nd</sup> Session in September 2018 in London, the International Coffee Council adopted Resolution 465 'Coffee Price Levels' to address the impact of low prices on the livelihoods of coffee farmers.

This resolution provides the Organization with a strong mandate to respond in a coordinated and integrated manner to current coffee price levels, including opening a sector-wide dialogue to engage all value chain actors, as well as the international community in collective action.

Other areas include taking measures to promote coffee consumption and to raise the awareness of consumers to the economic reality of coffee farmers.

Source: [ICC Resolution 465](#)

**Current low coffee price levels are mainly the result of overproduction.** The study identifies the fundamentals of demand and supply to be key drivers of price levels. Two consecutive years of surplus in the market have resulted in an estimated oversupply of almost 8 million 60-kg bags in 2018/19, the equivalent of nearly 5% of global output. Oversupply is the key factor driving current low coffee price levels, despite steady growth in consumption.

**Non-fundamental factors can also affect price levels.** Depreciation of local currencies of certain producing countries against the US dollar increases the competitiveness of some countries on the world market. While this lies outside the influence of growers, it provides incentives to produce and export, further fuelling the oversupply in the market.

**Speculation in coffee futures markets can intensify price movements.** The activity of non-commercial traders can initially exacerbate upward and downward price swings, although market fundamentals of demand and supply prevail in the long run. The results for the coffee market are in line with research on other agricultural commodities.

**Concentration on the buyer side is increasing, but a link with price levels remains unclear.** However, market power on the buyer side could lead to unfavourable contract terms for upstream value chain actors, such as farmers.

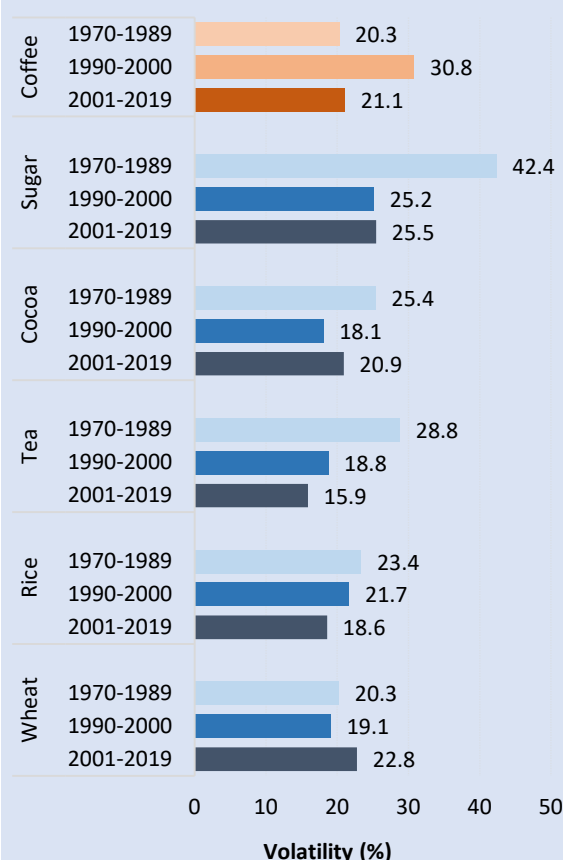
**Long-term trends in coffee prices are negative in some countries.** Real international coffee prices show a high variation in the short run but no long-term trend. In some producing countries (e.g. Brazil, Colombia, Ethiopia, Honduras), however, real coffee prices have decreased since the 1970s, potentially leaving farmers worse off if falling prices have not been offset by higher productivity.

**Price volatility is not on the rise but remains at a critical level** (Figure 2). In the decade following the liberalization of the coffee market, price volatility initially rose from 20.8% during the period when ICA economic clauses (quotas) were in place to 30.8% in 1990-2000. However, volatility in the subsequent period (2001-2018) was significantly lower at 21.1%, statistically indistinguishable from the level observed during the quota period. Compared to other cash and food crops, coffee prices show similar volatility levels, leaving farmers with risky production and livelihood choices.

**The impact of prolonged periods of low price levels on producers is severe.** Within a decade, the cost of production in local currency has nearly doubled in major production regions. Labour constitutes more than 50% of total cost in most production systems (except Brazil). In high-cost origins, 25-50% of farmers are unable to cover their full production cost. Systematic global farm-level data is not available – pointing at a severe data gap – but existing studies in individual countries show that strained liquidity of farmers leads to reduced use of seasonal inputs and a lack of long-term investments in the modernization of coffee plantations. The risk of pests and diseases spreading across coffee areas increases, as does vulnerability to the impact of climate change.

**Spatial concentration of production means less diversity of origins and higher supply risks.** Since 1990, the share of the top-five producing countries in global output has increased from 57% to over 70%. Concentration of production could increase further and result in higher supply risks and less consumer choice in terms of origins.

**Figure 2: Volatility of coffee prices and other agricultural commodities**



Note: Volatility is measured as the annualized standard deviation of the weekly rate of change of the ICO composite indicator.

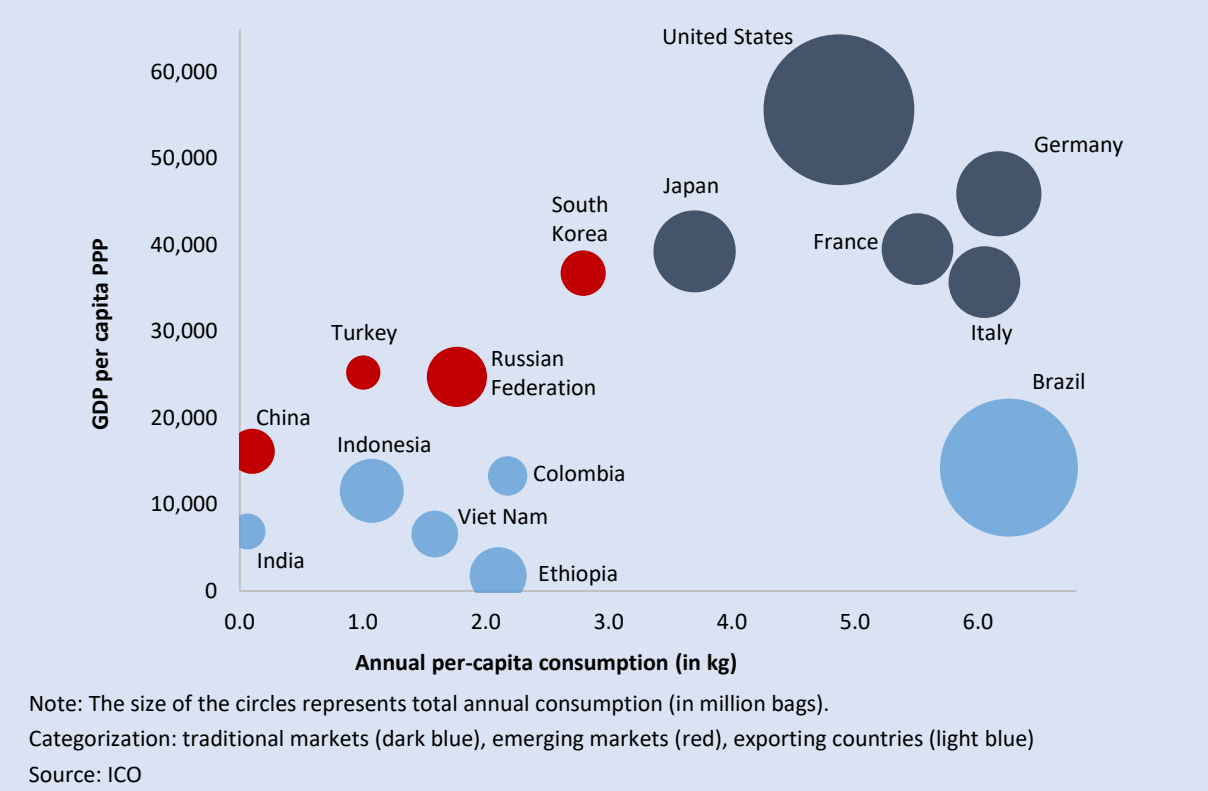
The difference in volatility levels between the periods 1970-1989 and 1990-2000 is significantly different at the 95% statistical confidence level.

The difference in volatility levels between the periods 1970-1989 and 2001-2019 is not significantly different.

Volatility of cocoa, sugar and tea is calculated with monthly data from the World Bank commodities price database.

Source: ICO

**Figure 3: Per-capita consumption across markets (2018)**



**Equitable growth is possible but barriers to value addition remain.** Coffee consumption in emerging markets and producing countries has increased at a faster pace than in traditional markets providing new market opportunities.<sup>4</sup> Today, 46% of the global demand for coffee stems from emerging markets and coffee-producing countries, compared to 29% in the early 1990s. In view of global population growth and a continuing convergence of per-capita consumption rates between traditional and non-traditional coffee-consuming countries, significant potential for growth of the overall coffee market still exists (Figure 3).

**Rising costs for processing, marketing and distribution in consuming countries are among the key factors behind the decreasing farmers' share in the coffee retail price.** The scope for systematic analysis of margins at various levels in the supply chain is limited due to a lack of data and transparency. However, in a competitive market

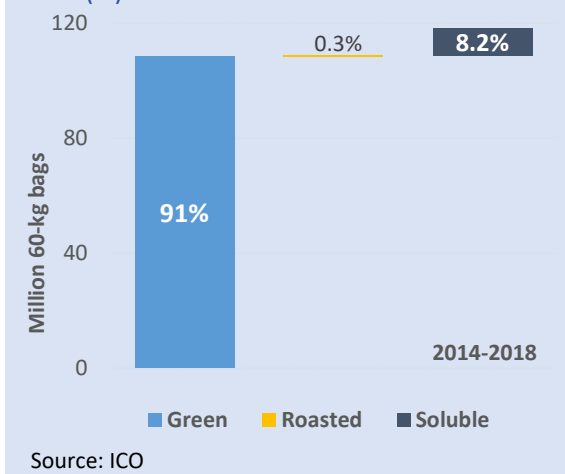
with increasing costs, margins for value chain actors tend to be low. The scope for re-distribution of value from downstream value chain actors to coffee farmers would be limited. Strategies that aim at the creation of value on farms through decommodification (e.g. via accessing high-value markets) and at the level of producing countries (e.g. through processing of green coffee) would be more effective in creating economic benefits and fostering prosperity.

**Over 90% of coffee is exported in green form and value addition remains concentrated in importing countries** (Figure 4). While technical challenges can be overcome, transportation and marketing costs, as well as tariff and non-tariff trade barriers, remain an obstacle to value addition at origin.

<sup>4</sup> For the scope of this analysis markets are defined as follows: producing countries (56 exporting countries as of August 2019), traditional markets (Australia, Canada,

European Union, Japan, Norway, United States, Switzerland), emerging markets (rest of the world).

**Figure 4: Coffee exports by form and market share (%)**



**An economically viable coffee sector in producing countries contributes crucially to achieving the Sustainable Development Goals.** Quantitative analysis traces the effect of coffee price shocks from farm-level to rural communities and the wider economy, confirming a strong correlation between changes in the international price of coffee and economic and social development. Higher coffee prices are associated with more rural employment, a higher contribution of agriculture to GDP, lower levels of poverty (SDG 1), increased food security (SDG 2), reduced inequality (SDG 10), and higher political stability (SDG 16). Hence, policies that help to increase and stabilize income levels of coffee-producing households can have a significant impact on economic and social development, thereby directly contributing to the realisation of the 2030 Agenda for Sustainable Development.

**Phases of boom and bust are a recurring theme in the coffee market, but the sector has changed since the previous coffee price crisis.** Structural changes include the concentration of production in fewer origins on the supply side and the consolidation of the industry on the processing side. Sustainability initiatives have grown, ethical consumerism is more widespread, the speciality coffee segment has emerged with dynamism and almost half of the coffee produced worldwide is now consumed outside traditional markets. There are new challenges, such as the impact of climate change on coffee production, posing a serious threat not only to the livelihood of millions of growers but also affecting the sustainability of the entire sector.

On the other hand, **there also opportunities related to innovation and new technologies** that can help address at least some of the challenges faced by the sector. For example, our ability to collect and analyse data has increased dramatically as a result of ongoing digitalization. Digital innovations can support farmers' decision making, increase productivity, result in better access to finance and markets, improve efficiency and transparency in value chains and bring producers closer to consumers.

## **4. Growing for prosperity: Key areas for action in the coffee sector**

The Report discusses a wide range of actions that can be taken at production, market, and sector governance level and their trade-offs and barriers to implementation are assessed.

**Production level.** Actions at the production level include mechanisms that can enhance farm performance (productivity, quality and resilience), promote income diversification, improve access to insurance against agricultural and price risks, encourage aggregation of growers and create added value.

In many producing countries, there is still a need to establish, strengthen or innovate new service delivery models that can be driven by supply chain actors, producer organizations, the public sector or specialized service providers. Availability of farm-level data remains a serious constraint. The design of these models needs to consider the farming system and households' needs as a whole (instead of a single focus on coffee) to achieve a living income. Measures that increase the profitability of coffee farming can have important positive, short-term effects for producers. In the long term however, these measures can create an imbalance in supply and demand. Therefore, production measures must take into account sector-level supply management strategies. In addition, greater investment in research and development (e.g. varieties) is needed to enhance the economic sustainability of coffee farming. The adoption of information and communication technology (ICT) innovations also has the potential to achieve transformative outcomes in farm management and efficiency and in organizing sourcing, traceability and payments.

**Market level.** At the market level, solutions comprise price and premium management, trading practices, demand promotion, value addition and investment strategies by value chain actors.

Price-setting mechanisms can be decoupled from international market prices and be defined against different benchmarks, such as the costs of sustainable production (cost-plus model) or upon income benchmarks, such as the poverty line and a living income. Prices paid to growers can also be based on considerations of fairness in line with expectations of educated consumers (e.g. ethical consumerism).

Other options to offer a more stable price environment while remaining aligned with market dynamics should also be considered. These include, for example, fixing prices of forward contracts based upon the futures market, introducing a floating price, or promoting responsible trading practices, such as long-term purchase commitments, short invoice payment periods, respect for contract terms and conditions, providing sourcing plans to suppliers and paying premiums. These trading practices, in combination with stable prices or premiums, help to share risks among value chain actors and, thus, provide coffee producers with a predictability that incentivizes investment in their farms. Responsible trading practices require supply chains with more direct linkages (e.g. outgrower schemes) and greater transparency.

Value chain actors can also invest in producer support, community development and landscape management, either individually or collectively, through corporate programmes. More direct, stable and transparent supply chains enable the channelling of better incentives that promote the economic viability of coffee farming. Sourcing decisions cannot be based only on price but need to consider farm competitiveness and sustainability.

**Sector governance level.** Governments and governing bodies at the national, regional and

international level can make use of a wide range of measures, including purchase guarantee mechanisms, price setting, stabilization funds, supply management and demand promotion.

Sector-level interventions require a comprehensive strategy that balances short- and long-term objectives and addresses underlying market fundamentals. This requires a thorough understanding of markets, and the potential impact that measures can have. Many of these measures should not be considered in isolation. For example, supply management is preferably done based upon international coordination in order to avoid that countries undermine each other's strategies to increase producer incomes. There are many opportunities to align national strategies and to catalyse co-investment in a market-based environment.

Transparency and accountability are the cornerstones of sector governance. Effective sector governance requires the monitoring of progress towards the fulfilment of the sector's vision and to inform evidence-based learning. A diversified funding strategy can finance the measures needed to promote sector-wide competitiveness. Complementary strategies, such as a pre-competitive global coffee fund (Sachs, 2019), could co-finance, direct income transfers to alleviate extreme poverty in the value chain, and increase investment in the sector through blending of public and private funding. Finally, both national and international mechanisms need to be built on multi-stakeholder governance and independent decision-making and evaluation.

Table 1 summarizes the main actions discussed at the production, market, and sector governance level and classifies them according to barriers to implementation and potential impact. While some solutions may be more difficult to implement, they tend to contribute to more systemic, wide-scaled impacts. The solutions outlined in Table 1 need to be complemented by adequate funding mechanisms, multi-stakeholder coordination and provision of services.

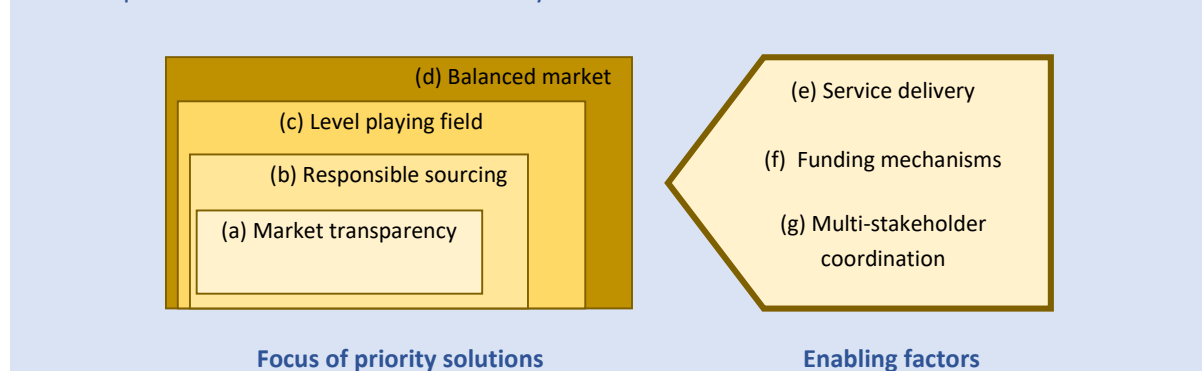


**Table 1:** Potential solutions classified according to three key issues, lead actors and barriers to implementation

Lead actors	Solutions (according to barriers to implementation and potential impact)		
	Low barrier / Narrow-scaled impact	Medium	High barrier / Wide-scaled impact
<b>A. Solutions to address price levels and demand-supply imbalances</b>			
<b>Producers</b>	<ul style="list-style-type: none"> <li>Investment in farm profitability and sustainability</li> </ul>	<ul style="list-style-type: none"> <li>Income diversification</li> </ul>	<ul style="list-style-type: none"> <li>Alternative livelihoods</li> </ul>
<b>Market actors</b>	<ul style="list-style-type: none"> <li>Market promotion</li> <li>Producer support services</li> </ul>	<ul style="list-style-type: none"> <li>Full traceability, supply chain partnerships</li> <li>Price and premium management</li> <li>Community development, landscape management</li> </ul>	
<b>Public sector and international organizations</b>	<ul style="list-style-type: none"> <li>Sustainable public procurement</li> <li>Market promotion</li> <li>Regulation on quality assurance and social &amp; environmental practices</li> <li>Investments in R&amp;D</li> </ul>	<ul style="list-style-type: none"> <li>Supply management by reduction of hectares under coffee production</li> <li>Landscape management</li> <li>Basic services e.g. healthcare and education</li> </ul>	<ul style="list-style-type: none"> <li>Direct income transfers</li> <li>Differentiated taxes and tariffs</li> <li>Rural infrastructure development</li> <li>Land tenure reform</li> <li>Promotion of alternative uses of coffee</li> <li>Supply management by international production and export quota</li> </ul>
<b>B. Solutions to address issues related to price volatility</b>			
<b>Producers</b>	<ul style="list-style-type: none"> <li>Physical strategies</li> </ul>	<ul style="list-style-type: none"> <li>Hedging strategies</li> </ul>	
<b>Market actors</b>	<ul style="list-style-type: none"> <li>Contract farming</li> </ul>	<ul style="list-style-type: none"> <li>Floor prices, access to hedging services</li> </ul>	
<b>Public sector and international organizations</b>	<ul style="list-style-type: none"> <li>Farmgate price-setting in relation to export price</li> </ul>	<ul style="list-style-type: none"> <li>Purchase guarantees</li> <li>National strategic buffer stock management</li> </ul>	<ul style="list-style-type: none"> <li>Modifications to futures exchange</li> <li>Price stabilization funds</li> <li>International coordination of buffer stocks</li> </ul>
<b>C. Solutions to address risk and value distribution in the value chain</b>			
<b>Producers</b>	<ul style="list-style-type: none"> <li>Product differentiation, aggregation and marketing</li> </ul>	<ul style="list-style-type: none"> <li>Roasting at origin / value addition</li> </ul>	<ul style="list-style-type: none"> <li>Branding</li> </ul>
<b>Market actors</b>	<ul style="list-style-type: none"> <li>Purchase of certified coffee, premiums</li> <li>No unfair trading practices</li> </ul>	<ul style="list-style-type: none"> <li>Full traceability and supply chain partnerships</li> <li>Price and premium management</li> <li>Pre-finance</li> </ul>	<ul style="list-style-type: none"> <li>Decoupling sourcing strategy from futures markets</li> </ul>
<b>Public sector and international organizations</b>	<ul style="list-style-type: none"> <li>Upgrade existing market information systems</li> <li>Benchmarks of production and living costs</li> </ul>	<ul style="list-style-type: none"> <li>Observatory for costs, prices, margins</li> <li>Export auctions</li> <li>Regulation on due diligence and unfair trading practices</li> </ul>	<ul style="list-style-type: none"> <li>Farmgate price-setting in relation to export price</li> <li>Anti-trust regulation</li> </ul>



**Figure 5: Priority solutions and enabling factors to address the price crisis, achieve economic viability of coffee production and foster sustainability of the sector**



### Priority solutions

The Report identifies four priority solutions and three enabling factors as well as critical roles for key actors to play in addressing the current price crisis, in order for farmers to achieve economic viability and for fostering the sustainability of the coffee sector (Figure 5).

#### **(a) Enhance market transparency by collecting and assessing costs of production and living income benchmarks and through upgrading of existing market information systems**

Better insights are required into the cost of sustainable production and the cost of a decent living for different segments of coffee producers. This should also include an overview of how coffee prices relate to these costs and the determination of, for example, reference prices that enable a living income and living wage. This role has to be taken up by an independent *international institution* or initiative. It is important that all stakeholders use consistent and widely-accepted methodologies for these benchmarks across coffee origins. In addition, there is a need to further upgrade existing market information systems to provide real time data on price levels and price volatility as well as demand and supply data and forecasts. This strategy should inform sourcing practices of the coffee industry and empower producers with the objective to come to a more equitable distribution of value generated in the sector.

#### **(b) Adopt responsible sourcing practices**

There is scope to develop more direct, transparent and stable commercial relationships with suppliers that reward good performance (e.g. quality, consistency and sustainability) with price incentives and responsible sourcing practices (e.g. contract and payment terms). More impactful measures will require changes in the way that many companies conduct their business. It implies building partnerships across supply chains in which the terms of trade and price match the objective of increasing the profitability and sustainability of coffee production. This match could mean less dependence on the commodity markets (de-commoditization) and that the prices and premiums paid are informed by cost of production, living income or living wage benchmarks.

#### **(c) Create a level playing field for the industry on trading practices and ensure efficient functioning of futures markets**

*Within the context of the global trade system, governments in producing countries* are responsible for setting the rules of how markets work for the benefit of their coffee producers. They can create a level playing field by adopting several measures influencing trading relationships, price discovery and value distribution.

They can help create a level playing field by adopting several measures that influence trading relationships, price discovery and value distribution. They can introduce auctions, fix

farmgate prices according to export prices, establish stabilization funds or introduce purchase guarantee mechanisms. All of these measures can, to some degree, be developed in alignment with global market prices, which would therefore reduce financial risks and lessen distortions of the market.

In addition, *governments in importing countries* also can adopt various measures to foster responsible sourcing practices. They can promote voluntary commitments by the industry to achieve responsible supply chains and/or enforce such practices through regulations on due diligence and fair trading practices. They could incentivize sustainable production, responsible trade and value addition at origin through differentiated taxation schemes and their own procurement practices.

Finally, governments can support further research on the influence of commodity exchanges on short-term price developments and consider measures (e.g. regulation on speculation and trading practices) to mitigate volatility if the impact is too substantial.

#### **(d) Achieve a more balanced market**

*Governments in exporting countries* can adopt various measures to influence supply and demand in the short and long terms. They can promote demand in domestic and export markets through market development (e.g. building a reputation for quality and sustainability), while increasing value addition through domestic processing and by removing trade barriers. The latter is a measure that can also be taken by *governments in importing countries*. Exporting countries can devise strategies that contribute to a more balanced market in terms of supply and demand. Governments can limit the coffee-producing areas to the most suitable locations, protect native vegetation against encroachment, stimulate on-farm diversification or promote alternative livelihoods for coffee producers. These strategies will require the integration of coffee-specific policies into wider agricultural and rural development frameworks, possibly including land tenure reforms and trade and industrial policies.

#### **(e) Promote competitive and sustainable coffee production through viable and scalable service delivery models and a level regulatory playing field on production practices**

In the transition towards a more profitable and resilient production base, coffee producers, particularly smallholders and their organizations, need access to extension services, technology, inputs and finance. This access requires investments in research and development and cost-efficient, economically viable and scalable service delivery models (whether public or private). The introduction of digital technology solutions can facilitate farm management and the efficient functioning of producer organizations that service delivery models seek to support. To promote producer resilience, service providers need to take a holistic approach to the farming system and households' needs (instead of a narrow focus on coffee) to achieve a living income.

To ensure a level playing field among coffee producers, *governments in producing/exporting countries* should consistently enforce sound social and environmental regulation around protection of native vegetation, water management, labour practices, and bans of hazardous agro-chemicals.

#### *Enabling factors*

#### **(f) Develop financial mechanisms that extend access to finance and enable strategic investments**

Coffee producers and small- and medium-scale value chain actors require access to financial products that allow them to invest in their businesses. The *financial sector* can develop tailored products for these potential clients, including working capital and investment loans as well as insurance. Blended finance mechanisms can also fund various strategic investments, such as research and development, digital innovations, infrastructure, and programmes related to on-farm diversification, alternative livelihoods and

landscape management. To coordinate investments in the global coffee sector, an option is to pool resources from *donors, governments and the coffee industry* in a global funding mechanism.

*Governments in exporting countries* can also work on structural revenue mechanisms (e.g. export fees) to finance investments in the coffee sector. However, the trade-offs between benefits from structural investments in the sector and the impact of taxation of farmers on international competitiveness need to be balanced.

**(g) Ensure multi-stakeholder dialogue, alignment and learning**

The coffee sector is characterized by growing concentration and by a number of private sector-led initiatives. However, there is still scope for better integration and harmonization of approaches or alignment of objectives and actions. *National and international multi-stakeholder platforms* can play an important role in creating a space for dialogue among sector stakeholders and

in supporting the creation of a shared vision, as well as identifying long-term and transformational solutions to the structural issues facing the sector. This includes alignment of ambitious and time-bound action plans by individual stakeholders on priority topics, for which they need to be held accountable. Platforms can also promote the development of specific tools, sector-wide monitoring, and the sharing of best practices and lessons learned.

While sustainable coffee livelihoods are not a sufficient condition for a sector that is inclusive, fair and environmentally friendly, they are certainly a necessary condition. If rural households engaged in coffee production are lifted out of poverty and obtain an income that allows a decent standard of life (i.e., a living income), social objectives such as gender equality and eradication of the worst forms of child labour are more likely to be reached. Environmentally detrimental practices such as deforestation would be significantly reduced. Hence, economic viability is the catalyst for the sustainability of the entire coffee sector.

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