



**Background Paper**

**Achieving the Sustainable Development  
Goals in the Coffee Sector**

**Solutions to improve farmers' livelihoods  
and foster a sustainable coffee value chain**

1. The Executive Director presents his compliments and has the pleasure of circulating to Members, observers and members of the Private Sector Consultative Board, the Background Paper for the symposium 'Meeting the SDGs: Challenges for the Coffee Value Chain. Shared Solutions to coffee price levels, volatility and long-term sustainability' to be held on 6 June 2019 at the Albert Borschette Congress Center in Brussels, Belgium.
2. Initiated by the ICO, in partnership with the European Coffee Federation and hosted by the European Commission, this symposium is the fifth event held as part of the ICO's 'Structured Sector-Wide Dialogue' to implement Resolution 465 on Coffee Price Levels.
3. This symposium will bring together coffee sector stakeholders, policy-makers, academia, civil society and development partners to identify solutions for a sustainable and inclusive development of the coffee sector in a spirit of shared values and responsibility.

# Achieving the Sustainable Development Goals in the Coffee Sector

Solutions to improve farmers' livelihoods and foster a sustainable coffee value chain

Background Paper – ICO/ECF Symposium  
Brussels, 6 June 2019

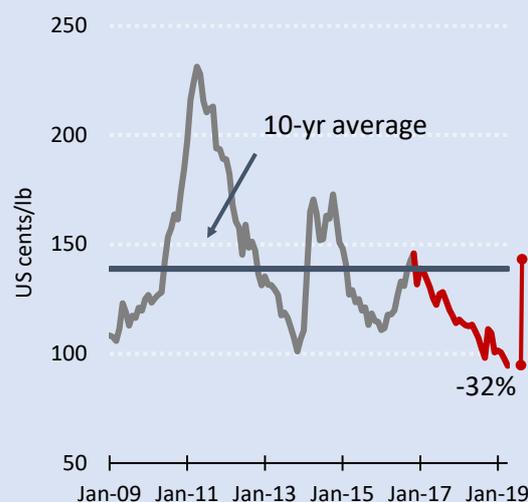
## Background

The coffee market has been experiencing a continued downward trend since 2016 and coffee prices today are 32% below the average of the last ten years (Figure 1). Many of the over 12 million coffee farms worldwide struggle to cover their operating costs, while prices decrease, but inputs, compliance and transaction costs rise (ICO, 2019a, 2019b). As a result, farm incomes decline and the livelihoods of coffee-producing households, the majority of which are smallholders in low- and middle-income countries, are increasingly at risk.

Low coffee prices have severe economic and social consequences. Poverty is reported to have increased in coffee-producing areas of ICO Member countries (ICO, 2019a). Women in coffee, who represent around 25% of farm operators and contribute up to 70% of labour, depending on the region, are particularly vulnerable (ICO, 2018c). Low prices are correlated with increased risk of child labour, as adults in coffee-producing households take on off-farm employment to supplement dwindling agricultural income (Beck, Singhal and Tarp, 2016). Reduced use of inputs and less long-term investments in the modernization of coffee plantations are linked to a higher risk of pests and diseases spreading across coffee areas and increased vulnerability to the impact of climate change (Avelino *et al.*, 2015).

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

**Figure 1: Coffee prices dropped by 32%**  
(monthly ICO composite indicator price)



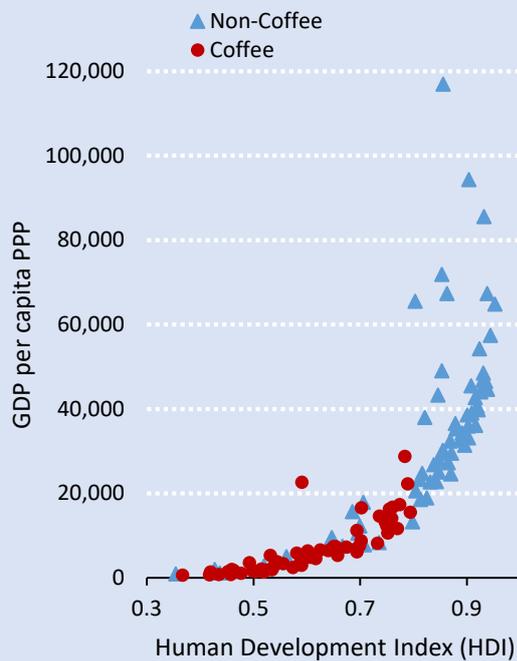
Source: ICO

Hence, joint action is needed by all stakeholders in the sector, including farmers, traders, roasters, consumers, governments, academia and research institutions, as well as development partners, to identify solutions that help to alleviate the short-term impact of low prices and to put the coffee sector on a positive development and sustainability trajectory.

## Coffee remains an economically important commodity...

Coffee is produced predominantly in countries that rank low in economic and social development metrics, with 18 out of 44 exporting Members of the ICO falling in the category of Least Developed Countries (ICO, 2018a). These countries are characterized by low per-capita GDP and lag behind in Human Development Index (HDI) scores compared to coffee-importing countries (Figure 2).

**Figure 2: Coffee is produced in low- and middle-income countries (2017)**

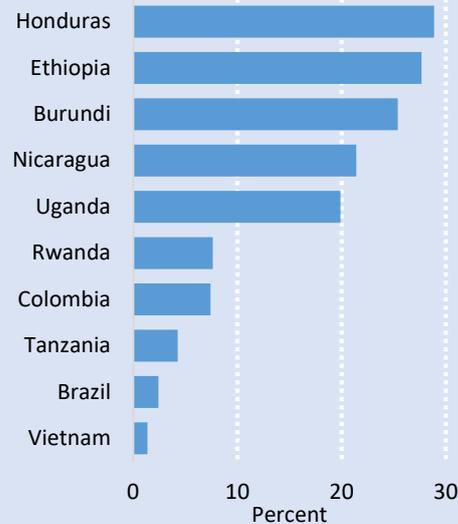


Source: World Bank / United Nations

However, for this group of countries coffee remains an important agricultural commodity in terms of its contribution to rural employment, GDP and export earnings (Figure 3). For example, in Colombia and Rwanda the share of coffee in total exports exceeds 5%. In other important producing countries such as Honduras, Ethiopia and Burundi this share is even higher, exceeding 20%.

Coffee remains a primary export commodity. More than 70% of production is shipped to international markets (ICO, 2018a). The vast majority of coffee is exported in green form, which means that much of the value addition from processing is captured by processors and retailers in importing countries. However, the past two decades have seen a trend of rising domestic consumption in coffee-producing countries, resulting in an increasing share of value addition that is retained in these regions.

**Figure 3: Share of coffee in total exports of selected countries (2017)**



Source: ICO

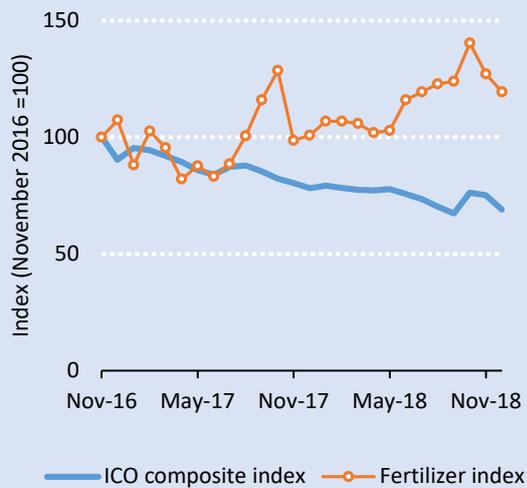
### ...but low prices affect farmers, rural communities and the wider economy

The economic and social consequences of low coffee prices for producing countries can be severe and include the pauperization of rural communities, social unrest, domestic and international migration, abandonment of coffee growing or even a switch to the production of illicit crops.

At current price levels a significant proportion of farmers struggle to break even as input costs have increased. For example, over the period November 2016 to December 2018, prices of fertilizers increased by almost 20% (Figure 4).

The impact of low prices varies between countries and across prevailing production systems. Origins with low productivity and high costs are most severely affected. A recent study has shown that 53% of Colombian farmers were operating at a loss. Growers in Costa Rica and Honduras perform slightly better, but more than 25% of them also operated at a loss (ICO, 2019b).

**Figure 4: Cost of major inputs increase while coffee prices fall**



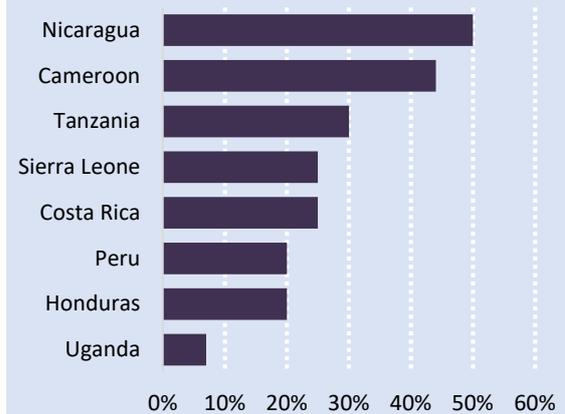
Source: World Bank / ICO

The current low level of coffee prices affects the revenues of growers, with severe impact on the most vulnerable groups, such as smallholders and female producers. Often, small farms do not have access to risk mitigation instruments and lack financial resources and other assets to smooth household incomes.

A recent ICO survey showed that the income of coffee growers decreased by 10% on average in 2018, among respondents (ICO, 2019a). With farm incomes falling, poverty rates in coffee-producing areas are rising. The survey results suggest that the proportion of farmers living below the poverty line of US\$1.90 per day increased between 7% and 50% (Figure 5).

Qualitative evidence also suggests a link between low coffee prices and migration from coffee-producing countries to OECD countries, especially from Central America to the United States (Financial Times, 2019; The Economist, 2019). However, more quantitative research is required to confirm the relationship and magnitude of this effect.

**Figure 5: Increase in the proportion of farmers living with less than US\$1.90 a day**



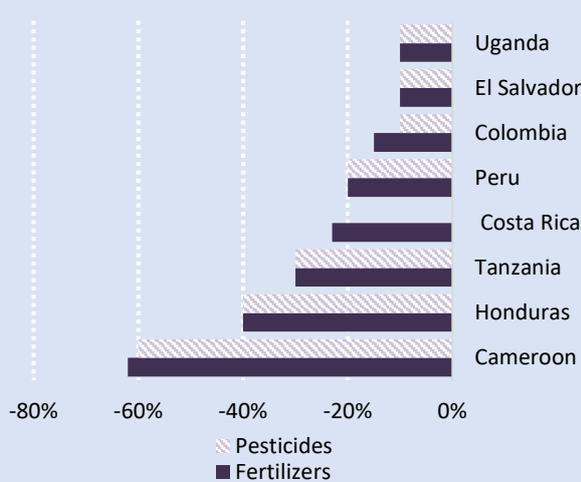
Source: ICO

### Low prices hamper investment – a threat to supply and the long-term sustainability of the sector

Prolonged periods of low prices and resulting lower revenues from coffee production put a serious strain on farmers' liquidity, as well as on their ability to buy inputs and to undertake investments in the modernization of farms. This hampers future coffee production and could negatively affect farmers' earnings as well as the supply of quality coffee.

The ICO survey shows that expenditures on fertilizers and pesticides decreased by 26% on average over the last two years. This decrease ranges from 10% in El Salvador and Uganda to 60% in Cameroon (Figure 6).

**Figure 6: Decrease in fertilizers and pesticides expenditure by farmers**



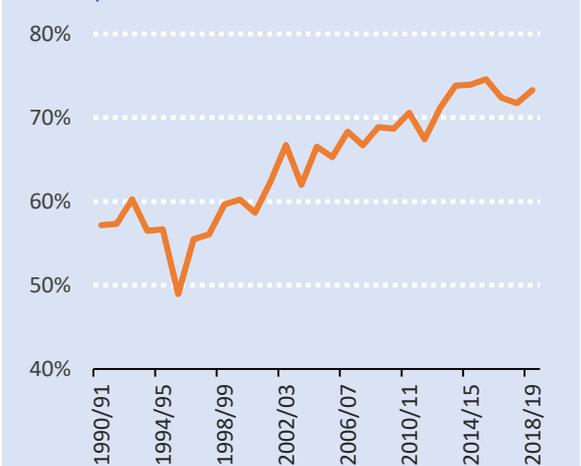
Note: Costa Rica reported a reduction in the use of fertilizers but not pesticides.

Source: ICO

Low profitability also means that vital investments in rehabilitation and replanting of coffee trees are postponed or cancelled. As a result, the adoption of new varieties that are resistant to coffee leaf rust and better adapted to the impact of climate change is severely constrained.

Furthermore, current coffee price levels foster concentration of production and exports in a small number of highly competitive origins (ICO, 2018a). Today, just five countries produce and export over 70% of the world's coffee (Figure 7).

**Figure 7: Share of Top-5 producers in global coffee production increases**



Source: ICO

If this trend continues, the global market share of the Top-5 producers could surpass 80% over the next decade. Losing diversity of origins makes the global coffee sector more vulnerable to severe market shocks, such as extreme weather events affecting any of the top producers, with a potentially catastrophic effect on both the coffee industry and consumers.

### The commodity cyclical variation affects price levels and volatility...

The main factors determining movements of coffee prices are related to supply and demand in the market, particularly production, consumption and stock movements.

Currently, the coffee market is affected by excess supply. Production is expected to increase by 1.5% in coffee year 2018/19 to 168 million 60kg bags, while consumption is estimated at 165 million bags. The supply overhang is likely to amount to 3 million bags, due to expected bumper crops in a number of producing countries. This is the second consecutive year of surplus, adding to the downward pressure on coffee prices (Figure 8).

**Figure 8: Two consecutive years of surplus in the market**

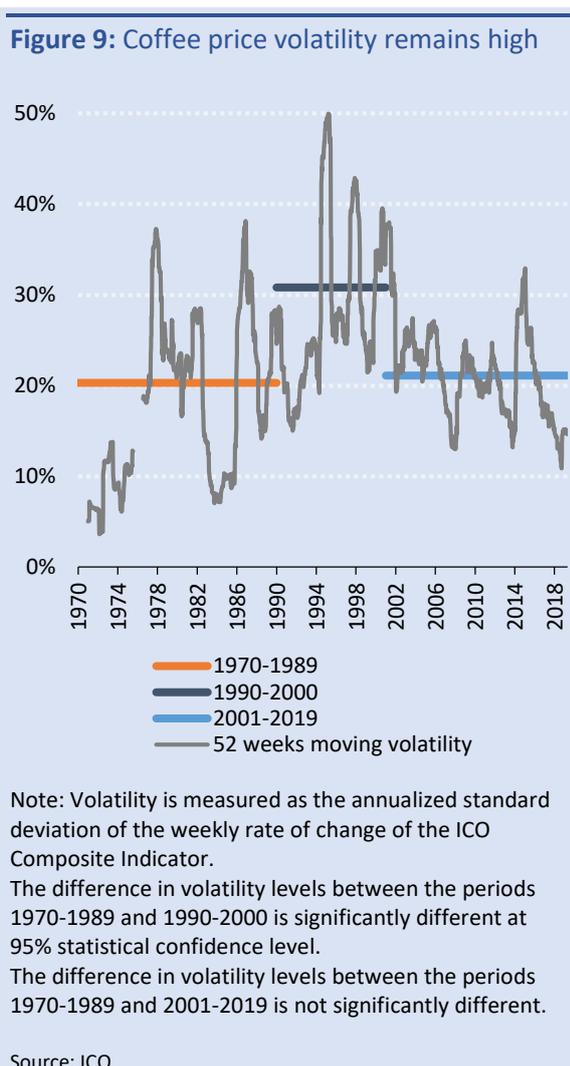


Source: ICO

However, not only price levels matter. Volatile prices negatively affect those growers who lack access to price risk management tools, such as

hedging in futures markets. Smallholders in particular do not have the scale or capacity to use formal risk management tools.

As a general trend, coffee price volatility is relatively higher compared to other tropical commodities such as cocoa, tea and sugar (Gilbert *et al.*, 2010). In recent years though, variability was lower than in the decade following the collapse of the international quota system (Figure 9).



### ...but other factors also influence international prices

Additional factors can supersede the underlying fundamentals and thus influence coffee price behaviour and volatility: exchange rate movements; trading activities in futures markets; and the consolidation in the roasting industry.

Volatility in the **exchange rates** of the US dollar against the currencies of coffee-exporting countries can have a profound impact on the competitiveness of their producers on the world market. For example, the nearly 44% depreciation of the Brazilian real against the US dollar encouraged record volumes of coffee exports from Brazil in 2016 and 2018. This depreciation increased the earnings in local currency of Brazilian exporters, thereby creating an incentive to release their stocks to the international market (ICO, 2019b). However, the appreciation of the US dollar can also contribute to higher production costs, caused by increased prices of imported inputs, such as fertilizers and fuel.

**International futures exchanges** are important as a price discovery mechanism and instrument for market participants to hedge price risks. Over the past two decades the main exchanges have been subject to a process of “financialization”, characterized by a significant increase in the trading activity of non-commercial traders. This phenomenon causes some concern among sector stakeholders, since the increased participation of these investors or speculators in the futures markets may exacerbate price trends caused by fundamental factors. However, while recent research finds a short-term causal link between speculative activity and spot market prices at the coffee futures markets in New York and London, fundamentals prevail in the long term (ICO, 2019b).

Finally, the coffee-processing industry has undergone a process of **market concentration**. For example, a series of mergers and acquisitions has resulted in the two biggest coffee companies in the USA and Europe having a combined market share of about 39% of global coffee sales. Many stakeholders are concerned that an increase in market power could have a negative impact on the relationship between buyers of coffee and upstream value chain actors such as farmers, e.g. in terms of contractual arrangements such as prices and payment terms (Panhuysen and Pierrot, 2018). However, further research is required to

understand better how seller-buyer relations may have changed over time and if sustainable sourcing practices could result in measurable benefits to farmers.

## The sustainable expansion of the coffee sector...

While coffee prices have significantly deteriorated in recent years, the trend for the overall market points upwards: **coffee is a growth market**. Over the past two decades, global production of coffee has increased by more than 78%, from 94.6 million 60kg bags on average in the first half of the 1990s to an estimated 168 million bags in coffee year 2018/19.

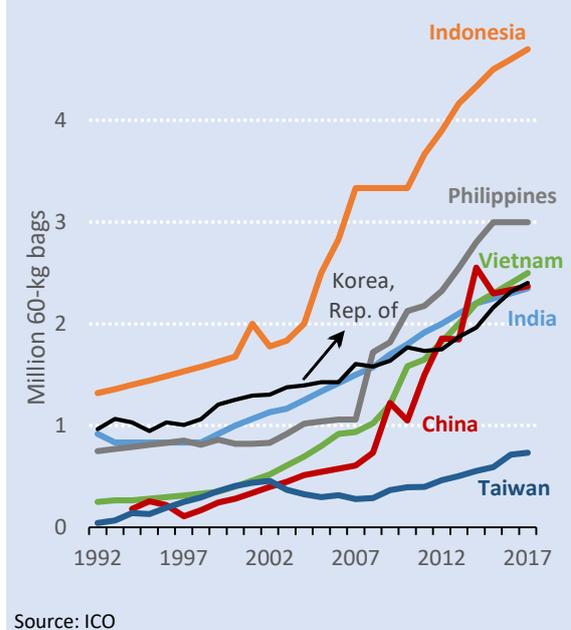
Analyses of coffee trends forecast **that global consumption of coffee will continue to grow at average annual rates of around 2%**. This increase is mostly due to steadily increasing consumption in emerging markets. In Asia, for example, consumption of coffee increased at average annual rates between 10% and 12% over the past two decades (Figure 10). This also includes domestic consumption in coffee-producing countries, such as India, Indonesia and Vietnam.

## ...requires new solutions and commitments from all sector stakeholders

Enabling farmers to benefit from growing global demand for coffee, and to find new markets for their products including expansion of their domestic markets, while addressing the enormous sustainability challenges of the sector, requires joint efforts of all sector stakeholders, both public and private. In the short run, the extreme poverty of some producers, which is exacerbated by current depressed price levels, needs to be overcome. Social issues must to be promptly addressed and significant investments are required to increase the resiliency of farmers against the impact of climate change.

Simultaneously, the sector needs to attract and nurture a generation of young farmers that are ready to adopt new technologies that increase their productivity, income and the livelihoods of their families.

**Figure 10: Coffee consumption in select Asian markets**



Source: ICO

These are necessary steps not only to maintain the current levels of supply but also to ensure that coffee production will be able to meet future consumer demand.

## The ICO Sector-wide Dialogue presents a unique opportunity to work together

The ICO Sector-wide Dialogue presents the key forum for discussion among all sector stakeholders to identify solutions to address the pertinent sustainability challenges and build consensus on the way forward.

## ICO Sector-wide Dialogue

In September 2018, during its 122<sup>nd</sup> Session in London, the International Coffee Council adopted **Resolution 465 on “Coffee Price Levels”**. This Resolution provides the ICO with a strong mandate to respond to low coffee prices by launching a sector-wide dialogue.

Main objectives:

- **Identify transformational solutions** that can be implemented jointly by sector stakeholders to address price levels and volatility in order to promote economic, social and environmental sustainability.
- **Foster commitments by the ICO Member governments and coffee value chain actors** to endorse and support the implementation of the recommended solutions through coffee-specific programmes.

### A series of consultative events for all coffee stakeholders...

The Sector-wide structured dialogue comprises a stakeholder consultation process with five consultative events organized by the ICO:

- a) **Sustainability Seminar**, Nairobi (25 March 2019), in cooperation with the Global Coffee Platform (GCP) and the Government of Kenya.
- b) **Two side events** at the United Nations in New York (16 April 2019), as part of the UN-DESA Finance for Development Forum and the SDG Investment Fair, in cooperation with IFAD/SAFIN and with support from the NCA of USA.
- c) **Interactive Workshop**, as part of the EXCO2019 development fair in Rome (16 May 2019) in cooperation with the Italian Ministry of Foreign Affairs and International Cooperation.
- d) **Symposium on “Meeting the SDGs: Challenges for the Coffee Value Chain”**, Brussels (6 June 2019), organized in partnership with the European Coffee Federation (ECF) and hosted by the European Commission.

Participants in these consultative events assessed the short-, medium- and long-term trends of the coffee sector, the opportunities and the sustainability challenges faced by coffee stakeholders and debated the causes of the price crisis, value creation and the distribution of risk and income in the different links of the coffee supply chain with a view to identifying feasible solutions.

### ...leading up to the CEO and Global Leaders Forum

This “dialogue” culminates with the **ICO’s first CEO and Global Leader Forum**, to be held on 23 September as part of the 125<sup>th</sup> Session of the International Coffee Council in London. Here, high-profile coffee sector and policy leaders will review the outcomes of the stakeholder dialogue and seek to converge towards: a) measurable commitments for the sustainable future of coffee growers and of the whole coffee sector in line with the UN Sustainable Development Goals; and b) concrete programmes, funds and actions.

## **Main outcomes to date**

Coffee sector experts participating in the consultative events have identified key areas in which growers, industry, donors, development partners, financial and research institutions should work together to agree, fund and implement shared solutions:

### ***Increase farm incomes***

- Increase productivity with a focus on higher quality, efficiency and lower costs reducing supply of low-quality coffee
- De-commoditize coffee to achieve higher prices and increase value addition in producing countries
- Diversify farm incomes enabling smallholders to access price risk management tools and schemes
- Foster the sharing of risk along the value chain in order to reduce the risk of farmers
- Pursue more selective and higher quality production, 'premiumization', value addition and product development
- Consider the living income concept in relation to coffee price levels

### ***Market efficiency and transparency***

- Streamline value chains in order to increase the share of world market prices transmitted to growers
- Encourage direct links (including digital solutions) between farmers and the market
- Review the role of price-discovery mechanisms in the coffee market
- Improve the effectiveness and scope of voluntary sustainability initiatives, and standards and certification schemes
- Promote domestic consumption
- Project a positive image of coffee

### ***Address the long-term challenge of climate change***

- Foster adoption of climate-smart agriculture
- Invest in agricultural research and development, as well as in dissemination of new climate-tolerant and disease-resistant varieties
- Attract more responsible and sustainable investment through blending public-private finance in the coffee sector

## Main focus of the ICO-ECF Symposium

The symposium will build on the discussions and key outcomes of the previous Sector-wide Dialogue events. Taking into account the latest research results and projections for the coffee sector, this consultative event will promote innovative thinking and the development of new ideas in the areas of:

### **Profitability of coffee production**

- Increase productivity and efficiency through investment
- Improve the cost structure of smallholder farmers to increase competitiveness
- Increase quality and access to high-value market segments to achieve higher prices

### **Increasing household incomes**

- Coffee pricing and premium schemes
- Sustainable procurement practices, voluntary standards, regulation
- Income transfer mechanisms (e.g. global sustainability fund)
- Develop alternative income sources to increase resiliency of growers to agricultural commodity cycles, price and climate shocks

### **Managing volatile coffee prices and promoting alternative coffee pricing mechanisms**

- Hedging and price risk management schemes for smallholder farmers
- National price stabilization mechanisms
- Develop income sources to increase resiliency to agricultural commodity cycles, price and climate shocks

### **Innovative approaches and digital tools to foster value chain transparency and market access**

- Using digital innovation for transparency and traceability (e.g. Blockchain)
- Global benchmarking of coffee production systems and costs

### **Public-private initiatives with clear commitments to address sustainability challenges**

- Building consensus on sectoral targets on living income, labor issues, gender inequality, deforestation and biodiversity
- Learning from other sectors, e.g. cocoa

The discussions at the symposium will be guided by the principles of shared values and responsibilities between farmers, downstream value chain actors, consumers and policy makers.

## Next steps

The findings of this extensive Sector-wide Dialogue will also be set out in the **ICO's first economic Flagship Report**, which will be launched in September 2019 and will include empirical analysis on the impact of price levels and recommendations for actionable solutions.

It is envisaged that a **joint declaration** will result from the Coffee and Global Leaders Forum, which will be submitted to the International Coffee Council for endorsement and then to governments, development and financial institutions for funding and implementation. The Declaration will identify a roadmap with concrete actions and programmes to address the coffee price crisis and volatility, drive transformational change in the sector and work towards achieving the Sustainable Development Goals.

## References

Avelino, Jacques, *et al.* (2015). "The coffee rust crises in Colombia and Central America (2008–2013): impacts, plausible causes and proposed solutions." *Food Security* 7.2: 303-321.

Beck, Singhal, and Tarp (2016). "Coffee price volatility and intra-household labour supply - evidence from Vietnam." UN-WIDER Working Paper 2016/16

FT (2019). The abandoned farms behind the global coffee craze. Financial Times, 20 May 2019. <https://www.ft.com/content/5009be96-7569-11e9-be7d-6d846537acab>

Gilbert, C. L., & Morgan, C. W. (2010). "Food price volatility". *Philosophical Transactions of the Royal Society B: Biological Sciences*, 365(1554), 3023-3034.

ICO (2018a). "Development of Coffee Trade Flows". [ICO document ICC-121-4](#), International Coffee Organization, March.

ICO (2018b). "The role of the coffee futures market in discovering prices for Latin American producers". [ICO document ICC-122-5](#), International Coffee Organization, September.

ICO (2018c). "Emerging coffee markets: South and East Asia". [ICO document ICC-122-6](#), International Coffee Organization, September.

ICO (2019a). "Survey on the impact of low coffee prices on exporting countries". [ICO document ICC-124-4](#), International Coffee Organization, March.

ICO (2019b). "Profitability of coffee farming in selected Latin American countries – interim report". [ICO document ICC-124-6](#), International Coffee Organization, March.

ICO (2019c). "Futures markets: the role of non-commercial traders". [ICO document ICC-124-5](#), International Coffee Organization, March.

Panhuysen, S. and Pierrot, J. (2018). "Coffee Barometer 2018".

The Economist (2019). "Go home, and don't come back: Donald Trump cuts off aid to Central America". 4 April 2019, The Americas edition. <https://www.economist.com/the-americas/2019/04/04/donald-trump-cuts-off-aid-to-central-america>