

A high-angle photograph of a person with dark skin, wearing a green and white striped long-sleeved shirt, sitting on the ground and sorting through a large pile of cocoa beans. The beans are in various stages of ripeness, showing shades of green, yellow, and orange. The person's hands are visible, reaching into the pile. To the right, a metal bowl filled with sorted, light-colored cocoa beans is visible. The background is filled with more cocoa beans and some dry leaves.

MARCH 2018

Assessing the Growth Potential of Eastern Congo's Coffee and Cocoa Sectors

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CSIS | CENTER FOR STRATEGIC & INTERNATIONAL STUDIES

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Assessing the Growth Potential of Eastern Congo's Coffee and Cocoa Sectors

Richard Downie

Executive Summary

During the past decade, donors and companies have begun to build viable coffee and cocoa sectors in the Democratic Republic of the Congo (DRC). The locus of activity has been in eastern Congo, where decades of conflict and poor governance have displaced populations and ruined livelihoods. While the political and security environment in the DRC does not favor large-scale cash crop production, the climatic conditions do. Eastern Congo, particularly the provinces of North Kivu and South Kivu, produces excellent coffee and cocoa. Furthermore, eastern Congo has a successful history of large-scale coffee production, first under the Belgian colonists, then in the first decades of independence before the sector fell apart under President Mobuto Sese Seko.

The recent entry into eastern Congo of development dollars and private-sector partners, ranging from small traders to retail giants like Starbucks, has provided a foundation to expand the DRC's agricultural export sector. These groups and individuals have taken a risk on a country that has largely been written off by an international community disillusioned by endemic crisis and corruption. Now it is up to the DRC to reward this show of faith by taking steps to attract a larger pool of investors focused on achieving both financial returns and positive social impact. The DRC can only do this by forging a vision for the cash crop sector, putting its own resources into its development, and taking actions to improve the business environment.

Any credible strategy for expanding the agricultural export economy in eastern Congo must be centered on sustainable growth that benefits smallholder farmers and their communities and helps cement peace in a volatile region. With future global supplies of coffee and cocoa threatened by farmer poverty, the impact of climate change, and corporate doubts about the sectors' profitability, the DRC can create a market opportunity for itself, provided it shows vision and intelligence. If the DRC can learn from mistakes made by other producing nations, it has the potential to build a thriving cash crop sector that not only benefits the national economy but improves the lives of some of its most vulnerable citizens.

Realizing this vision, however, will not be easy. Daunting barriers stand in the way of a large, successful cash crop sector. Farmers are poor, lack support, and struggle to access finance. Their trees are old, badly maintained, and low-yielding. Companies worry about the expense and logistical challenges of getting produce out of the country, at volume. Insecurity and poor governance create a level of unpredictability that deters potential investors.

This report weighs up the size of these risks, compared with the opportunities on offer, and suggests some strategies for overcoming them. Material is drawn from expert interviews and a

literature review of global best practices in the coffee and cocoa sectors. The evidence suggests that expectations for the DRC should be realistic. Eastern Congo is highly unlikely to become the next Colombia of coffee production or displace Côte d'Ivoire as the world's leading source of cocoa. Nevertheless, there is potential to scale up coffee and cocoa production in the DRC in a sustainable way that improves the livelihoods of smallholder farmers. Success will depend on:

- Effective partnerships between donors, private-sector actors all the way along the value chain, and the Congolese government, which must lay out a compelling strategy for expanding the agricultural export sector and rally support around it.
- Sustained training of farmers and cooperatives that increases production of coffee and cocoa without compromising on quality.
- Increasing the flow of capital into eastern Congo's agricultural sector by deploying new, innovative financing mechanisms and technologies.
- Finding new ways to market Congolese products that connect with consumers and shift a greater share of value chain profits toward smallholder farmers.

Overview of DRC's Coffee and Cocoa Sectors

Agricultural commodities once enriched the Congolese economy—and before that, the Belgian empire—but now make a minor contribution to the country's wealth. In 2015, the DRC exported products worth \$5.69 billion, with refined copper making up 45 percent of the total, followed by cobalt, diamonds, and other minerals.¹ Coffee and cocoa barely registered on the ledger. In 2016, coffee output was just 8,000 tons,² a far cry from the 1980s, when an average of 88,000 tons of beans were exported each year and coffee was the country's second-most-valuable commodity.³

The Congolese coffee industry was damaged by several factors. They included decades of poor governance, which led to the neglect of the sector; conflict, which hit the coffee-producing region of eastern Congo the hardest and forced farmers to abandon their fields; poor roads that hampered market access; and the impact of Coffee Wilt Disease (CWD), a fungus that has ravaged coffee crops across East Africa.

Coincidentally, one of the reasons for the recent revival in cocoa production was the problem of CWD, which prompted many coffee farmers to look for alternative crops to grow. Cocoa production in the DRC increased from a paltry 660 tons in 2000 to more than 11,000 tons in 2015.⁴

¹ MIT Media Lab, The Observatory of Economic Complexity, DRC country profile, <https://atlas.media.mit.edu/en/profile/country/cod/>.

² Richard Downie, "Coffee: Providing an Economic Jolt to Eastern Congo?," *CSIS Commentary*, December 1, 2017, <https://www.csis.org/analysis/coffee-providing-economic-jolt-eastern-congo>.

³ Kambale Kisumba Kamungele, "Robusta Coffee in D.R. Congo," *African Fine Coffees Review Magazine*, 7, no. 4 (July-September 2017): 22, <https://afca.coffee/wp-content/uploads/2017/08/July-September-2017-Magazine-Issue.pdf>.

⁴ Oliver Nieburg, "Cocoa in the Congo: Emerging Origin for Organic Chocolate Makers," *Confectionary News.com*, July 19, 2017, <https://www.confectionarynews.com/Article/2017/07/20/Cocoa-in-the-Congo-Emerging-origin-for-organic-chocolate-makers>.

Coffee and cocoa in the DRC are mainly grown by smallholder farmers, usually alongside other crops like bananas and soy beans. The provinces of North and South Kivu in eastern DRC are the main areas of coffee production, while cocoa is predominantly cultivated in North Kivu and Ituri.

Recent Developments in the Congolese Coffee and Cocoa Sectors

The smallholder farmers who grow coffee and cocoa in the DRC derive very little profit from their produce. Congolese farmers receive virtually no support in terms of extension services and agricultural inputs, their plants are old and in poor condition, yields are low, and—as a result—their economic returns are minimal. Yet despite these incapacities, the quality of their produce is high. During the past decade, the specialty coffee industry has become excited about Congolese Arabica coffees, the tastier, more expensive of the two main coffee varieties grown worldwide. Specialty confectioners have also spotted the potential of Congolese cocoa, the core ingredient of chocolate.

At the same time, donors including the U.S. Agency for International Development (USAID) have identified coffee and cocoa as the most promising cash crop sectors to catalyze economic activity, foster peace, and rebuild livelihoods in a region damaged by conflict. Today, a mixture of entrepreneurs, companies, donors, nongovernmental organizations (NGOs), and individuals within the Congolese government are trying to achieve these ambitious goals in eastern Congo. Their strategies include facilitating market development, incorporating marginalized groups such as women and former combatants into value chain activities; and establishing and professionalizing farmers' cooperatives.

The focus on cooperatives is a particularly important part of the effort. Up to 50,000 farmers are already members of coffee cooperatives in eastern Congo.⁵ Well-run cooperatives offer several opportunities to farmers. They can access training in agronomy and receive inputs that offer the potential of higher yields; they can increase their chances of securing bank loans through their collective; and they can gain entry to facilities such as washing stations and dry mills where basic processing of their coffee cherries and cocoa pods can be done to a higher standard than before.⁶ Finally, they increase their chances of finding buyers for their produce. Buyers are often willing to pay a higher price for any improvements they detect in the quality of the farmer's produce. This is particularly true if the farmer's collective has been accredited by one of the certification schemes that measure different elements of sustainable practice, such as UTZ Certified, Fair Trade, and organic.

Public- and private-sector engagement in the coffee and cocoa sectors is less than a decade old, but the partnerships that were established accumulated a large bank of knowledge in a short time and raised awareness about eastern Congo's agricultural export potential. In 2011, a partnership was struck between an NGO, Eastern Congo Initiative (ECI), the Howard G. Buffett Foundation, USAID, and World Coffee Research (WCR) with the objective of revitalizing the coffee sector. The

⁵ Calculation based on aggregate number of farmers' cooperatives cited in Eastern Congo Initiative Coffee Atlas, September 2017.

⁶ The drying process is a particularly important part of both coffee and cocoa production, and a major driver of quality. For example, wet processing is the main method for transforming arabica cherries into export-ready "green" coffee, incorporating a series of steps that include pulping, fermenting, washing, and drying. Investments in professionally run washing stations are a way to improve the quality of arabica coffee and the price it fetches.

project, implemented by Catholic Relief Services, attracted investment from coffee giant Starbucks and specialty producer Falcon Coffees, and negotiated a credit line for participating cooperatives provided by Westrock Coffee Company. The resulting public-private partnership (PPP), called Kawaha Bora Ya Kivu (KBYK), the Swahili term for Kivu fine coffee, boosted production and stimulated international interest in Congolese coffees. The partnership worked with more than 5,000 farmers in South Kivu, constructed four coffee processing stations, and produced more than 100 tons of specialty coffee for Starbucks alone.⁷

In the summer of 2017, a successor program to KBYK was announced. Funded by the USAID-led Feed the Future initiative, the Strengthening Value Chains Activity is a five-year program worth \$23 million focused on the coffee, soy, and dried common beans value chains in three territories of South Kivu. The program has an ambitious agenda to strengthen value chains, build PPPs, expand cooperatives, extend credit to farmers, and address cross-cutting problems such as gender inequality, conflict, poverty, and poor nutrition. In-field training on agronomic best practices is provided by TechnoServe, a nonprofit organization specializing in the farming business. Other arms of the U.S. government are also getting involved. In September 2017, the Office of Weapons Removal and Abatement at the Department of State's Bureau of Political-Military Affairs launched a victims' assistance fund to help communities affected by violence move back to their land and take up farming. The fund is a PPP, with \$500,000 pledged by the State Department and matching grants from other governments and coffee companies.⁸

While the U.S. government has been at the center of activities in the coffee sector, others have also played prominent roles. A UK-based ethical trading organization, Twin, made the initial connections between Congolese coffee producers, exporters, and U.S. retailers, winning recognition from the Specialty Coffee Association (SCA) for its work. A Michigan-based coffee company, Higher Grounds, has invested in the embryonic coffee sector and, through its nonprofit arm, On the Ground, is trying to promote more gender equity in the value chain. Higher Grounds launched the first coffee tasting—or cupping—competition, to showcase Congolese specialty coffee and link producers with buyers. The event, Saveur de Kivu—Taste of Kivu—has been held for the past three years, in collaboration with partners including ECI and USAID.

Meanwhile, the cocoa sector has also benefited from investment. Theo Chocolate, a Seattle-based confectioner, began operations in the DRC in 2010 and now sources 70 percent of its cocoa from the country, working with more than 4,500 farmers in a partnership with ECI and a local exporter, ESCO Kivu.⁹ The UK Department for International Development is building market connections in the cocoa sector (as well as the coffee sector) through its ÉLAN RDC program, implemented by Adam Smith International. ÉLAN RDC is working with cocoa producers to improve yields and quality, helping value chain actors secure financing, and liaising with the Congolese government to improve the business climate.

These activities are starting to have an impact. Cocoa exports are forecast to surpass 17,500 tons in the 2017–2018 season.¹⁰ According to the International Coffee Organization (ICO), coffee exports

⁷ Eastern Congo Initiative, "Revitalizing Congo's Coffee Sector," <http://www.easterncongo.org/blog/detail/2016-03-revitalizing-congos-coffee-sector>.

⁸ Comments by senior State Department official at United Nations General Assembly, New York, September 19, 2017.

⁹ Theo, "Congolese Cocoa," February 22, 2017, <https://www.theochocolate.com/blog/congolese-cocoa/>.

¹⁰ Nieburg, "Cocoa in the Congo: Emerging Origin for Organic Chocolate Makers."

from the DRC in October 2017 rose 300 percent on the same month in 2016, albeit from the modest figure of 3,000 to 12,000 bags of coffee.¹¹ The coffee infrastructure in the region is improving and cooperatives are expanding. In 2016, North and South Kivu had a total of 98 washing stations, up from just seven in 2011.¹² Coffee retailers from Starbucks to specialty operators like Blue Bottle Coffee and Counter Culture Coffee are sourcing from the DRC.

Yet it is important to put these developments into context. The Congolese contribution to global coffee exports in October 2017 was just 0.14 percent.¹³ Furthermore, the encouraging steps to date have taken place against a backdrop of political chaos, insecurity, civilian displacement, and humanitarian crisis in eastern Congo specifically, and the DRC more broadly. There is a disconnect between the bleak reality of Congo's intractable national crisis and the optimism expressed by operators on the ground who have placed a bet on the growth potential of the cocoa and coffee sectors. The following section examines some of their reasons for optimism, before considering some of the roadblocks to further expansion of the cash crops sector, and suggesting ways they might be overcome.

Identifying the Opportunities in Eastern Congo's Agricultural Export Sector

What factors account for the increasing interest in Congolese cocoa and coffee, and why are people putting time and resources into such a high-risk environment? Each stakeholder arrives with different motivations but first and foremost, they are united in their belief in the quality of the coffee and cocoa being produced on Congolese farms and see the potential to expand each sector.

In addition, the reentry of the DRC into the global coffee and cocoa markets is happening at an opportune moment characterized by high demand and increasing supply problems among some of the traditional producers. The DRC has strategic and climatic advantages that could give it a competitive edge over its peers. A glance at trends in the global coffee sector, worth approximately \$200 billion, attests to these advantages.

On the demand side, the global market for specialty coffee has exploded in recent years, which is a boon for Arabica production in the DRC. The U.S. market reflects this trend. Not only is overall coffee consumption increasing, consumers are becoming more discerning about what they drink. Of all the cups of coffee drunk in the United States each day, approximately 59 percent fall into the gourmet category.¹⁴ Members of the millennial generation are the demographic driving the growth of what has been termed the third wave of coffee, the movement toward high-quality, artisanal

¹¹ Coffee is transported in standard-sized bags, each weighing 60 kilograms, or 132lb. Figures taken from International Coffee Organization, "Monthly export statistics, October 2017," <http://www.ico.org/prices/m1-exports.pdf>.

¹² Alexandra Wexler, "The Most Dangerous Cup of Coffee in the World," *Wall Street Journal*, October 14, 2016, <https://www.wsj.com/articles/the-most-dangerous-cup-of-coffee-in-the-world-1476453922>.

¹³ International Coffee Organization, "Monthly export statistics, October 2017," <http://www.ico.org/prices/m1-exports.pdf>.

¹⁴ National Coffee Association, "Daily Coffee Consumption Up Sharply," March 25, 2017, http://www.ncausa.org/Portals/56/PDFs/Communication/NCA_NCDT2017.pdf?ver=2017-03-29-115235-727. Note that "gourmet" is a marketing term denoting quality coffee and is not the same as specialty coffee, which is judged to higher standards.

Company Insights

"This year we purchased coffee from the Muungano Cooperative, based in Kinieziere, South Kivu. The plant varieties, altitude, climate, and soil in this area have the potential to produce some of the highest-quality coffees in the world. The fact that many of these coffees have organic certification makes them even more appealing for us, as this is rare in this area of East Africa."—Kyle Tush, coffee quality specialist, Counter Culture Coffee.

"The Congo has a rich coffee history but it's a difficult market. After we sent some of our team to the DRC, we were so inspired by the power of coffee to create economic prosperity and opportunity for this community, despite the challenges facing this country. We were delighted by the elegance and quality of the coffee we tasted."—Kelly Goodejohn, director, ethical sourcing, Global Social Impact, Starbucks Coffee Company.

"The production potential for cocoa is very high, in the appropriate regions, in Eastern Congo. The key issue is how to do it in a way that protects the rich biodiversity of this ecologically important part of the world. When I first visited eastern DRC in 2010, the total export potential was 600 tons [per year]. Now it is north of 10,000 tons. We invested in DRC because of the strength of our in-country partners, the farmers' commitment to adopting best practices, and the resilience of the Congolese. Our work in DRC has resulted in a high-quality cocoa supply chain that is important to consumers. Other brands and manufacturers are now taking notice and starting to source high-quality cocoa from DRC."—Joe Whinney, founder and former CEO, Theo Chocolate.

"DRC is the last place on earth with substantial supply to fill an insatiable global demand for specialty coffee. It is the toughest yet most exciting place of any of the countries I have ever worked in. It's opportunity-laden, with the very real chance to rebuild an industry that could bring peace and prosperity to a rich, entrepreneurial culture yearning for a chance to enter the global market."—Chris Treter, owner and cofounder, Higher Grounds Coffee.

coffee. They are also the most socially conscious consumers, taking an interest in where their products come from and how they are sourced.

While the DRC does grow Robusta, the hardier but cheaper and less delicious variety of coffee, its main advantage is in Arabica, which accounted for more than 60 percent of production in the 2015–2016 season.¹⁵ Eastern Congo is blessed with the perfect set of climatic conditions for growing Arabica, which thrives in moderate temperatures and higher altitudes. The volcanic soil abutting Lake Kivu is rich and fertile. The Specialty Coffee Association (SCA), a global NGO representing coffee professionals, awards specialty status for coffees that score more than 80 on a 100-point scale when judged by professional cuppers. Coffee grown in the Kivus has frequently scored more than 80 points. Achieving this quality threshold is important for farmers because specialty grades command a higher price. In commodities markets, the Coffee 'C' futures contract is the global benchmark for Arabica coffee. In the year up to December 2017, the average price for Coffee 'C' futures contracts bounced between \$1.18lb and \$1.68lb.¹⁶ Companies like North Carolina-based Counter Culture Coffee have been paying a premium of \$2.70lb above the C-market price to Congolese farmers who hit their quality-control targets.¹⁷

¹⁵ Data extracted from Congo Coffee Atlas Dashboard, ELAN RDC, <http://www.elanrdc.com/perennialagriculture>.

¹⁶ Intercontinental Exchange (ICE), Coffee C Futures, data accessed on December 13, 2017, <https://www.theice.com/products/15/Coffee-C-Futures/data>.

¹⁷ Information provided by Kyle Tush, coffee quality specialist, Counter Culture Coffee, December 11, 2017.

Furthermore, certifications of Congolese coffee and cocoa provide quality assurance to consumers who want to feel that the goods they buy have been sustainably produced and ethically sourced. Some of the main cooperatives in the Kivus, such as KACCO, RAEK, and CPCK in the Bord du Lac region, and Virunga Coffee in the Grand Nord region, have had their coffee certified as Organic, Fair Trade, or both. The DRC's cocoa farmers have also made good progress on certification. More than half of the DRC's cocoa is both Organic and UTZ Certified, while only approximately 0.5 percent of the world's cocoa is organic.¹⁸ While there are legitimate debates to be had about the effectiveness of these certification schemes in achieving their ambitious sustainability goals, they are recognized as a stamp of quality by the industry and consumers. Single-origin coffees—those that have not been blended with coffee from other regions—are another comparative advantage for Congolese producers. They offer consumers a compelling narrative of where their drink comes from and how it was produced. Under the KBYK project, Starbucks has been selling Congolese single-origin coffee since 2015 in more than 1,500 stores.¹⁹

Turning to supply considerations, global coffee and cocoa markets have suffered from output problems that provide a potential opening for expanding producers like the DRC. Surging global demand for coffee in established markets, as well as the expansion of new markets such as China, are outstripping supply.²⁰ According to current forecasts, 159 million bags of coffee will be produced in the 2017–2018 season, barely enough to meet demand.²¹ By 2030, however, demand is expected to reach 200 million bags.²² While African coffees are highly valued by consumers, both as standalone origins and as key ingredients in blended coffees, African coffee production has been falling²³ and currently represents about 12 percent of global production.²⁴ The DRC has an opportunity to enter this market and study the experiences of its more established African peers for lessons on how to compete.

Partly because the DRC is starting from a point of relative disadvantage, there are opportunities to significantly improve production by providing farmers with training and inputs to improve coffee yields, and making other relatively low-cost interventions. There are also opportunities to increase large-scale production by building on the agricultural legacy in eastern Congo, where coffee estates left fallow for many years can be renovated with modest investment. Also, larger landowners are more likely to be willing and able to invest in road infrastructure that would help

¹⁸ Nieburg, "Cocoa in the Congo: Emerging Origin for Organic Chocolate Makers."

¹⁹ Starbucks 1912 Pike, "Project in Congo helps restore country as source of coffee," February 29, 2016, <https://1912pike.com/project-in-congo-helps-restore-country-as-source-of-coffee/>.

²⁰ In December 2017, Starbucks opened its largest store anywhere in the world in Shanghai, anticipating increased demand among the Chinese middle class.

²¹ International Coffee Organization, "Coffee Market Report, November 2017," 7, <http://www.ico.org/documents/cy2017-18/cmr-1117-e.pdf>.

²² Christine Mungai, "Global coffee market in turmoil, but for Africa, the answer may be to look at home," *Mail&Guardian*, October 17, 2015, <http://mgafrica.com/article/2015-10-17-global-coffee-market-in-turmoil-but-for-africa-the-answer-may-be-to-look-within>.

²³ Reasons for declining production across the African continent include a reduction in the amount of arable land due to urbanization and population growth; the inability of many smallholder farmers to make a profit from coffee; and the unattractiveness of farming as a career for young people. See Innocent Anguyo and Isis Almeida, "Hip coffee at \$4 a cup revives African industry left behind," *Bloomberg*, August 2, 2017, <https://www.bloomberg.com/news/articles/2017-08-01/trendy-coffee-at-4-a-cup-revives-african-industry-left-behind-j5u6te3n>.

²⁴ Mungai, "Global coffee market in turmoil, but for Africa, the answer may be to look at home."

the sector grow. As sub-Saharan Africa's largest country, the DRC can draw upon an estimated 80 million hectares of arable land and plentiful water resources.²⁵

In the long term, climate change threatens the viability of coffee production in parts of the world critical to today's supply, offering further opportunities to the DRC's nascent sector. Rising temperatures are reducing the areas where coffee can be cultivated, forcing the more vulnerable Arabica plant to be grown at higher elevations. While big coffee-producing nations like Brazil do not have much higher ground to move to, the DRC has hilly terrain that gives it greater ability to absorb temperature rises for longer. Erratic rainfall patterns are another impact of climate change that has long-term repercussions for coffee production. Less rainfall in some regions intensifies the search for drought-tolerant coffee varieties, while warmer, wetter conditions increase the prominence of pests and diseases like La Roya, or coffee leaf rust, that have ravaged Arabica crops in central and South America. The lack of genetic diversity in the two main coffee varieties heightens supply concerns, increases the pressure on researchers in institutions like World Coffee Research to safeguard the future of coffee, and presents an opportunity for underdeveloped markets like the DRC to step up production.

Cocoa production is also vulnerable. Supplies are highly dependent on just two producers, Ghana and Côte d'Ivoire, which between them are responsible for more than 60 percent of global output. The cocoa sectors in both countries are under strain due to factors including farmer poverty, ecological stress and deforestation, and competing government price guarantees to farmers that have led to cross-border smuggling. Cocoa farmers in both countries receive as little as 5 percent of overall value chain profits because virtually all processing, manufacturing, and retailing of cocoa products takes place outside the region.²⁶ The past year summed up the structural fragility of the cocoa system. A record production year in 2016 led to a plunge in global prices which left farmers without the means to buy fertilizer and other inputs for the 2017 season. Now, heavy rains have led to an increase in brown rot disease that threatens to severely curtail output. As cocoa production increases in the DRC, the sector can learn a lot from its West African neighbors about mistakes to avoid and priorities to emphasize, including the importance of sustainable and climate-smart practices, good governance, innovation, and value addition.

These macrolevel conditions in the global commodity markets present an opening for the DRC to expand its already-promising coffee and cocoa sectors, grow the national and sub-national economies, and provide jobs to its citizens. If conducted in a sustainable, producer-centered manner, cash crop production has the potential to generate steady incomes for farmers and other value chain participants, reduce poverty, empower women, and support peacebuilding in a region that has experienced chronic conflict. These are big potential payoffs but many obstacles must be overcome before they can be realized. The next section examines the most important barriers, before considering possible ways to tackle them.

²⁵ Kambale Kisumba Kamungele, "Robusta Coffee in D.R. Congo," *African Fine Coffees Review Magazine* 7, no. 4 (July-September 2017): 23, <https://afca.coffee/wp-content/uploads/2017/08/July-September-2017-Magazine-Issue.pdf>.

²⁶ Victoria Crandall, "The Challenges Facing West Africa's Chocolate Industry," *How We Made It in Africa*, September 25, 2017, <https://www.howwemadeitinafrica.com/challenges-facing-west-africas-chocolate-industry/59799/>.

Obstacles to Growth of a Sustainable Cash Crop Sector in the DRC

Serious, interdependent threats to sustainability must be addressed before the DRC can become a more significant producer of coffee and cocoa rather than a bit-part player. These solutions can only be reached through cooperation between donors, companies, and the Congolese government.

When categorizing the main challenges, it is helpful to adopt some of the terminology used by companies that think about the sustainability of their operations. While each company takes a distinct approach, many cohere around the basic idea of a “triple bottom line” of sustainability that considers the impact of operations on:

- People (including the welfare of company employees, producers, and value chain actors at all points in between)
- Planet (including land and water use, conservation, and climate change adaptation)
- Profits (the economic bottom line for the company, including ensuring supplies of raw materials, and strengthening demand).

Increasingly, companies are using the United Nations’ Sustainable Development Goals as an additional tool to check progress in these three categories.²⁷ Let us examine each component of the triple bottom line in turn, referencing the main threats to sustainability in the context of eastern Congo.

People

The acid test for sustainable coffee and cocoa production in the DRC is whether it can support—and improve—the livelihoods of the most vulnerable actors at the far end of the value chain: the individual farmer and his/her family. Congolese farmers, like many of their fellow citizens, suffer chronic levels of poverty, poor health and nutrition, and low access to public services. While some established producers make a profit, most live on the margins. Life is particularly hard in eastern Congo, where, according to a 2015 assessment by USAID, South Kivu had the highest percentage of food-insecure households in the country.²⁸

The fundamental questions to consider are: Can the smallholder farmer earn enough from coffee/cocoa production? And if not, what steps must be taken to make this kind of cash crop farming a more viable occupation? People will not grow coffee or cocoa unless they see economic value in doing so. The challenges faced by smallholder farmers are not unique to the DRC. A global study of Fairtrade coffee farmers (who already attract a premium price for their

²⁷ The United Nations defines sustainability along similar lines, clustered around the concepts of ending poverty, protecting the planet, and ensuring prosperity for all. See UN Sustainable Development Goals, <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>.

²⁸ Sixty-four percent of households in South Kivu were judged to be food insecure, compared with 49 percent in North Kivu. USAID Office of Food for Peace, “Food Security Desk Review for Katanga, North Kivu, and South Kivu, Democratic Republic of Congo,” November 2015, 1, <https://www.usaid.gov/sites/default/files/documents/1866/FFP%20Kivu%20Katanga%20Desk%20Review%2011-10-15%20FINAL%20508.pdf>.

certified produce) in seven countries found that farmers in only one country—Indonesia—earned a living household income from coffee production alone.²⁹ Eastern Congo is a region where many people are struggling to survive, having depleted their assets and exhausted their coping strategies following years of war and hardship. Moving into cash crop production is a risky proposition, despite the potential rewards. Any sustainability strategy must try to offset the risks of exposing subsistence farmers to the highly volatile global markets in coffee and cocoa, where global prices are determined by the laws of supply and demand, not the cost of production.

Companies investing in the DRC must consider the importance of ensuring that farming households earn a living income, have access to social services, and are well-fed and nourished in a region with high levels of food insecurity. Furthermore, the history of conflict in eastern Congo and the social fractures it has exposed require special interventions to empower women and youth and build peaceful communities. This is a tall order for any company, but it is achievable through partnerships with donors and NGOs, and it is the only way to build sustainable coffee and cocoa sectors in the DRC.

Any serious attempt to expand cash crop production in eastern Congo must address the following problems for smallholder farmers:

- *Insecure land access and tenure:* Land ownership and use is highly contested in eastern Congo, where conflict, displacement, areas of high population density, and rival claims on land between indigenes and settlers (keenly exploited by political actors) and within families frequently cause violence. The presence in eastern Congo of fast-growing urban settlements, fueled by displacement, makes it important to consider ways to integrate urban dwellers into coffee and cocoa value chains.
- *Old plants and few inputs:* Farmers' coffee and cocoa trees are aging (many coffee trees are 30–50 years old), poorly maintained, and low-yielding. Crops are vulnerable to disease and pests, and few farmers have access to fertilizer and other inputs. Congolese farmers lack knowledge of good agronomic practices and extension services are minimal. While researchers from organizations like WCR and the World Cocoa Foundation are testing and introducing new varieties to regenerate the coffee and cocoa sectors, their work is still at an early stage.
- *Low access to credit, insurance, and other financial instruments:* This is perhaps the single biggest problem facing farmers, particularly women producers. Switching to cash crops is a risk for farmers, requiring up-front investment in—for example—coffee trees that only produce fruit after three years and do not become profitable until several years after that, even under the best of conditions. Aspiring cash crop farmers are not willing to take on the risk unless they can access capital, but banks are unwilling to lend to farmers at affordable rates. Access—via cooperatives—to cheap loans and financial products that manage risk are a prerequisite for the expansion of cash crop production.

²⁹ Assessing Coffee farmer household income, PowerPoint presentation by True Price and Fairtrade, 2017, 4, http://fairtradeamerica.org/~media/Fairtrade%20America/Files/Reports/1706_ExecSummary-AssessingCoffeeFarmerIncome_final.pdf.

- *Limited market access:* Market access makes it difficult for farmers to negotiate a fair price for their produce. The problem of information asymmetry, where producers lack knowledge about where, when, and at what price to sell, is a major problem in the globalized, extended coffee and cocoa value chains. Although more companies have entered the Congolese market in the past five years, farmers still have relatively few buyers to choose from, which gives them a weak negotiating hand.
- *Shortage of professionally run cooperatives:* Attempts are being made to address the challenges outlined above by forming and developing cooperatives that offer a degree of protection, support, and market access to smallholder farmers. While progress has been made and there are successful, professionally run cooperatives operating in both North and South Kivu, others are poorly managed. Any significant expansion of cash crop production in eastern Congo will require the establishment of a greater number of professionally run cooperatives, probably alongside farming on larger-scale estates.
- *Weak institutional environment and lack of government support:* Finally, Congolese farmers operate in a weak institutional environment where low capacity and lack of support from government at all levels compounds the difficulties of doing business. The main government agency in charge of promoting and exporting coffee and cocoa and assisting farmers in both sectors, the Office National du Café, or ONC, lacks capacity and—outside South Kivu—visibility. Historically, the ONC has levied excessive taxes that have held back the agricultural sector and prompted farmers to smuggle their produce via neighboring states, where export taxes have been lower. While it is impossible to put a precise figure on the amount of produce smuggled abroad, the ONC itself estimates that approximately 50 percent of the coffee grown in the South Kivu leaves the country illegally.³⁰

Informal taxes levied by officials and nonstate actors are another significant drag on the agricultural sector. Until recently, taxes were set at 13 percent of the free on board (FOB) price (the price paid for commodities before export), compared with less than 5 percent in Rwanda, Uganda, and Burundi.³¹ There are signs of progress, however, as donors continue to engage with the ONC and the Congolese government wakes up to opportunities in the agricultural export market. Positive working relationships have been established between donors, companies, and officials in the Congolese agriculture sector. In 2016, the ONC cut the (official) export tax on cocoa from 4.2 percent of the FOB price to 3 percent.³² Looking ahead, a more ambitious but vitally important task will be to transform the ONC into an organization that does more than levy taxes, and instead plays a constructive role promoting high-quality Congolese agricultural commodities on the global stage.

Planet

A second, critical component of the sustainability agenda is the need to grow coffee and cocoa in an environmentally sensitive way, taking steps to protect the future of the crops while confronting

³⁰ Political Economy Analysis—Democratic Republic of the Congo: Coffee, Bean, and Soybean Value Chains, Feed the Future Democratic Republic of the Congo Strengthening Kivu Value Chains Activity, November 2017, 23.

³¹ Baraka Kasali, “The Potential of Coffee in Eastern Congo,” August 17, 2015, <https://suluhu.org/2015/08/17/aiai-25-the-potential-of-coffee-in-eastern-congo/>.

³² Nieburg, “Cocoa in the Congo: Emerging Origin for Organic Chocolate Makers.”

the heightened threats of climate change and disease. There are concerns in some cocoa and coffee-producing nations about the long-term viability of producing these crops in the face of warmer temperatures and more unpredictable rainfall patterns. The risks are exacerbated by unsustainable farming practices. For example, high global demand for cocoa has driven deforestation in West Africa, as farmers search for more land to grow cocoa, often in conditions of direct sunlight that quickly lead to declining yields. According to the think tank Chatham House, global production of cocoa increased by 32 percent between 2000 and 2014, resulting in a 37 percent rise in the land-use footprint of cocoa plantations, from 7.6 to 10.4 million hectares.³³

Can similar mistakes be avoided in the DRC? Can coffee and cocoa production be expanded in a way that respects the environment, preserves water, safeguards soil quality, and prevents deforestation? Furthermore, can the scientific race to breed stronger varieties of coffee be won in the face of an assault from pests and diseases, aided by climate change? Research into Congo's coffee varieties is far less advanced than in other parts of the world such as Central and South America, where coffee leaf rust prompted sustained action to save Arabica production in Colombia and other nations. The DRC's coffee plants remain vulnerable to coffee leaf rust, as well as diseases common to East Africa like Coffee Berry Disease and Potato Taste Defect, a poorly understood bacterial problem that can spoil a whole bag of ground coffee if even a single bean is affected.³⁴ An urgent task is to replenish stocks of aging coffee plants with stronger, more disease-resistant, higher-yielding breeds while maintaining the unique taste profiles of Congolese varieties.

Profit

The third—and for companies, most critical—measure of sustainability is financial. Companies operating all the way along the coffee and cocoa value chains must consider necessary steps to safeguard their financial sustainability in the long term. The stakes are raised for private-sector investors in the DRC, where operating costs are high and conditions on the ground are fluid and uncertain. The potential returns on investment are offset by the realization that global prices in commodities like coffee have hardly increased over the past two decades, despite considerable volatility within that period.³⁵

Simply put, is coffee worth the investment in the DRC, a difficult country in which to operate, located in a continent where coffee production has declined since 1990, when the ICO ended attempts to maintain price stability in the global market?³⁶ The fate of producers cannot be separated from these calculations. For the value chain to be sustainable, participation must make economic sense for all parties. Companies must keep an eye on their margins and extract a competitive price for their raw materials. At the same time, they cannot secure a reliable supply of

³³ Alison Hoare et al., "Cocoa Trade, Climate Change, and Deforestation," [resourcetrade.earth](https://resourcetrade.earth/stories/cocoa-trade-climate-change-and-deforestation#top), <https://resourcetrade.earth/stories/cocoa-trade-climate-change-and-deforestation#top>.

³⁴ Chris Cornman, "Potato Taste Defect: What roasters need to know," *Daily Coffee News*, December 20, 2017, <https://dailycoffeenews.com/2017/12/20/potato-taste-defect-what-roasters-need-to-know/>.

³⁵ According to the ICO, the composite price for coffee (including robusta and arabica) was 134 U.S. cents/lb in 1997 and only 127 cents/lb in 2016: <http://www.ico.org/historical/1990%20onwards/PDF/3c-indicator-prices.pdf>.

³⁶ According to an ICO report from 2014, Africa's coffee production slumped from an average of 19.1 million bags per year during the regulated period to only 15.8 million when free market conditions were established in 1990. Nick Brown, "A brief history of global coffee production as we know it," *Daily Coffee News*, July 17, 2014, <https://dailycoffeenews.com/2014/07/17/a-brief-history-of-global-coffee-production-as-we-know-it-1963-2013/>.

coffee or cocoa unless they pay a fair price to farmers.³⁷ At the other end of the value chain, the consumer must be made more aware of the costs of production and accept the reality that they still pay too little for the coffee they drink and the chocolate they eat. While it is true that they absorb premiums for certified and specialty products, even these more expensive items do not fully reflect the true costs of transforming a Congolese Arabica coffee bean or Organic cocoa bean into a cup of single-origin coffee or artisanal chocolate bar.

The pursuit of profit is not the only motivation for some of the companies currently working in the DRC. Coffee companies like Higher Grounds and Starbucks and confectioners like Theo Chocolate articulate their business endeavors in the DRC as part social enterprise and part testing ground for sustainable approaches, often using money from their foundations or collaborations with nonprofits to complement their activities. They are willing to pay above the market price for high-quality coffee and cocoa, partly because they believe in the DRC's potential and want to see Congolese farmers obtain a fair price for their produce. This approach is laudable and makes sense when trying to build an incipient sector in a new country. But can it be sustained in the long term, and will other investors that are not as motivated to do good for the Congolese people be persuaded to join the trailblazers? Significant improvements must occur on the ground before the steady flow of interest from the private sector becomes a rushing torrent. Priority challenges include:

- *A dearth of information about the market, the players, and the opportunities:* For risk-averse investors, the DRC is uncharted territory. It is difficult for companies to access the kinds of basic information that helps guide investment decisions. As a result, the popular perception of the DRC as a lawless, violent, corrupt nation in the "dark heart of Africa" dominates the conversation, clouding efforts to form a more balanced assessment of the risks and opportunities. (Some companies and nonprofits have contributed to this problem by using the DRC's reputation for danger, conflict, and gender-based violence as the basis of marketing strategies that stress the unique story behind products sourced from the country.) The Coffee Atlas, an online tool launched in 2017 by ELAN RDC and ECI, is one of the first attempts to address this need. The atlas provides up-to-date information about companies operating in the Congolese coffee sector, the locations of washing stations, export figures, and searchable functions that, for example, allow the user to find out which cooperatives have received certifications for their coffee.³⁸
- *Conflict and insecurity:* While the business opportunities in the DRC are underappreciated, the operating risks for companies, their staff, and partners are real. The DRC has a high fear factor for companies and investors. These concerns are magnified in North and South Kivu, the epicenter of violent conflict in the DRC for the past two decades. Ongoing attacks by a constellation of armed militia as well as the daily predations of the Congolese military, the Armed Forces of the Democratic Republic of the Congo (FARDC), pose an ongoing threat. The unpredictability of these threats and the constantly shifting locations of attacks pose a

³⁷ In Indonesia, one of the world's top four cocoa producers, farmers are cutting down cocoa trees to plant other more profitable crops, placing supplies in jeopardy. See Adva Saldinger, "Inside Mars, Inc.'s \$1 billion pivot toward sustainability," *Devex*, October 16, 2017, <https://www.devex.com/news/inside-mars-inc-s-1-billion-pivot-toward-sustainability-91138>.

³⁸ Élan RDC, "Perennial Agriculture," <http://www.elanrdc.com/perennialagriculture>.

daily headache for companies. Can they safely move their produce? Will their staff be safe from kidnap and extortion by corrupt officials and armed militia? The unacceptable level of insecurity in eastern Congo puts livelihoods at risk and deters investors, who are reluctant to enter the market unless they have a trusted partner on the ground.

- *Logistical challenges:* Combined with the security problems are the more mundane challenges of getting goods out of the country and navigating the appalling roads that slow traffic to a virtual standstill, especially when the rains hit. Most of the DRC's cash crops are exported through the ports of Dar Es Salaam in Tanzania or Mombasa in Kenya, which are both approximately 1,000 miles from Goma and Bukavu, the main cities in eastern Congo. It can take up to 50 days to transport a container of green coffee along these routes, which is expensive for coffee exporters and degrades the quality of the product they are moving. One of the reasons for the excessive delays is the presence of illegal roadblocks along all main routes. A mapping exercise published in December 2017 counted 798 roadblocks in the Kivus, operated mostly by FARDC personnel. The roadblocks were separated by an average distance of just 11 miles. The report found that six trucking companies in North Kivu were paying a combined total of more than \$1.5 million in fines each year.³⁹
- *Unreliable government partners:* The DRC has become a byword for corruption and poor governance. The reputation of the Congolese government is toxic and the country's political crisis is likely to deteriorate further in the short term due to President Joseph Kabila's failure to leave office at the end of his second and final term. The national crisis has knock-on repercussions for provincial and local government. The private sector is not insulated from the impact of the DRC's governance failures. The agricultural export sector has suffered from decades of neglect. Now that it shows signs of promise, an emerging risk is that it attracts unwanted attention from rent-seeking politicians and the corrupt elites clustered around the first family. The private sector will eventually reach a ceiling where poor and predatory systems of governance, if left untouched, encroach on their operations and prevent further growth.

Beyond the problems of corruption and political interference, doing business in the DRC is an exhausting slog involving daily battles to accomplish even the most modest of tasks. Investors look for predictability and clearly defined procedures. The DRC is anything but predictable. Foreigners complain that the process for securing a visa to enter the country is slow and unpredictable, with increasing numbers of applications rejected or not responded to at all. Investors, buyers, donors, and other value chain participants cannot properly plan their activities in the DRC when it takes up to two months to acquire a business visa.⁴⁰ The 2018 edition of the World Bank Doing Business report ranks the DRC 182nd of 190 countries on criteria including electricity access, ease of obtaining construction permits, and enforcing contracts.⁴¹ By contrast, its neighbor Rwanda ranks 41st. The DRC may offer

³⁹ International Peace Information Service (IPIS), "Roadblock Rebels: IPIS Maps Important Mechanism of Conflict Funding in Central Africa," December 6, 2017, <http://ipisresearch.be/2017/12/roadblock-rebels-ipis-maps-important-mechanism-conflict-funding-central-africa/>.

⁴⁰ Interview with Chris Treter, owner and cofounder of Higher Grounds Coffee, February 17, 2018.

⁴¹ World Bank, Doing Business 2018 Country Tables, October 31, 2017, 79, http://www.doingbusiness.org/reports/global-reports/~/_media/WBG/DoingBusiness/Documents/Annual-Reports/English/DB18-Chapters/DB18-Country-Tables.pdf.

Addressing Inequalities in Global Value Chains

The coffee and cocoa global value chains are long and complex. Most of the value is extracted at the consumer end of the chain. In the coffee sector, this phenomenon has given rise to the notion of the coffee paradox, where coffee-consuming countries are experiencing a boom while coffee-producing countries are finding it harder than ever to stay in the business^a In the United States alone, coffee-related activity in 2015 accounted for 1.6 percent of GDP and employed 1.7 million people.^b Rabobank calculates that retailers capture a 25 percent share of the margins from the coffee supply chain, with advertisers taking 11 percent and roasters taking 15 percent. At the other end of the chain, coffee farmers receive only 27 percent of the value of what they produce.^c The inequalities are even wider in the cocoa sector, where the thriving retail market for chocolate products is a world away from the daily struggles of the cocoa farmer.

How can some of this enormous value be spread more equitably along the value chain, so that the producers see greater economic returns from their participation? Two main groups must assume greater responsibility for the sustainability of the cocoa and coffee supply chains: First, the consumer-facing companies and retailers must take bolder steps to pass dividends along the value chain; second, consumers themselves must accept that they are paying too little for the coffee they drink and the chocolate they eat. For example, the inflation-adjusted price of a cup of coffee in the United States has actually decreased over the past 50 years.^d Overcoming these inequalities will require the commitment of companies to put sustainability at the heart of their operations. Consumers have a responsibility to ask tougher questions about the products they buy.

Finally, the DRC itself must push for the best possible deal for its producers. The DRC has a unique story to tell about its cocoa and coffee. It should do this in alliance with domestic producers and international donors, buyers, and retailers through savvy marketing that emphasizes the quality of Congolese products. Focusing on single-origin, traceable products will enable farmers and their cooperatives to connect with consumers on a more personal level. Smart companies like Higher Grounds, Counter Culture Coffee, and Theo Chocolate are finding ways to tell these stories in captivating ways through blogs, videos, and other multimedia techniques. The ONC can facilitate and encourage these efforts and avoid narratives that market the DRC's uniqueness in negative ways—as a place that is locked in an against-all-odds struggle to produce coffee and cocoa amid barbarous violence and predatory governance. These approaches risk being exploitative. They also scare away investors and insinuate that the reasons people buy coffee and chocolate sourced in the DRC have less to do with their quality and more to do with their sympathy for the downtrodden Congolese.

The DRC should look to the Colombian Coffee Growers Federation (FNC) for inspiration, which created the fictional farmer Juan Valdez to represent the values and characteristics of its Arabica coffee. What would a Congolese Juan Valdez look like? By focusing on developing "intangible values," such as clever marketing and branding for its products, the DRC can potentially strengthen links along the global value chains for coffee and cocoa and ultimately improve farmer incomes.^e

a. Benoit Daviron and Stefano Ponte, *The Coffee Paradox: Global Markets, Commodity Trade, and the Elusive Promise of Development* (London: Zed Books, 2005), xvi.

b. National Coffee Association, "The Economic Impact of the Coffee Industry," <http://www.ncausa.org/Industry-Resources/Economic-Impact>.

c. Xinnan Li, "Banking for Coffee," Rabobank, November 2016, file:///C:/Users/owner/Downloads/985204_Banking%20for%20Coffee%20Infographic%20(1).pdf.

d. Nick Brown, "U.S. consumers paying less for coffee now than they have over the past 50 years," *Daily Coffee News*, July 27, 2016, <https://dailycoffeenews.com/2016/07/27/us-consumers-paying-less-for-coffee-now-than-they-have-over-the-past-50-years/>.

e. For more details about how this might be achieved, see Luis F. Samper et al., "The powerful role of intangibles in the coffee value chain," World Intellectual Property Organization, November 2017, http://www.wipo.int/edocs/pubdocs/en/wipo_pub_econstat_wp_39.pdf.

the potential for high rewards, but the hurdles that must be overcome deter all but the most ardent investors. Changing this calculus will not only require commitment from the Congolese government; investors will need to agree on priority steps to improve the business environment and work with the Congolese to achieve them.

Looking Forward: Expanding Cash Crop Production in the DRC

The story of the DRC's coffee and cocoa expansion has involved a wide cast of actors, including companies and entrepreneurs, social enterprises, NGOs, plant scientists, and donors. These groups have established relationships with Congolese farmers, cooperatives, and research institutions, with some input from the host government. Their hard work has enabled the cocoa and coffee sectors to gain a foothold in the DRC. But what must happen to elevate commercial cash crop development to the next level? And how can coffee and cocoa production be scaled up in a sustainable way without losing the unique identities that make them attractive to consumers?

This section addresses these questions by drawing on information from interviews with experts engaged in the coffee and cocoa sectors, both in the DRC and beyond; and referencing instructive examples from elsewhere in the world.

First, it would be helpful to define what a flourishing, sustainable cash crop sector should look like in the DRC. By extending the theme of triple-bottom-line sustainability, the following priorities emerge:

- *People:* The livelihoods of farmers and their families are improved through training, mentoring, and support. These engagements go beyond efforts to boost agricultural output, which for most smallholder farmers would generate marginal but not significant increases in profits. They also try to uplift the communities around them through access to education, health services, and clean water; and include programs to empower women and consolidate peace. Strategies are also pursued that allow Congolese to extract a greater share of profits along the value chain. They include boosting coffee and cocoa processing and improving the capacity and professionalism of cooperatives.
- *Planet:* Cash crop production is expanded in an environmentally sustainable way that preserves the unique qualities of Congolese coffee and cocoa. This includes efficient water use, intercropping, and strategies to conserve forest cover by producing shade-grown crops.
- *Profits:* The DRC becomes a crowded marketplace for cocoa and coffee, with many private-sector actors—both Congolese and foreign—competing in a safe, business-friendly environment. Lower formal and informal taxes and improved roads make it cheaper and quicker to move produce out of the DRC. More producers, processors, and other value chain actors enter the cash crop sector, guaranteeing increased supply. At the same time, ongoing training and improved access to professionally managed washing stations ensures that the quality of specialty Congolese coffee and cocoa remains consistently high, allowing it to compete in global markets. In the long term, the DRC develops a domestic consumer market for specialty coffee and cocoa products.

Achieving this ambitious agenda will take time, patience, and resources. Setting priorities is a challenge when so much work needs to be done. However, the most successful approaches will involve strong partnerships, use innovative financing mechanisms, and try to tackle the inequities in global value chains that keep smallholder farmers in poverty.

The following recommendations are directed toward two groups: First, the government of the DRC; second, its international partners, including companies, investors, and donors.

For the Congolese government:

- *Lay out a vision for the agriculture sector that investors and donors can rally around:* Investors and donors seek assurances that the growth of the agricultural export sector is a priority of the Congolese government, at the national and provincial levels. The government of the DRC should write and publicize strategic plans for coffee and cocoa that contain realistic growth targets for each sector and assign clear responsibility for enacting them.⁴² Each plan should be costed and should include domestic budgetary commitments in addition to making realistic financial requests of donors and investors. The strategies should contain detailed infrastructure plans to stimulate expanded coffee and cocoa production. They should also seek more support for investments in research that promotes more sustainable, high-yielding crop varieties through Congolese institutions like INERA, the Institut National pour l'Etude et la Recherche Agronomiques.
- *Empower the ONC:* Any strategy to transform the agricultural export sector in the DRC should put the ONC at the center. It will take time to increase the capacity of the ONC, but it is the best way to ensure that the Congolese fully own and develop their agricultural export sector. A fully capacitated ONC would step up delivery of services to farmers that help improve quality and output, such as distributing seedlings and trees, and providing agricultural inputs. The ONC would also become a more effective export promoter by aggressively reaching out to investors, facilitating investment into the country, and marketing coffee and cocoa worldwide. The DRC should seek guidance and inspiration from other countries as it considers how to implement this ambitious strategy. One model for the ONC to study is the Colombian Coffee Growers Federation, known by its Spanish acronym, FNC, which is the gold standard for national coffee organizations worldwide.⁴³ The FNC represents 500,000 smallholder farmers, provides extension services, conducts research, offers leadership on sustainability issues, and has been so successful in marketing Colombian coffee worldwide—in part through its Juan Valdez brand and retail outlets—that it is almost universally associated with high quality. The ONC can also learn from other examples of good practice in countries with lower government capacity, such as Rwanda's OCIR Café and the Consejo Salvadoreño del Café in El Salvador.

⁴² The DRC could study examples of strong leadership from other major agricultural exporters. For example, Vietnam, which in 2017 announced the formation of a PPP—with \$4.8 million of government funds—to boost coffee exports, improve quality, and develop a premium brand. For more details, see Nick Brown, "Vietnam launching \$7.5 million coffee development project," *Daily Coffee News*, November 22, 2017, <https://dailycoffeenews.com/2017/11/22/vietnam-launching-7-5-million-coffee-development-program/>.

⁴³ Unlike the ONC, Colombia's FNC is an NGO, rather than a government entity.

- *Build the trust of foreign investors:* Investors demand predictability and consistency from their partners but these characteristics are not commonly associated with the Congolese government. Investors are also justifiably concerned about some of the reputational and security risks of operating in eastern Congo. These problems will not disappear overnight, but the government should take good-faith steps to build investor confidence. These could include efforts to remove illegal roadblocks and unravel some of the red tape that makes it so difficult to run a business in the DRC. In particular, the DRC should speed up, and remove uncertainties around, the visa process for foreign investors, businesses, government officials, and NGOs. It should engage the World Bank to discuss an action plan to improve its scores on the Doing Business Index. It could also make a strong statement about its priorities by fulfilling its promise to allocate 10 percent of its national budget to agriculture, in line with commitments made under the African Union's Comprehensive African Agriculture Development Program (CAADP).⁴⁴
- *Initiate land reform:* Land pressures and land-related conflicts deter agricultural investment in eastern Congo. Land reform is a complex, contentious undertaking but the Congolese government can make a start by mapping land use in eastern Congo as a first step toward promoting secure land tenure and stimulating investment. Satellite imagery could be collected to assist the process, acquired from companies like San Francisco-based Planet, which builds and operates a fleet of commercial satellites to photograph the earth.
- *Practical outreach and information dissemination to companies and investors:* Companies with investments in the DRC emphasize the importance of having trusted local partners. Can the ONC or another Congolese entity facilitate contacts between roasters/retailers and local/regional exporters? The Saveur de Kivu festival is a readymade platform to make these introductions and expand the circle of coffee professionals in Congo. The ONC—in partnership with companies—should also collect and share information with stakeholders in the coffee and cocoa sectors. While information on investment opportunities, market conditions, and the fluid political and security landscape is already available through products like the Congo Coffee Atlas and the Kivu Security Tracker,⁴⁵ stakeholders would benefit from a single, open-source platform to assess information, share intelligence, and view opportunities. This platform, to be part-funded by the private sector, could include security updates, the locations of illegal roadblocks, weather conditions, plant disease outbreaks, market prices, best-practice sharing, partnership opportunities, and any other relevant information.
- *Learn from other coffee and cocoa-producing nations.* The DRC should reach out to countries with more established cash crop sectors to learn about different aspects of the business and the challenges of developing export agriculture in conflict or post-conflict settings. For example, the DRC could examine neighboring Rwanda's efforts to build a coffee sector virtually from scratch in the aftermath of the 1994 genocide, with support

⁴⁴ For more information on the CAADP, see New Partnership for Africa's Development, "Comprehensive Africa Agriculture Development Program," <http://www.nepad.org/programme/comprehensive-africa-agriculture-development-programme-caadp>.

⁴⁵ The Kivu Security Tracker is a project by the Congo Research Group and Human Rights Watch. It provides up-to-date information on attacks by armed groups in eastern Congo. See <https://kivusecurity.org/map>.

from the USAID-funded PEARL project.⁴⁶ Knowledge-sharing between the two countries should be encouraged, despite the history of conflict and rivalry between them. Colombia is another example of a country that developed coffee as a “peace crop” and can pass on useful lessons to the DRC.⁴⁷ Myanmar’s growing Arabica coffee sector is another possible case study to examine. Donors and the private sector could help facilitate these knowledge-sharing exercises, based on their international links with other cash crop-producing nations.

For international partners, including donors, investors, and companies along the value chain:

- *Develop a clear, realistic outreach strategy for the DRC:* Companies with investments in the DRC know they are dealing with a government with low capacity and questionable political will to follow through on commitments. They should tailor their engagement strategies accordingly. Companies are more likely to build traction with the government by agreeing on a common set of achievable goals and engaging their Congolese partners frequently and consistently, taking time to cultivate relationships over the long term at both the national and provincial levels.
- *Intensify training of farmers and cooperatives to ensure high-quality production:* All engagement must begin with the smallholder farmer. The TechnoServe approach to farmer training, currently being rolled out in parts of South Kivu covered by the Strengthening Value Chains activity, should be expanded throughout the region. It should include in-person teaching of farmers on demonstration plots as well as distance learning options. Everything from basic cell phone-based SMS tools and WhatsApp group chats to augmented reality tools (soon to be available on the market at affordable prices) can be used to deliver interactive training and mentoring on agronomy, farm management, conservation, and the coffee and cocoa business. Training programs for cooperatives should also be a priority, to improve professionalism, efficiency, and financial management. Coffee and cocoa companies should invest more in this training effort, slowly assuming the lead role from donor-funded projects. For example, Starbucks could extend its Farmer Support Center in Rwanda to include training for producers in eastern Congo. Company-funded research into farmer sustainability, such as the Farmer Income Lab recently established by Mars Incorporated, should be widely disseminated.⁴⁸
- *Share best practice through industry platforms:* Companies working in the coffee and cocoa sectors should extend cooperation across the many organizations and initiatives already in existence and consider how the knowledge they share can be applied to the DRC. Examples include the Global Coffee Platform and World Cocoa Foundation. They also include initiatives like the Sustainable Coffee Challenge that involve companies along the value chain from exporters and importers to roasters and retailers. These forums provide an opportunity to disseminate and learn from industry best practice and examine what is

⁴⁶ PEARL stands for Partnership for Enhancing Agriculture in Rwanda through Linkages. The program ran from 2000–2005 and was succeeded by SPREAD (Sustaining Partnerships to Enhance Rural Enterprise and Agribusiness Development) from 2006–2011.

⁴⁷ Curt Reintsma, “Coffee—The Peace Crop?,” Agrilinks blog, Feed the Future, August 4, 2016, <https://agrilinks.org/blog/coffee%E2%80%94-%E2%80%9Cpeace-crop%E2%80%9D>.

⁴⁸ For more information on the Farmer Income Lab, see <https://www.farmerincomelab.com/>.

already being done by companies through models like the Mars Sustainable in a Generation Plan, Barry Callebaut's Forever Chocolate plan, and Counter Culture Coffee's annual transparency report.⁴⁹

- *Increase access to finance by harnessing traditional and nontraditional financing tools:* Donors, multilateral banks, social impact investors, and capital markets should seek creative solutions that unlock additional sources of financing for the cash crop sectors in eastern Congo. They should:
 - Study existing financial models in DRC to see what has worked and what can be done differently. For example, agricultural impact investor Root Capital and Westrock Coffee Company have provided loans to Congolese farmers at competitive rates. Can these models be improved upon, scaled up, and used as leverage to attract additional entrants?
 - Continue and expand the deployment of innovative financing mechanisms, in partnership with the private sector, that extend microfinance loans to farmers. These include the Development Credit Authority loan guarantee mechanisms being rolled out in South Kivu under the USAID Strengthening Value Chains Activity.
 - Consider investment instruments that involve partnerships between the public and private sectors, such as development impact bonds (DIBs). Under a DIB, the private sector agrees to take on the risk of funding a development activity and is compensated for its efforts, either by donors or the host government, when predetermined outcomes are achieved.
 - Solicit the interest of development finance institutions and social impact investors in designing blended finance mechanisms and other innovative funding platforms that could provide capital to producer cooperatives.
 - Investigate the potential of crowd sourcing initiatives to tap into the large group of coffee and chocolate consumers in the United States and other markets who enjoy Congolese products. Transform this group from passive consumers into social impact investors who have a direct financial stake in the success of Congolese coffee and cocoa. The idea is that a large pool of participants could put in a relatively modest amount of money—\$20, for example—for a share of the delivered product, such as coffee or cocoa beans, bags of coffee, or even certificates for cups of Congolese coffee in participating retail outlets.
 - Tap into international commodity markets: Give producers and their cooperatives access to financial tools such as weather insurance and price risk management products, as well as training on how to navigate futures markets. Producers should be given opportunities to close the financial gap between the coffee and cocoa they

⁴⁹ For more information on Mars' Sustainable in a Generation plan, see <http://www.mars.com/global/sustainable-in-a-generation>. More information on Barry Callebaut's Forever Chocolate initiative can be found at <http://forever-chocolate.barry-callebaut.com/>. For the 2017 Counter Culture Transparency Report, see <https://counterculturecoffee.com/transparency-report>.

grow and the global markets such as the Chicago Mercantile Exchange and Intercontinental Exchange (ICE) where their produce is ultimately traded. Coffee traders, retailers, and roasters with an interest in the DRC should devise a joint approach to facilitate these connections with the long-term goal of establishing a financial instrument tailor-made for the Congolese cocoa and/or coffee sector. Even without their buy-in, newer platforms such as PanXchange make online commodities trading more feasible for smaller producers.⁵⁰ Examine innovations in other agricultural producing nations such as Mexico, where the government has long sold insurance options to its coffee farmers but is now providing seed funds to agricultural producers that will allow them to buy derivatives contracts managed by private brokers.⁵¹

- *Use technology to bring producers nearer to the market and address information asymmetry:* Companies and donors should invest in and pilot technological innovations that improve transparency along the value chain, enforce contracts, and make swifter, fairer payments to producers. Many Africans are already familiar with mobile money transfer systems such as M-Pesa. Companies should expand their use, studying initiatives by the likes of agribusiness giant Cargill, which is sourcing cocoa directly from certified farmers in Ghana, and paying them upon delivery via cell phone or e-wallet.⁵²

Blockchain technology offers possibilities for producers by strengthening their negotiating position with buyers, enforcing contract transparency, and reducing transaction costs. The blockchain electronic ledger system enables buyers and sellers to agree to terms, set a price, and sign a smart contract embedded within an algorithm that automatically pays out in a cryptocurrency when the terms are met. Companies are waking up to the possibilities for the agricultural sector. A mineral investing company, African Potash, has announced plans to set up agricultural commodity chains entirely based on blockchain to easily connect farmers with buyers and brokers. The company said that under the system, microloans would be made available to producers at 12 percent interest, a much lower rate than most banks offer.⁵³ These fledgling efforts should be closely monitored to see whether they can be extended to the DRC.

Several startup firms have layered additional innovations onto blockchain technologies that have the potential to shorten the cash crop value chain, placing more financial power in the hands of producers. In one example, a Colorado-based company, Bext360, is linking robotics and cellphone technology with blockchain in a way that allows farmers to have their produce graded at source by a machine equipped with sensors and optical recognition devices. Based on this evaluation, the produce is

⁵⁰ For more information, see Chris Outcalt, "The commodities disruptor," *Galvanize*, November 17, 2016, <http://blog.galvanize.com/the-commodities-disruptor/>.

⁵¹ Gabriel Stargardt, "Mexico offers new hedging aid program for farmers," Reuters, August 1, 2017, <https://www.reuters.com/article/mexico-hedging-idAFL2E8J1ITS20120801>.

⁵² Sue Lynn-Moses, "The global cocoa crisis and what a corporate funder is doing to help farmers in Ghana," *Inside Philanthropy*, September 12, 2017, <https://www.insidephilanthropy.com/home/2017/9/13/the-global-cocoa-crisis-and-what-this-corporate-funder-is-doing-to-help-farmers-in-ghana>.

⁵³ Joe Easton, "Blockchain venture wants to change African farming forever," Bloomberg, November 28, 2017, <https://www.bloomberg.com/news/articles/2017-11-28/blockchain-venture-wants-to-change-african-farming-forever>.

assigned cryptocurrency tokens and is then tagged through to the point of delivery.⁵⁴ The DRC should closely track progress with this initiative, which is being piloted in Uganda and Ethiopia.

The MIT Food Computer, an open-source effort to replicate and perfect optimum growing conditions for crops, is another initiative that has the potential to improve links between producers and buyers. In principle, Food Computers could allow buyers to accurately monitor the growth of the crops they are buying in real time, from a distance, and agree prices enforced through smart contracts.⁵⁵

- *Build a marketing strategy for Congolese produce that draws in consumers:* Coffee retailers, roasters, and confectioners should work with the ONC to develop a branding strategy for Congolese produce that strengthens links between retailers and consumers. This strategy would serve both ends of the value chain. Consumers—particularly the influential millennials that drive the specialty market—want to know the story behind their product and want reassurance that it was sourced in a responsible way. They are prepared to pay more for this knowledge.⁵⁶ Producers can tap into this appetite—and negotiate higher prices in the process—by building direct relationships with consumers through blogs, videos, marketing campaigns, and other outreach. Companies should facilitate this engagement, working with the ONC to showcase the different producer groups and regions of eastern Congo and promote them through their own brands.
- *Increase scrutiny of sustainability policies by consumers and investors:* While there are many schemes and accreditation programs that measure certain aspects of sustainability in the coffee and cocoa sectors, none of them are all-encompassing, nor do they attempt to compare and benchmark company performance across each sector. NGOs or industry groups such as the SCA or World Cocoa Foundation should fund an independent initiative to evaluate company sustainability practices. This would serve multiple purposes by showcasing industry best practices across the value chain, providing consumers with an accessible tool to guide their purchasing decisions, and informing investors focused on understanding long-term business sustainability. A simple scorecard could be designed to assess companies on multiple components of sustainability such as sourcing practices, supply chain transparency, environmental stewardship, and community development.

The coffee and cocoa industry should make use of knowledge-sharing platforms in their own sectors such as Cocoa CONNECT and the Sustainable Coffee Challenge. It can also assess the strengths and weaknesses of efforts already under way in other sectors. For example, since 2010, the Enough Project, an advocacy organization, has

⁵⁴ Robert Hackett, "How this startup plans to use Blockchain to revolutionize the coffee supply chain," *Fortune*, October 24, 2017, <http://fortune.com/2017/10/24/blockchain-coffee-bext360/>.

⁵⁵ For more information, see MIT Media Lab, Open Agriculture Initiative (OpenAg), <https://www.media.mit.edu/groups/open-agriculture-openag/overview/>; and Mark Anderson, "MIT's Food Computer: The Future of Urban Agriculture?," *IEEE Spectrum*, January 20, 2016, <https://spectrum.ieee.org/computing/embedded-systems/mits-food-computer-the-future-of-urban-agriculture>.

⁵⁶ Jonathan Josephs, "How changing coffee tastes are helping farmers," BBC, December 28, 2017, <http://www.bbc.com/news/business-42403021>.

graded the efforts of major electronics and jewelry companies to build conflict-free minerals supply chains in the DRC. The coffee and cocoa sectors should also study the approach taken by the Responsible Business Alliance—a business-led initiative that has established a set of sustainability standards for companies in the electronics industry—and consider using the Sustainability Accounting Standards Board’s (SASB) framework for disclosing material sustainability factors to investors.

Conclusion

Promising steps have been made to restart the coffee sector and expand nascent cocoa production in eastern Congo. There are many opportunities to build on this foundation. Some are achievable in the short to medium term. They include extending finance to farmers and training them in agronomic practices such as tree rejuvenation that help improve yields and stimulate further investment in their land. Other opportunities are harder to grasp and will require a longer-term outlook. They include improving capacity at the ONC and addressing the governance and infrastructure deficits that make Congolese coffee and cocoa so expensive to export. It is important to manage the expectations of all stakeholders, from investors down to the farmers themselves. Clearly, Congolese coffee and cocoa have growth potential. Experts consulted for this report argued that production of Arabica coffee could double or even triple without major improvements to the regulatory environment or infrastructure. However, the specialty market will become saturated at some point, and Congolese coffee will struggle to compete due to the high costs of production—namely the excessive costs of transporting coffee out of a landlocked country on poor roads. There is also a risk that the unique selling points of Congolese coffee and cocoa—its high quality, remote geographic origin, and the compelling stories of those who produce it—could be eroded as production reaches larger volumes. These and other constraints mean that the DRC can realistically aim to surpass Rwanda’s level of coffee production and even catch up with larger regional competitors like Kenya, but it is unlikely to become the next Colombia.

Going forward, it will be important to preserve the distinctive characteristics that made Congolese coffee and cocoa attractive to investors and consumers in the first place: First and foremost, its high quality. Donors, companies, and Congolese stakeholders should safeguard high production standards among farmers and cooperatives by prioritizing technical training, improved agronomic and processing practices, and access to finance. In the process, it will be imperative to provide a living income to the Congolese smallholder farmer, the lynchpin of the production system upon whose shoulders rests the sustainability of the entire value chain.

About the Author

Richard Downie is a senior associate with the CSIS Africa Program. In this role, he analyzes emerging political, economic, social, and security trends in sub-Saharan Africa with the aim of informing U.S. policymakers, the U.S. military, members of Congress, and leaders from the business and nongovernmental communities. He is the author or coauthor of more than 20 CSIS reports and has conducted research for CSIS in more than a dozen African countries on topics as diverse as security sector reform, political risk, religious trends, and economic development. Downie is also a consultant with the CSIS Global Health Policy Center, where his work has included writing a series of reports on U.S. bilateral health relationships and leading a working group examining how the United States can manage its HIV/AIDS programs with partner countries.

Downie joined CSIS following a decade-long career in journalism. He was a reporter for several newspapers in the United Kingdom before joining the British Broadcasting Corporation (BBC), where he worked as a senior broadcast journalist. Since then, he has conducted research and completed writing projects on Africa for the Council on Foreign Relations and the U.S. Institute of Peace. He is a contributor to the Africa section of Freedom House's annual report, *Freedom in the World*. He is a frequent commentator on African issues for U.S. and international media organizations. Downie holds a master's degree in international public policy from the Johns Hopkins School of Advanced International Studies (SAIS) and a B.A. in modern history from Oxford University.

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