**Cocoa and Coffee Farmers Face Uncertain Future**

Coffee and chocolate face an uncertain future due to the impacts of climate change and extreme weather. For the millions of people employed worldwide within these industries, the future is equally troubling.

The export of coffee and cocoa beans accounts for billions of dollars’ worth of trade each year. In a number of countries, growth and trade of these products makes up a sizeable chunk of gross domestic product (GDP). Hundreds of families throughout the world have been farming these products for generations.

According to the Observatory of Economic Complexity (OEC), Brazil is the leading exporter of coffee beans, followed closely by Vietnam and Colombia.

“I grew up with coffee,” Jacques Carneiro shared in an interview with Sprudge Media. Carneiro runs Carmo Coffees, one of many coffee producers in the Carmo de Minas region of Brazil. “Me, my father, and grandfather—that’s all we have, coffee production. My education and lifestyle are based on coffee farms.”

The farm Carneiro oversees has been in his family for four generations. When operations were passed down to him, Carneiro worked hard to make Carmo Coffee stand out, collaborating with other families in the region and spearheading a shift from traditional blends to single origin coffee roasts.

Stories such as Carneiro’s are common. Many families have been producing and perfecting their coffee for decades.

According to the International Coffee Organization, Brazil exported 2,785 thousand 60 kilogram bags of coffee beans in February 2016. This accounted for just over 30 percent of the world’s total production.

The Business Insider estimates that coffee farms provide an economic livelihood for over 25 million people worldwide.

Cocoa production shares a similar familial history. “There are an estimated 5 million households that farm cocoa as a cash crop,” Holly Houston said in an article for the Center for Strategic and International Studies. “In West Africa, 70 percent of cocoa is produced on small family farms, where farmers generally live on less than $2/day and rely on cocoa for 60 to 90 percent of their income.”

The Food and Agriculture Organization of the United Nations lists Côte d’Ivoire, Ghana, and Indonesia as the top three producers of cocoa beans.

According to OEC, Côte d’Ivoire exported $2.73 billion worth of cocoa beans in 2013. As the 82nd largest export economy in the world, their economy relies heavily on this production.

“More than a third of the world's cocoa comes from Ivory Coast,” Eliza Barclay said in an article for NPR’s The Salt. “But most of the farmers are small producers like Alphonse, cultivating less than 12 acres and struggling to survive. He's supporting 15 family members on $9.40 a day.”

Despite this staggering production, many Ivorian cocoa farmers have never tasted chocolate. Metropolis TV, a part of Netherlands broadcasting organization, VPRO, recently released a video of Alphonse, an Ivorian cocoa farmer, and his friends tasting chocolate for the first time. You can watch the full video here.

Shortages would also have an immense impact on the cultures and consumption habits of importing countries.

“Chocolate plays an important role in American culinary culture,” shared Toby Gadd, owner of Nuance Chocolate in Fort Collins, Colo. “Whether used as a food coloring in commodity baked goods like Oreos, or appreciated for the sophistication of its 600+ naturally-occurring flavor compounds in single-origin bars, chocolate is present in very possibly the widest range of foods of anything that we eat.”

Nuance Chocolate is one of few bean to bar chocolate makers in the United States.

There are a number of groups around the world working to ensure the survival of these beloved plants.

Organizations such as World Coffee Research and the Kew Royal Botanic Gardens are working to strengthen and diversify these crops in hopes of making them more resilient to future climate changes.

When asked about the future of chocolate, Gadd seemed hopeful.

“Chocolate, in any of its forms, makes people happy,” said Gadd. “I am optimistic that chocolate will continue to bring joy to generations to come!”