Hawaii in a Global Market

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Coffee

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Coffee Utilized Production Down 1 Percent from Last Season

Hawaii utilized coffee production is forecast at 26.2 million pounds (cherry basis) for the 2019-2020 season, down 1 percent from the previous season. Bearing acreage totaled 6,900, down 200 acres from the previous year. Average yield, at 3,830 pounds (cherry basis) per acre, was down 15 pounds from the previous year.

Coffee Bearing Acreage, Yield, Production, Price, and Value - Hawaii and United States: 2017-2018,

Chaha		Bearing acreage		Yield per acre 1			
State	2017-2018	2017-2018 2018-2019		2017-2018	2018-2019	2019-2020	
	(acres)	(acres)	(acres)	(pounds)	(pounds)	(pounds)	
Hawaii	7,200	7,100	6,900	3,530	3,845	3,830	
United States	7,200	7,100	6,900	3,530	3,845	3,830	
State		Total production 1	25.		Utilized production 1		
State	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	2019-2020	
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	
Hawaii	25,416	27,300	26,430	24,592	26,400	26,240	
United States	25,416	27,300	26,430	24,592	26,400	26,240	
State		Price per pound ¹ Value of utilized production				ion ¹	
State	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	2019-2020	
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)	
Hawaii	1.78	1.90	2.01	43,774	50,160	52,742	
United States	1.78	1.90	2.01	43,774	50,160	52,742	
Cherry basis. Coffee Utilized Product and 2019-2020	ion and Price	on Equivalen	t Basis – Haw	/aii: 2017-2018	3, 2018-2019,		
Basis and State		Utilized production			Price per pound		
dasis and State	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	2019-2020	
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Coffee Utilized Production and Price on Equivalent Basis – Hawaii: 2017-2018, 2018-20	119,

Coffee Utilized Production and 2019-2020	tion and Price	on Equivaler	nt Basis – Haw	/aii: 2017-201	8, 2018-2019,		
Basis and State		Utilized production		Price per pound			
	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	2019-2020	
Davelsment	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(dollars)	(dollars)	(dollars)	
Parchment						1	

	Basis and State	Utilized production Price				Price per pound
	basis and State	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019
200		(1 000 nounds)	(1 000 nounds)	(1 000 pounds)	(dellara)	(dollars)

Basis and State						
basis and State	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	ĺ
	(1.000 pounds)	(1.000 pounds)	(1.000 pounds)	(dollare)	(dollare)	ſ

6,850

5,480

6,340

5,072

11.10

17.20

13.40

19.40

12.30

17.50

Basis and State						
basis and State	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	
3)	(4.000	(4.000 1.)	(4.000	(1.11)	7 1 II S	

6,050

4,840

Hawaii

Green

basis and state	2017-2018	2018-2019	2019-2020	2017-2018	2018-2019	
	(1,000 nounds)	(1 000 pounds)	(1 000 pounds)	(dollars)	(dollars)	

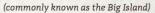


A GUIDE TO HAWAI'I'S COFFEE INDUSTRY:
YESTERDAY, TODAY & TOMORROW



HAWAI'I'S GEOGRAPHICAL GROWING REGIONS







HAMAKUA

Farms: 15-20

Growing Area: ~45 acres Elevation: 350-2,500 feet Average farm size: 5-7 acres

This region is a cool, high-rainfall, red soil coffee area.

Tasting notes: citrus, sweet cocoa, nutty. Good body and mouthfeel.



KA'Ū

Farms: 80-90

Growing Area: 830 acres Elevation: 1,100-2,700 feet Average farm size: 5-10 acres

An unspoiled land, sunny climate and misty afternoons give Kaʻū coffee its characteristic deep flavors.

Tasting notes: chocolate, cherry, floral, citrus. Awards: 2010, 2011, 2012, 2014, 2017 Hawaii Coffee Association (Grand Champion, various divisions); 2007, 2009, 2010, 2011, 2012 Roaster's Guild Coffee of the Year







KONA

Farms: 900-1,000

Growing Area: 3,800-4,000 acres Elevation: 500-3.000 feet

Average farm size: 2-5 acres

Kona is Hawai'i's most recognized coffee region, commanding some of the highest prices in the world. The 'Kona Typica' variety is most commonly grown here.

Tasting notes: floral, citrus, berry, and nutty notes in the cup with a smooth finish.

Awards: 2009, 2012, 2013, 2014, 2015, 2016 Hawaii Coffee Association (Grand Champion, various divisions)



HAWAI'I

Farms: 20+ farms Growing Area: 125 acres Elevation: 300-2.600 feet

This region includes Puna, the wettest locale of Hawai'i Island with an average rainfall of 150" to 220" annually. Most coffee farms in this region are composed of 2-3 acres.

Tasting notes: honey, mineral, wine, full-bodied, peach/stone fruit, nutty overtones.

Awards: 2013 Hawaii Coffee Association (Grand Champion, Creative Division)







Growing Area: 600 acres

Lahaina: 500 acres in large commercial production **Upcountry:** 100 acres in smaller, independently owned farms.

Maui has a large-scale commercial farm on the Lahaina side and several smaller estates in the "Upcountry" region on the slopes of Haleakalā.

Tasting notes: Earthy, sweet, with notes of chocolate and vanilla.

Awards: 2017 Hawaii Coffee Association (Grand Champion, Creative Division)



Growing Area: ~150 acres

This small island of approximately 7,500 residents has one 150-acre plantation and a mill in the village of Kualapu'u. It's the sole source of Moloka'i coffee.

Tasting notes: nutty, sweet, caramel, slightly herbal, full-bodied, earthy, chocolate aftertaste.





Growing Area: ~160 acres

The majority of the acres belong to a single farm on the island's north shore. The smaller portion of acreage belongs to an agricultural research company that harvests a fraction of its fields for commercial use.

Tasting notes: milk chocolate, sweet, fruit, floral.







Growing Area: ~3.000 acres

Most of the commercial coffee grown on Kaua'i is washed processed Arabica varieties. There are three commercial farms, with the largest coffee farm producing more than one third of all the coffee grown in the USA.

Yield: 2.4 million pounds of green coffee

Tasting notes: chocolate, earthy, spicy, mango, mellow, delicate.

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MAUI COFFEE

On Maui, there are over 500 acres, cultivated by over 50 farms of varying sizes on the slopes of Haleakala and the West Maui Mountains. The industry on Maui has grown considerably in recent years, as its quality, diversity, and uniqueness has become better known.

HAMAKUA COFFEE

valley of Waipio and on to Upcountry Waimea. Hamakua coffee has flavors that are often described as dessert in nature: vanilla, caramel and rich cocoa.

HAWAII

MAUI

The Hamakua District runs from the lush jungle and waterfalls of Hilo to the deep

KAHO'OLAWE

MOLOKA'

LÂNA'I

KONA COFFEE

Hawai'i's best-known coffee. asked for around the world. With almost half of the total coffee grown in Hawai'i, over 600 independent farms within the borders of North and South Kona on Hawai'i Island produce 100% Kona Coffee, with its delicate, aromatic flavor, Aficionados consider 100% Kona Coffee to be the only way to go.

KA'Ū COFFEE

The district of Ka'ū spans the south side of Hawai'i Island, providing a unique climate for growing specialty coffee. The climate and soils of the region have produced some of the best coffees in the world, described as having a rich flavor, piquant acidity and intriguing hints of sweetness and spice, citrus and jasmine aroma, fresh butter undertones, hints of lime and currant, and a long spice finish.

PUNA*

Coffees grown in Puna are included in the the Hawai'i region. Puna is located between Hilo and Hawai'i Volcanoes National Park. It is typically full-bodied, heavy, with nutty overtones.

*Puna is not a recognized geographic region for purposes of coffee labeling and advertising under Hawaii law. Coffee grown in the Puna district may be labeled Hawaii Island coffee.

KAUA'I COFFEE

NI'IHAU

Most of the commercial coffee grown on Kaua'i are washed processed Arabica varieties. There are three commercial farms, with the largest coffee farm producing more than one third of all the coffee grown in the USA.

KAUA'I

O'AHU COFFEE

Near O'ahu's North Shore, at 600-700 feet above sea level, between the towns of Wahiawa and Waialua, you'll find 155 acres of Arabica 'Typica' coffee. O'ahu coffee has been described as a smooth, mellow, well-balanced cup with a medium body, clean finish, hint of chocolate and a pleasant, lingering aftertaste.

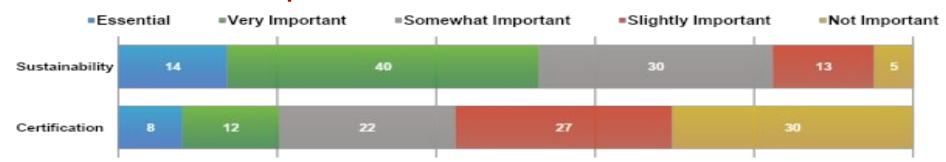
Hawai'i's Distinct **Growing Regions**

2019	2018	Much/Somewhat more likely to buy
2,815	2,737	Base
58	58	The level of roast is specified
51	49	Grown on farms that treat workers well
49	49	Grown in an environmentally sustainable way
46	45	The company supports the communities in which the coffee is produced
45	44	Donates a percent of proceeds to a charitable cause
44	42	The grind is specified
43	40	Fair Trade Certified
43	39	Organic Certified
42	41	Recycled or compostable packaging
41	37	Coffee produced from a single origin
41	41	Free from GMOs
41	37	Rainforest Alliance Certified
40	39	Blended coffee
40	36	There is information about the region where the coffee is grown
37	35	There is information about the farm where the coffee is grown
37	36	Provides instructions for how to use the coffee for different brewing methods
36	36	Made with 100% Arabica beans
34	36	Includes added antioxidants
33	29	Conservation International Certified
31	32	Includes added vitamins
31	28	Bird Friendly Certified
29	28	Healthy ingredients like turmeric or matcha added to the coffee
29	26	Small batch
29	28	Includes added protein
28	28	Includes added Omega 3
26	27	Includes added probiotics
26	24	Made with 100% Robusta beans
24	22	Includes added cocoa flavanols
20	-	Includes added CBD (cannabidiol)
19	17	Shade Grown Certified
17	16	Utz Certified
17	16	Includes added collagen

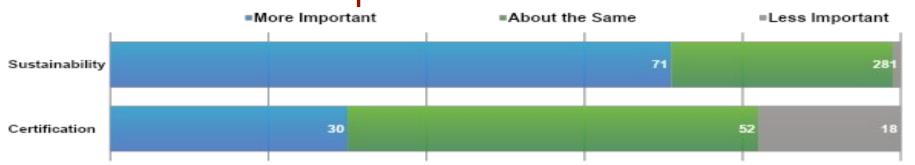
9 of the Top 12 Are Related to Sustainability:

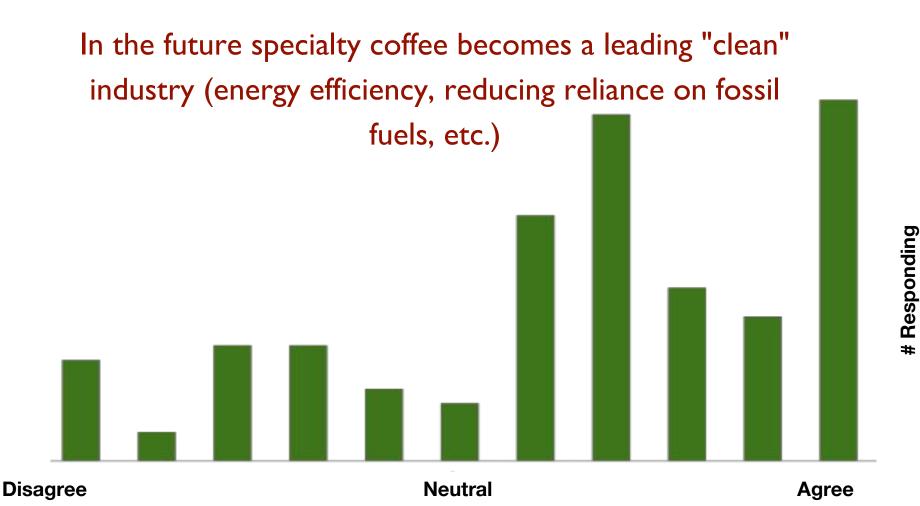
- Grown on farms that treat workers well
- \bigvee Donates a percentage of proceeds to a charitable cause
- $\sqrt{}$ Grown in an environmentally sustainable way
- Supports the communities in which the coffee is produced
- Fair Trade Certified
- $\sqrt{}$ Organic Certified
- Recycled or compostable packaging
- √ Free from GMOs
- Rainforest Alliance Certified

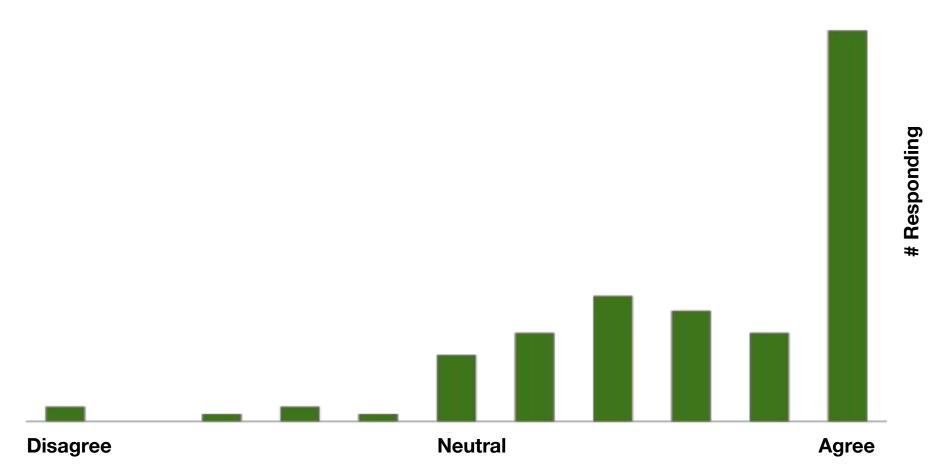
Importance to Customers Now



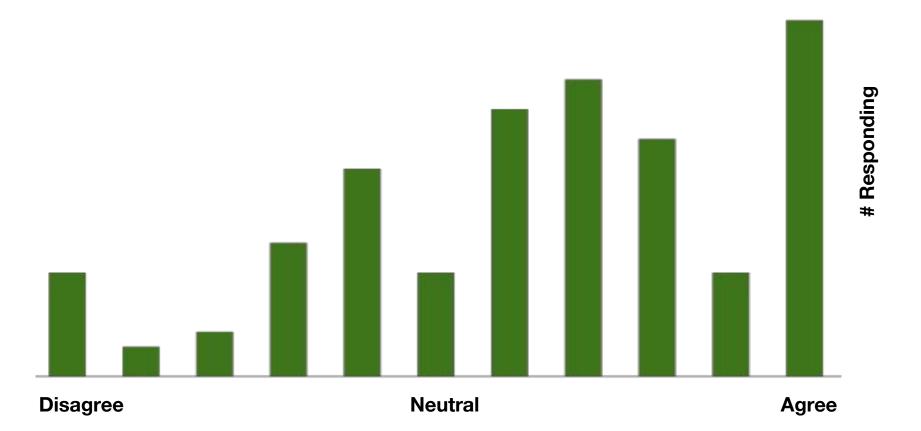






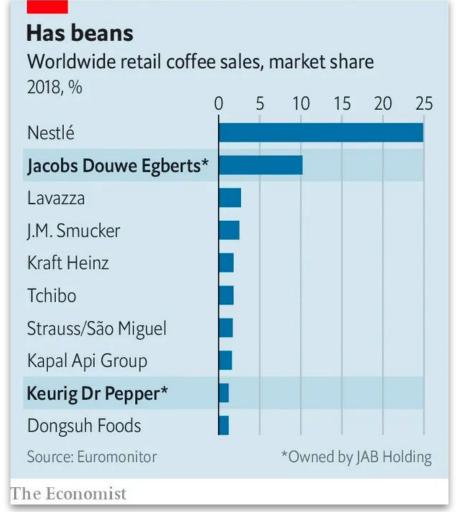


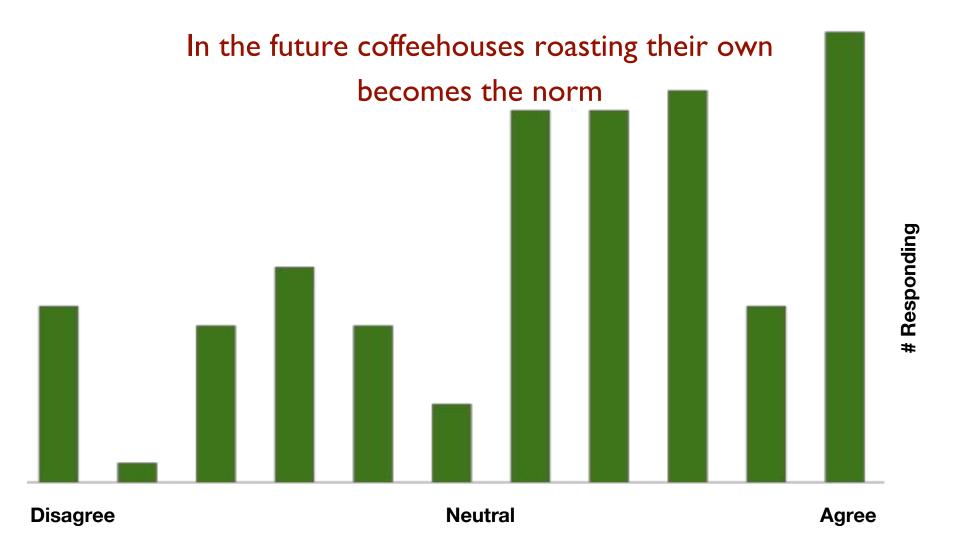
In the future the farmer owns their brand and the added value of roasted and/or brewed coffee is shared equally



Coffee companies consolidate

- •Nestlé & JAB control ~ 40% of retail market
- Coca-Cola expands in coffee, buys
 Costa
- Lavazza purchases Mars coffee
- Amazon purchases Whole Foods and acquires Allegro







An example of the sleek innovation typical of Asian coffee companies. This wall has samples of green beans and corresponding vials of roasted coffee that one can sniff, via devices that resemble a perfume atomizer with a squeeze ball.

Describe your vision for the future of specialty coffee's next wave

profits think will quality coffee lives process speciality direct trade going brewing practices increase involved farming come believe better quality coffee One works Coffee industry companies pay use understand education produce cafes hope Greater roasting think quality traded price also farmers

Describe your vision for the future of specialty coffee's next wave

The role of the roaster will be de-emphasized leading to a greater connection between consumer and **producer**. This will lead to greater awareness of the difficult situation of most coffee farmers which will lead to more socially responsible supply chains.

Describe your vision for the future of specialty coffee's next wave

That we get better at **providing the farmers** and workers with better pay. I pay my staff above minimum wage. It should be the same for all farmers and their workers.

Global Context

3 countries contain 1/2 of world's coffee farms

- Ethiopia
- Uganda
- Indonesia

Source: Scott Browning, Enveritas during a lecture at ASIC 2018

Brazil ~ 30% of global production

Vietnam ~ 19% of global production

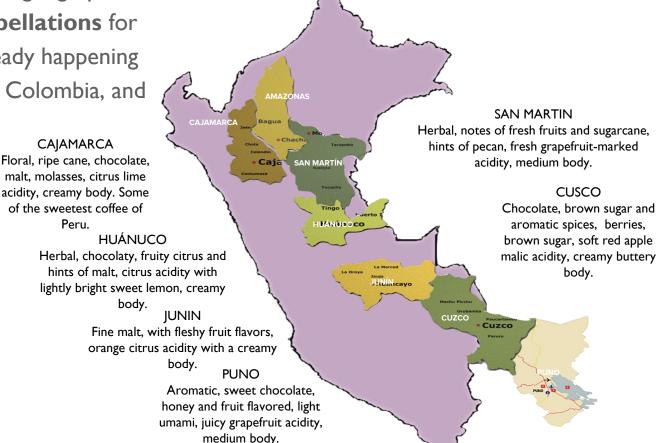
Ethiopia, Uganda, Indonesia ~ 15% combined global production

Hawaii ~ .04% global production

Source: Wikipedia and ICO

Hawaii In The Global Context

Identify unique **terroirs** and geographic flavor maps to develop **appellations** for distinct growing areas (already happening in Hawaii, Peru, Honduras, Colombia, and elsewhere).



Hawaii In The Global Context

Producer Profiles: Unique farm stories, acknowledging challenges and struggles





Since 2013 the women of Nyampinga have received training in agronomy, market access, and quality control from Sustainable Growers. The result of the farmer's hard work and enhanced knowledge of coffee production has been a resounding improvement in cup quality. Nyampinga coffees are among finest available in all of Rwanda.

One driver of better agronomic practices has been a unique program called Premium Sharing Rewards, which rewards farmers with points for attending trainings and implementing their learnings on the farm. With these points, farmers can purchase rewards from a catalog of items they have collectively chosen. The program was developed as a way to incentivize farmers in a respectful way to encourage further training and technical assistance, and implement those skills to produce better crops.

Nyampinga operates its own washing station, which processes coffee from farmers all over the area. It serves as a key component of specialty coffee infrastructure, elevating the region's cup profiles upward. At the coffee washing station the coffee is carefully depulped, fermented, washed, and dried on raised African beds. The members of the cooperative and coffee washing station diligently hand sort the coffee at each step of the way.

Tourism (Rutas del Café in Colombia, Boquete Coffee Tour and Kona Coffee Belt Driving Tours) - challenged in current and post-Covid 19 world.



De derechas

Justicia

¿'Timochenko' al Senado?

3 Los audios que la 'Mata Hari' le

grabó a la Corte Suprema de

A derrotar la maquinaria

¿Dejar o no tareas? El nuevo

debateo en la formación infantil

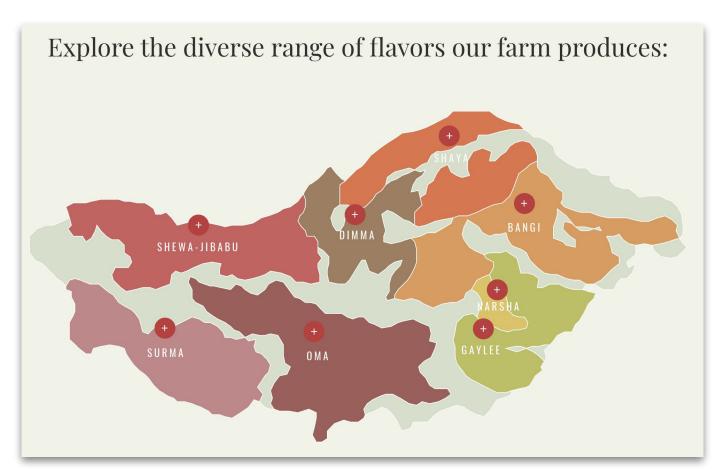
VER 50 MÁS COMPARTIDAS



alrededor del cultivo del café. El proyecto ofrece recorridos y

Hawaii In The Global Context

Micro and nanolots focused on terroir, appellation, harvest / processing dates, variety, unique processing, etc.



Lots in this auction

Hawaii In The Global Context

Champions Reserve

Micro and Nano-lot Auctions

Lot	Score	Weight	Increment	Bid	Total value	Title	High bidder	Time left
	Score		merement		Total value			
GVA.RSV.1a	93.47	132.28lbs	\$0.50	\$119.50/lb	\$15,807.46	Surma Gesha 1931 Natural	saza coffee	FINISHED
GVA.RSV.1b	93.47	132.28lbs	\$0.50	\$112.50/lb	\$14,881.50	Surma Gesha 1931 Natural	White owl coffee roasters	FINISHED
GVA.RSV.2a	92.89	132.28lbs	\$0.50	\$41.00/lb	\$5,423.48	Shaya Gori Gesha Natural	Cioclato & whiteowl	FINISHED
GVA.RSV.2b	92.89	132.28lbs	\$0.50	\$42.50/lb	\$5,621.90	Shaya Gori Gesha Natural	Lost Alley	FINISHED
GVA.RSV.3a	92.37	132.28lbs	\$0.50	\$52.50/lb	\$6,944.70	Narsha Gesha 1931 Natural	Geshary Coffee	FINISHED
GVA.RSV.3b	92.37	132.28lbs	\$0.50	\$51.00/lb	\$6,746.28	Narsha Gesha 1931 Natural	White owl coffee roasters	FINISHED
GVA.RSV.4a	92.01	132.28lbs	\$0.50	\$38.00/lb	\$5,026.64	Shewa-Jibabu Gori Gesha Natural	White owl coffee roasters	FINISHED
GVA.RSV.4b	92.01	132.28lbs	\$0.50	\$37.50/lb	\$4,960.50	Shewa-Jibabu Gori Gesha Natural	RedmeowCofee, RoastWork, Favilla	FINISHED
GVA.RSV.5a	91.78	132.28lbs	\$0.50	\$42.00/lb	\$5,555.76	Oma Gesha 1931 Natural	Cloudpink Ltd	FINISHED
GVA.RSV.5b	91.78	132.28lbs	\$0.50	\$42.00/lb	\$5,555.76	Oma Gesha 1931 Natural	T.S.E. Custom Roastery Ltd. / HWC Taiwan	FINISHED
GVA.RSV.6a	91.14	132.28lbs	\$0.50	\$38.00/lb	\$5,026.64	Oma Gesha 1931 Natural	Common Grounds Coffee Roaster	FINISHED
GVA.RSV.6b	91.14	132.28lbs	\$0.50	\$38.00/lb	\$5,026.64	Oma Gesha 1931 Natural	BlendIn Coffee Club	FINISHED
GVA.RSV.7a	90.75	132.28lbs	\$0.50	\$40.00/lb	\$5,291.20	Surma Gesha 1931 Honey	Coffee Me Up (Korea)	FINISHED
GVA.RSV.7b	90.75	132.28lbs	\$0.50	\$39.50/lb	\$5,225.06	Surma Gesha 1931 Honey	Zephyr Coffee Japan	FINISHED

Hawaii In The Global Context

- Roasting and growing the local market
- Leveraging larger farms / central processors to identify the hidden gems amongst smaller growers who sell cherries to aggregators
- Quality standards for macro-lots and protecting the classic Kona Hawaii profile (and other traditional profiles)

What is the future?

Coffee is producer first.

Coffee creates equivalent opportunities throughout the supply chain for sustainable and responsible growth, equality and quality.

"Businesses can lead with their values and make money, too. You don't have to be simply profit driven. You can integrate social and environmental concerns into a business, be a caring business, be a generous business and still do very well financially"

Jerry Greenfield, Ben and Jerry's Ice Cream



GLOBAL COFFEE: UNDERSTANDING THREATS TO GROWTH IN 2020 AND BEYOND

January 2020

Long-term trends could force radical changes to coffee production

Climate change represents a potential existential threat

- Changing climate conditions are disrupting coffee's traditional growth regions
- Long-term adaptation will require significant investment, difficult for an industry still heavily reliant on relatively small farms

Significant, ongoing upheaval among coffee growers

- · Low green coffee prices globally are rendering growing numbers of small farms unprofitable
- Over time, the twin forces of climate change and structurally low prices could concentrate coffee growing in a smaller number of well-capitalised regions, such as Brazil and Vietnam

Adaptation could mean less interesting coffee

- Much of the growth in global coffee spending over the last 10-15 years has been driven by high-quality, speciality coffee, particularly in higher-income markets
- Climate change could have a homogenising effect, which could necessitate a very different approach to marketing coffee, particularly at the high end

A more consolidated coffee market impacts speciality sector

- Led by independent shops in markets such as North America. Australasia and Japan, speciality coffee has driven much of the ongoing premiumisation in the coffee category, particularly in higher-income markets.
- These shops championed coffee varieties from small producers in underappreciated regions, while introducing a host of new coffeebased beverages, starting with Italian-style espresso-based beverages and extending into more modern innovations such as cold-brew.
- At the core of this process has been a strong emphasis on taste. Speciality coffee, often found in a coffee shop. presented as a better-tasting alternative to other coffee, and worth paying more for.

- . The growth of speciality coffee created opportunities in highercost, less-mechanised coffeeproducing markets such as Nicaragua, with producers able to command higher prices for interesting coffee varieties that the speciality coffee industry helped to popularise.
- As climate change and low prices put more pressure on higher-cost markets, the pool of coffee producers will likely narrow, with farmers switching to different crops or emigrating. while demand from coffee buvers will shift to lower-cost producers.
- While very high-quality coffee will still command very high prices, a middle tier of speciality coffee could be squeezed out.

. Over time, this could lead to less variety in terms of coffee flavours and quality. For many consumers, this may not matter - most consumers are not coffee experts, and a vast proportion of coffee-drinking occasions are still driven by daily demand for caffeine or the desire for a coffee shop experience, less by a desire for a variety of new coffee flavours and origins.

A thriving speciality coffee sector has fuelled much of the premiumisation trend in the 21st century

Less differentiation could drive very different strategies

- . Yet there is no question that much of the growth in coffee shops and premium coffee in developed markets has been underpinned by the idea that the coffee they sell (not simply the experience) is better, in terms of taste and quality. If climate change and low prices further reduce the pool of producers, differentiating on taste could become more difficult.
- Less differentiation could potentially dampen growth in coffee value - while consumer demand for premium coffee can seem endless, ongoing value gains need to be driven by something, particularly as overall volume growth slows.
- . Going forward, this may come from innovation in additives, or in formats - cold coffee, coldbrew coffee, coffee cocktails, etc. In other words, the "third wave" movement's singular focus on coffee itself (taste, varietals, brewing techniques) may have reached a high water mark, with innovation giving way to coffee as one component in a variety of beverages.
- Does this mean climate change is of no consequence to the broader coffee industry? Not at all - as noted, less acreage could push costs higher and introduce periodic supply shocks, all of which could impact profits for players up and down the coffee value chain.
- Yet it is likely the speciality segment will be most strongly impacted, and a weaker speciality coffee segment likely means the force of premiumisation becomes more muted. Coffee as an affordable luxury has driven both higher prices and higher volumes, as consumers pay more for coffee and drink more overall.

A shift from evermore premium coffee to more ubiquitous "good enough" coffee is coming