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SEMINAR
— SERIES —



Sustainability: What Does It Mean And Why Is It Important?

KEN MELBAN | CALIFORNIA AVOCADO COMMISSION
VICE PRESIDENT OF INDUSTRY AFFAIRS

Today's Discussion



What is sustainability?

Is Sustainability important to California avocados?

California Avocado Commission's efforts to-date and into the future.



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Three Pillars of Sustainability



Social: Worker pay, worker health, worker conditions?

Environment: What's the impact to air, water, communities?

Economic: Is the business viable?



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The Sustainability Consortium



Supply Chain Transparency

“Addressing many of the environmental and social challenges within an agriculture supply chain requires cooperation among companies at different stages of the supply chain. Final product manufacturers should determine the locations of farms that produce their supply and engage in initiatives that improve transparency, communication, and data sharing. **Suppliers can work together to address common issues, such as energy use, water availability and quality, chemical use, worker health and safety, and labor rights.**”



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Who Cares?

Lots of folks
Retailers
Consumers
Our target
customers



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Survey



**California Avocado Commission study
SureHarvest conducted handler, retailer surveys**



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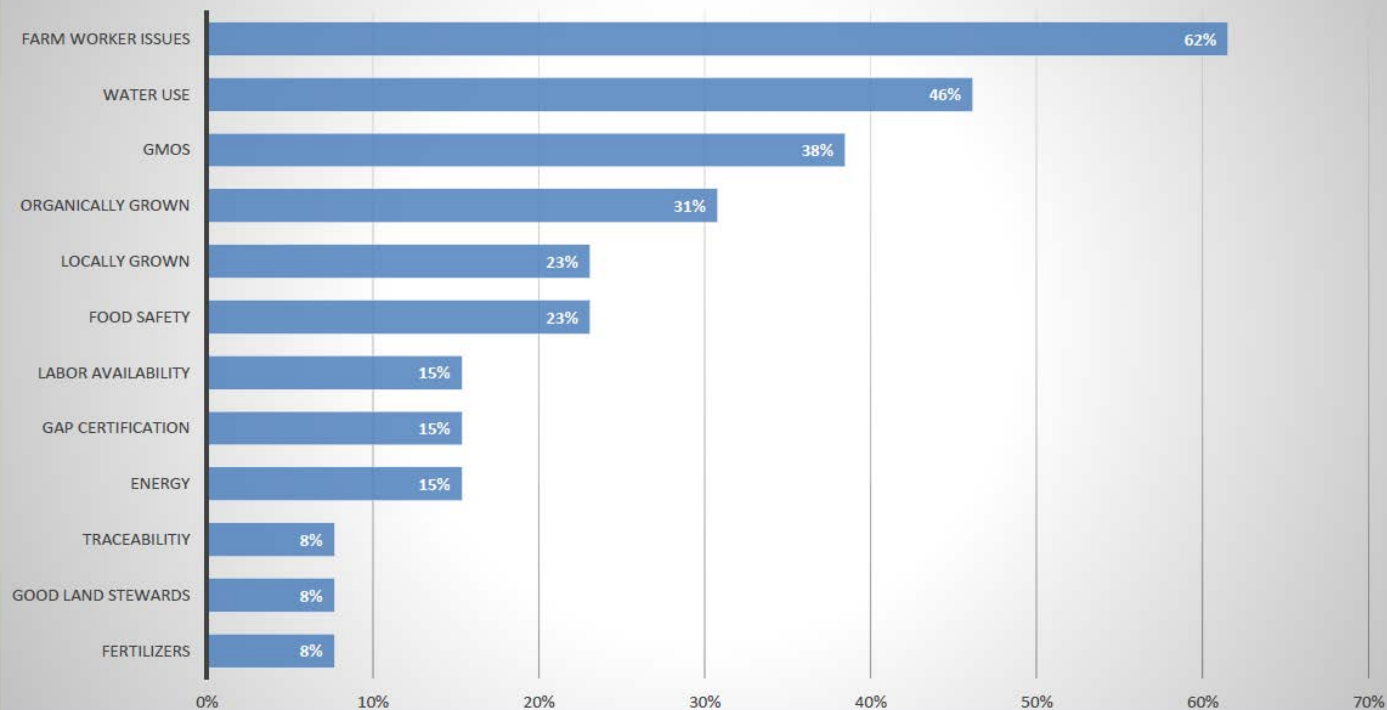
Summary of Findings

- Large buyers show more interest in sustainability issues than small buyers:
 - Large buyers mentioned in interviews: Walmart/Sam's Club, Wegmans, Kroger, Costco
- Less than 5% of consumers express interest in sustainability except at one specialty store that promotes sustainability to their customers
 - in that case 60% of consumers express interest
- Top four categories overall:
 - Farm Worker Issues (e.g. health & safety, working conditions, fair wages)
 - Water Use
 - GMOs
 - Organically Grown



Summary of Findings

Figure 1: 12 Sustainability Categories Identified



Buyer Requests



Tropical and Specialty Fruits

Category Sustainability Profile

Version 03.01.10.003



Introduction

This Category Sustainability Profile (CSP) details key performance indicators (KPIs) that can be used to track and measure the sustainability performance of a brand manufacturer, as well as the set of science-based environmental and social hotspots that support the KPIs. The Sustainability Consortium® (TSC®) has created this CSP through its multi-stakeholder development process with members and partners, including manufacturers, retailers, suppliers, service providers, NGOs, civil society organizations, governmental agencies, and academics, each bringing valuable perspectives and expertise.

TSC is a global organization dedicated to improving the sustainability of consumer products that also offers a portfolio of services to help drive effective implementation. For more information please visit www.sustainabilityconsortium.org.

Key Performance Indicators



QUESTION	RESPONSE OPTION
<p>1. Crop Supply Mapping</p> <p>For what percentage of your crop supply can you identify the country, region, or farm of origin?</p>	<p>A. We are unable to determine at this time.</p> <p>B. The following percentages represent the origins of our crop supply:</p> <p>B1. _____% is the portion of our crop supply for which we are unable to determine the origin.</p> <p>B2. _____% is the portion of our crop supply for which we have identified the country of origin.</p> <p>B3. _____% is the portion of our crop supply for which we have identified the region of origin.</p> <p>B4. _____% is the portion of our crop supply for which we have identified the farm of origin.</p>
<p>2. Child Labor Use - Growing Operations</p> <p>What are the outcomes of the risk assessments for the worst forms of child labor performed on your crop supply?</p>	<p>A. We are unable to determine at this time.</p> <p>B. The following percentages, by mass purchased, represent the outcomes of our risk assessment(s) for the worst forms of child labor for our crop supply:</p> <p>B1. _____% of crop supply came from low-risk countries with corrective actions taken for any known high-risk sites.</p> <p>B2. _____% of crop supply came from high-risk countries that have high-risk sites for which we took corrective actions.</p> <p>B3. _____% of crop supply came from high-risk countries, but an audit determined the site risk to be low.</p>
<p>3. Fertilizer Application - Growing Operations</p> <p>What was the nitrogen use intensity and phosphorus surplus associated with fertilizer application at the growing operations where your crops were produced?</p>	<p>A. We are unable to determine at this time.</p> <p>B. We are able to report the following for our crop supply:</p> <p>B1. _____ kg nitrogen per metric tonne of crop harvested.</p> <p>B2. _____% of our crop supply, by mass, is represented by the number reported in B1.</p> <p>B3. _____ kg phosphorus surplus per metric tonne of crop harvested.</p> <p>B4. _____% of our crop supply, by mass, is represented by the number reported in B3.</p>





4. Greenhouse Gas Emissions Intensity - Growing Operations

What was the greenhouse gas emissions intensity associated with the growing operations that produced your crop supply?

- A. We are unable to determine at this time.
- B. We are able to report the following for our crop supply:
- B1. _____ kg CO₂e per metric tonne of crop harvested.
- B2. _____% of our crop supply, by mass, is represented by the number reported above.

5. Labor Rights - Growing Operations

What are the outcomes of your risk assessments, conducted against a labor standard, that were performed on the growing operations that produced your crop supply?

- A. We are unable to determine at this time.
- B. The following percentages, by mass, represent the outcomes of our risk assessment(s):
- B1. _____% of our crop supply came from low-risk countries with corrective actions taken for any known high-risk sites.
- B2. _____% of our crop supply came from high-risk countries that have high-risk sites for which we took corrective actions.
- B3. _____% of our crop supply came from high-risk countries, but an audit determined the site risk to be low.

6. Pesticide Application - Growing Operations

What percentage of your crop supply, by mass, was provided by growing operations that had a verifiable, site-based environmental, health, and safety (EHS) program to assess and manage impacts to humans and the environment from pesticides and that shared data on their pesticide use?

- A. We are unable to determine at this time.
- B. We are able to report the following percentages for our crop supply:
- B1. _____% of our crop supply, by mass, was provided by growing operations that had a verifiable EHS program to assess and manage impacts to humans and the environment from pesticides.
- B2. _____% of our crop supply, by mass, was provided by growing operations that shared data on their pesticide use.



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7. Yield - Growing Operations

What was the average yield of your crop supply from growing operations?

A. We are unable to determine at this time.

B. We are able to report the following for our crop supply:

B1. _____ metric tonnes of crop supply harvested per hectare planted.

B2. _____ % of our crop supply, by mass, is represented by the number reported above.

8. Transportation to Retailers

What percentage of your final product was transported to downstream retail or distribution centers by logistics providers (carriers) that reported their annual greenhouse gas (GHG) emissions associated with transportation?

A. We are unable to determine at this time.

B. The following percentage of our product, by mass, was shipped to retail or distribution centers by carriers who reported their GHG emissions associated with transportation:

B1. _____ %.



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But Wait A Minute...



**Everybody loves avocados.
Avocados are nutritious and
healthy.
We should be exempt.
Let's just ignore it.
After all...**



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The Darling Of Produce



Benefits Of Avocado: 11 More Reasons To Love The Fruit

Sushmita Sengupta | Updated: April 20, 2018 12:12 IST



'Good' fats pump up avocado's healthy claim

Tags: [food](#)

Posted April 26



[Reactions](#)



12 health benefits of avocado

By [Megan Ware RDN LD](#) | Last updated Tue 12 September 2017

Reviewed by [Natalie Olsen, RD, LD, ACSM EP-C](#)



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The Darling Of Produce



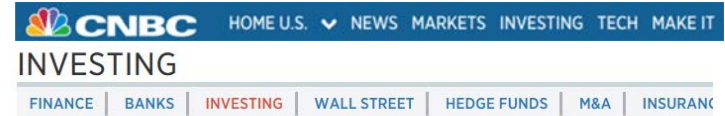
Why You Should Eat Avocado Every Single Day

Get your guac fix — your heart will thank you for it.



By [Jaclyn London, MS, RD, CDN, Good Housekeeping Institute](#) and [Caroline Walder](#) Feb 26, 2018

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Forget passive investing, put your money into the likes of avocados, says asset manager

- Invest actively, not passively, said an investment manager.
- Agricultural assets — like avocados — are good investment opportunities, he said.
- That recommendation comes as Asia is set to consume more avocados.

Huileng Tan | [@huileng_tan](#)
Published 3:16 AM ET Thu, 3 May 2018



Fame Brings Scrutiny



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INDY/EATS

WHY VEGANISM ISN'T AS ENVIRONMENTALLY FRIENDLY AS YOU MIGHT THINK

Western demand is forcing countries to consider importing their native fruit and vegetables to keep up with local consumption / *Alamy*

Go vegan, they said. Save the world, they said. But is the plant-based diet as good for the environment as we've been told? Emma Henderson finds out how it could be more sustainable

EMMA HENDERSON
Saturday 27 January 2018 00:00 GMT



748 SHARES



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INDY/LIFE

Sustainability in the Supply Chain: Can it be Saved?

Sustainability isn't just a rallying cry from conservationists. Increasingly limited resources and market pressure could disrupt our supply chain within the century.

SUSTAINABILITY > MARCH 2018 > BY NICOLE DUNCAN



Avocado: superfood and environmental killer

The avocado is considered a superfood and is popular in Europe because of its nutritional value. But in Chile, one of the main growing areas, the avocado has been linked to water shortages, human rights violations and an environmentally damage.



▶ Watch video

28:31

Avocado: Love hurts

22 Dec 2017



“This is yet another example of how global food trends are changing the global food supply chain, with devastating results for our planet. Avocado production has a huge carbon footprint.”

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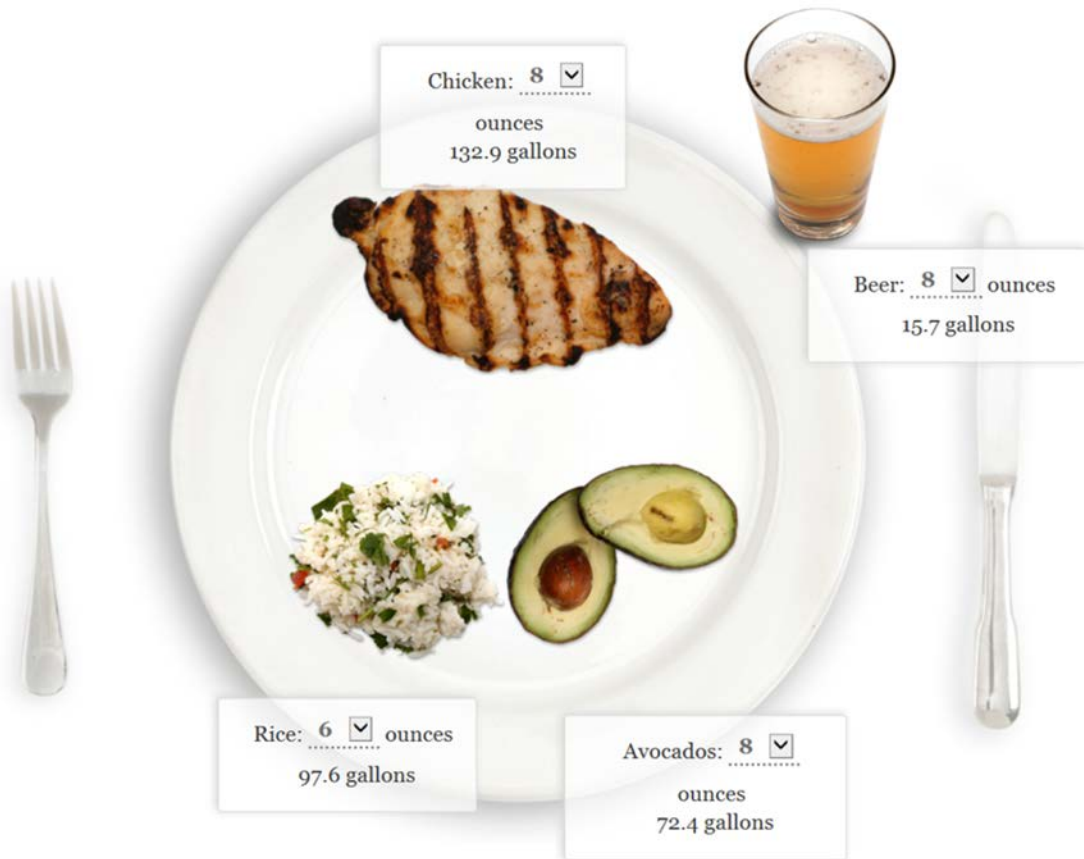
We love our avocados indiscriminately; small, round, oval – in all shapes, sizes and colours.

319 gallons of water were used to make this plate

By KYLE KIM, JON SCHLEUSS AND PRIYA KRISHNAKUMAR

APRIL 7, 2015

Los Angeles Times



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Target Consumer



Sustainability is very important to millennials
California Avocado brand: leading edge or late adopters?
Farm to Fork



Making The Case



California farmers are highly regulated
California Avocado Commission funded a
study

SureHarvest reviewed federal and state
laws

Labor, pesticide use, environmental

Results



Table 1: Summary of occurrence of California and Federal labor regulations

Regulatory Category	Federal Regulations	California Regulations
Wages and Benefits	2	14
Occupational Health and Safety	7	18
Recruitment and Workforce Management	2	8
Child and Voluntary Labor	4	6
Non-Discrimination	2	5
Freedom of Association	1	2

Results



Table 2: Summary of occurrence of California and Federal environmental regulations in agriculture

Regulatory Category	Federal Regulations	California Regulations
Pesticides and Hazardous Materials Management	4	11
Water Resources	1	9
Air Resources and Climate	4	2 (including AB32)
Ecosystem Protection	5	3
Soil Resources	2	-

Building The Platform



California farmers have a strong starting position

Good story to tell buyers

Look for opportunities to strengthen practices

Specialty Crop Block Grant



Submitted proposal to develop a web-based tool
Side-by-side with the Decision Support Tool
Allow growers to voluntarily provide information
Aggregate findings

Next Steps



Further quantify California's sustainable growing practices

Advocate the benefits of those practices

Identify Best Management Practices (BMPs)

Educate industry on BMPs

Continue to work with HAB



Thank you.
Questions?



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