Mission Produce

Davis Cracknell*  Kendall Moore†
Salvador Lopez‡

*Agribusiness, Cal Poly San Luis Obispo
†Agribusiness, Cal Poly San Luis Obispo
‡Agribusiness, Cal Poly San Luis Obispo
This paper is posted at DigitalCommons@CalPoly.
https://digitalcommons.calpoly.edu/agb_cs/19
Mission Produce

Steve Barnard, president and CEO of Mission Produce, gives a presentation to a produce marketing class at California Polytechnic State University, San Luis Obispo in April 2017. With ten percent compounded annual growth in the past eighteen years, Mission Produce maintains 500 employees, $543 million in sales in 2016, and is the leading avocado distributor in the United States. The avocado industry is going through what Steve likes to call “the avocado revolution,” Steve's biggest concern is that “supply is going to be an issue.”

Steve also discusses the brand new ripening centers and record breaking packing houses located around the world. Mission Produce enters the avocado market in Southeast China and is currently the sole distributor of avocados to the area with ripe rooms in Shanghai. Mission also opens their newest and largest packing house in Peru just thirty days after opening an identical packing house in the central coast of California.

Being a Cal Poly alumni himself, Steve enjoys giving back to his alma mater and helping students with a bright future. In his presentation, Steve talks about Mission Produce and his advice to the students as they get ready to compete in the job market. He informs the class that mission is also implementing a program in the summer of 2016 that gives employees the tools to career success.

Steve Barnard reflects on how far Mission has come. Over 33 years ago Mission started as a California packer, in a rented office trailer, a rented packing shed and cooler, and a determination to win. Flash forward to today, Mission Produce has positioned themselves on top of the avocado industry and is still pushing towards the future. Steve Barnard “plays offense at all times” and is always looking for ways to stay on top. Mission is the largest avocado packer in the world and continues to invest heavily in facilities, farms, equipment and technology. Mission is positioned in the world market better than anyone in the avocado business and they continue to analyze worldwide opportunity to build their winning team and create success.
Missions History:

Steve Barnard was raised the son of a farmer who grew both citrus and avocados in Ventura County. Steve always wanted to get into the agriculture business. However, his father told him there wasn't enough room for the both of them on the family farm and he needed to find his own way into the industry. After attending Fillmore High School, Steve attended Cal Poly San Luis Obispo and attained a degree in agriculture business. Each summer during college Steve worked in a different sector of the agriculture industry, working for his father, Sunkist, Newhall Land Farming Company and also spend a summer with a tomato harvesting operation. According to Steve, “These were all great experiences, but I knew I didn’t want to do any of those things. The one thing I hadn’t tried was fresh produce.”

Once college educated, Steve arranged an interview with Santa Clara Produce. When he did not receive a job offer, Steve told them that he would do anything including load trucks. Two weeks later he was on the loading docks of Santa Clara Produce, working in the cooler for a gross pay of $125 per week. Eventually, he moved up the company ladder and began running three harvesting crews of various vegetable operations. That continued for several years until he got tired of the time spent away from home.

Santa Clara Produce begun an avocado operation to fill empty vegetable warehouses and Steve was able to help the manager connect with local growers. When that manager retired, Steve was offered the position. Steve knew enough about avocados to see that Santa Clara was in the avocado business for the wrong reason and wasn’t packing avocados properly. “I went and told the owners we should change the operation, so it would run better. I should also become part owner,” Steve noted. However, Santa Clara turned him down. Steve responded “don’t be surprised if I pop up across the street.”

Steve began looking for partners to begin his own avocado operation. By 1983, he and a set of partners raised $900,000 and established Mission Produce.

Avocado Industry:
Avocados are native to Central America and Mexico. They originated sometime between 7000 and 5000 B.C. Archaeologists in Peru have found evidence of the cultivation of domesticated avocado seeds buried with Incan mummies in approximately 750 B.C. Spanish conquistadors were intrigued with the fruit, but could not properly pronounce the name. The conquistadors decided to amend the pronunciation of the word “aguacate” to something more manageable. Eventually, the word became “avocado” in English. The first mention of avocados in the English language was by Sir Henry Sloane in 1696.

It wasn’t till 1871 when Judge R.B. Ord of Santa Barbara introduced avocados to the United States. He did this with trees from Mexico. Growers in the 1900s saw the commercial potential in avocados and constantly searched for improved varieties. In the 1950s there were around 25 different varieties of avocados that were being commercially packed and shipped in California. At this time, the avocado variety Fuerte accounted for more than two-thirds of the production.

In the late 1970s, the most popular variety became the Hass. The Hass replaced Fuerte as the leading California variety. The mother of all Hass trees was born in a backyard in La Habra Heights, California. Hass was discovered in the early 1930s and patented by Rudolph Hass in 1935. Today the Hass variety continues to have commercial success in the avocado industry, due to its superior characteristics.

Avocados are commercially grown best in tropical and Mediterranean climates. The trees can potentially grow up to 80 feet in height. They are also grown best in well-aerated soils in climates without frost and little wind. Avocado harvests are done by hand in which crews use ladders that are up to 30 feet long and avo-clippers to pick out the right avocado on the tree. These avocados are put into the workers harvest bag, which can carry fifty to eighty pounds of avocados per bag. Pickers can also use a harvesting tool known as a pick-n-pull. This tool is a 14 feet long pole with a bag and a blade. The blade at the end of the pole is activated by the string that runs along the pole. The picker holds the pole and maneuvers it around the tree until an avocado meets the bag. Then the picker pulls the string that activates the blade. The blade clips the avocado and falls perfectly into the bag. The pick-n-pull method doesn't require a ladder for harvesting, but it can be just as labor intensive. Once the pickers have their bags full with avocados, they empty their bags into the picking bins.
Every picking bin can hold up to 900 pounds of fruit. The fruits is then transferred from the field to the packing house. In the packing house, they are put into a large cold storage room for 24 hours to remove field heat and preserve quality. Mission Produce is currently the only avocado packer that uses a hydrocooler to wash the fruit coming into the packing house. The hydrocooler removes any debris and field heat, preserving the quality of the fruit. The avocados are then place onto a conveyor belt for grading and sorting. The fruit is then washed, inspected for quality, and placed into single layered cartons called flats or into double layered cartons called lugs. Lugs hold about 25 pounds of avocados. Avocado size classification are based on the quantity of avocados that can fit into one lug. After the sorting process, the fruit is shipped in refrigerated trucks to distribution centers or end markets.

The avocado industry in California has been facing volatile yields over the past ten years. This was due to the drought that affected California’s agriculture for six years. Every year the Hass Avocado Board reports data on Hass avocado yields for all countries that have data available. Hass avocados in California are harvested as early as March or April. The California avocado season plateaus in July and November. These months nearly report zero yields each year. California alone isn't capable of meeting demands for the United States avocado market. This is why close to 85 percent of the avocados consumed in the United States are sourced from outside the country. According to the Hass Avocado Board, avocado consumption in the United States has increased over 300 percent in the past fifteen years. This sums up the avocados industries largest issue, not having enough supply.

Ripening Avocados:

Mission has had a ten percent compound annual growth for the past eighteen years. Steve says the three reasons why that is so is because globalization, ripe rooms, and promotion. In 2007, Mission produced 1.61 billion pounds of avocados. In 2016, Mission produced 2.40 billion pounds of avocados. They are projecting to have 2.64 billion pounds of avocados in 2017 and 2.90 billion pounds in 2018. The only thing that could potentially slow Mission down is supply. Steve Barnard believes the reason why Mission is able to able to grow in the past eighteen years is because of three factors. Promotion, globalization, and ripening rooms.
Avocados do not ripen on the tree. The fruit is harvested when oil content and dry matter are at their peak. The hard avocados are processed and packed into 25 pound lugs. For proper consumption, avocados must be ripened. Many Mission Avocados available in grocery stores, have been pre-ripened for consumer convenience. This is performed by using large scale “Ripening Rooms.” These ripening rooms filter ethylene gas throughout the room and slowly bring the avocados towards the desired firmness.

Ripening avocados depends heavily on season. Early season avocados may take longer to ripen than middle to late season avocados. Mature avocados should be shipped and stored at 41-51 degrees Fahrenheit. Before ripening begins, the fruit pulp temperature should be raised to 65-68 degrees Fahrenheit. Once fruit pulp temperature stabilizes, a Catalytic Generator pumps ethylene gas throughout the room to speed up the ripening process. Humidity is very important and should be maintained at 90-95%.

Carbon dioxide will build up during ripening and anything above 1% can hinder ripening and cause “checkerboard” ripening within the room. If rooms don’t have automatic ventilation, be sure to open the doors every 12 hours for 20 minutes even when applying ethylene. Check pulp temperature and firmness twice a day and the fruit should be ready to ship within 3-6 days. Once ripening has reached the desired degree of firmness, lower the pulp temperature to 40-42 degrees Fahrenheit.

Ripening Centers

When Mission started, avocados were only sold in the western United States due to the small supply in California. Import restrictions from Mexico choked supply. The arrival of Mexican fruit and increasing popularity at the retail level has increased demand for ripe avocados. Mission has established strategically located Distribution and Ripening Centers across the United States. They have also established them internationally to help provide fresh ripe avocados year-round to food services and consumers across the world. Oxnard and Seattle provide the ripe fruit to the west coast. Denver, Dallas, and Chicago provide ripe avocados to the middle of the United States. New Jersey and Atlanta provide fresh ripe fruit to the east coast consumers.
Recently, Mission Produce has expanded to global markets. Toronto and Calgary are the Canadian distribution centers. Breda, Netherlands provides ready to consume fruit to European markets. New emerging markets in China have led Mission to build distribution capabilities in Shanghai. These ripening centers make it possible for Mission to provide fresh avocados to health conscious consumers around the world.

The Avocado Revolution: Health Benefits

America’s appetite for avocados is not slowing down anytime soon. According to an article in The Washington Post the demand for avocados has increased consecutively for the past fifteen years. The avocado revolution is a term used by Steve Barnard to explain consumer demand. There are a few key reasons for this skyrocketing increase in demand.

The first reason being that avocados are a very distinct fruit. This fruit cannot be easily replaced with any other fruit, due to its amazing taste and distinct creamy texture. The texture and nutritional value of avocados can be used a healthy baby food option. It is very convenient for a mother to be able to feed some of her avocado to her child, while she eats one as well. Avocados can also be spread to spice up a plain piece of toast, or even freshly cut to add to a delicious dish. The possibilities are endless, and Mission Produce has created an Instagram to demonstrate these beautiful creations. This Instagram is a great way to appeal to the modern day public. It promotes new ways to consume this “trendy” fruit, along with insight into the recipes.

The second reason for the rise in demand, is due to the health benefits associated with avocados. Many consumers are becoming more health conscious and are looking to avocados to add in their diet. Avocados are considered a superfood. The electronic dictionary definition of a superfood is, “a nutrient rich food that is especially beneficial for health and well-being.” According to the BioMed Central Nutrition Journal, avocados contain Monounsaturated fatty acids, essential nutrients, phytochemicals, and zero cholesterol. Along with this, in one of their studies they found that consumers of avocados had a better quality diet and nutrient intake. These people had a lower BMI and waist circumference than non-avocado consumers. Lastly, avocado consumers had significantly higher HDLs and had a 50% less risk of getting metabolic syndrome.
The health benefits make avocado oil a healthier cooking option, than other cooking oils on the market. The *Hass Avocado Board* continues to research the health benefits of avocados to keep consumers informed. This is done through their research and wellness program called “One Love Today.” This marketing campaign reminds Americans to continue to incorporate Hass avocados in their daily meals.

**Mission Europe**

Mission strives to provide the highest quality fresh avocados to Europe. Mission takes the best avocados that are hand-picked at peak season for premium taste and exports them. According to Steve Barnard, “Exports are the highest of quality.” This is done to increase demand overseas. Mission sends their best avocados to Europe, to keep consumers coming back for more.

European’s are still fairly new to avocado consumption, with very selective consumers. If consumers buy an avocados that has defects on the surface, they might think the entire piece of fruit is damaged. Over time, these European consumers will discover that surface defects generally have no impact on the pulp quality of the fruit.

Another reason the European exports are of the highest quality, is because it can take 25 to 30 day to ship these avocados overseas. On the long boat ride, certain surface defects can spread to other pieces of fruit and create food safety hazards. To minimize risk and promote demand overseas, only the highest quality fruit is exported.

**Mr. Avocado in China**

Mission’s goal is to help lead the “ripe revolution” around the world. They want to allow ripe avocados to be accessed and consumed in countries where they previously have not been. Despite the Chinese markets only having access to hard avocados, the fruit has seen exponential growth rates. Mission has recently opened a new ripening facility in Shanghai, China. They launched a new ripe avocado brand under the name, *Mr. Avocado*. Steve Barnard explained, “We already had the name, so we used it.”
“We are extremely excited about the growth we’ve seen in China over the past several years. By opening the Mr. Avocado Ripe Center in Shanghai, we will be able to provide ripe fruit to the market and accelerate that growth.” says Steve Barnard. The Mr. Avocado brand began with a partnership between Mission and Lantao. They received help from Pagoda Stores at the PMA Fresh Connections conference, held in China in March 2016. Pagoda Stores is a direct link to Chinese consumers, and the California based Mission produce can now deliver ripe fruit into a market that is ready for rapid expansion.

According to Steve Barnard, “China was three years old” when it came to avocados and “they have been eating them rock hard.” With this new partnership, Mission is able to deliver fresh avocados that China never had the ability to taste before.

One of the main marketing strategies Mission uses for their success in China is baby food. “It’s the perfect baby food, it’s good for the mother and the baby.” The Chinese population is becoming more health aware and are pursuing food that is best for them and their families.

In early April, Mission and Pagoda had sold out their avocados in one day. “Those avocados were still wet.” Steve was referencing that the avocados couldn’t have been any fresher. This was an exciting new chapter in Missions history. However, this was merely in 16 of Pagoda’s stores in China. Pagoda operates over 1,800 stores across China, in which Mission plans on supplying fresh avocados. Pagoda hopes to continue to open 10,000 stores by 2020. The potential issue for Mission is having enough avocados to supply all these stores.

Mission Packing Houses

Mission Produce is able to ensure peak eating quality avocados year-round by sourcing their avocados from five countries. Mission is vertically integrated throughout these countries, they own the avocado groves and packing house facilities.

One of the more standard operations outside of the United States, is Mission Produce packing house facility in Chile. It has an inside square footage of 97,000 feet and covers about 6.2 acres of land. The Chilean packing house produces 20 truckloads of avocados per day on average. This is during their season, which lasts from November to March. The storage capacity of this packing house can hold up to 48 truckloads of avocados in the ripening rooms located
inside the facility. Although Chile may not be the largest share of avocados, Steve Barnard is optimistic about the supply. He states, “Chile is coming in strong.”

In Mexico there are two Mission packing house facilities. They are both located in the state of Michoacán. The first of the two packing houses is located in Uruapan. This packing house covers about 10 acres of land, with a square footage of 95,000 feet. It produces 22 truckloads of avocados on average and is capable of storing 45 truckloads within the facility. The second packing house is located in Zamora, Michoacán. This packing house covers about 12 acres of land and has a square footage of 90,000 feet. Its production in packing and shipping avocados averages 20 truckloads per day and is capable of storing 40 truckloads of Mexican Hass avocados. These two packing houses are definitely the workhorse of Mission Produce and they account for 70% of Missions avocados.

The newest avocado packing facility in California didn't move too far away from Mission's previous packing house. Located in Oxnard California, this packing facility is 230,000 square feet being the largest avocado packing facility in North America. Many of the features in this packing house includes state of the art washing, sorting, packing and bagging line. This packing house facility can process over 1,000 pallets of fruit daily. Mission also focuses on energy efficiency as the packing house contains 4 acres of solar panels that are located on the roof of the facility. The solar field is capable of offsetting the entire electric load of the pack house, and front office building. Because avocados are seasonal in California, the Oxnard pack house has excess refrigerated storage capacity throughout the year. Mission has taken advantage of this and become a third party warehouser. The original avocado packing house is located several miles down the road. This packing house is still owned by Mission and acts as their ripening facility.

However, as impressive as the new Oxnard packing house sounds, it was only record breaking for approximately 30 days. While the packing house was being built in Oxnard in 2015, Mission was also in the process of building an identical avocado packing house in Peru. Just thirty days after the grand opening of the Oxnard facility, Peru was home to the world's largest avocado packing house facility. The largest avocado packing house facility is approximately 250,000 square feet and contains identical features and technology used in the Oxnard based facility. Not only is the Peruvian packing house larger, but it was also built quicker. It was built for a fraction of the cost of the Oxnard packing house due to lack of government regulation.
Mission is fully integrated in Peru, and all 4,000 acres of Missions growers in Peru are Global GAP. This is not the case for the growers in California. This record-breaking packing house is capable of producing 40 truckloads of avocados per day. This is due to the plug-ins for 50 ocean containers, which ship the ripe Avocados overseas.

Mission University

Mission produce is committed to implementing business tactics to remain at the top. In the summer of 2016 they created a program called Mission University. Mission University was created to provide educational and training seminars on different aspects of the business. It is a way for employees to get away from their desks and focus their attention on something else for an hour. Once a week, a different department is responsible for presenting their role within the company. This allows employees to get a glimpse of the other departments. As Steve Barnard explained, “It shows employees how to be a leader in the category of each department, and move up higher in the business.” Employees are able to acquire some of the knowledge and skills that their fellow employees apply to their jobs daily. These seminars enable the employees to grasp how each department fits together to accomplish Mission Produce’s greater goals.

Mission university educates employees on many other pivotal topics as well. Mission cares about the safety of each employee. Safety trainings are conducted to ensure employees perform their best, while using proper techniques. Mission university also enables relationship building between the employees. Every employee has their own unique story and background. Mission university allows employees to really get to know each other. They are able to meet the people that surround them in their office, but they may not come into contact with on a daily basis. No matter one’s age or background, employees are brought together to create personal and trusting relationships.

The Mission Bell

The Mission Bell is Mission Produce’s news article. It is a message from Steve Barnard to keep employees up to date on certain events within the company. The spring 2016 issue display the passion that Mission Produce has for their employees. The company care about their employees’ health and happiness. In October 2016 Mission Produce held their first health
and wellness fair. Their motto for the event was “Live Healthy, Live Well.” The health and wellness event was attended by 80% of their employees. Mission had many great vendors come to the event for their employees to talk to as well as win amazing prizes. Some of these vendors were Good2Go Juice Truck, Coastal Skin Care, United Blood Services, and delicious food prepared with Mission Avocados. Employees were allowed to ask about any health questions they desired. This event created an enjoyable environment for Mission employees to become informed on their health and wellness.

The Mission Bell gives great advice to help their employees and reduce stress levels. In the 2016 spring issue, Mission gives fitness advice to go along with the theme of their previous event. The fitness section encourages realistic fitness goals. It discusses the unrealistic goals that many people usually set and eventually give up. The article stresses that living a healthy lifestyle is very important, even though it may not always be an easy way to live. Many times daily life can get very busy, and The Mission Bell gives tips to help with employee health and exercise. A few of these tips are meal prep for the week on Sundays, pack a lunch each day, eat a healthy breakfast, and pack healthy snack to keep from overeating. Mission also offers a free workout class at their gym twice a week. This helps contribute to the overall employee satisfaction.

Lastly, The Mission Bell recaps other outside work events. Two of these events were the “Tackle Hunger with Food Share” and their “Fall Paintball War 2.0.” “Tackle Hunger with Food Share” is one of their community outreach events. Mission collected canned food to give to those in need. Mission has a very positive attitude and takes pride in giving back to their community. “Fall Paintball War 2.0” was a paintball battle between employees of different departments. This competitive event was another way to encourage employee relationship building outside of the office.

Outlook for the Future

As Barnard presented in front of the produce marketing class, he sees potential in all the students. He leaves the students with advice for them to keep as they enter the job market. He tells students, “don’t be afraid and just go.” Steve took risks in his life to get him where he is today, the world leader in producing, distributing and marketing fresh Hass avocados.
Mission continues to find technology, quality assurance and growing techniques to bring consumers the best tasting piece of fruit year-round. Mission is planning on increasing their employee population by 30%, and they need individuals with competitive attitudes to hop on board the avocado revolution. Mission produce is also looking into diversifying packs, improving product handling and cold chain management in Columbia. They plan on doing this by implementing 5,000 acres of Hass avocados.

Steve finishes his presentation and can see that all the Cal Poly students are very passionate. They are intrigued and are looking forward to the future of the avocado revolution. Mission Produce now looks on to setting more standards and continuing on being the world leader in the booming avocado industry.
Exhibit 1: Mission Produce History

Source: Mission Produce Inc. website/

Exhibit 2: Avocados eaten in the U.S. since 2000

Source: Hass Avocado Board

Exhibit 3: Number of Avocados consumed (2013)
Where people eat the most avocados

Approximate number of avocados consumed in each market in 2013.

1. Los Angeles: 293.15 million
2. New York: 119.49 million
3. Dallas: 116.24 million
4. Phoenix: 114.52 million
5. Houston: 111.02 million
6. San Francisco: 94.16 million
7. Denver: 75.64 million
8. Baltimore: 59.23 million
9. Chicago: 63.65 million
10. San Diego: 56.65 million
11. Portland: 50.69 million
12. Seattle: 50.37 million
13. Sacramento: 49.71 million
15. Boston: 46.62 million
16. Atlanta: 42.88 million
17. Philadelphia: 36.82 million
18. New England: 36.52 million
19. Detroit: 30.35 million
20. Tampa: 29.91 million
21. South Carolina: 28.59 million
22. Orlando: 28.28 million
23. New Orleans: 23.24 million
24. Kalamazoo: 23.17 million
25. Richmond: 22.2 million
26. St. Louis: 18.63 million
27. Charlotte: 16.36 million
28. Cincinnati: 16.36 million
29. Roanoke: 13.3 million
30. Jacksonville: 12.92 million
31. Indianapolis: 12.85 million
32. Columbus: 12.7 million
33. Albany: 8.52 million
34. Louisville: 6.92 million

Source: Hass Avocado Board
Exhibit 4: Share of imported Avocados in the United States

How much of America's avocados are imported

Today, 85 percent of avocados eaten in the United States are grown elsewhere.

Source: Hass Avocado Board

Exhibit 5: Avocado Ripening Centers

Source: Mission Produce Inc.
Exhibit 6: Monthly Avocado Volume using data from Hass Avocado Board

Source: This graph was conducted using data compiled from the Hass Avocado Board

Exhibit 6: Monthly California Avocado Volume using data from Hass Avocado Board

Source: This graph was conducted using data compiled from the Hass Avocado Board
Exhibit 7: Steve Barnard Signing Partnership with Lantao and Pagoda

Source: Mission Produce Inc.
Exhibit 8: Mission Produce Compounded Annual Growth

Source: Mission Produce Inc.
Exhibit 9: Global Distribution and Ripening

Source: Mission Produce Inc.
Endnotes


Barnard, Steve. CEO at Mission Produce Inc. (2017, April 19). Cal Poly San Luis Obispo Classroom Presentation Q&A.


