

Avocado- Price and Quantity Analysis

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Abstract:- The following analysis is done to understand the trend of avocado prices and quantity in various U.S. markets. This analysis help understand the future trends in production and sale prices of the commodity.

I. INTRODUCTION

Persia americana, or the avocado, possibly originated within the Tehuacan Valley within the state of Puebla, Mexico, although fossil evidence suggests similar species were far more widespread many years ago. However, there's evidence for 3 possible separate domestications of the avocado, leading to the currently recognized Mexican (aoacatl), Guatemalan (quillaoacatl), and West Indian (tlacacolaocatl) landraces. The Mexican and Guatemalan landraces originated within the highlands of these countries, while the West Indian landrace may be a lowland variety that ranges from Guatemala, Costa Rica, Colombia, Ecuador to Peru, achieving a good range through human agency before the arrival of the Europeans. The three separate landraces were presumably to possess already intermingled in pre-Columbian America and were described within the Florentine Codex.

In 2017, world production of avocados was 5.9 million tonnes, led by Mexico with 34% (2.01 million tonnes) of the entire (table). Other major producers were Dominican Republic, Peru, Indonesia, and Colombia, together producing 30% of the planet total. In 2018, the US Department of Agriculture estimated that 231,028 hectares (570,880 acres) in total were under cultivation for avocado production in Mexico, a 6% increase over the previous year, which 2 million tonnes would be exported. The Mexican state of Michoacán is that the world leader in avocado production, accounting for 80% of all Mexican output. Most Mexican growers produce the Hass variety thanks to its high demand worldwide and longer time period.

II. ANALYSIS

The data below contains the price and quantity of Avocados in multiple U.S. Markets within the span of 2015 to 2016 sorted on the basis of month.

Price here is the sum of Average prices of different batches per month. Similarly, quantity is the sum of volume on monthly basis.

| | Price | | Quantity | |
|--------------|----------------|---------------|-------------------|-------------------|
| | 2015 | 2016 | 2015 | 2016 |
| Jan | 589.7 | 669.7 | 318085209.6 | 475405765.6 |
| Feb | 573.24 | 534.43 | 362637599.2 | 428645802 |
| Mar | 735.47 | 528.86 | 418583069.8 | 391212408.3 |
| Apr | 597.65 | 520.57 | 344144395.2 | 401832751.8 |
| May | 726.13 | 647.85 | 483784044.8 | 561230530.6 |
| Jun | 604.4 | 554.28 | 381826743.7 | 410328154.1 |
| Jul | 608.88 | 756.72 | 356701872.6 | 467275344.2 |
| Aug | 780.02 | 609.6 | 419244814.8 | 370796967 |
| Sep | 626.03 | 616.84 | 329218833.1 | 362303275.5 |
| Oct | 601.33 | 840.83 | 305776111 | 360201804.3 |
| Nov | 718.53 | 669.61 | 369440036.4 | 260209336.7 |
| Dec | 562.56 | 568.51 | 296025931.9 | 331447751.9 |
| Total | 7723.94 | 7517.8 | 4385468662 | 4820889892 |

Table 1

On the basis of above data Index Number are calculated to show the change in the value of Avocados from 2015 to 2016.

| Price | | | |
|--------------|----------------|---------------|--------------|
| Months | 2015 | 2016 | Index Number |
| Jan | 589.7 | 669.7 | 113.57 |
| Feb | 573.24 | 534.43 | 93.23 |
| Mar | 735.47 | 528.86 | 71.91 |
| Apr | 597.65 | 520.57 | 87.11 |
| May | 726.13 | 647.85 | 89.22 |
| Jun | 604.4 | 554.28 | 91.71 |
| Jul | 608.88 | 756.72 | 124.29 |
| Aug | 780.02 | 609.6 | 78.16 |
| Sep | 626.03 | 616.84 | 98.54 |
| Oct | 601.33 | 840.83 | 139.83 |
| Nov | 718.53 | 669.61 | 93.2 |
| Dec | 562.56 | 568.51 | 101.06 |
| Total | 7723.94 | 7517.8 | 97.34 |

Table 2

After analyzing the prices, we can conclude that prices have dropped 2.66% from 2015 to 2016.

The drop in prices can be due the various reasons but here we are keeping other factors constant except quantity.

Here the rise and fall in the price of quantity will explain the fall in price of Avocados.

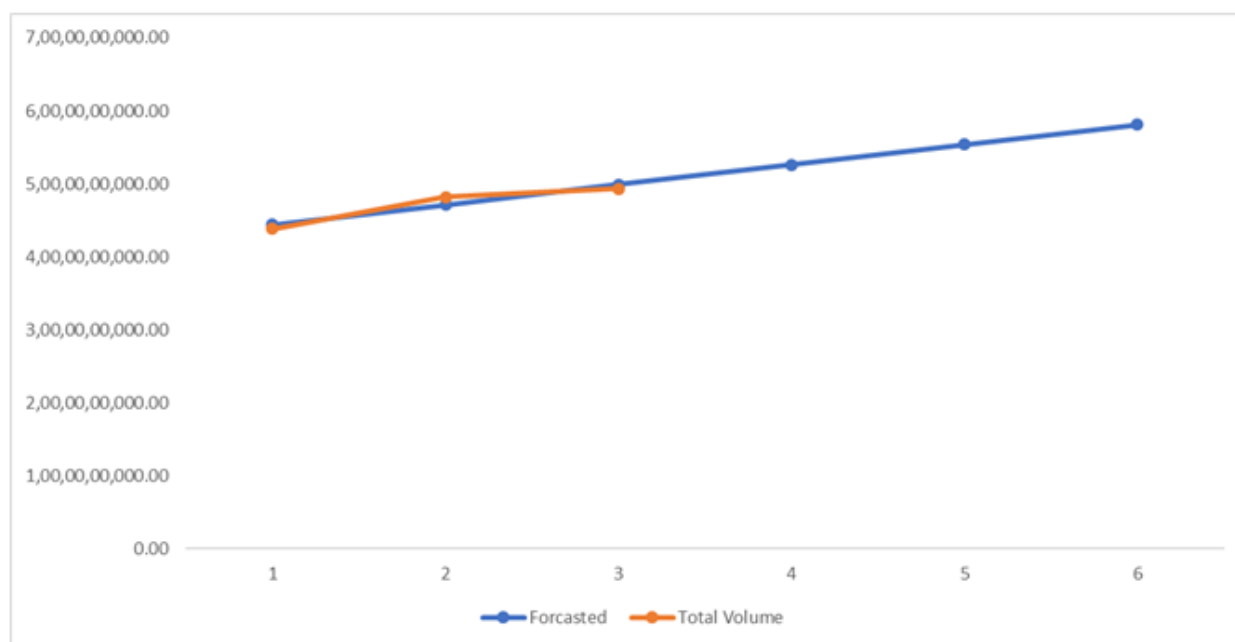


Fig 1

The chart above shows that volume of Avocados sold have increased and is further forecasted to increase (Other factors constant).

The increase in volume sold reduces the average prices of the commodity. This is due to the law of demand i.e. when price of commodity falls its quantity increases and vise-versa.

But law of demand only applies to normal goods which avocado isn't. But perception of good changes from time to time that is what exactly happened in the period of 2015-16.

While considering price and forecasting the future prices –

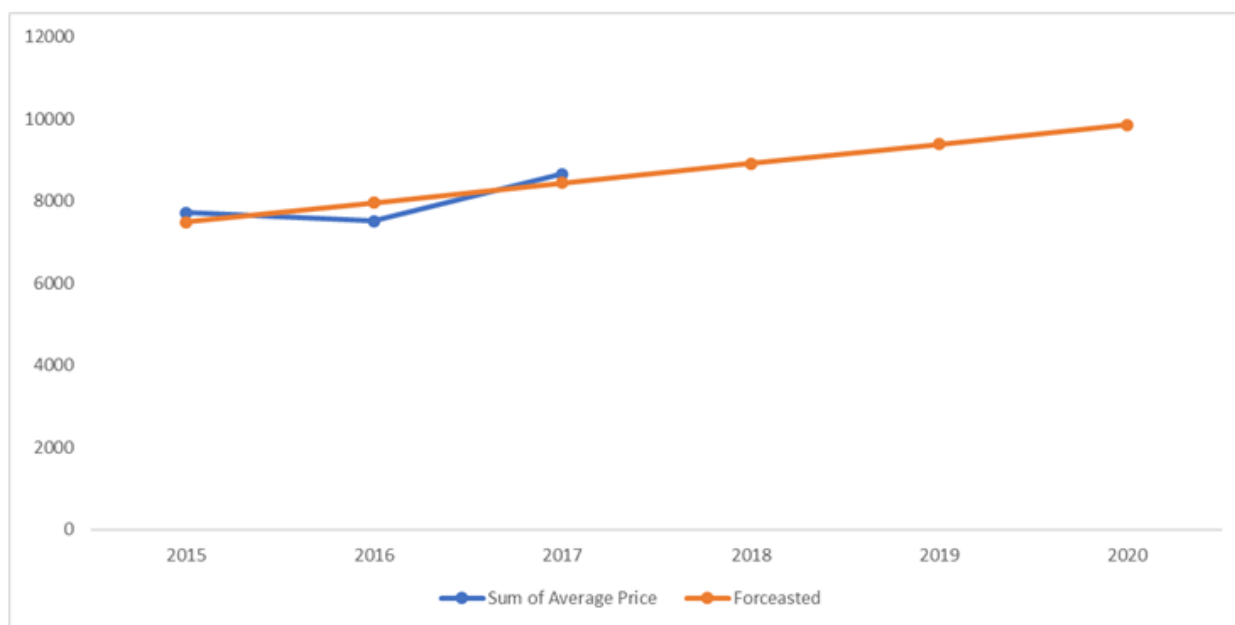


Fig 2

The forecasted prices show that the prices are going to increase despite the fall in the period of 2015- 16.

The above phenomenon can be better understood by defining the type of goods avocados are i.e. luxury goods. Therefore, when there is an increase in the quantity the prices were also increasing.

Thus, in 2020 prices and quantity will be increasing.

➤ Analyzing monthly trends in the prices of Avocados-

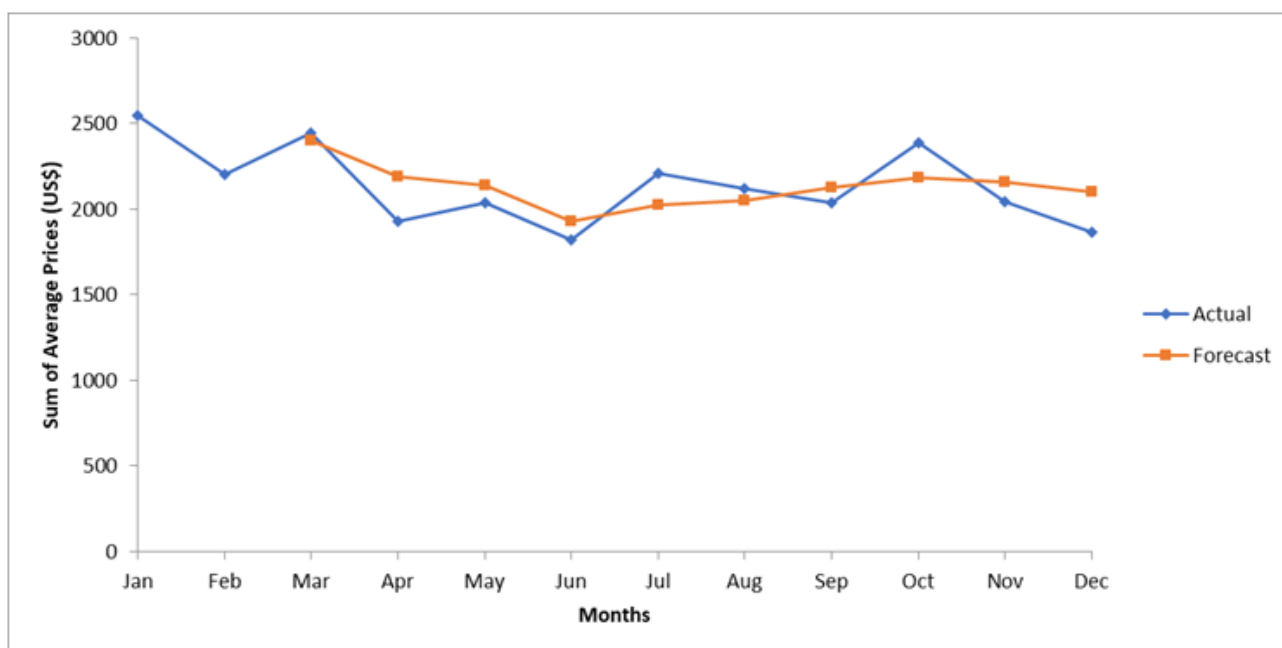


Fig 3

The graph above indicates moving average for 3 months from 2015 to 2018.

The data shows the trend that during the period of Sept-Oct-Nov, the sales prices have increased constantly. On the other hand, during Mar-Apr-May the prices have fell drastically. Although the prices on an average were highest during March for 3 years.

III. CONCLUSION

The price for America's beloved savory fruit continues to rise as global supply wanes near the top of a season in California, Peru and Mexico, but prices will come down as planting begins again in California and Mexico, which supplies 80 percent of America's avocado obsession.

It'll be "tight for subsequent few weeks then Mexico will start to urge into its new bloom and regular crop...," California-based avocado marketer Gary Caloroso told The Packer. "...then we'll start to ascertain increased volume begin of Mexico."

Relief can't come in time for guac fans. the typical retail price of a Hass avocado is \$1.58—up 43 cents, or nearly 40 percent—this year. Organic varieties now retail for about \$2.99, a \$1.33 hike from their previous price, or roughly 80 percent.

This surge charging is to be expected, consistent with The Packer. California just bound up its avocado season, and Peru is nearing its own conclusion. It's simple economics: a reduced number of avocados and an increased demand means prices will rise.

With prices still high, some restaurants are mixing the avocado pulp with fresh avocados within the meantime—call it the a-faux-cado fix.

Avocado prices haven't deterred avid fans, however; they're consuming about 1.65 billion pounds of avocados a year, consistent with the Hass Avocado Board.

REFERENCES

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