

Avocado – Superfood and Environmental Killer

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✓ Fact Checked

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STORY AT-A-GLANCE

- › Avocados have become immensely popular in the U.S., Europe and China due to their many nutritional benefits and taste
- › Each avocado requires 70 liters (18.49 gallons) of water to produce, which means the fruits can be environmentally destructive
- › In drought-prone Petorca province in Chile, avocado plantations have diverted and stolen water, causing streams to run dry and harming local people
- › Water conservation activists in Chile opposing the water theft receive threats and little government support
- › In the state of Michoacan, where 80% of Mexico's avocados are produced, cartels have crowded into the business and terrorized local people

Avocados are one of the healthiest foods you can eat. Rich in monounsaturated fat, fiber, magnesium, potassium, B vitamins, vitamin K, vitamin E and carotenoids, they not only reduce hunger and fight obesity but also contain avocatin B, a molecule with cancer-fighting properties. Studies have found avocatin B fights acute myeloid leukemia by targeting leukemia stem cells.¹

But a 2018 documentary, "Avocado – A Positive Superfood Trend?,"² from the German public broadcast company DW, reveals a side to avocados that is underreported: environmental destruction. The super fruit that has become so popular in the last decades is a water hog.

Each avocado requires 70 liters (18.49 gallons) of water to produce compared to an average of 22 liters (5.8 gallons) to grow an **orange** and only 5 (1.32 gallons) to grow a tomato.³

In drought-prone areas like Chile's Petorca province in the Valparaíso region, a three-hour drive north of the capital Santiago, such water requirements from large-scale avocado operations have caused environmental destruction and impoverished local farmers.

While many countries in the world have a love affair with the **avocado**, "Avocado — A Positive Superfood Trend?"⁴ shows an unethical and environmentally destructive side to the crop that may make you think long and hard about where your avocados come from.

Scarce Water From Chile Shipped to Europe

Chile's Petorca province in the Valparaíso region has always been a dry area. In fact, in the summer drought is so severe that a state of emergency is often declared.⁵ Still, until the mass growing of hundreds of hectares of avocados by rich exporters, poor farmers could still make a living raising their crops and keeping livestock. (One hectare is 2.47 acres.)

Only since huge avocado plantations invaded the Chilean region have the streams that poor farmers and rural people relied on for water dried up, forcing them to rely on trucked in water to survive, says the film.

How have rich avocado exporters diverted and sometimes unabashedly stolen the water from the poor people? They have done it in two ways, the film explains. First, Carlos Estevez, director of the Chilean Water Authority, admits that state-issued water licenses are essentially auctioned and "can be resold to whoever is offering the most money."

He adds that they are lifelong rights. Secondly, in addition to the state authorized auctioning of water rights, avocado tycoons divert water from illegal underground channels. At least 65 such underground channels were found by the Water Authority's

own report to siphon water from rivers to avocado plantations.⁶ But, when water thieves are caught, the penalties they receive are trifling, says the film.

To demonstrate the illegal practice, Rodrigo Mundaca, a water conservation activist who appears in the film, surreptitiously enters an area where one such illegal underground channel is located. A pipe can be seen directly flowing toward the avocado growers' lands. Mundaca throws a rock into the well it pulls from and it splashed as it hits the stolen water.

A Mayor and Activists Resist the Water Theft

Gustavo Valdenegro Rubillo, the mayor of Petorca, says the avocado industry settling in the area initially looked fortuitous but not for long:⁷

"When the big avocado firms appeared, starting around 2006, the 'green gold' they cultivated initially was seen as a potential boom for Petorca, the three-time mayor said. 'It was going to be the panacea. We were going to have a better life and better jobs,' he said ...

But residents in the region's hard-scrabble towns said it is mainly the avocado producers who have grown richer, and that many of the jobs they have created are short-term employment, not the steady work locals had hoped for."

The mayor supports local water conservation activists but says his hands are tied when it comes to mediating with the massive avocado growers. In a meeting, he tells local Petorca citizens that he approached them and asked if they would be willing to share water in times of drought. They unequivocally said no; profits were their only interest.

Meanwhile, water conservation activists receive threats and, says Mundaca, they are called "ecoterrorists" and "revolutionaries." Veronica Vilches, president of the nonprofit San Jose Water Cooperative, which provides water to 1,000 people from a well close to the avocado growers, says her group has experienced government reprisals.

"It's because we resisted when they tried to force us to give our water to a private company," she says, adding, "Our water is for the people, the community."

Blight Exists Next to Booming Agriculture

The images of barren, drought-blighted land coexisting next to lush avocado farms in "Avocado – A Positive Superfood Trend?" is striking: An area where one stream once flowed is now desiccated land with a garbage dump.

In 2019, the agriculture ministry reported that 106,000 animals have died from lack of water and food and about 37,000 farmers are at risk from the drought.⁸ While the avocado farms bloom, surrounding areas are desolate, reports KCET:⁹

"As residents' demands have not been met, many have been forced to rely on water brought to them in cistern trucks twice a week. Each individual has the right to 13 gallons per day, and according to Mundaca more than 60% of the population of Petorca relies on such deliveries – which are often dirty or heavily chlorinated.

Carolina Vilches, who manages the water resources division of Petorca's municipal government, believes the answer lies in addressing the root of the issue rather than allaying it further with short-term measures: 'It is important to monitor water levels, democratize resource management and prioritize its uses.'"

Before the mega avocado farms, Zoila Quiroz, a farmer in the film, had 300 avocado trees, apple and apricot trees and enough water to raise cows and goats for milk and cheese. Now, her land is barren. With water trucked in twice a week, showering is a luxury in the summer and laundry can only be done once a month, she says.

Vilches agrees about the hardships. "People get sick because of the drought – we find ourselves having to choose between cooking and washing, going to the bathroom in holes in the ground or in plastic bags, while big agri-businesses earn more and more."

In addition to the water abrogation, there are two other negative environmental effects of the avocado boom. Avocados are shipped in special air-conditioned containers, which take a further environmental toll. And, since consumers want ready-to-eat avocados, they are ripened in "huge temperature controlled warehouses that simulate the humidity and heat of their natural environment."

Images of row upon row of warehoused, ripening avocados show one of the pitfalls of the Chilean avocado industry – along with the fact that there's nothing natural about growing hundreds of hectares of only one crop, a practice called monoculture.

Gourmet Heaven for the Instagram Generation

Avocados have gone from a very popular food that is also good for you to almost a cult. Sales have soared in Europe, the U.S. and China.¹⁰ Here is how Vice's Munchies describe the near obsession, especially among the young:¹¹

"Is it possible to remember a time before full avocado saturation? From the piles of guac that crown our nachos to the toasts that crowd our Instagram feeds, the beguiling green fruit has become as ubiquitous on our grocery lists as eggs and milk.

Hell, people are even using avocados to hide engagement rings and propose to their partners – people we don't know and wouldn't willingly fraternize with, just to clarify."

There are now avocado-themed restaurants where all dishes include the popular fruit. One of the first, run by Dutch marketing experts, is found in Amsterdam, according to the film. "We didn't want to open another burger place or another pizza place," says Ron Simpson, owner of the new restaurant chain The Avocado Show.

"We are ready to develop the entire franchise formula" and many more restaurants are in the pipeline, he says. But one news outlet, the Independent, cautions against blaming a particular, in vogue, food or young people's eating habits for the environmental destruction seen with avocados:¹²

"The tone is reminiscent of a 2013 debate about quinoa, when reports surfaced that demand for quinoa was driving up prices in its native Andean region, raising concerns about whether poor Peruvians and Bolivians could afford to eat it.

'Can vegans stomach the unpalatable truth about quinoa?' demanded one indignant op-ed ... but the criticisms don't always stand up to scrutiny. Studies later found the suggestion that rising quinoa prices were starving poor farmers was wrong."

Clearly, most of the fault lies with unethical agricultural practices.

Avocado Growers and Marketers Defend Their Business

When asked by filmmakers if his Petorca operations are causing water shortages among the poor, Matias Schmidt, one of Chile's biggest avocado exporters, says he doesn't know "to what extent" there really exists a water shortage. He also admits he has to drill down 120 meters (393.7 feet) into the ground to get water for his avocados.

Francisco Contardo-Sfeir, an avocado marketing manager, takes the denials a step further. The producers always strive to make sure there is plenty of water "left over," he says.

"For one, they save money if they use the least possible water per plantation and per tree." The myth that ethical practices are in food producers' interests so they will self-police is used with many egregious industries including animal-abusing **concentrated animal feeding operations** (CAFOs).

The film ends at a produce trade show in Germany. Ethical avocado buyers and traders like Jan Willem Verloop of Nature's Pride tell filmmakers that they avoid the fruits when they are sourced from Petorca because of the water issues.

But Chilean exporter Diego Torres from ProChile Germany, after claiming that all exports are sustainable and ethical, fumbles when asked by filmmakers about the sustainability

of exporting avocados from Petorca. "I don't know about that," he says dismissively.

Five Years Later Not Much Has Changed

Five years after the feature film was made, the drought is in its 13th year and the rivers are still dried up, plantation owners are still taking what little water there is in Petorca,¹³ and critics are still reporting on and writing about the fallout of the monoculture avocado industry.

However, while avocados are still in hot demand worldwide, production is down — mainly due to the drought, although a winter frost factored in, too. Interestingly, the industry itself isn't taking much responsibility for draining the rivers.

Rather, in 2022, they are now citing a study¹⁴ by the Regional Water Center for Arid, Semi-arid Zones in Latin American and the Caribbean that claims Chilean avocado producers have moved "toward a more sustainable and regenerative agriculture." Saying adult avocado trees absorb CO2 and release oxygen, the study concluded:

"One of the most original findings of the report was the positive effects of the surrounding crops, considering the improvement of the soil as well as the interaction with both native flora and fauna.

Although when the planting of avocado trees begins there is a change of the vegetation, the study concluded that in the medium term a new ecosystem is generated with greater vegetable coverage compared with the original, which can contain diversity with a high presence of microfauna, pollinating insects and native fauna."

While this might be a pat on the back for avocado plantation owners, it does nothing to solve the water crisis or return the rivers back to what they were before the big plantations moved in and took over the water.

Avocado Problems in Another Country

Chile is not the only country where the growing of avocados has produced social upheaval and suffering. Episode 1, "The Avocado War," in season 2 of the Netflix series *Rotten*,¹⁵ shows how the success of avocado plantations in Mexico – the world's top grower – led to its infiltration by organized crime. Here is some history from a Canadian journalist:¹⁶

"For a long time, high tariffs kept Mexican avocados out of the United States. But with the passage of the free trade agreement between the United States, Canada and Mexico in the early 1990s, avocados by the ton began pouring into American marketplace ...

... When a local drug cartel tried to muscle in on the trade, the Mexican government intervened, but ineffectively. Criminals forced farmers to establish protective self-defence forces, but the struggle continues and Michoacan is still considered a dangerous area. As a result, the U.S. State Department advises travelers to avoid it."

In the state of Michoacan, where 80% of Mexico's avocados are produced, as many as four truckloads of avocados are stolen every day because cartels consider the fruit as lucrative as drugs, and invade into the trade.¹⁷ "The Avocado War" shows how avocado farmers have been forced to establish their own protective "police" forces to defend themselves against the cartels and reveals the efforts have not always been successful.

Locals often cannot tell who the "good" or "bad" guys are, as the difference between police and criminals blurs.¹⁸ It is sad to think such a healthful and delicious food can bring such suffering and environmental destruction. On a personal note, it's important to keep your habits in line with what these informative documentaries are trying to tell you.

Further, when purchasing avocados, seek sources that are producing the fruit responsibly, and encourage your friends, family and local restaurants to do the same. You can even learn how to grow avocados in your own backyard.

Sources and References

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