



Everything
YOU'VE HEARD ABOUT
Cotton
IS WRONG

Refuting "Alternative Facts"
About
Cotton



Alternative Fact 1: Cotton uses 25% of the world's pesticides.

Why It's Wrong: There is no organization that monitors the application of pesticides. The sales of pesticides are tracked. According to Informa, global cotton production accounted for 5% of pesticide sales in 2016.

Alternative Fact 2: Cotton production requires excessive amounts of water.

Why It's Wrong: Cotton is a heat- and -drought-tolerant crop. According to Water footprints of nations (Hoekstra, A. Y. & Chapagain, A. K. (2007), global cotton production accounts for 3% of agricultural water.

The same source estimates that 50% of the global cotton crop relies on rainfall, alone, to meet its water needs. That percentage jumps to 60% for U.S. cotton crops (1961 to 1991; Data from NRCS, NOAA and Oregon State University).

Based on data from the 2015 Life Cycle Assessment of Cotton Fiber & Fabric, it takes more water to grow an acre of lawn grass than an acre of cotton.

Alternative Fact 3a: It takes 1,800 gallons of water to grow enough cotton to make a pair of jeans.

Why It's Wrong: To calculate how much water it takes to grow enough cotton to make a pair of jeans, you have to consider the amount of water it takes to grow the fiber. Conventional production tends to produce more fiber per acre than organic. It is important to remember that half of the global crop relies on rainfall.

| | Conventional | Organic |
|---------------|-----------------|-----------------|
| | 1,135.0 gallons | 2,641.0 gallons |
| Adj. Rainfall | 567.5 gallons | 1,320.5 gallons |

Calculated using data from the 2015 Life Cycle Assessment of Cotton Fiber & Fabric



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Alternative Fact 3b: It takes 400 gallons of water to grow enough cotton to make a tee shirt.

Why It's Wrong: To calculate how much water it takes to grow enough cotton to make a tee shirt, you have to consider the amount of water it takes to grow the fiber. Conventional production tends to produce more fiber per acre than organic. It is important to remember that half of the global crop relies on rainfall.

| | Conventional | Organic |
|---------------|--------------|-------------|
| | 290 gallons | 660 gallons |
| Adj. Rainfall | 145 gallons | 330 gallons |

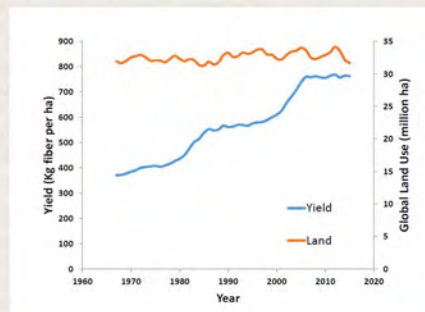
Calculated using data from the 2015 Life Cycle Assessment of Cotton Fiber & Fabric

Alternative Fact 4: Cotton's excessive water needs led to the draining of the Aral Sea, once the worlds fourth-largest lake.

Why It's Wrong: According to The Aral Sea Crisis, a study by Columbia University, in the 1960s, the Soviet government deliberately diverted the flow of the two rivers feeding the Aral Sea. The goal was to transform the surrounding desert into farmland to grow a number of crops, including cotton. It was a poor engineering decision, not cotton's water requirements, that led to the depletion of water in the Aral Sea.

Alternative Fact 5: Cotton occupies lan that should be used to grow food for a growing population.

Why It's Wrong: Cotton crops provide food as well as fiber and is regulated as a food crop in the United States. Over the past 50 years, the land used to grow cotton has remained relatively stable, although the volume of fiber grown has increased.





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Alternative Fact 6: Conventional cotton farming is industrial farming.

Why It's Wrong: There are 18,155 cotton farms in the United States. Of these, 69% are family farms. An additional 21% are partnerships, many of these are family partnerships.

Combined, family farms and partnerships make up 90% of U.S. cotton fiber grown, and 87% of cotton fiber sold.

Source: USDA 2012 Ag Census

Alternative Fact 7: Cotton is responsible for an increase of farmer suicides in India.

Why It's Wrong: While some claim there has been an increase in Indian farmer suicides since the introduction of Bt cotton there in 2002, an extensive study of the situation Dr. Matin Qaim provides evidence to the contrary. In his study, *Genetically Modified Crops and Agricultural Development*, Qaim shows that the instances of Indian farmer suicides have remained flat since 2002, even as acres planted with Bt cotton have increased.

Alternative Fact 8: Chemicals used to grow cotton can permeate the skin through cotton apparel and home textile.

Why It's Wrong: Insecticides are used on cotton to protect the plants while they are young and vulnerable. Once the boll opens to reveal the fibers, the plant is mature and no additional protection from insects is required.

Additionally, from harvest to finished textile item, cotton undergoes a series of washings that would help eliminate any farm chemical residues that might be present. A short animation explaining this and other reasons can be found on www.cottontoday.com.

Alternative Fact 9: "Cotton Kills"

Why It's Wrong: This phrase is still used by rangers in some U.S. national parks and elsewhere. It refers to the fact that cotton is very absorbent, making it a potentially unsafe fiber for hiking and camping. The risk is getting caught in a rainstorm and having the apparel cling and potentially lead to hypothermia. However, advances in textile chemistries have resulted in innovative finishes that make cotton water- and wind-resistant, but still breathable.



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Alternative Fact 10: "Cotton is the Enemy"

Why It's Wrong: This trademarked phrase was once used by the athletic apparel brand Under Armour to refer to the fact that cotton did not wick moisture away from the skin as well as synthetics. However, advances in textile technologies now make it possible for cotton to perform as well, or better, than some synthetics as an athletic apparel fiber.

It is worth noting that Under Armour's Charged Cotton line of apparel utilizes just such a technology.