STOP. A GLOBAL TOBACCO INDUSTRY WATCHDOG

Fact sheet

Global

May 2026

Flue-Cured Tobacco Fact Sheet

Flue-curing tobacco leaves isn't just a method of processing tobacco. It's a product design choice that drives addiction, deforestation and exploitative labor systems.

As smoking rates have fallen in many parts of the world, demand for tobacco leaf was projected to fall, as well. However, the latest data suggests the tobacco industry is sustaining, and even growing, the demand for tobacco leaf.

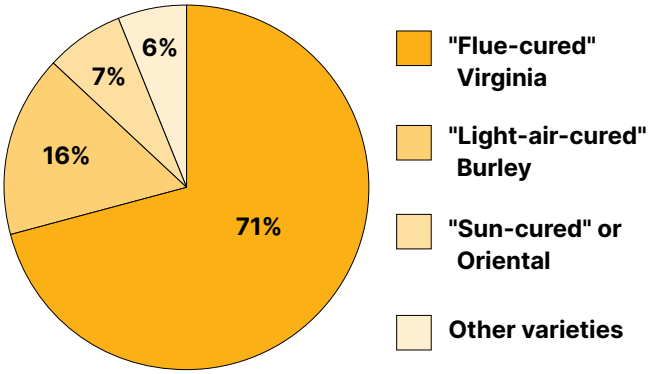
Growing tobacco causes significant environmental harm, but flue-cured tobacco in particular is a major driver of deforestation and greenhouse gas emissions, and keeps people hooked on the industry's harmful products.

Virgina tobacco leaf ready for harvest.
Photo by Pollinator / CC BY-SA 3.0

What is flue-cured tobacco?

Flue-cured tobacco is tobacco leaf that is dried (cured) in closed barns that are heated by chimneys (flues) that run through the barn. The heat is usually produced from fires maintained outside of the barn.[1]

- Since the Virginia variety of tobacco leaf is most often used in flue-curing, flue-cured tobacco is also commonly known as flue-cured Virginia (FCV).
- Most commercial cigarettes contain FCV.
- FCV makes up an estimated 71% of the tobacco leaf market, leading over the other major tobacco leaf varieties, Burley and Oriental.[2]



FCV is a global problem because it is grown all over the world.

- FCV became a major cash crop in the United States in the 1800s, but is now grown in more than 120 countries.[3]
- Today, the major producers of FCV include Brazil, China, India, the United States, Zimbabwe, Argentina and Pakistan.[4, 5, 6, 7]
- FCV is also one of the leading tobacco crops grown in Bangladesh, Indonesia and the Philippines, and is increasing in Türkiye.[8, 9, 10, 11]

FCV is very profitable for the tobacco industry.

- FCV drives demand for tobacco industry products. The leaf type and curing process result in higher sugar content, creating a sweeter taste, and produce lower nicotine content than Burley (though still enough to be highly addictive).
- The tobacco industry instructs farmers to carefully control fertilizer in order to create the precise nicotine level that will be both addictive and palatable.
- Flue-curing dries leaves more quickly than air-curing, which can take up to two months, and sun-curing, which can take at least two weeks.[12] While flue-curing is resource- and time-intensive, it is the fastest method of curing.

FCV is especially hazardous to the environment.

- Flue-curing requires burning millions of tons of fossil fuels. Wealthier farmers use coal, contributing to greenhouse gas emissions. In China, an estimated 3–4 million tons of coal are burned to flue-cure tobacco every year.[13]
- Poorer farmers can only afford wood, which they often must take from nearby woodlands, contributing to significant deforestation.
  - Eight million tons of firewood are used in flue-curing tobacco every year.[14]
  - One tree is burned to cure just 300 cigarettes' worth of tobacco.[15]
- The poorest farmers are often blamed for the associated deforestation, even though they are not paid enough by tobacco buyers to purchase alternative sources of heating fuel or to look after tree saplings supplied as part of industry corporate social responsibility efforts.

A Zimbabwean flue-cured tobacco facility. Photo by Chris Sheppard / Shutterstock.com

Flue-Curing Is Devastating the Miombo Woodlands

The Miombo woodlands, which span Angola, the Democratic Republic of the Congo, Malawi, Mozambique, Tanzania, Zambia and Zimbabwe, are under considerable threat due to FCV.[16] Every year, 60,000 hectares of woodlands are lost to curing tobacco in Zimbabwe alone. This rapid deforestation threatens irreversible damage to ecosystems and perpetuates climate change.[17, 18]

FCV deepens addiction and sustains the tobacco epidemic.

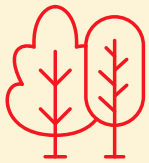
- The higher sugar content of flue-cured leaves creates a sweeter, more enjoyable flavor, making smoking more appealing.
- Nicotine levels are ideal for hooking users. The lower nicotine content, while still addictive, creates a less harsh smoking experience and reduces the unpleasant effects of nicotine, such as light-headedness, rapid heart rate and nausea.[19, 20] It also contains more nicotine than the Oriental variety of tobacco leaf, making flue-cured tobacco more "satisfying" to smoke.

FCV is harmful to farmers.

- The growing and processing of flue-cured tobacco is highly labor- and time-intensive, particularly compared to Burley.
- Unfair contract systems in some countries result in farmers not earning enough from their crop to hire laborers, so they enlist family, including children, to help.
- Some farmers have reported becoming sick from the curing process, describing dizziness, vomiting and insomnia.
- Agrochemicals are essential for tobacco companies to pay good prices for FCV. Even if less fertilizer is used than for the Burley variety, there is potential for agrochemicals to damage farmers' health and the environment.[21]

Industry-proposed solutions are not working.

History has shown that the "solutions" Big Tobacco proposes to the problems its products cause—whether related to health, labor conditions or the environment—are not effective. Often, they serve to benefit tobacco companies' public image, but fail to address the root causes of the problem at hand.

Industry-proposed solution	Barriers
 **Reforestation programs** • Example: British American Tobacco Bangladesh's "Bonayan" program that distributes saplings around operational areas[22]	• Farmers have reported not having the time or resources to tend to saplings. • Eucalyptus seedlings provided to farmers in the Miombo woodland area are non-native and do not support biodiversity. • Indigenous tree seedlings, when provided, take a long time to mature and provide good provision for biodiversity.
 **Efforts to make flue-curing more sustainable** • Example: Philip Morris Brazil's program to use "100 percent firewood from reforestation" and encourage growers to diversify their fuel sources[23]	• As the industry promotes programs for commercial estate farmers to phase out coal as fuel for flue-curing, wood briquettes may become a preferred source of fuel, diverting wood from vital uses such as domestic cooking and/or increasing pressure on receding woodland.[24, 25, 26] • Solar power is underdeveloped and is too expensive for smallholder farmers to implement.
 **Crop diversification programs** • Example: Imperial Tobacco's efforts to facilitate farmers growing alternative crops in Malawi[27]	• Industry programs ultimately aim to encourage farmers to grow other crops alongside—rather than instead of—FCV.
 **Paying farmers more for flue-cured tobacco** • Example: Philip Morris International's Living Income program, which prioritizes farmer incomes in Mozambique, India, Indonesia and the Philippines[28]	• Higher pricing attempts to address some of the economic harms of growing flue-cured tobacco, but perpetuates environmental damage by encouraging farmers to continue growing FCV.

Policymakers can protect the environment and public health by regulating FCV.

They can do this by:

Regulating FCV as an ingredient.

Parties to the global health treaty, the WHO Framework Convention on Tobacco Control, are obligated to take measures to reduce the demand for tobacco. Many governments work toward this by regulating ingredients in tobacco products and banning those that make tobacco use more appealing, such as flavors. By categorizing FCV as an ingredient, governments can regulate or ban its use, effectively lowering demand for this harmful crop.

To alleviate possible financial harm to farmers due to lower demand for FCV, international organizations and governments must simultaneously assist farmers in transitioning to viable alternative livelihoods.

Holding the industry financially accountable for the environmental harm it causes.

While tobacco companies should not be allowed to drive or influence environmental initiatives, due to their history of being ineffective and serving as public relations opportunities, they should be held financially accountable for the pollution, deforestation and waste they cause.

Endnotes

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About STOP (Stopping Tobacco Organizations and Products)

STOP is a global tobacco industry watchdog whose mission is to expose the tobacco industry tactics that undermine public health. Comprised of a network of academic and public health organizations, STOP researches and monitors the tobacco industry, shares intelligence to counter its tactics, and exposes its misdeeds to a global audience. STOP is funded by Bloomberg Philanthropies as part of the Bloomberg Initiative to Reduce Tobacco Use. For more information, visit exposetobacco.org.