



GOLDEN LEAF The Costs of Tobacco Farming
BARREN HARVEST

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For more information on global tobacco issues, please visit our website at:
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Cover Photo: Woman fertilizing tobacco plants by hand in Morogoro, Tanzania.
(Ron Giling/Lineair Foto/Peter Arnold Inc.)

Back Cover: Tobacco auction floor, Zimbabwe. (Carlos Guarita/Still Pictures)

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INTRODUCTION

For decades, cigarette companies have been encouraging countries and farmers to grow more tobacco. In search of ever-lower prices, they have been promoting tobacco growing as a panacea, claiming that it will bring unparalleled prosperity to farmers, their communities, and their countries.

Indeed, the expansion of tobacco farming encouraged by the major cigarette companies has produced a glut in global tobacco markets, as more and more farmers compete with each other to sell tobacco leaf to the companies at lower and lower prices. The results for tobacco growers in developing countries have been disastrous. While a few large-scale tobacco growers have prospered, the vast majority of tobacco growers in the Global South barely eke out a living toiling for the companies. Many tobacco farmers are now stuck producing a crop that is labor and input intensive and brings with it a host of health and environmental dangers. Meanwhile, the cigarette companies continue to downplay or ignore the many serious economic and environmental costs associated with tobacco

cultivation, such as chronic indebtedness among tobacco farmers (usually to the companies themselves), serious environmental destruction caused by tobacco farming, and pesticide-related health problems for farmers and their families.

The major cigarette companies have tried to vilify the public health community and convince tobacco farmers and national policymakers that measures designed to reduce the toll of death and disease from tobacco, rather than company actions, are the true cause of tobacco farmers' increasingly desperate plight. For example, the companies are trying to characterize current intergovernmental negotiations on a global tobacco treaty (the Framework Convention on Tobacco Control) as an

immediate threat to the well-being of developing countries and tobacco farmers because it will reduce global smoking levels and thereby reduce the demand for tobacco leaf. The companies have taken the opportunity to paint themselves as the true friends of developing countries and attack their many critics as insensitive to the needs of poor farmers.

However, like past efforts to obscure the addictive nature of nicotine or deny the link between tobacco use and chronic diseases and death, the companies' efforts to portray global tobacco control efforts as a threat to tobacco farmers is based on public relations spin rather than fact. Recent research conducted by the World Bank has shown that, contrary to tobacco industry claims, global tobacco control efforts are not a threat to developing countries or tobacco farmers. As this report shows, even with global demand for tobacco leaf rising, the inescapable problems with tobacco farming make it a losing investment for most countries and farmers.



TOBACCO GROWING GOES GLOBAL

Efforts by multinational cigarette companies to increase and improve tobacco production in the developing world have been designed to feed the growing needs of their overseas markets with more readily available and cheaper tobacco leaf. Over the past twenty years, the cigarette companies have engaged in a massive buying spree throughout the world, spending billions of dollars building new factories, entering into joint-venture agreements with private and government-owned tobacco companies, and buying formerly state-owned factories, usually at fire-sale prices. At the same time, the companies have been working closely with U.S.-based leaf companies to expand the cultivation of lower-priced tobacco to supply their new factories. Today, Philip Morris, British American Tobacco (BAT) and Japan Tobacco each own or lease manufacturing facilities in over 50 countries, and purchase tobacco in dozens more.¹

BUYING LEAF

Leaf buyers stalk the world's largest tobacco auction floor in Harare, Zimbabwe. (Carlos Guarita/Still Pictures)



The world tobacco leaf market is dominated by three U.S.-based leaf companies: DIMON, Standard Commercial, and Universal. These companies—which select, purchase, process, and sell tobacco—work with the cigarette companies to determine which countries will produce how much tobacco leaf and what kind. As *The Washington Post* reported in 1997, in many countries the leaf companies get down payments from cigarette companies to deliver a set amount of leaf. “They then use that down payment to provide cash advances to growers in countries such as Brazil,” said the *Post*, “helping to finance farmers there without putting their own funds at risk.”²

In Brazil, DIMON pays out \$100 million a year to provide tobacco farmers with

GLOBAL EXPANSION

Tending tobacco plants in the Dalat area of Vietnam. With the help of foreign companies, countries like Vietnam saw a surge of production the 1980s and 1990s. (Jean-Leo Dugast/Panos Pictures)

fertilizer and other inputs. The company also agrees to purchase the entire crop, and in some cases finances the construction of curing barns.³ In Tanzania, DIMON contracts with more than 30,000 tobacco growers, providing similar assistance.⁴ In Poland, Philip Morris established a growers’ fund for 18,000 tobacco farmers to improve the quality of the Polish crop,⁵ while BAT has set aside \$3 million for no-interest loans to Polish farmers.⁶ In China, Philip Morris sent 12 American experts to provide guidance to local growers to increase the production of tobacco for use in the company’s Marlboro cigarettes.⁷ Argentina.

Azerbaijan. India. Malaysia. Turkey. Vietnam. The list of countries that are receiving loans, technical assistance, and infrastructure investment from the leaf dealers and cigarette companies appears endless.

Lower Prices, Market Instability

Because of the companies’ efforts, worldwide tobacco production has skyrocketed over the past few decades, increasing by 59 percent between 1975 and 1997. For the most part, this increase has occurred in developing countries, where production grew by 128 percent

TOBACCO FARMING

The tobacco plant originated in the Americas, where native peoples smoked tobacco during ceremonies and used it for medicine as far back as 6000 BC. Offered to the sailors who accompanied Christopher Columbus in his first voyage to the Americas in the late 15th century, tobacco became fashionable in Europe in the middle of the 16th century when adventurers and diplomats like Jean Nicot de Villemain, France's ambassador to Portugal (after whom nicotine is named), promoted its use.

At first, tobacco was produced mainly for pipe smoking, chewing, and snuff. The first successful commercial crop was cultivated in the British colony of Virginia in 1612 and within seven years became the colony's largest export, grown and harvested primarily by slave labor. Cigarettes, which had been around in crude form since the early 1600s, became widely popular in the United States only after the Civil War, with the introduction of "bright" tobacco, a specially cured yellow leaf grown in Virginia and North Carolina.¹

Initially cigarettes were hand-rolled at the average rate of three a minute. But the invention in 1880 of the first working cigarette-making machine, which produced 200 cigarettes a minute, gave birth to the modern cigarette industry. Today the fastest machines can pump out 16,000 cigarettes a minute.² But despite the advances in technology at the factory, growing tobacco on the farm is still a back-breaking, labor-intensive job.

Growing Pains

Despite its hardiness as an adult plant, the tobacco seedling requires great care. First a seedbed must be carefully ploughed, and then sterilized with ashes or gas to kill any unwanted insects or weeds. Tiny tobacco seeds (about 10,000 seeds weigh 1 gram) are then spread on the beds and covered with hay or cloth to protect them. After three or four months, seedlings sprout to a height between 25 and 40 centimeters, at which point they are transplanted into the fields, one at a time. As many as 25,000 seedlings are planted per hectare on ridges spaced about a meter apart.

The top of the plant is pinched off when it reaches a specific height to improve leaf quality and quantity. For five to six weeks, growers have to remove any new growth on the plant to ensure that the selected leaves mature fully. At the same time, the oozing sap produced by the tobacco plant attracts a variety of predatory insects that must be removed and killed. Some of these insects, like the hornworm, are camouflaged green making them hard to find. On average, growers must tend between 250,000 and 400,000 individual leaves on every hectare.³



TENDING THE CROP

Tobacco plants require great care in order to thrive. Nicaragua. (Jon Spaul/Panos Pictures)

The process of harvesting can be extremely labor intensive. If high-quality leaf is desired, a technique called "priming" is used, in which only three or four leaves are removed at a time, starting at the bottom of the plant. The uppermost leaves, which have the highest nicotine content, are harvested last. Tobacco must then be dried, or "cured." This typically happens in specially designed steep-roofed curing barns that are between 5 and 6 meters long and 8 meters high. The leaves are tied together in "hands" of three and then hung over tiered wires for a week while the water is leached out of them with the help of heat. In the past, open fires were tended under the leaves. Today, many curing barns use flues to deliver hot air from covered fires. Like the growing process, this is a labor-intensive job because the temperature inside the barn needs to be carefully monitored 24 hours a day since over-cured leaves lose flavor while under-cured leaves can be attacked by mold. Finally, when the leaves are ready, the barn is opened up to allow the leaves to reabsorb some moisture, making them pliable enough to be removed by hand, sorted by leaf characteristics, packed into bales, and taken to buyers.⁴



between 1975 and 1998, while falling 31 percent in developed countries. While U.S. tobacco production fell by 18 percent between 1975 and 1997, countries like Brazil, China, Malawi, Vietnam, and Zimbabwe all registered triple-digit growth. Today, tobacco is grown in more than 100 countries, including 80 developing countries, on a total of 5.3 million hectares of arable land.⁸

In 2000, three countries accounted for just over half of global production: China (34 percent of global production), India (10 percent), and Brazil (9 percent). The United States, which up until 1997 was the world's second largest tobacco producer, now accounts for 7 percent of global production. Altogether the top 12 tobacco-growing countries account for approximately 80 percent of global production.⁹

OVERSUPPLY

The expansion of global tobacco production has hurt tobacco-dependent countries like Zimbabwe, pictured above. (Neil Cooper/Panos Pictures)

According to BAT Managing Director Ulrich Herter, "there is no reason why availability of leaf will be an issue in the future. Obviously there could be what we refer to as 'source drift'. This means lower production in one country and increased production elsewhere. I believe the issue is more likely to be one of a surplus of tobacco rather than a shortage as we go forward into the next century."¹⁰ The "source drift" that Herter mentions results from the companies determining from year to year the needs of their manufacturing facilities and then using their significant financial assistance and technical expertise to ensure that tobacco reaches those factories in the cheapest manner possible. According to Robert

Jones of Universal Leaf Tabacos in Brazil, the rush to expand "is one of the problems in this industry. Overproduction is cyclical, and it creates ups and downs in the market."¹¹

The massive increase in global tobacco production fueled by the tobacco industry has resulted in a worldwide oversupply of tobacco and a corresponding decline in prices. Between 1960 and 1989, the world price for flue-cured tobacco declined in real terms by between 1.1 percent and 1.7 percent per year. This trend accelerated between 1985 and 2000, according to the World Bank, when the real price per ton fell 37 percent to \$1,221 per ton.¹²

COMPANY PROFILES

Company: **British American Tobacco (BAT)**

Headquarters: **London, United Kingdom**
2000 Tobacco Revenues: **\$18.8 billion**
2000 Tobacco Profits: **\$4.2 billion**
Chief Executive Officer: **Martin F. Broughton**
2000 Salary: **\$1.9 million** (plus \$458,000 in deferred bonus, 178,602 ordinary shares, and 890,896 share options)¹

BAT was created in 1902 by the merger of two rivals: Imperial Tobacco and American Tobacco. In 1999 the company acquired Rothmans, making it the second largest private tobacco company in the world. The company has 86 factories and 23 leaf processing plants in 64 countries, and uses more than 700 million kilos of tobacco leaf a year. In 2000, the company sold 807 billion cigarettes in 180 countries worldwide. Its top brands include Benson & Hedges, Kent, Kool, Lucky Strike, and Rothmans.

Company: **DIMON**

Headquarters: **Danville, Virginia, U.S.A.**
2000 Tobacco Sales: **\$1.5 billion**
2000 Tobacco Profits: **\$18 million**
Chief Executive Officer: **Brian J. Harker**
2000 Salary: **\$400,000**; \$526,711 in total compensation

DIMON was formed with the 1995 merger of Dibrell Brothers (founded in 1873) and Monk-Austin (founded in 1907), two of the U.S.'s leading leaf tobacco dealers. It is now the second largest leaf processor in the world.

Company: **Japan Tobacco**

Headquarters: **Tokyo, Japan**
2000 Tobacco Revenues: **\$40 billion**
2000 Tobacco Profits: **\$1.7 billion**
Chief Executive Officer: **Katsuhiko Honda**
Salary: **N/A**

Japan Tobacco was created in 1898, when the nation's Ministry of Finance formed a bureau to monopolize the production of the tobacco crop. The purpose of the monopoly was to fund military and industrial expansion. The Japanese Finance Ministry still owns two-thirds of the company, which has the exclusive right to produce tobacco in Japan. In 1999, the company acquired the international operations of R.J. Reynolds, making it the third largest tobacco company in the world. The company makes some of the world's leading cigarette brands, including Camel, Kool, and Mild Seven.

Company: **Philip Morris**

Headquarters: **New York City, New York, U.S.A.**
2000 Tobacco Revenues: **\$49 billion**
2000 Tobacco Profits: **\$10.6 billion²**
Chief Executive Officer: **Geoffrey C. Bible**
Salary: **\$13.7 million**, plus stock option grants which were valued at \$32,120,927 in 2000

Philip Morris opened his London tobacco store in 1847 and by 1854 was making his own cigarettes. Today the company that bears his name is the biggest in the world and sells cigarettes in 180 countries, including seven of the top 20 brands outside the United States, such as Marlboro, the world's biggest-selling cigarette.

Company: **Standard Commercial**

Headquarters: **Wilson, North Carolina, U.S.A.**
2000 Tobacco Sales: **\$887 million**
2000 Tobacco Profits: **\$20.3 million**
Chief Executive Officer: **Robert E. Harrison**
Salary: **\$713,054**

Founded in 1910, this tobacco merchant is now the world's third-largest processor of leaf tobacco.

Company: **Universal Corporation**

Headquarters: **Richmond, Virginia, U.S.A.**
2000 Tobacco Sales: **\$2.4 billion**
2000 Tobacco Profits: **\$223.5 million**
Chief Executive Officer: **Henry H. Harrell**
2000 Salary: **\$1.5 million**; \$6,449,753 in total compensation³

Jaquelin Taylor founded Universal Leaf Tobacco Company in 1918 by merging six rival tobacco dealers. Today it is the world's largest independent tobacco leaf merchant, with operations in dozens of countries.

* Except where noted, all data have been sourced from company 2000 annual reports, company websites, and 10-K and Schedule 14A filings with the United States Securities & Exchange Commission.



By encouraging more and more countries to grow tobacco, the companies have succeeded in driving down the world price. Tobacco farmers must now compete not only with farmers in their own country but with farmers half way around the world. These price declines have meant lower revenues and shrinking profits for farmers, who are becoming increasingly vulnerable to the vagaries of the global tobacco market. A frost in one country or a devastating drought in another can cause the price of tobacco to rise. Conversely, a bumper crop in a major tobacco-producing country can send prices plummeting.

Developments in neighboring countries can also have an effect on leaf prices. Malawi, for example, recorded an unprecedented 14 percent drop in tobacco export earnings in the year 2000, despite the fact that the country had actually increased production by 19 percent. According to a report by the Tobacco Exporters Association of Malawi, increased smuggling of poor-quality Zimbabwean tobacco onto Malawi's auction floors largely contributed to the drop in price.¹³ Growers claimed that the leaf-processing companies were behind the smuggling in an attempt to force down

MAIN TYPES OF TOBACCO

Flue-cured tobacco (40 percent of world production): The name comes from the flues of the heating apparatus originally used in curing barns. This tobacco is yellow to reddish-orange and has a thin to medium body and a mild flavor. Flue-cured tobacco is used almost exclusively in cigarettes. A well-grown plant can reach a height of 130 centimeters and have 18–22 harvestable leaves. Flue-cured is grown in approximately 75 countries.

Fire-cured tobacco (20 percent of world production): Fire-cured tobacco is light to dark brown and has a medium to heavy body and a strong flavor. Its name originates from the smoky flavor and aroma received from firing it over open fires in curing barns. Fire-cured tobacco is used for roll and plug chewing tobacco, strong cigars, and heavy smoking tobacco.

Oriental tobacco (16 percent of world production): Oriental tobacco has a strong aroma and is used in heavier cigarette blends. The plant ranges in height between 90–150 centimeters, and has smallish leaves.

Light air-cured tobacco (11 percent of world production): Light air-cured tobacco includes burley and Maryland types, both of which are used mainly in cigarettes. Burley is normally cured without supplementary heat. Typically taller than flue-cured tobacco plants, light air-cured plants yield between 20–30 harvestable leaves. It is grown in around 55 countries, although fewer than half of those produce any significant amount.¹

the auction price of Malawian tobacco, which at one point in 2000 hit a historic low of \$10 per kilo.¹⁴

Economic policy measures taken in one country can also affect tobacco farmers in another. In Argentina, for example, tobacco sales plummeted 25 percent in 2000 after Brazil devalued its currency, making Brazilian leaf more attractive. Those farmers who did manage to sell their crop received approximately 16 percent less than the year before.¹⁵ Because of the tobacco companies' successful and ongoing efforts to expand tobacco production throughout the world, downward pressures on tobacco prices will continue despite the fact that global cigarette consumption is steadily increasing.

PUTTING TOBACCO ON A "DIET"

One of the most popular expansion processes today is the dry ice expanded tobacco process (DIET), which was invented by a Philip Morris joint venture in 1979. This involves soaking cut filler tobacco with liquid carbon dioxide, which solidifies at atmospheric pressure. Hot gases are then pumped into the mix, heating the tobacco, which causes the dry ice to vaporize and thus the tobacco to puff up. "If you send us rubbish, we will return only bigger portions of rubbish," says Phill Green, plant manager at BAT's Corby factory in the United Kingdom, which uses the DIET process.¹

In the past, expansion was also done with chlorofluorocarbons (CFCs) until their use was banned because of the harmful effect of CFCs on the ozone layer. Other companies have come up with new methods: the German tobacco company Reemtsma uses nitrogen in a process called INCOM, while Imperial uses isopentane instead of carbon dioxide in a process called IMPEX. All these methods claim to expand the volume of the tobacco by 60 to 100 percent.²

Less Tobacco, More Cigarettes

To reduce their need for tobacco leaf and put even more downward pressure on tobacco leaf prices, the major cigarette manufacturers have been aggressively developing and improving new technologies that allow them to use less tobacco leaf per cigarette. Some of these new technological procedures increase the vol-

GROWERS THREATENED

Tobacco farmers are threatened by the companies' continuing efforts to reduce the amount of tobacco in each cigarette. Bulgaria.
(Melanie Friend/Panos Pictures)

ume of a given amount of tobacco leaf so that less is needed to fill a cigarette. Others allow manufacturers to convert the sweepings from their factory floors into filler, or “expanded tobacco,” that tastes like natural tobacco and even looks like the original to the untrained eye.¹⁶

Kilo for kilo, expanded tobacco costs a little more than raw leaf tobacco but because less is used per cigarette, it is profitable for manufacturers. The ability to fill a cigarette with less tobacco means higher profits for the companies because they need to purchase less new leaf to produce a given amount of cigarettes. Phill Green, plant manager at BAT’s Corby factory in the United Kingdom, estimates that in the near future 10 percent of full-flavor brands, 20 percent of lighter cigarettes, and between 40 to 50 percent of ultralight cigarettes will have expanded tobacco.¹⁷ Allen King, former president of Universal Leaf Company, argues that in developed countries, cigarette companies have “pretty much achieved all the efficiencies they can.” In developing countries, however, there is plenty of room to reduce the amount of tobacco per cigarette.¹⁸

Scientists at the major tobacco multinationals have also been working for more than 50 years to figure out ways to follow the old adage “waste not, want not.” Enter reconstituted tobacco—available as slurry or paper—made from the by-products and waste from tobacco processing, such as tobacco stems, small tobacco particles, and tobacco dust.¹⁹ These parts of the tobacco plant are not palatable to smokers in their raw form, and must be reconstituted rather than put directly into the cigarette. As *Tobacco Reporter* puts it, “Stem has been traditionally been regarded as one of the less desirable parts of the tobacco plant. It produces harsh smoke and is difficult to process.”²⁰

In the slurry process (which makes up 30 percent of the reconstituted tobacco market) adhesives are added to ground



tobacco.²¹ But the most popular form of reconstituted tobacco is “paper tobacco” which comprises 70 percent of the market

and is gradually edging out the slurry process. “It’s basically the same process as making paper. You take the water sol-

FIGHTING THE GLOBAL GLUT

Governments in several developed countries maintain price support systems for tobacco that actually limit the amount of tobacco that can be grown in order to support and stabilize tobacco prices. The U.S. tobacco price support program, for example, has two key components: a price support system, to guarantee a minimum price for tobacco, and a marketing quota system, which limits the amount of tobacco each farmer can sell, thus limiting the overall supply of tobacco. Under the price support program, the government guarantees that tobacco farmers will receive a minimum price for their crop. If leaf buyers do not bid above the government rate, growers can sell their tobacco to a cooperative association, which then re-dries, packages, stores, and eventually sells the tobacco. Farmers and the tobacco companies contribute to a fund each year to cover any potential losses suffered by the cooperative associations as a result of their purchases of tobacco, ensuring that there are no taxpayer subsidies. In return for receiving a guaranteed minimum price for their tobacco, farmers agree to abide by a system of marketing quotas, which limits the overall supply of tobacco (and thus indirectly keeps prices higher).¹

By keeping U.S. tobacco prices artificially high, the U.S. tobacco price support program has frustrated attempts by the tobacco companies to further increase their profit margins. Although they publicly voiced support for the program, the companies worked for years to undermine it. In 2000, the companies took a more aggressive approach when they greatly expanded their contracting with U.S. farmers. U.S. tobacco farmers are concerned that the withering away of the program will lead to a precipitous drop in price, forcing them to produce more and more tobacco in order to stay in business. According to the United States Department of Agriculture, elimination of the program “would likely cause consolidation into fewer but larger, more mechanized tobacco farms, with reduced costs of production.”²

Bruce Flye, president of the Flue-Cured Tobacco Stabilization Corporation, told Congress in 1998 that if the tobacco program collapses, “We have been told by executives of a major cigarette manufacturer that we could expect prices to drop from an average of \$1.70 per pound to as low as 70 cents or 80 cents a pound.” This would create a “huge windfall” for the companies, said Flye, of around \$2 billion per year.³ It would also affect global tobacco prices, which are informally pegged to the U.S. price. The result would be an even greater supply of cheap tobacco and a consequent increase in the profits—and power—of the manufacturers.

According to Howard Montague, a tobacco farmer in Kentucky, “If they destroy the program, we’ll be at the mercy of the tobacco companies.”⁴ The companies would likely move exclusively to a contract system with large-scale growers for reduced prices, making it increasingly difficult for small-scale producers to compete. Such a scenario has led many U.S. public health groups to oppose the elimination of the price support system. The result of higher leaf prices in the United States “may help to raise the global price of raw tobacco leaf, offering better returns to farmers in low-income countries,” according to the World Bank.⁵

The elimination of the price support system could thus have serious international repercussions. The resulting fall in the U.S. price of tobacco would likely cause a boom in tobacco production in the United States.⁶ Without the current controls in the United States on who can grow tobacco commercially, large agribusiness conglomerates could begin to buy up tobacco lands and open new land for cultivation. Their ability to sell tobacco at a lower price would not only increase profits for the cigarette companies but drive tens of thousands of tobacco farmers out of business. This would force tobacco farmers in other countries to cut their prices still further in order to compete.

ubles out of the raw material until only fibers are left. That forms a sheet, and then the solubles are put back in,” says *Tobacco Reporter*.²² One of the latest methods for manufacturing reconstituted tobacco is to add tobacco materials directly to an ammonium solution. The resulting slurry is steam pressurized for up to five minutes and then depressurized rapidly to be formed into a second slurry

which is then cast into a reconstituted tobacco sheet.²³ Cigarette manufacturers then put these reconstituted tobacco sheets (which do not resemble tobacco leaf) through the expansion process. The sheets are “puffed up” to look like particle board and subsequently fed into giant mills that shave them into the little golden curls that look almost identical to natural cured tobacco leaf.

Manufacturers can add flavorings and other chemicals to the mix, allowing them to use larger quantities of lower-quality, cheaper tobacco leaf (or other plant parts) and greater amounts of reconstituted or expanded tobacco, because the additives mask the harsh nature of the smoke and help create flavors and characteristics that came before only from high-quality leaf.



POWER IMBALANCE:

Companies vs. Farmers

DANCING TO THE SAME TUNE

Buyers bid on tobacco in Harare, Zimbabwe. Farmers around the world charge that the companies collude to keep prices low.
(Carlos Guarita/Still Pictures)

Increasing the global supply of tobacco leaf to reduce worldwide leaf prices and destabilize tobacco leaf markets is only one way that the major cigarette companies and leaf dealers keep tobacco farmers in a weak and dependent position. Other ways that tobacco companies control farmers are through the systems under which tobacco is bought and sold—either by auction or contract. Under both of these systems, multinational companies (both leaf and cigarette companies) evaluate the quality or “grade” of tobacco to set purchase prices. Farmers complain that the companies typically “under-grade” and set low prices, but as the buyers operate as a monopoly or oligopoly, the farmers have no recourse but to accept whatever they are offered.

On the Auction Block

Under the auction system, at the end of the growing season farmers take their crop to auction floors, where the leaf companies bid against each other after inspecting the quality of the leaves and determining the grade. In many countries, one or two companies control over half of the market so farmers have little choice of where, or to whom, to sell their tobacco.

Tobacco International magazine, normally a staunch friend of the tobacco industry, ran an article recently titled “The Question of the Moment Is: Are the Big Companies Killing Market Prices?” suggesting that the small number of leaf companies in Malawi “has led to reduced competition—especially when one company is purchasing more than 50 percent of the crop.” Not surprisingly, prices for tobacco in Malawi fell dramatically in 2001 even after the previous year’s 14 percent drop.¹

In April 2000, Malawian riot police were called to quell violence in the capital city of Lilongwe when scores of tobacco growers staged a protest over low auction prices. The protests forced the auction to close twice. Tobacco Association of Malawi (TAMA) official George Mituka said growers were unhappy with the prices at auction, which had gone as low as \$0.10 per kilo. In 1999, the same quality leaf was fetching between \$1 and \$2 dollars a kilo. But buyers, insisting that the leaf was of poor quality, refused to pay more.² Wilson Unyolo, a worried grower from the town of Milepa, asked “How are we going to pay our tenants? Think about transport and fertilizer: the peanuts we are getting here won’t be enough.” Chichere Ndala, a farmer from the town of Machinga, agreed: “We are being cheated here.”³ This was not the first time that the exchange had been shut down by growers. In 1997, the exchange was shut down for two days when tobacco farmers went on a rampage, tossing tobacco leaves at foreign buyers and forcing them to flee.⁴



UNLOADING TOBACCO

Whether under the auction or contract system, tobacco farmers’ bargaining power vis-a-vis the companies is limited. Zimbabwe. (Photo Oikoumene, World Council of Churches)

The lack of competition in the auction market is not limited to Malawi. In Zimbabwe, 70 percent of the market is controlled by just two companies, the local subsidiaries of DIMON and Universal. Growers have become increasingly frustrated with the low prices offered by these two companies on the auction floor.⁵ In 1998, three-quarters of the growers tore up their auction tickets in Harare, Zimbabwe, when prices fell to \$0.80 per kilo, temporarily halting the auction.⁶

Signing Their Lives Away: The Contract System

Under a direct contracting system, the tobacco companies effectively operate as banks, extending credit to the farmer at the beginning of the year in the form of seed, fertilizer, pesticides, and technical support. In return, the farmers pledge to sell their entire crop to the company at harvest time. Once again, the leaf buyers determine the grade and thus the price of the leaf, often paying the farmer less than the value of the initial loans.⁷ This debt bondage is another major way that tobacco companies control farmers.

In Brazil, two U.S.-based leaf companies, Universal Corporation and DIMON Inc., have direct contracts with nearly



half of the tobacco farmers.⁸ Souza Cruz, a subsidiary of British American Tobacco (BAT), contracts with most of the rest. Having signed a contract with a particular company, Brazilian tobacco farmers may only purchase seeds, fertilizers, and pesticides from that company.⁹ Growers pledge to sell their harvest exclusively to the company, which determines how much land will be cultivated and how much of each type of input should be used. Company inspectors make regular visits to the farms to make sure its guidelines are being followed. But the company accepts no responsibility for any kind of disaster, whether natural or accidental. So, for example, if a truck delivering cured leaves to a buyer breaks down, allowing the tobacco to become moist, the farmers must pay for

it with a lower classification and hence a lower price.¹⁰

Following a growers' strike in the late 1980s, the companies "tightened the pricing noose" by banding together, according to the *New York Times*. In an effort to keep production costs even lower, the tobacco companies now "decide prices among themselves, and punish growers heavily should they decide to sell elsewhere. . . . the big companies join together to estimate the growers' cost of production plus a modest margin. To help enforce their control, the companies hold back a share of the farmer's payment until the entire harvest is delivered." Farmers who try to withhold their crops over grading disputes often have their crops seized by police acting on behalf of

the companies. Helio Friedrich, a city councilman in Venâncio Aires claims that "We have a system in which a half dozen companies are strangling the growers. Each year they come up with a new way to squeeze the growers tighter."

In 1998, tobacco farmer Glenio Haas said that he was dreading the arrival of the police at his farm to confiscate his crop on behalf of the leaf dealers. He had delivered part of his crop to Souza Cruz at the top rate: \$35 an arroba, a bundle of about 15 kilos. But he balked when the company wanted to pay him \$18 a bundle for the rest of his crop. He agreed the second parcel was not top quality, but believed it was worth more than \$18. He took his tobacco home, saying he would rather not sell. At the price the company

"BETRAYAL, BLACKMAIL AND ROBBERY"

A Kenyan Story

"For far too long, the poor tobacco farmer has had to suffer in silence, often a victim of his own ignorance, at the hands and to the advantage of the rich multinational tobacco firms. . . . Tobacco was introduced in Kuria district, a tiny but productive area in Western Kenya, as a cash crop in 1969. It was then grown by farmers who were organized into a cooperative society. However, the society only lasted three years as the British American Tobacco (Kenya) Limited silenced it. That marked the beginning of the tobacco farmers' woes in Kuria district. My personal recollection of events then is that BAT went into a full-scale recruitment drive targeting farmers of its own choice, mostly ignorant people who could hardly question officialdom, leaving any "trouble-makers" aside.

. . . In short, it was a ring of daylight gagging, mugging, and bagging. Betrayal because the unsuspecting farmers entirely trusted BAT, or its appointees, to be doing things to the best interest of the farmer. . . . Silence, because by killing the cooperative society, BAT had taken away the right of the farmer to bargain collectively. In fact, the farmer, without the advantage of average formal education, was left on his own to farm, harvest, cure, and sell according to the dictates of BAT. Blackmail because BAT kept de-registering farmers they did not like, or declined to register farmers they did not like, as a way of silencing anyone who would want to demand a better deal for himself. This way, the farmer in Kuria was blackmailed into silence. Robbery, and this is the most bitter bit, because the Kuria farmer has never reaped his worth's return from farming tobacco. . . . The insulting payment made to the farmer at the end of every farming season only achieves one thing—it enhances a circle of dependency which the main beneficiaries of the crop, namely the firms, have cultivated over a period of 31 years . . ."

—Samson Mwita Marwa

Former Tobacco Farmer & Member of Parliament, Kenya'

was offering, his family would have earned about half Brazil's minimum wage for each month worked, Haas estimated.¹¹

In 1999 the president of the rural workers federation in the state of Santa Catarina estimated that excessively severe grading standards put in place by the companies would result in a 20 percent income loss for farmers.¹² Suspicious that buyers were deliberately "undergrading," growers organizations like the Brazilian tobacco growers association (AFUBRA) asked government graders to attend classification sessions that year at a watch post in Santa Cruz do Sul. "We don't have a legal right to impose a certain classification, but the official classifier does," said Hainsi Gralow, president of AFUBRA.¹³

Grading the Crop

Under both the auction and contract systems, growers are at the mercy of the buyers who establish the grade of the leaf, which in turn determines the price.

And farmers do not have a higher authority to appeal to if they feel that the buyers have deliberately downgraded the leaf in order to buy it more cheaply. Because there are no other buyers for tobacco except for the tobacco companies, farmers have no choice but to sell at the price offered to them.

The grading may be determined by the position of the leaf on the plant, color, size, maturity, or other recognizable qualities. Flue-cured tobacco in the United States and Zimbabwe is graded this way, and each grade bulked or baled separately. Other countries use much simpler systems, with buyers examining the baled leaves in order to grade the quality and hence set the price. The process is an inexact science, like tea-tasting, and can be very subjective. Two individual buyers might grade the same leaf differently and thus offer different prices for the crop. Many tobacco farmers suspect that the buyers (who work for leaf merchants) deliberately classify the leaves at a lower

grade in order to minimize costs and maximize profits.

Until quite recently farmers in the United States enjoyed a more equitable system because most tobacco was graded by government inspectors from the United States Department of Agriculture (USDA), under a voluntary agreement between farmers and buyers. The USDA inspectors use a single system of grading and pricing that is open to all sellers and moreover, since the USDA had no financial interest in profiting from the system, the grades are considered relatively fair. Unfortunately, in 2001 multinational buyers pressured farmers in the United States to switch largely to a system of contracting, with private graders, that farmers worry will eventually lead to lower prices down the line.¹⁴

Debt Bondage

For years, many developing country governments have tried to protect their tobacco farmers from unstable or reduced tobacco prices by subsidizing the prices of imported inputs like seeds, pesticides, and fertilizers. But as government debts have mounted and pressure from multilateral institutions like the International Monetary Fund to cut subsidies has increased, this financial help has been cut back or eliminated altogether. Currency devaluations encouraged by these institutions make these countries' tobacco exports more competitive on the world market, but they have also had the effect of greatly increasing the cost of imported inputs.

Tobacco companies have stepped into the breach, offering apparently attractive loans. Now, many farmers are going deeper and deeper into debt to pay for imported inputs, often to the tobacco companies themselves. In 2000, Rabison Mwase, a farmer in Kasungu district in Malawi, said he got a loan of about \$800 for fertilizer and a further \$500 for other

MAKING THE GRADE

Buyer checking grade and quality, Zimbabwe. Growers charge that many companies deliberately under-grade the tobacco in order to justify lower prices. (Carlos Guarita/Still Pictures)



DEMISE OF THE AMERICAN FAMILY FARM

Just like their counterparts in developing countries, many family tobacco farmers in the United States are struggling to stay afloat. In the state of Kentucky, for example, tobacco farmers earn an average of just \$12,000 per year from their tobacco crop.¹ Nationally, an estimated 71 percent of all tobacco farmers have gross sales of less than \$20,000 per year from tobacco, and most must work at jobs off the farm to supplement their income.² By contrast, garbage collectors in the United States made an average of \$29,307 in 1999.³

U.S. tobacco farmers' real income has been declining for decades. While the inflation-adjusted cost of producing tobacco increased nearly 200 percent between 1980 and 1998, the price that tobacco farmers received was just 19 percent higher for flue-cured leaf and 14 percent higher for burley. To add insult to injury, the tobacco growers' share of each dollar spent in the United States on a pack of cigarettes dropped from seven cents in 1980 to about two cents in the late 1990s, while the cigarette companies' share increased from 37 to 49 cents.⁴

The number of tobacco farmers is dwindling. Between 1992 and 1997, the number of tobacco farms in the United States dropped 32 percent, even as production levels stayed the same. As small tobacco farms go out of business, their production is being replaced by larger, more mechanized farms. Between 1992 and 1997, the number



Big Shelby Tobacco Warehouse in Kentucky shut down sales in 2001 after 80 Years. The companies' move to the contracting system was blamed for the closure.
(Ed Reinke/Associated Press)

of farms under 2 hectares fell 34 percent, to 56,285. Meanwhile, the number of tobacco farms of 20 hectares or more grew by 45 percent, to 3,769.⁵

farm inputs like seeds.¹⁵ “What I got from my tobacco could scarcely enable me to repay the loan, let alone pay my tenants.” Mwase said he had to sell off some of his less-valuable property to prevent creditors from confiscating his entire land.¹⁶

Some of Mwase's peers have had their tractors and farm equipment seized for failing to repay private lenders like TAMA, which is owed some \$5.3 million in unpaid loans from the previous two growing seasons.¹⁷ Other tobacco farmers have simply stopped buying expensive inputs—in 2000, fertilizer use dropped by 40 percent in some areas of Malawi, continuing a trend that began in 1997.¹⁸ “[The 1998] devaluation of the kwacha (the Malawian currency) pushed up the prices

of farm inputs including fertilizer. Many growers reduced their hectares because they could not afford to buy enough inputs,” said Gasper Banda, the chief tobacco classifier for TAMA.¹⁹ His colleague Alex Kavinya said that the farmers are facing financial ruin. “These prices are the lowest in 10 years. The growers need to sell the leaves for at least \$1.50 per kilo just to break even. . . . This could mean that many of the growers won't have money to plant in October, and they won't return to the auction floors next year.”²⁰

The situation is similar in Tanzania, where in 2000 small tobacco farmers owed Universal Leaf, DIMON, and Standard Commercial a total of \$19.1 million. Prime Minister Frederick

Sumaye has backed the companies' attempts to collect the loans, calling for “stern measures” against farmers who sell their crop to buyers other than the companies that gave loans to them.²¹

Borrowing from one company and selling to another was common practice in the early 1990s in Kenya, when a local company named Mastermind took advantage of the liberalization of the tobacco market to buy crops from farmers that BAT had sponsored (in Kenya BAT has worked directly with tobacco farmers rather than through leaf dealers). After BAT lost millions of dollars, a law was passed in 1994 prohibiting anyone from buying tobacco from a farmer who they had not officially sponsored.²² But the tobacco companies



FALLING DEEPER INTO DEBT

In the mid-1970s Blasio and Claire Lehman bought a piece of land in the state of Santa Cruz do Sul in southern Brazil and built a simple wooden house with their savings from tobacco growing. That was more than 20 years ago, when companies bought tobacco on the free market, and price was related to supply and demand. About two decades later, in 1998, the Lehmans' son Ismail offered to quit high school to save the family \$35 a month in bus fare because the family calculated that their income would amount to just \$75 a month. They were the lucky ones: 35 percent of the 160,000 tobacco growers in Brazil expected to end the harvest owing more money than they earned. Said Mrs. Lehman, "All we're doing is falling deeper and deeper [into debt] each year."¹

have yet to solve the debt problem. In 1999, 42 percent of the contracts were not fulfilled, and the bad debt bill rose to \$1.5 million. Francis Kimondiu, BAT's leaf export and services manager, accused farmers of selling their crop to middlemen at night and threatened to disqualify debtors from getting future loans. BAT

the law catches up with them. We have to be fair to each other because if someone has advanced you farm inputs, it's a right for him to recover it," he said.²³ Company interference has gone beyond merely trying to collect tardy loans. In 1999, BAT officials in Kenya joined with government officers and "village vigilantes" to put a

A FAMILY AFFAIR

Family preparing tobacco leaf in Parana State, Brazil. Many Brazilian tobacco farmers have fallen into debt to the companies. (Pesticide Action Network)

also threatened to sue farmers to recover the money. As in Tanzania, the Kenyan government backed the company. Lawrence Sifuna, a member of parliament, vowed not to defend the defaulters "when the long arm of

stop to "harmful" growing practices. According to *Tobacco Reporter*, "farmers violating preferred farming methods will be arrested and prosecuted."²⁴

In Latin America, farmers are also facing difficulties. In 1998, the farmers' union in the Rio Azul region of Paraná state in Brazil estimated that 70 percent of farmers would not be able to pay their debts, 20 percent would break even, and only 10 percent would make a profit.²⁵ The union calculated that the average tobacco farmer would end up \$500 in debt to the leaf companies after paying for pesticides, fertilizer, insurance, technical assistance, and minimum salary for two workers. The companies, on the other hand, were set to make \$2 million just from selling chemicals to the farmers, never mind the profits made on selling the tobacco to cigarette manufacturers.²⁶



ILLUSORY ECONOMIC BENEFITS OF TOBACCO

Cigarette industry arguments that tobacco is a mainstay of many countries' economies are not supported by the evidence. For most tobacco-producing countries, tobacco comprises a miniscule percentage of total exports. Only 18 out of the 141 countries that export tobacco leaf derive more than 1 percent of their total export earnings from tobacco and in only four of those (Kyrgyzstan, Macedonia, Malawi, and Zimbabwe) do tobacco leaf exports account for more than 5 percent of total export earnings.¹ Macedonia and Kyrgyzstan rely on tobacco for 16 percent and 8 percent of their export earnings respectively. The other two that are significantly dependent on raw tobacco for their export earnings, are Zimbabwe, where tobacco accounted for 32 percent of export earnings in 1999, and Malawi, where tobacco accounted for 58 percent of export earnings.² Over the last 20 years Malawi has decreased its dependence slightly (from 63 percent in 1979), while Zimbabwe has grown more dependent (tobacco accounted for 23 percent of export earnings in 1979). Yet clearly, commercial tobacco production has done little to boost the economic status of either Zimbabwe or Malawi—both remain among the poorest countries in the world. The United Nations Development Program places Zimbabwe 130th out of 174 countries in the Human Development Index, while Malawi ranks 163rd.³

TOBACCO'S HIDDEN COST

Child carrying tobacco in Tanzania. The tobacco industry continues to gloss over the very real social and economic costs of tobacco cultivation.
(M. Schapira/International Labor Organization)

Darius Mans, the World Bank's country director for Malawi, blames the country's current economic crisis in part on its excessive dependence on tobacco growing.⁴ The outlook for the future is not too bright either, according to a study by international management consultants Price Waterhouse Coopers. "Even though Malawi is a relatively large player in the global tobacco leaf export market, Malawi is essentially a price taker in the world market for tobacco leaf. . . . [t]he significance of the tobacco industry to the Malawi economy is only overshadowed by the reliance that the industry has on the international market for tobacco products." By Price Waterhouse's calculations, Malawi relies on tobacco for 15 percent of its Gross Domestic Product.⁵

Exaggerated Employment Claims

The tobacco industry estimates that 33 million people are engaged in tobacco cultivation globally. These industry totals

include not only farmers who rely entirely on tobacco, but also farmers who grow other crops besides tobacco, seasonal laborers, family members, and other part-time workers. Using the tobacco industry's 33 million figure to compare with the employment figures from other economic sectors where jobs are full-time and year-round is, consequently, highly misleading.⁶

To gauge the true importance of the crop to employment levels, the World Bank suggests a more accurate number to use would be one that reflects the number of farmers who are dependent on tobacco production or employed full-time in tobacco cultivation. This is expressed in full-time equivalent (FTE) figures, which for the tobacco sector are typically about one-third of the tobacco industry's estimates.⁷ In Argentina, for example, while 105,000 people are reported to be employed in the growing of tobacco, the FTE figure is 44,000; Malawi reports 157,000 people growing tobacco but only

93,000 FTE, while India claims 3,500,000 people are engaged in tobacco growing, while the FTE is less than a third of that, at 1,108,000. Other countries report much the same disparities.

In addition, the World Bank points out that tobacco farming makes up a tiny fraction of the agricultural labor force in most developing countries and an even smaller percentage of the total labor force. In Sri Lanka, for example, tobacco FTE constitutes 1.5 percent of the agricultural labor force and 0.67 percent of the total labor force, while in Brazil, one of the world's largest producers of tobacco, tobacco FTE is approximately 1.9 percent of the total agricultural labor force and 0.44 percent of the total labor force.⁸

Illusions of Profit

At the farm level, despite all of the problems with declining prices and increasing debt, many tobacco farmers continue to

VOICES FROM KENYA

"Due to the twin fact that a lot of valuable land space and quality time are allocated to tobacco growth, food production suffers. As a result, Kuria district has joined arid and semi-arid areas as an area constantly in need of famine relief food. Furthermore, the strained land is becoming ever more unproductive as repeated farming of tobacco has sucked any nutrients there may have been in the land. The people of Kuria, rather embarrassingly, are back to suffering from diseases associated with low nutritional levels such as marasmus, kwashiorkor, etc., a situation that could be remedied if more land and time were committed to food production. . . . If there is one single crop that has subjected children to excruciating, mostly forced, labor, it is tobacco. At the peak of the season, children are withdrawn from school to work on the tobacco farms. This work is not, however, reflected in solid financial commitments on the side of parents to better their children's education. And, as is wont to be in such circumstances, ignorance abounds."

—Samson Mwita Marwa

*Former Tobacco Farmer & Member of Parliament*¹

"I come from a tobacco growing community in Mbeere District in Kenya. In the past, every dwelling had a livestock shed and a granary for storing agricultural produce for domes-

tic consumption. But all that has changed with the introduction of tobacco as a cash crop. Today . . . in almost all homesteads, the livestock shed and the granary/food stores have disappeared. All you see now are dwellings and tobacco drying kilns in the compounds. Tobacco, the cash crop, has replaced the food crops and livestock and threatens the food security of every family. Yet tobacco is not yielding enough money for these people to buy food for subsistence and viable livelihoods.

"Two months ago when I visited the villages, I asked the farmers why they had no food and yet they had a good harvest. They informed me that since the tobacco trade had been liberalized, they no longer had guaranteed buyers for their produce. Before liberalization, they told me they could get free seed, pesticides, delivery of dry leaves, and their checks on time. With free trade, there has been competition among the tobacco manufacturing companies, and this has hit the farming communities at a time when they have already abandoned subsistence crops. Now, Mbeere district is one of the worst famine stricken districts in the country. With the current drought the farmers are surviving on food rations and famine relief supplies."

—Litha Musyimi-Ogana

*African Center for Empowerment, Gender, and Advocacy*²

believe that tobacco is always more profitable than any realistic alternative crop. Besides the often high cost of fertilizers, pesticides, and other capital inputs, however, the high labor costs of tobacco farming reduce the net returns to the land, leading to a situation where alternative crops may often yield higher cost-benefit ratios to farmers even if they earn lower gross income per acre. Unfortunately, in many countries, these labor costs are not factored into the cost-benefit analysis because much of the labor is provided for “free” by other family members, including children.

According to the World Bank, “when examined on a cost-benefit basis, tobacco may not ultimately produce the best economic returns.” In India, while gross income from a hectare of tobacco is 22 percent higher than for an alternative crop like safflower, after factoring in production costs, safflower actually brings in 17 percent more profit because tobacco has one of the highest input costs of agricultural crops grown in the country. A study for the World Health Organization showed that 41 percent of the cost of growing tobacco in India was spent on fertilizers and pesticides, almost 1.5 times more than spent on sugarcane, the second-most-expensive crop to grow in terms of cash outlays.⁹ This does not even take into account the high labor costs associated with tobacco. Since tobacco farming is more labor intensive than most other crops, alternative crops may often yield higher cost-benefit ratios even if they earn lower net income.¹⁰

Although the tobacco industry grossly exaggerates the number of people dependent on tobacco farming for income, there is no doubt that growing tobacco is very labor intensive. Brazilian researchers estimate that up to 3,000 person-hours per year are required to grow one hectare of tobacco—in other words, more than eight hours a day for one person working every single day of the year. But since these hours are concentrated in the planting, harvesting, and curing seasons, extra, seasonal labor is required. By comparison, the Brazilian researchers found that vegetables typically take one-tenth of the

labor to grow. Beans, for example, take only 298 hours of labor per hectare, while maize takes approximately 265 hours.¹¹

District studies in Kenya show that the average tobacco farmer who contracts with BAT makes \$120 a year after paying off the costs of inputs. But even that meager figure does not take into account labor costs. Gustin Otieno, a Kenyan tobacco farmer, quit growing tobacco after he realized how little he was actually making. “I worked on my two-acre tobacco farm with my wife and six relatives to get the work done. When I began to cost their labor, I found that my annual profit was 50 shillings (less than one dollar),” he said.¹²

George Onyango, a farmer in the Migori district of Kenya, recently switched from tobacco to maize on his 1.25-hectare farm. His annual income has mushroomed from about \$133 from a single tobacco crop to \$1,000 from two harvests of maize a year. Not only is his work less tedious now, said the father of four, “but I can feed my family and sell off some of the maize to pay school fees.”¹³ “The days of the green gold are numbered,” said a commentary in Malawi’s *Daily Nation*. “Malawi’s tobacco farmers must understand that theirs is a losing battle in which they will invest time, energy, and money for little or no return.”¹⁴

Many countries are currently looking for alternatives to tobacco. Researchers John Ngondo and Godfrey Ching’ona have advised the Malawian government to increase the production of macadamia nuts, which would allow commercial and small farmers to grow maize, beans, and cassava between the trees until they matured five years after planting. In the short term, the researchers suggest that Malawi should expand cotton production and build up a local textile industry. “Macadamia trees takes five years to mature and have a life span of 40 to 50 years. The exciting thing is that every 100 trees could earn farmers up to \$10,000 annually. Just as importantly, macadamias are an environmentally friendly crop, where we even use the nut shells for oil production,” said Ching’ona.¹⁵

In China, Li Jiating, governor of Yunnan, the country’s largest tobacco-producing province, has backed a government push to cut the country’s dependence on tobacco-growing and cigarette sales for tax revenues. “Although it is a high tax earner, it is bad for one’s health and thus not a promising industry over the long-term. Our goal now is to cut production, boost quality, and increase profits. Then we can use tobacco to raise funds for the development of other industries,” he said in 1999, after overproduction in the mid-1990s caused the central government to order a major cutback in production.¹⁶

Food Security Threatened

Women in Kenya say that tobacco growing places a major strain on the entire family. “In the tobacco season we have a lot of work and we have little time to cook for our children,” says Awino, a farmer in Migori district in western Kenya who grows tobacco for BAT. During the growing season from February to August, Awino’s two teenage sons skip school to help her with housework. For her pains, Awino makes about \$83 after the multinational has recovered its loan. She says she is now considering switching to growing sugarcane. Many Kenyan tobacco farmers complain of the same problems, saying they do not have the time to grow traditional food crops like maize, beans, sorghum, cassava, and sweet potatoes. Nor do they earn enough from tobacco to buy sufficient food to feed their families.¹⁷ A 1994 study conducted by John Nkuchia for the University of Michigan School of Public Health suggests that switching from food crops to tobacco may have lowered incomes for farmers in Kenya.¹⁸

It is not until July that most farmers can take a break from tobacco and start cultivating food crops in time for the short November rains. But the problem for Kenya is that two maize crops per year are needed to provide sufficient food. Tobacco cultivation makes this impossible, contributing to the high number of cases of malnutrition among children. A survey by UNICEF found that 52 percent

of children in Migori district, a major tobacco-producing region, either suffer from chronic or acute under-nutrition or are underweight.¹⁹

Child Labor

Although tobacco farming does not create as many jobs as the tobacco industry claims, the use of child laborers in tobacco production is still common in the major tobacco-producing countries, including Argentina, Brazil, China, India, Indonesia, Malawi, the United States, and Zimbabwe.²⁰ While the tobacco sector is not unique in its use of child labor, the particular hazards to health and physical development posed by tobacco cultivation place these children at heightened risk.

In Malawi, for example, tobacco is more than just a family business. Many children get sent to work on the estates far from their homes to provide money for their families. Just as in Kenya and Uganda, this means that these children cannot

attend school, although schooling is free. “Many of these children have never seen a classroom despite the fact that education is free in this country. Perhaps 90 percent do not attend school,” says John Kapito of the Consumer’s Association of Malawi.²¹ A 1993 study in Malawi found that the majority of children living on tobacco estates were working full or part time: 78 percent of 10–14 year olds and 55 percent of 7–9 year olds.²²

In November 2000, Tobacco Association of Malawi Vice President Fredgstone Thangwi publicly conceded that the industry was exploiting child labor. He said that underage workers were paid much less than adults, but were expected to work just as hard. “There are employers who strongly deny the use of child labor. Such denials are unfortunate because child labor exists and is threatening the future of the entire tobacco industry. It would be a disaster if international labor authorities were to come out here to inspect us,” said Thangwi.²³

The admission followed a survey carried out by the Malawi Congress of Trade Unions (MCTU) in collaboration with the International Labor Organization.

“Malawi has one of the most serious child labor records in the world,” said Dorothy Makhasu of MCTU. Union spokespeople attributed the problem of child labor in Malawi to chronic poverty among many Malawian households. Many school-going children from poorer families found themselves being asked to help feed their families.²⁴ “Child labor is an evil practice that contributes to Malawi’s poverty rates. Most of these children are denied schooling and grow up illiterate and uneducated. How can they contribute to real economic development?” asks MCTU President John Mhango.²⁵

Many tobacco farmers make the choice between work and education for their children because their families exist at poverty level. But the reason for their poverty is because leaf companies will not pay the parents enough for their crop to allow them to survive without the help of their children’s labor. “The tobacco industry, taking advantage of cheap labor, has targeted children to work on tobacco farms. [This practice] perpetrates poverty because most of the children are exploited and they are denied a meaningful and sustainable future,” says John Kapito of the Consumers’ Association of Malawi.²⁶

HOMEWORK

Children harvesting tobacco in Malawi. The use of child labor in cultivating and harvesting tobacco is widespread. (Jorgen Schytte/Still Pictures)





TOLL ON PEOPLE & THE ENVIRONMENT

POISONED LAND

Many tobacco farmers, such as this one in Sri Lanka, lack the proper protective equipment or training in the handling of hazardous chemicals, risking their health and that of their families. (Jeremy Hartley/Panos Pictures)

The economic problems associated with tobacco farming are only part of the equation. The seriously damaging health and environmental impacts caused by tobacco farming parallel those caused each time a cigarette is taken out of a packet and lit. From the moment the tobacco seed is planted to the time the tobacco plant is harvested and cured, the health of those who cultivate the crop is constantly put in peril. Health threats include the large amount of pesticides used on virtually all tobacco crops as well as illnesses related to the handling of raw tobacco leaves.

ZIMBABWE

“[T]he worst who suffer in my country are women who are growers. The multinational corporations exploit women working in tobacco fields and tobacco barns, as they work for very low earnings. Women who work on tobacco farms, particularly migrant women, are also often addicted to tobacco. The mortality rate from coronary heart disease among this group in Zimbabwe is three times higher than among non-smoking rural women. Tobacco is more freely available to them since they do not buy it. Since many of these women do not have access to radios, newspapers, or education, few, if any, know that tobacco harms their health. Furthermore, women who work in tobacco fields are exposed to chemicals without protective clothes.”

—Rudo Shalom Mungwashu
*Zuna Women's Operation Green,
Chinhoui, Zimbabwe¹*



BRAZIL

A year after Natalia Konflanz was born into a family of small tobacco farmers in Camaquan, a municipality of the state of Rio Grande do Sul in southern Brazil, she came perilously close to becoming a casualty of the toxic agrochemicals used on tobacco farms when her pacifier fell onto a spot where pesticides had accumulated. She survived, thanks to the quick action of her parents, who rushed her to a nearby health clinic. Unfortunately her health remains at risk today. Natalia is now a teenager who goes to school in the morning and picks tobacco in the afternoon. Like many other kids her age, she would prefer to watch television, but she has little choice because she has to help her father, Evaldo Konflanz, who suffers from diabetes, high blood pressure, stress, and dizzy spells. Like his daughter, Evaldo was born on the family tobacco farm and has spent his life growing and picking tobacco leaves.

Evaldo was forced to take some time off from work due to frequent vomiting and general poor health. But like his fellow tobacco workers who suffer the same ailments, sometimes he

takes a pill that reduces dizziness and just keeps on working. He only goes to the doctor when he gets too sick to work. Similar symptoms have showed up in the rest of the family. Konflanz's wife has an ugly red rash on her back, caused by an allergy to tobacco, and vomits when she comes close to green tobacco leaves. Nevertheless, she worked in the fields until just a few days before Natalia was born.

Natalia is not alone in her plight. School students interviewed in Rio Grande do Sul for a report for the Regional Office of the Labor Ministry said they had helped apply agrochemicals, despite local legislation that bars children or teenagers from participating in such work. Eighteen of the minors were hospitalized due to contact with agrochemicals. Six of them were younger than 12 years of age.² Despite these hazards, leaf companies in the region have reportedly asked schools to rearrange class schedules to allow children to help their families in the fields.³

TOXIC TOLL



TOXIC COCKTAIL

Some of the tobacco pesticides used in Brazil. (Pesticide Action Network)

KENYA

“From the day the nursery is laid to the day the pay cheque is collected, the farmer inhales an assortment of chemicals. . . . To make matters worse, the farmer has no protective gloves, gas masks, gum boots, or dust-coats during his sad sentence as a tobacco farmer. Thus, at the end of the farming season, the farmer spends all he earned from the crop, sometimes more, to seek medication. At the Kehancha District Hospital, more than 60 percent of deaths are due to tobacco-related ailments. Infant mortality is also on the increase, as are the incidents of unexplained miscarriages, just to mention a few. . . . Tobacco nurseries are situated near water masses, most times at the source. Thus, as the farmer waters his chemical-drenched seedbed, the water flows back to the river, carrying with it remnants of such chemicals. It does not need much intelligence to figure out that the same water will be used downstream by communities and their animals. The result is a proliferation of all sorts of ailments assaulting man and beast in the area.”

—Samson Mwita Marwa

Former Tobacco Farmer & Member of Parliament, Kenya'

MEXICO

In a voice trembling with grief, an indigenous Huichole woman working in the tobacco plantations of Nayarit lamented: “The people of the communities of Santa Catarina and from San Sebastian, we come looking for work. We have been carrying poisonous things in our bodies. Here we are feeling sick.”

For thousands of years, the Huichole Indians lived in the mountains and forests of the Sierra Madres in Mexico. They believed that the land was sacred, and they held a respect for all creatures whom they considered their relatives from the beginning of time. The land and forests provided them with all that they needed to live. However, all this changed in 1976, when large timber companies moved into the region, constructing roads and destroying the forests that the Huicholes depended on for survival.

Forced to leave in search of work, many Huicholes traveled to the Nayarit coast of Mexico, where they joined other indigenous peoples to work on tobacco plantations as migrant day laborers. As displaced migrant workers, the Huicholes have few options but to take jobs on the plantations, even though they know they will be exposed to highly toxic pesticides. Because wages are based on the amount of work performed, everyone in a family, including children, must work to earn enough to survive.

Ignacio Carillo, a Huichole, had been working several years in the tobacco fields of Nayarit when suddenly he began bleeding uncontrollably. Ignacio died soon afterwards of aplastic anemia, a blood disease that has been associated with chronic exposure to organochlorine pesticides like chlordane. Victor Guzman, also a young tobacco worker, collapsed while working in the fields and died.⁵ Patricia Diaz-Romo, a Mexican public health activist, said that one of the most glaring effects of the pesticides is on the pregnant Huicholes who have worked in the tobacco fields. “They give birth to deformed children, some of whom have no genitalia and die within a few days of being born, some who have no limbs.”⁶



CHILDREN AT RISK

Many Huichole Indians like this girl have been forced by economic necessity to risk their health in the tobacco fields.
(Patricia Diaz-Romo/Centro de Derechos Humanos Miguel Agustín Pro. Mexico)

Tobacco's Toxic Toll

A tremendous amount of pesticides are used on the tobacco plant to protect it from insects and disease. An instruction leaflet given to tobacco farmers in Kenya by BAT, for example, recommends that farmers apply 16 separate applications of pesticides during the three month period before the seedling is transplanted to the field.¹ The heavy and repeated use of pesticides takes a toll on tobacco farmers, many of whom are unaware of the proper safety procedures necessary to handle the chemicals. In addition, many tobacco farmers purchase dumped or banned agro-chemicals from middlemen. Although cheaper than modern brand-name chemicals, they are often scooped out of bulk sacks and packaged in recycled cans with no proper labeling or instructions for use and safe storage. Compounding the problem, said Virginia Kimani of Kenya's Pest Control Products Board, "[i]n many homesteads, harmful chemicals are stored side by side with foodstuffs such as grains."²

Not surprisingly, there are a lot of pesticide-related ailments and even deaths. For example, a study conducted by the Kenya Medical Research Institute reported 1,000 deaths and 35,000 cases of occupational poisoning on all farms in 1997. "These cases are just a small tip of what happens on those farms," said the report, which explains that most cases go unreported (the report did not break down the poisonings by the type of crop).³ Official data on pesticide poisonings in many developing countries likely underestimate the incidence because of a lack of medical personnel in rural areas and because many health professionals don't report the cases of pesticide poisonings that they do see. The Serviço Brasileiro de Justiça e Paz (SEJUP), a Brazilian nongovernmental organization, estimates that as many as 300,000 people are poisoned by agricultural pesticides in Brazil each year, and the number is rising.⁴ Another study in the tobacco-growing state of Santa Catarina found that 79 percent of growers had been poisoned by pesticides.⁵

A survey of tobacco growers in southern Brazil found that 55 percent were not using the protective clothing recommended by the leaf companies, such as masks, gloves, boots, and long-sleeved or water-repellent overshirts. The farmers cited the high cost of the equipment and the fact that it was not designed for the steamy tropical weather. The survey also found that about 48 percent of family members suffered health problems connected with the use of the chemicals, including persistent headaches and vomiting, and that 42 percent knew of someone with physical birth defects. Nearly 80 percent of the families disposed of their waste inadequately, the study noted, throwing the used pesticide containers in the woods or burning them. Nestor Mahler, a local manager for DIMON, said

the companies are studying alternatives to pesticides, although they haven't put any into practice. As for complaints about the protective clothing, he said, "What can we do if they don't use it? We counsel the growers, but we have no police powers." Although protective suits are available for purchase from the leaf companies, they cost \$37 each, more than one quarter of the average monthly salary of tobacco farmers in the region.⁶

In tobacco-growing areas of Brazil, exposure to pesticides has been linked to rising suicide rates. Researchers from the Federal University of Rio Grande do Sul have hypothesized that organophosphate pesticides may cause or exacerbate depression, increasing the likelihood that farmers, already under the stress of accu-

SOME COMMON TOBACCO PESTICIDES

Aldicarb: one of the most acutely toxic pesticides registered in the United States; its lethal toxicity to humans is in the range of one hundredth of a gram. In laboratory animals, aldicarb causes chronic damage to the nervous system, suppresses the immune system, and adversely affects fetuses. In human cells, aldicarb causes genetic damage. It is also toxic to birds, fish, honey bees and earthworms. Aldicarb's agricultural formulation contains a toxic contaminant, dichloromethane, that causes damage to hearing, vision, kidneys, and livers and is both carcinogenic and mutagenic.¹

Chlorpyrifos: a broad-spectrum organophosphate insecticide and the most widely used insecticide in the United States for both household and agricultural purposes, it is also used on tobacco. Like all organophosphate insecticides, chlorpyrifos affects the nervous system by inhibiting an enzyme that is important in the transmission of nerve impulses. Symptoms of acute poisoning include headache, nausea, muscle twitching, and convulsions. Chlorpyrifos poisonings are reported to state and federal agencies in the United States more often than poisonings of almost every other insecticide. In addition to acute poisonings, exposure to chlorpyrifos products has also been associated with human birth defects. The pesticide has caused genetic damage in human blood and lymph cells and has also been found to affect the male reproductive system. Chlorpyrifos is known to contaminate air, groundwater, rivers, lakes, and rainwater, with residues being found up to 25 kilometers from the site of application.²

1,3-D (1,3-Dichloropropene, also known as Telone): a highly toxic soil fumigant that causes respiratory problems in humans, as well as skin and eye irritation and kidney damage. A California study of applicators found evidence of kidney damage in nine of the 15 workers tested. 1,3-D causes cancer in laboratory animals and genetic damage in insects and mammal cells. It leaches through soil easily and has been found in U.S. groundwater, drinking water, and rainwater.³

mulated debts, may commit suicide. They report a potentially disturbing link between organophosphate pesticides and a skyrocketing suicide rate in Venâncio Aires, a small city in the major tobacco-producing state of Rio Grande do Sul, where suicide rates had soared to nearly seven times the average Brazilian rate.

The researchers found that 66 percent of the dead had worked on tobacco farms, and that the majority of the suicides had occurred during the planting and harvesting periods when organophosphate pesticides are used intensively. During the planting season, one local hospital reported seeing eight to 10 cases of agrochemi-

cal poisonings each day. The study points to evidence that those who committed suicide were suffering from acute neurological imbalances and mental disorders (including organophosphate-induced delayed neuropathy) that are caused by organophosphate pesticides and can result in psychological depression.⁷

Mining the Soil

In addition to pesticides, tobacco requires heavy use of fertilizers because it rapidly depletes nutrients from the soil. An early study on this subject showed that tobacco used up more nitrogen, phosphorus and potassium than other major cash and food crops. The impact of this soil depletion is particularly severe in tropical countries where soil nutrient content is low in the first place.⁸ A more recent comparative study suggests that the impact of tobacco on soil nutrients is even higher, although not as severe as oil palm and coffee.

Tobacco's high mineral absorption is a direct result of specific agricultural practices designed to attain high levels of nicotine

enrichment, high yields, and thus higher profits. "Topping" and "desuckering"—the custom of manually removing leaves and suckers from the plant to force nutrients to go into leaf production instead of seed production—make the upper leaves longer and wider, thicker and darker. They also stimulate root growth, draining more nutrients from the soil. Specifically, nitrogen is vital for the green color of the leaves and the nicotine content, phosphorus for nutrition, and potassium boosts leaf combustibility and leaf color. Unless farmers use a system of crop rotation to replenish the soil nutrients, this means that the soil will be depleted over time and will only be productive with the help of costly artificial fertilizers.⁹

Green Tobacco Sickness

Unlike most food and cash crops, handling tobacco itself can be toxic to workers. Nicotine, the active ingredient in cigarettes, is so potent that it has been used as a pesticide and insecticide since 1763.¹⁰ Green tobacco sickness (GTS) is an occupational illness found among workers harvesting tobacco. It is caused by dermal (skin) absorption of nicotine from contact with wet tobacco leaves. GTS is characterized by symptoms that may include nausea, vomiting, weakness, headache, dizziness, abdominal cramps, and difficulty in breathing, as well as fluctuations in blood pressure and heart rates.¹¹ Local farmers and health care workers often confuse these symptoms with heat exhaustion or pesticide poisoning, especially if pesticides have recently been applied to the crop. During harvest time, the average field worker may be exposed to up to 600 milliliters of dew or rain on the tobacco plants, the rough equivalent of the nicotine content of 36 cigarettes.¹² This moisture collects on the worker's clothing, effectively wrapping them in a giant contiguous nicotine patch.

The exact number of tobacco workers who are affected by green tobacco sick-

ness is unknown: one study by the United States National Institute for Occupational Safety and Health estimated a crude incidence as 10 cases per 1,000 workers. But a recent study by Sarah Quandt from the Wake Forest University School of Medicine of Hispanic migrant workers in North Carolina suggests that 41 percent of the workers get green tobacco sickness at least once during harvest season.¹³

HAZARDS OF THE JOB

"You are on-duty in the emergency room in a rural hospital. At about 10:30 pm, a 33 years old white male is brought into the emergency room by his wife who says, 'He's real sick. I had to get all over him to make him come to the emergency room. He couldn't even drive himself. I'm scared.' The wife tells you he has vomited six times in the last three hours and can't keep anything down. The patient complains of nausea, dizziness, weakness and being shaky. He says he feels awful. The patient denies chest pain and has no history of heart trouble . . . major illnesses, alcohol intake and is on no medications . . . On questioning, you find the patient has been harvesting tobacco all that day from about 8 a.m. to about 6 p.m. and the day before . . . As you are about to continue your exam the patient vomits on you and the floor. The vomitus is a clear yellow fluid with no apparent blood."

—Excerpted from questionnaire about green tobacco sickness designed by Kentucky Regional Poison Center to test physicians and nurses¹

Deforestation

After being harvested as a green leaf, tobacco is cured to preserve it for storage, transport, and processing. Curing also gives it the characteristic tobacco taste, aroma, and color. Wood is used in many developing countries as the fuel to provide the energy for curing, as well as in the infrastructure to build the curing barns, which typically have to be rebuilt every two to three years.

Recent research indicates that an environmentally critical situation is emerging in more than 30 countries with South Korea, Uruguay, Bangladesh, Malawi, Jordan, Pakistan, Syria, China, and Zimbabwe leading the list of countries with the highest percentage of tobacco-related deforestation.



In Southern Africa alone, an estimated 140,000 hectares of woodlands are cleared annually to cure tobacco, accounting for 12 percent of the deforestation in the region, according to extensive aerial and satellite data as well as surveys of 565 tobacco growers in Malawi and Tanzania, both smallholders as well as those on the larger estates. In one region of the Namweran highlands in Malawi, nearly 80 percent of all the wood cut down is used for tobacco, even though tobacco farmers make up a mere 3 percent of the farmers in the area.¹⁴

Annual deforestation rates in the three major tobacco-producing countries in Southern Africa—Zimbabwe, Malawi, and Tanzania—are almost 60 percent higher than the African average of 0.7 percent a year. Nearly 90 percent of the tobacco is produced in the dry forest regions (also known as the “miombo,” or fringe rainforests) that still provide huge areas of easily accessible wood. According to Helmut Geist, the world’s leading authority on tobacco-related deforestation, miombo forests are cut down to grow the crop “since virgin land is essential for seedbeds and tobacco plots because fresh land is free from nematodes, and tobacco cultures have also to be shifted every two to four years in order to avoid nematode infestation.”

As the surrounding forests get chopped down for tobacco-farming purposes, women have to go further and further to gather wood for cooking, not only making their own lives more difficult but also expanding the deforestation problem.

Governments and the tobacco industry have responded to this situation by providing farmers with tree seedlings to encourage reforestation. But despite government recommendations to have 10 percent of farm land planted with trees, studies by the Extension Service of Malawi found that 80 percent of estate farmers had failed to follow this advice. In Tanzania’s Southern Songea highlands, where most tobacco is fire-cured, Geist found that a mere 1.4 percent of the overall farmland of tobacco growers was planted with trees, as opposed to the officially mandated 20 percent.¹⁵

The situation is similar in Brazil, where only 35 percent of tobacco farmers dry their products naturally in the sun and wind during the hot Brazilian tropical summer. The rest use wood-burning stoves. The Brazilian tobacco growers’ association, AFUBRA, estimates that there are more than 120,000 curing stoves.¹⁶

DISAPPEARING FORESTS

Tobacco curing barns, such as this one in Tanzania, have contributed to massive deforestation in Southern Africa.

(Ross Hammond)

The Industry Response to Deforestation

In an effort to deal with the problems of deforestation in tobacco-growing areas, the Brazilian Environmental Control Institute (IBAMA) signed an agreement with the industry in 1992 requiring it to plant 500 eucalyptus trees for each curing stove owned by tobacco growers. AFUBRA claims that it has kept its side of the bargain by helping to plant some 300 million trees in the past 20 years to make up for the deforestation. But neither AFUBRA nor IBAMA can say how many of these trees have survived.

Souza Cruz, a subsidiary of BAT and the largest tobacco company in Brazil, claims that it has distributed 10 million eucalyptus seedlings over the past 10 years, but it cannot say how many of these grew to produce firewood. One NGO in the region claims that only one-tenth have survived. Wigold Bertoldo Schaffer, spokesperson for the National

Environmental Foundation, goes even further. "We have no more trees here. Tobacco farmers are replanting nothing."¹⁷

The International Tobacco Growers Association (ITGA), an industry front group, has tried to dismiss the link between deforestation and tobacco farming by claiming that only 5.5 kilograms of wood in Malawi is used to cure each kilo of tobacco.¹⁸ But this figure does not explain how many trees need to be cut down to provide that quantity of wood, nor does it explain what area of forest cover has to be chopped down. The answer, of course, varies considerably depending on the kind of trees being cut down and the relative density of the forest cover. Additionally, Geist points out that this estimate does not include the use of the polewood to build the curing barns, nor the wood used for the grading sheds or holding barns. Including these in the totals would increase the estimates of overall wood

use per farm by seven to 34 percent. He estimates that 19.9 cubic meters of wood are used to cure every ton of tobacco.¹⁹

An ITGA survey of 16 tobacco-growing countries showed that wood use in curing had dropped from 85 percent of all fuels in 1985 to 69 percent of all fuels in 1996. Yet the very same survey showed that during this period, flue-cured tobacco production rose by 28 percent, wiping out the gains. This survey also showed that in those areas where wood is the most commonly used fuel for curing tobacco, fewer than half of tobacco growers plant trees and only 10 percent of farmland is set aside for growing trees. Eucalyptus was the most popular species grown for woodfuel, comprising 63 percent of plantings.²⁰ Although eucalyptus can grow to maturity in just five years even in dry areas, it does this by drawing heavily on underground water, which in turn reduces the productivity of the land. In addition, many farmers prefer to use eucalyptus trees for building purposes, and so continue to cut native forest for tobacco curing.²¹

The ITGA survey points out that a few countries like Bangladesh and Sri Lanka (which have very little forest cover in the first place) have switched to using farm waste materials for 60 percent or more of their fuel needs. The survey also found increased use of coal, natural gas and oil/kerosene in the period, all potent contributors to global warming.²² This is despite the fact that alternative barns that run on solar energy have been designed. The use of these barns has yet to take off because of high costs and the lack of interest in promoting them by the tobacco companies. Although cigarette companies profess to be concerned by tobacco-related deforestation, their tree-planting programs are often poorly designed and not commensurate with the scale of the problem. BAT's website admits that wood is used in two-thirds of company growing operations in 20 countries and that almost half of these use wood for half or more of their curing. The company claims that they have run ambitious afforestation pro-

RATES OF DEFORESTATION

Country	Mean Annual Tobacco Production ('000 tons)	Total Annual Wood Consumption ('000 tons)	Area of Natural Woody Biomass Removed (hectares)	Total Annual Deforestation ('000 hectares)	Percentage of Tobacco-Related Deforestation
South Korea	85.5	272.2	5846	13.0	45.0
Uruguay	1.4	7.6	162	0.4	40.6
Bangladesh	55.0	128.0	2750	9.0	30.6
Malawi	125.4	485.4	14382	55.0	26.1
Jordan	2.8	11.7	252	1.0	25.2
Pakistan	96.0	486.1	10443	55.0	19.0
Syria	18.5	42.3	909	5.0	18.2
China	3049.0	722.8	15527	87.0	17.8
Zimbabwe	202.3	715.0	7945	50.0	15.9

SOURCE: Helmut Geist, "Global Assessment of Reforestation Related to Tobacco Farming," *Tobacco Control*, Spring 1999.

grams since the 1970s, sponsoring and promoting the planting of 267,000 hectares of managed, renewable woodlands worldwide in the last three decades. To put this into perspective, however, this is equal to the area of woodlands chopped down just in Southern Africa for tobacco in only two years.

BAT admits that its tree-planting programs do not necessarily take place in the same areas where farmers are cutting trees down. They claim, however, that as a condition of contract that farmers who use wood become “self-sufficient” by planting trees to supply their own fuel needs.²³ They do not mention what kind of trees are planted nor what percentage

of trees make it to maturity. In fact, many tree-planting programs in tobacco growing areas have failed because they follow the dictum of “cut a tree, plant a tree.” But given that only a small percentage of these seedlings survive, this means that the total forest cover decreases over time. According to a senior BAT employee in Kenya, “The company is shouting about massive tree planting, but this I’m afraid is nothing less than an outrageous attempt to veil the whole problem. There can be no argument that trees in the tobacco-producing areas are being felled willy-nilly and that in the not too distant [future], there won’t be any left at all. The problem is that BAT, as well as the farmer can get away with it, and they do.”²⁴

According to Samson Mwita Marwa, a former tobacco farmer and member of Parliament from the Kuria district in Kenya, “The lands are increasingly becoming bare and barren, unproductive, caked, ugly, and blistering. BAT claims to be engaged in reforestation programmes. I am yet to see a single mature tree that BAT has planted in Kuria district. In any case, the rate of deforestation is far too fast to be equal to the rate of reforestation. Surely that much is not, cannot, be in doubt.”²⁵

COLLECTING WOOD

Critics say that company afforestation programs are a sham. (Ross Hammond)





INDUSTRY MANIPULATION

For years, cigarette companies and leaf dealers have sought to align themselves with tobacco farmers and tobacco-producing countries in order to protect their profits. As a result, they have successfully shifted the terms of the debate in many countries from the protection of public health to the perceived damage that tobacco control policies will have on tobacco growers and their communities. Aligning themselves with tobacco farmers has proven to be a politically astute move on the part of the companies, since the public is much more sympathetic to the plight of peasant farmers eking out a living than they are to tobacco industry executives or stockholders.¹

SALES TRICKS

The tobacco industry aggressively sells both cigarettes (such as here in Japan) as well as the benefits of tobacco farming.
(J Holmes/Panos Pictures)

Around the world, the companies have engaged in a sophisticated campaign designed to shift attention away from their role in keeping tobacco prices down and undermining the bargaining power of farmers and towards the perceived impact that tobacco-control policies will have on farmers' (and countries') incomes. This has involved a two-pronged strategy of (a) exaggerating the impact of tobacco-control activities on the global demand for tobacco leaf and (b) misrepresenting the goals and programs of the World Health Organization (WHO). To carry out this strategy, the industry has worked directly, with sympathetic politicians and businesspeople, and indirectly, through front organizations that it has created and funded. Much of strategy has been coordinated by the companies through organizations such as the ICOSI (International Council on Smoking Issues), INFOTAB (International Tobacco Information Centre), and Agro-Tobacco Services. Internal tobacco industry documents made available as a result of court cases in the United States make clear the companies' desire to manipulate developing countries and tobacco farmers.

By the late 1970s, BAT was arguing that "Target countries should be made aware of . . . the long-term threat anti-tobacco measures pose for their economy. . . . We should approach the Grower Countries through our tobacco leaf buying connections and not through our cigarette manufacturing interests in the different countries. This has the advantage [that] the approach is made by the agricultural forces of the respective land, by people who themselves belong to the Third World, and not by an industry already under attack, by multinational enterprises who only care for their excessive profits."² The industry identified "mobilization of the leaf industry, especially in developing countries" as one of two "viable pressure points" for "dealing with the WHO."³

In 1984, the industry held a meeting with representatives of the international leaf dealers, asking them to help combat WHO's activities. One of the industry presenters remarked that they would:



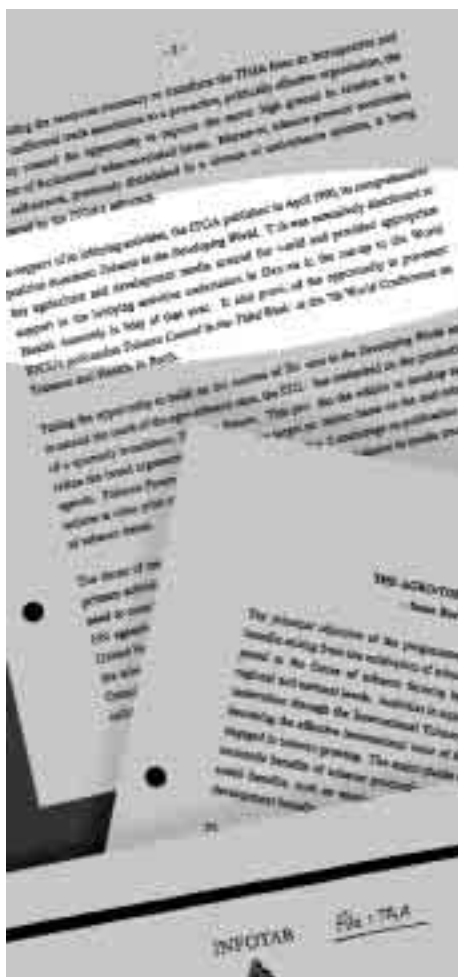
" . . . like briefly to turn to the revised presentation which we will be making to selected Ministers of Agriculture and other Ministers. In these presentations we shall be highlighting the threats to their own tobacco industries from the WHO and other UN agencies. . . . We will be emphasizing that the continuity of the attacks upon an industry so important to their country's economy will be hard to stop or even reverse. We shall also be emphasizing the evangelical and biased nature of

these attacks and the facts that they ignore completely many of the problems which the Third World should be treating as priority problems, such as poverty, malnutrition, and housing. . . . At an international level, would they be prepared to monitor, with the aid of their agricultural attaches accredited to intergovernmental organizations (UN, EEC, etc.) and embassies in the major countries the various anti-tobacco activities that are being planned or carried out . . . [and] engage their advice and



LEFT: Marlboro advertisement in Kazakhstan. The companies have shamelessly tried to manipulate governments and the public to oppose public health measures. (Gregory Wrona/Panos Pictures)

BELOW: Memo from Martin Oldman of the International Tobacco Growers Association (ITGA), a tobacco industry front group. The industry has used the ITGA to covertly lobby government officials in developing countries.



ernment and building relationships with the decision makers, and seeking opportunities to cultivate quietly a positive corporate image for Philip Morris. Particular care will be taken in developing relations with leaders of the tobacco growers.”⁶

The International Tobacco Growers Association (ITGA)

By the late 1980s, when tobacco growers had not materialized into a coherent voice for the industry, the major tobacco companies sought to “mobilize the Global Agro-Lobby” by creating a front organization.⁷ The vehicle they devised, which is still very active today, is the International Tobacco Growers Association, or ITGA. As this 1988 BAT memo puts it, “Manufacturers . . . would ‘control’ the primary funding of the organization, and would thus be able to ensure that it stuck to politics. . . . The ITGA could ‘front’ for our Third World lobby activities at WHO, and gain support from nations hostile to MNCs [multinational corporations]. The ITGA (pushed by us) could activate regional agriculture lobbies which are at present very weak and resistant to industry pressure.”⁸

Martin Oldman, the head of Agro-Tobacco Services who coordinated much of ITGA’s activities on behalf of the industry, wrote in 1991 that “The principal role of the new consultancy will be to control the international voice of agro-tobacco on behalf of its clients, ensuring that best use is made of the ITGA as a vehicle for targeted lobby activities. In particular, the consultancy will provide the coordination, facilitation, and motivation necessary to realize the full potential of the tobacco growers’ lobby. . . . Agro-Tobacco Services will develop and implement action plans for each of the ITGA member organizations, develop new argumentation, and liaise with external allies.”⁹

In 1995, Oldman wrote that one of the main issues to be resolved was “ ‘the management question’, i.e., how best to provide effective control over the manufacturers’ interest in the ITGA and its activities. . . . Subscribers to the agro-

assistance in devising strategies and actions appropriate to neutralize or moderate such activities?”⁴

A 1985 memo from Philip Morris details some of the company’s successes in manipulating the agriculture issue: “We have also helped organize growers in a number of countries. With their assistance, for example, the industry was instrumental in moving the Food and Agricultural Organization away from its anti-tobacco stance. Indeed, the FAO has made a 180-degree turn on this point.

Countries where we worked closely with the growers, and which were especially important in getting this change of position, include Malawi, Zimbabwe, Thailand, and Argentina.”⁵

In Turkey, a 1987 Philip Morris document details plans to “recruit and train a Corporate Affairs Manager. This individual will initially focus on identifying and developing relationships with the leaders of the “seed to market” elements of the Turkish tobacco industry, learning about the decision-making process of the gov-

tobacco program will wish to ensure that there is adequate control of the Association's activities. . . . It is certainly the case that there is less need for 'hand-holding' today than when the current arrangements were initiated. This said, it would be unwise for there to be much less contact between the manufacturers/dealers in the future than exists at present."¹⁰

Currently, the ITGA's lobbying and public relations activities are handled by a UK-based company, Hallmark Public Relations, which counts BAT as one of its main clients.¹¹ In a 1995 letter to BAT, Managing Director Tom Watson from Hallmark commented that "I am digesting Martin Oldman's notes but can't help but feel they show a touch of bunker mentality . . . Is there not a case for the ITGA to work with manufacturers like yourself and develop an international campaign which is aimed at a wider audience than governments? The campaign could use local voices (i.e., quotes and pictures) to make a case that tobacco is a fundamentally important cash crop which has high agronomic and foreign exchange value to a wide range of developing countries."¹²

Assault on the Tobacco Treaty

One of the main targets of the ITGA today is the Framework Convention on Tobacco Control (FCTC), currently being negotiated by WHO member states. ITGA attacks on the FCTC have followed a familiar pattern: exaggerate the economic importance of tobacco farming and misrepresent the goals of WHO and the FCTC process. In the year 2000, Hallmark "planned and implemented a strategy to take ITGA's messages to key government decision makers in South Africa, Zimbabwe, Malawi, Kenya, and India in an intensive 12-day Roadshow. . . . Hallmark set up a select series of briefings in capital cities where up to 100 invited guests—government ministers, MPs, media, and other opinion leaders – were informed of ITGA's position on current issues in the industry."¹³ According to ITGA president Richard Tate, "Our indus-

try faces its greatest ever global challenge with the WHO, supported by the World Bank, leading the 'anti' campaign to suffocate our markets and drive us all out of business."¹⁴ Todd Haymore, director of external affairs for Universal Leaf, added to the hyperbole when he accused WHO of "working to put millions of tobacco growers and workers out of business." He also inaccurately claimed that the FCTC is a "far-reaching attempt to control tobacco production and consumption."¹⁵

In fact, no person or institution involved in the FCTC negotiations—neither WHO, nor a single one of the 191 countries negotiating the FCTC, nor even any of the hundreds of NGOs that have been advocating for a strong FCTC—has ever called for any restraints whatsoever on tobacco farming. More importantly, there is no justification at all for the fears sparked by the cigarette companies and leaf dealers that a successfully negotiated FCTC will lead to economic ruin for anyone currently farming tobacco.

Even under the most optimistic tobacco-control scenarios, global tobacco consumption is projected to increase over the next three decades. According to the World Bank, if current trends continue, overall prevalence will fall in some countries but the absolute number of smokers will increase from the current 1.1 billion to 1.6 billion in 2025 (due in part to an increase in global population).¹⁶ Any declines in overall demand after that will be gradual, occurring over many generations.¹⁷ There is simply no realistic scenario under which anyone farming tobacco today will be put out of work as a result of the passage of the FCTC. As economist Ken Warner points out, "The principal effect of such diminution in tobacco use is not that tobacco farmers will be thrown out of work, but rather that the children of tobacco farmers will be less likely to go into tobacco farming than were their parents."¹⁸ Industry opposition to the FCTC is about protecting the profits of the cigarette companies and leaf dealers, not the livelihoods of tobacco farmers.

Growers Fight Back

Because cigarette companies and leaf dealers are the only buyers of tobacco leaf, individual farmers are reluctant to publicly criticize company practices out of fear of retaliation. Organizations such as the ITGA rarely, if ever, criticize the actions of the cigarette companies or leaf dealers that imperil the economic security of tobacco farmers (such as the growing use of reconstituted tobacco and cartel-like behavior in setting prices). Instead, they reserve their opposition for tobacco-control efforts such as the FCTC.

However, tobacco farmers have been gradually waking up to the fact that the cigarette companies are not their friends. In the United States, farmers' increasing bitterness over their plight has been accompanied by a growing realization that many of their problems are attributable to the actions of the tobacco companies, rather than competition from growers in other countries. More than 6,000 U.S. tobacco farmers have filed a \$69 billion lawsuit in federal courts against the manufacturers, alleging that the tobacco industry has conspired to destroy the federal tobacco purchasing system and replace it with a direct contracting system.¹⁹ In their complaint, the farmers assert that the companies "have manipulated the program and maneuvered its policies as part of their conspiracy to pay noncompetitive prices for tobacco."²⁰

In addition, tobacco growers and the public health community in the United States have established an ongoing dialogue on issues of common concern and agreed upon a set of "core principles" to both protect public health and the economic viability of tobacco-dependent communities.²¹

In other countries, farmers are realizing that tobacco is not the manna from heaven promised by the companies. Farmers in the Global South are now finding that as everybody expands production, supply is outstripping demand, making the global price for tobacco increasingly unstable.



CONCLUSION

The search for alternatives to tobacco will not be easy, given the powerful presence of the industry in developing countries. Says Reverend Luiz Prado, the bishop of Pelotas in Brazil, “Tobacco is a powerful economic temptation to our peasants . . . people have traditionally produced fruit, vegetables, and milk on a subsistence basis on five, 10, sometimes 18 hectares. The government does not give them economic support. The tobacco companies attack these small farmers, offering them an alternative cash crop. They say it’s possible for them to have cash in their pockets, a TV set, running water and sanitation in your house, etc., etc.” And that’s not all, says Prado, “When farmers opt to grow tobacco, they do it fully—turn over all their land to it. The result is monoculture. Farmers become dependent on tobacco.”¹

From the back-breaking manual labor to the deadly pesticides used to protect the crop and the vast quantities of timber used to cure the crop, the tobacco plant exacts a deadly toll on the farmer and the land. As the earnings of the companies soar, farmers are falling deeper and deeper into debt. Entire families of tobacco farmers, including women and children, now work without pay in the fields just to stay solvent.

Tobacco has never been a friend to the smoker. Now, from Argentina to Zimbabwe, tobacco farmers are learning that the tobacco is not their friend, either. Although the companies like to paint a picture of the farmers and companies as one big happy family, this picture is a myth. The reality is that the economic interests of the companies and tobacco farmers are not the same. Until this is acknowledged, workable solutions to the problems faced by tobacco farmers will be difficult to achieve.

DIMINISHING RETURNS

Work on tobacco farms, like this one in Malawi, is back-breaking and threatens the health of workers while returning little in the way of wages or profit.

(Giacomo Pirozzi/Panos Pictures)

RESOURCES on the web

Data Sources:

USDA Tobacco Briefing Room—an excellent source of data on global tobacco production and consumption from the U.S. Department of Agriculture
<http://www.ers.usda.gov/briefing/tobacco/>

USDA Foreign Agriculture Service Tobacco Room—data on tobacco farming and cigarette manufacturing around the world
<http://www.fas.usda.gov/cots/tobacco.html>

UN Food & Agriculture Organization data collections
<http://apps.fao.org/cgi-bin/nph-db.pl?subset=agriculture>

Miscellaneous:

Southern Tobacco Communities Project, which brings together tobacco farmers and public health advocates in the United States
<http://www.virginia.edu/~envneg/tobacco/>

“Core Principles” agreed to by major U.S. public health groups and tobacco producers
<http://www.virginia.edu/~envneg/tobacco/CorePrinciplesSummary.html>

Tobacco at a Crossroad: A Call to Action
Final report of the U.S. President’s Commission on Improving Economic Opportunity in Communities Dependent on Tobacco Production While Protecting Public Health
<http://tobaccofreekids.org/reports/falsefriends/pdf/report051401.pdf>

Framework Convention Alliance, coalition of NGOs from around the world working on the FCTC
<http://www.fctc.org>

News Sources:

International Tobacco List-serv: (news service on international tobacco issues)
Send the message “subscribe intl-tobacco <your e-mail address>” to listproc@essential.org

Tobacco BBS—links to news stories on tobacco issues, updated daily
<http://www.tobacco.org>

Industry Publications:

Tobacco Journal
<http://www.tobaccojournal.com/>

Tobacco Reporter
<http://www.TobaccoReporter.com>

Tobacco Asia
<http://www.tobaccoasia.com>

Companies & Affiliated Organizations:

British American Tobacco
<http://www.bat.com/>

Dimon Incorporated
<http://www.dimon.com/>

International Tobacco Growers Association
<http://www.tobaccoleaf.org>

Japan Tobacco
<http://www.jti.com/>

Philip Morris International
<http://www.pmintl.com/>

Standard Commercial Corporation
<http://www.sccgroup.com/>

Universal Corporation
<http://www.universalcorp.com/>

Other Reports by the Campaign for Tobacco Free Kids:

False Friends: The U.S. Cigarette Companies Betrayal of American Tobacco Farmers
<http://tobaccofreekids.org/reports/false-friends/pdf/campaign.pdf>

Public Health, International Trade and the Framework Convention on Tobacco Control
<http://tobaccofreekids.org/campaign/global/framework/docs/Policy.pdf>

Trust Us: We’re The Tobacco Industry
Quotes from internal company documents
<http://tobaccofreekids.org/campaign/global/framework/docs/TrustUs.pdf>

Illegal Pathways to Illegal Profits: The Big Cigarette Companies and International Smuggling.
<http://tobaccofreekids.org/campaign/global/framework/docs/Smuggling.pdf>

endNOTES

Chapter 1: Tobacco Growing Goes Global

- 1 "International Cigarette Manufacturers," *Tobacco Reporter*, March 2001.
- 2 Frank Swoboda and Martha Hamilton, "The Largest Independent Tobacco Merchants Are Based in Va. But Their Growth is Abroad," *Washington Post*, 7 July 1997.
- 3 Dimon SEC Form 10K-405, 25 September 1998; Chip Jones, "Harvesting 'Virginia Crude' Tobacco Keeps Rest Of Farm Afloat," *Richmond Times-Dispatch*, 28 June 1998.
- 4 Taco Tuinstra, "African Potential," *Tobacco Reporter*, November 1998.
- 5 "Poland: ZPT Cigarette Factory Initiates Growers Fund," *Tobacco International*, June 1996; *World Tobacco File: Emerging Markets in Central and Eastern Europe*, (London: DMG Business Media, 1997).
- 6 *World Tobacco File: Emerging Markets in Central and Eastern Europe* (London: DMG Business Media, 1997).
- 7 *Tobacco International*, September 1997.
- 8 Rowena Jacobs, et. al., "The Supply-Side Effects Of Tobacco Control Policies," in *Tobacco Control in Developing Countries*, Jha and Chaloupka eds., Oxford University Press, 2000.
- 9 Data for 1997 and 2000 tobacco production derived from FAO STAT database. The top 12 tobacco-producing companies in the year 2000 were China, India, Brazil, United States, Turkey, Zimbabwe, Indonesia, Italy, Greece, Malawi, Argentina and Pakistan, arranged in descending order of production volumes.
- 10 "Looking Ahead With Ulrich Herter," *Tobacco Reporter*, December 1999.
- 11 Chris Glass, "Growing Pains," *Tobacco Reporter*, May 1998.
- 12 Jacobs, op. cit.
- 13 Brian Ligomeka, "Malawi Headed For Slump As Tobacco Earnings Drop 14 Percent," *African Eye News Service*, 14 November 2000.
- 14 "Malawi Bans Tobacco Imports, Accuses Processors of Price-Fixing," *Tobacco Reporter*, June 2000.
- 15 Chuck Bennett, "Brazil's Success Hurts Neighboring Argentina," *Tobacco Reporter*, May 2000 and data from Global Agriculture Information Network reports, 30 April 2000, published by Economic Research Service, United States Department of Agriculture.
- 16 Chris Glass, "Paper Tobacco," *Tobacco Reporter*, August 1998.
- 17 Taco Tuinstra, "Swelling Profits," *Tobacco Reporter*, August 1999.
- 18 Taco Tuinstra, "A New Environment," *Tobacco Reporter*, August 1999.
- 19 Sworn affidavit made by former Philip Morris employee Jerome Rivers on March 7, 1996 to the United States Food and Drug Administration. <http://www.gate.net/~jcanon/documents/jrivers.txt>
- 20 Taco Tuinstra, "Rethinking Stem," *Tobacco Reporter*, July 1999.
- 21 John See, "Tastes Great," *Tobacco Reporter*, December 1998.
- 22 Chris Glass, "Paper Tobacco," *Tobacco Reporter*, August 1998.

- 23 "Making Reconstituted Tobacco Using Exploded Tobacco," *Tobacco Reporter*, September 1999.

Boxes: Tobacco Farming

- 1 Richard Kluger, *Ashes to Ashes*, (New York: Alfred Knopf, 1996).
- 2 Taco Tuinstra, "The Pursuit Of Perfection," *Tobacco Reporter*, December 2000.
- 3 Kluger, op. cit.
- 4 Kluger, op. cit.

Company Profiles

- 1 British American Tobacco, *Annual Review and Summary Financial Statement 2000*. Converted from British pounds at the rate of 1.00GBP=1.62USD on 1 January, 2001.
- 2 *Phillip Morris Annual Report, 2000*.
- 3 <http://www.aficio.org/cgi-bin/aficio.pl?tkr=UVV&pg=1>

Main Types of Tobacco

- 1 "Types Of Tobacco," North Carolina State University Cooperative Extension; <http://pitt.ces.state.nc.us/ag/tobacco/tobtypes.html>

Putting Tobacco on a "Diet"

- 1 Taco Tuinstra, "Swelling Profits," *Tobacco Reporter*, August 1999.
- 2 Rhonda Lee, "Expanding Horizons," *Tobacco Reporter*, October 1998.

Fighting the Global Glut

- 1 Adapted from: Jasper Womach, "Tobacco Price Support: An Overview Of The Program," USDA, 2 October 1997; Verner Grise, "Tobacco: Background For 1995 Farm Legislation," Economic Research Service, Agricultural Economic Report Number 709, April 1995.
- 2 Jasper Womach, "Tobacco Price Support: An Overview Of The Program," USDA, 2 October 1997.
- 3 Chip Jones, "Tobacco Farmers See Volatile Year," *Richmond Times-Dispatch*, 4 February 1998.
- 4 Janet Patton, "Many Farmers Are Wondering Which Way To Turn," *Lexington Herald Leader*, 21 June 1998.
- 5 Jacobs op. cit.
- 6 One study predicts that U.S. tobacco prices could fall by between 20 and 27 percent depending on the type of tobacco. See: A. Blake Brown, William Snell and Kelly Tiller, "The Changing Political Environment For Tobacco: Implications For Southern Tobacco Framers, Rural Economies, Taxpayers And Consumers," Southern Agricultural Economics Association Annual Meeting, Memphis, Tennessee, 2 February 1999.

Chapter 2: Power Imbalance: Companies vs. Farmers

- 1 Turkville Kille, "Big Domination," *Tobacco International*, September 1998.
- 2 "Malawian Riot Police Keep Calm In Tobacco Growers Protest," *South African Broadcasting Corporation*, 18 April 2000.
- 3 "Low Prices at Limbe Floors: Tobacco Growers Hit Below Belt," *Daily Times*, 5 April 2001.
- 4 Taco Tuinstra, "Malawi Farmers Turn On Foreign Buyers After Drop In Prices," *Tobacco*

Reporter, June 1997.

- 5 Taco Tuinstra, "Pressure Building," *Tobacco Reporter*, June 1998.
- 6 Michael Hartnack, "Tobacco Auctions Off To A Good Start," *Business Day* (South Africa), 22 April 1999.
- 7 For some examples of the conflict between tobacco companies and farmers over loans, see the following articles: "Tanzania's Tobacco Production Could Fall," *Tobacco Journal International*, 8 March 2000; Pamphil H.M. Kweyuh, "Does Tobacco Growing Pay? The Case Of Kenya," in ; *The Economics of Tobacco Control: Towards an Optimal Policy Mix*, Abedian et al. eds., (Cape Town: Applied Fiscal Research Center, 1998); "British American Tobacco Issues Warning To Kenyan Growers," *Tobacco International*, November 1999; and Robert Wafula, "BAT Takes A Hard Line On Debtor Farmers," *Daily Nation*, 9 July 1999.
- 8 Chip Jones, "A Virginia Grower Sees Offshore Battle Brewing," *Richmond Times-Dispatch*, 28 June 1998.
- 9 Katherine Ellison, "Threat To U.S. Markets Isn't In Courtroom - It's In Brazil," *Miami Herald*, 29 June 1997.
- 10 Angela Cordeiro, Francisco Marochi and Jose Maria Tardin, "A Poison Crop - Tobacco In Brazil," Pesticide Action Network Briefing Paper, June 1998.
- 11 Diana Jean Schemo, "In Brazil Tobacco Country, Conglomerates Rule," *New York Times*, 2 April 1998.
- 12 Guido Jungbluth, "Exchanges In Brazil," *Tobacco International*, April 1999.
- 13 Taco Tuinstra, "Price Quarrel," *Tobacco Reporter*, May 1999.
- 14 Bruce Schreiner, "Contract Buying Ignites Bidding War For Tobacco Farmers," *Associated Press*, 7 April 2001; David Rice and John Reid Blackwell, "Growing Pains; The Business End of Raising Tobacco Turns Into a Maze," *Winston-Salem Journal*, 17 June 2001.
- 15 Tobacco seeds in Malawi are produced by a government parastatal (the National Seed, Cotton, and Milling Company), purchased in 1989 by the U.S.-based Cargill Corporation. See "Malawi: Tobacco and Products Annual 2000," USDA/Foreign Agricultural Service, 20 July 2000.
- 16 "Many Farmers Abandon Tobacco Crop In Malawi," *Panafrican News Agency*, 15 January 2001.
- 17 Raphael Tenthani, "Malawi Tobacco Growers Anxious Over Debt," *Panafrican News Agency*, 9 May 2000.
- 18 "Tanzania's Tobacco Production Could Fall," *Tobacco Journal International*, 8 March 2000.
- 19 "Grower Exile Means Plummeting Yields In Malawi," *Tobacco International*, May 1999.
- 20 "Farmers Losing To Low Prices," *Tobacco International*, June 2000.
- 21 "Bogus-Buyers Directive Beefed Up," *Tobacco International*, March 1999.
- 22 Pamphil H.M. Kweyuh, "Does Tobacco Growing Pay? The Case Of Kenya," in *The Economics of Tobacco Control: Towards an Optimal Policy Mix*, Abedian et al. eds., (Cape Town: Applied Fiscal Research Center, 1998).

- 23 "British American Tobacco Issues Warning To Kenyan Growers," *Tobacco International*, November 1999.
- 24 "Farmers Set The Record Straight On Controversial Issues," *Tobacco International*, August 1999 and "Poor Husbandry Hurts Tobacco Farming In Kenya," *Tobacco Reporter*, September 1999.
- 25 "Rain And Economy Equal Tough Times," *Tobacco International*, September 1998.
- 26 Cordeiro, et al., op. cit.

Boxes: "Betrayal, Blackmail and Robbery"

- 1 Excerpted from testimony submitted on 17 August 2000 to the World Health Organization's public hearings for the Framework Convention on Tobacco Control.

Demise of the American Family Farm

- 1 R.W. Apple Jr., "For Tobacco Growers: A Changing Life," *The New York Times*, 14 September 1998. This works out to \$5.76 an hour, assuming a 40 hour work week, just above the national minimum wage of \$5.15.
- 2 USDA Economic Research Service, "Table B-1: Characteristics of Tobacco Farms, 1992," *Tobacco: Situation and Outlook Report*, April 1998.
- 3 U.S. Department of Labor, "National Compensation Survey: Occupational Wages in the United States, 1999,"; U.S. Bureau of Labor Statistics, June 2001.
- 4 Tom Capehart, USDA Economic Research Service, Verner N. Grise, USDA Economic Research Service, "The Changing Tobacco User's Dollar," *Tobacco Situation & Outlook*, June 1992; Wayne Purcell, "Who Gets The Tobacco Dollar?" *Tobacco Farming: Current Challenges and Future Alternatives*, Southern Research Report#10, Academic Affairs Library, Center for the Study of the American South, Spring 1998; Fred Gale "Tobacco Dollars And Jobs," USDA Economic Research Service, 14 October 1997.
- 5 1997 Census of Agriculture, USDA, National Agricultural Statistics Service, 1999.

Falling Deeper Into Debt

- 1 Schemo, op. cit.

Chapter 3: The Illusory Economic Benefits of Tobacco

- 1 Tobacco export data from FAO statistical database (<http://apps.fao.org>) for 1997; total export earnings data from the World Bank, *Entering the 21st Century: World Development Report 1999/2000*.
- 2 Based on *World Development Report* (World Bank) figures for 1999. Malawi earned \$272 million of its total exports of \$470 million from tobacco while Zimbabwe earned \$612 million of its total exports of \$1924 million.
- 3 *Human Development Report 2000*, United Nations Development Program, 2000.
- 4 "World Bank: Malawi Too Tobacco Dependent," *Tobacco Reporter*, September 2000.
- 5 *The Tobacco Industry in Malawi: An Economic Analysis*, Price Waterhouse Coopers, October 2000.
- 6 *Tobacco in the Developing World*, International Tobacco Growers Association, 1990 and Jacobs op. cit.

7 Using the FTE concept, two half-time employees would count as one FTE.

8 Jacobs, op. cit. According to one report, Universal is conducting experiments with mechanized farming in Brazil, possibly reducing this number further (Guido Jungbluth, "Double Whammy," *Tobacco International*, April 2000).

9 P.R. Panchamukhi, "Agricultural Diversification as a Tool of Tobacco Control," paper presented at WHO's International Conference on Global Tobacco Control Law: Towards a WHO Framework Convention on Tobacco Control, New Delhi, India, 7 January 2000.

10 Jacobs et. al, op. cit.

11 V.M. Varashin, et al. "Fatores limitantes ao desenvolvimento da agricultura familiar de subsistencia da Regiao Centro-Sul do Parana," Iapar: Londrina, 1991. Cited in Cordeiro, op. cit.

12 Kweyuh, op. cit.

13 Jane Kariuki, "Tobacco Cultivation Threatens Food Security In Kenya," *Panos Features*, May 2000.

14 Hazwell Kanjaye, "Farmers Grumble Over Tobacco Prices," *Inter Press Service*, 24 September 1999.

15 Brian Ligomeka, "Cotton, Macadamia To Replace Tobacco In Malawi," *African Eye News Service*, 13 November 2000.

16 Christiaan Virant, "China's Yunnan Looks Beyond Tobacco," *Reuters*, 4 May 1999.

17 "Tobacco Growing A Threat To Food?" *Tobacco International*, July 1999.

18 John Nkuchia, "Milking The Last Drop: A Case Of The Tobacco Industry In Kenya," Presented at Ninth World Conference on Tobacco OR Health, Paris, 10-14 October, 1994.

19 Jane Kariuki, "Tobacco Cultivation Threatens Food Security In Kenya," *Panos Features*, May 2000.

20 UNICEF, *The State of the World's Children 1997* (Oxford, 1997); U.S. Department of Labor, "By The Sweat And Toil Of Children Volume II: The Use Of Child Labor In U.S. Agricultural Imports & Forced And Bonded Child Labor," (Washington, 1995); ILO, "Bitter Harvest: Child Labour In Agriculture," (Geneva, 1997); ILO, "Child Labour In Commercial Agriculture In Africa" (Geneva, 1997); K.A. Ogen, Uganda: "Paying The Price Of Growing Tobacco," (Kampala: The Monitor Publications, 1993); and Ministério do Trabalho, Crianças e Adolescentes na Fumicultura/RS: Trabalho, Escola, Saúde (Porto Alegre, 1998).

21 Interview with authors, 7 April 2001.

22 Alec Fyfe, "Bitter Harvest: Child Labor In Agriculture," International Labor Organization, 1997.

23 Brian Ligomeka, "Malawi Admits Use Of Illegal Child Labor," *African Eye News Service*, 16 November 2000.

24 "Malawi Unions Cite Use Of Child Labor On Tea Estates," *Dow Jones Newswires*, 1 November 2000.

25 Ligomeka, op. cit.

26 Interview with authors, 7 April 2001.

Box: Voices from Kenya

1 Submitted on 17 August 2000; <http://www-nt.who.int/whosis/statistics/fcte/Submissions/F6360629.pdf>

2 Excerpted from testimony submitted on August 17, 2000 to the World Health Organization's public hearings for the Framework Convention on Tobacco Control

Chapter 4: Toll on People & the Environment

1 "Tobacco," in R.J.A. Goodland, C. Watson and G. Ledec, *Environmental Management in Tropical Agriculture*, Westview Press, 1984.

2 Judith Achieng, "Pesticides Pose Risk To African Farmers" *Inter Press Service*, 16 February 1998.

3 Cited in Achieng, op. cit.

4 "Poisonings in Brazil," *Global Pesticide Campaigner*, Pesticide Action Network, March 1997. The study did not specify what portion of these occurred on tobacco farms.

5 Lopes ER, et. al. "Cancer e meio ambiente: Tabaco - agrotóxicos - radiacoes - dieta. Um documento para a Conferencia Mundial de Ecologia," *Revista Brasileira de Cancerlogia*, 1992. Cited in Cordeiro, op. cit.

6 Katherine Ellison, "Tobacco Farming Central Shifts To South America," *Miami Herald*, 29 June 1997.

7 J.W. Falk, L.A. Carvalho, L.R. Silva and S. Pinheiro, Suicídio e doença mental em Venâncio Aires-RS: consequencia do uso de agrotóxicos organofosforados? Relatório preliminar de pesquisa, 1996.

8 A. Van Wambeke, "Management Properties Of Oxisols In Savanna Ecosystems," in E. Bornemisz and A. Alvarado, *Soil Management in Tropical America*, North Carolina State University, 1975.

9 Helmut Geist, "Soil Mining And Societal Responses," in *Coping with Changing Environments*, Beate Lohnert and Helmut Geist eds., Ashgate Publications, 1999.

10 Mary O. Amdur, et. al., *Casarett and Doull's Toxicology: The Basic Science of Poisons*, Pergamon Press, 1991

11 "Southeast Center Studies Ways To Prevent Green Tobacco Sickness," *NIOSH Agricultural Health & Safety Center News*, 4 August 1996.

12 S. Gehlbach et al. "Nicotine Absorption By Workers Harvesting Green Tobacco," *The Lancet*, 1975, number 1.

13 Sarah Quandt et al. "Migrant Farmworkers And Green Tobacco Sickness: New Issues For An Understudied Disease," *American Journal of Industrial Medicine*, February 2000.

14 Helmut Geist, "How Tobacco Farming Contributes To Tropical Deforestation," in *The Economics of Tobacco Control: Towards an Optimal Policy Mix*, Abedian et al. eds., (Cape Town: Applied Fiscal Research Center, 1998).

15 Geist, 1998. op. cit.

16 Beauty Lupiya, "Tobacco Kills Brazilian Forests" *Panos Features*, 8 August 1997.

17 Lupiya, ibid.

18 ITGA, *Deforestation and the Use Of Wood For Curing Tobacco*, January 1998.

19 Geist, 1998 and 1999. op. cit.

20 ITGA, op. cit.

21 Goodland, op. cit.

22 ITGA, op. cit.

23 <http://www.bat.com>

24 Quoted in John Madeley, "British American Tobacco: The Smokescreen," in *Hungry for Power*, (UK Food Group: London, 1999).

25 Testimony submitted on 17 August 2000 before the WHO Public Hearings on the FCTC; <http://www-nt.who.int/whosis/statistics/fcte/Submissions/F6360629.pdf>

Boxes: Zimbabwe

1 Submitted on 17 August 2000; <http://www-nt.who.int/whosis/statistics/fcte/Submissions/F6360629.pdf>

Brazil

2 Clarinha Glock, "Kids At Risk From Agrochemicals On Tobacco Farms," *Inter Press Service*, 17 February 1999

3 Cordeiro, op. cit.

Kenya

4 Excerpted from testimony submitted on 17 August 2000 to the World Health Organization's public hearings for the Framework Convention on Tobacco Control

Mexico

5 Ellen Hickey and Yenyen Chan, "Tobacco, Farmers And Pesticides," Pesticide Action Network, May 1998. The article was based on interviews with Huichol workers in the documentary film "Huicholes And Pesticides," by Patricia Diaz-Romo, produced in 1994 in Mexico.

6 Marwaan Macan-Markar, "Poisoned Lives: The Price Of Tobacco Farming," *Inter Press Service*, 27 August 2000.

Some Common Tobacco Pesticides

1 C. Cox, "Aldicarb," *Journal of Pesticide Reform*, Summer 1992.

2 C. Cox, "Chlorpyrifos Factsheet, Part 2," *Journal of Pesticide Reform*, Spring 1995.

3 C. Cox, "1,3-Dichloropropene," *Journal of Pesticide Reform*, Spring 1992.

Hazards of the Job

1 Example derived from questionnaire designed by Kentucky Regional Poison Center to test physicians registered for Continuing Medical Education Credits (CME) and for nurses taking Continuing Education Credits (CEU). <http://www.krpc.com/proffed/gts%5Cgreentobacco.cfm>

Chapter 5: Industry Manipulation

1 In 2000, for example, Philip Morris CEO Geoffrey Bible made \$13.7 million in salary (not counting stock options), more than 15,000 times more than Blasio and Claire Lehman, who are profiled in "Falling Deeper Into Debt," page 16.

2 J. M. Hartogh, "Letter to all Members of the ICOSI Working Group, enclosing a Memorandum by Dr E Bruckner," 26 June 1979, BAT Guildford Depository, Bates Number 100433043-47.

3 R. Marcotullio, "INFOTAB Board of Director's (BOD) Meeting - 30 March 1981," <http://www.rjtdocs.com>, Bates Number 502741855.

4 INFOTAB, "Meeting With Representatives Of International Leaf Dealers," 4 May 1984, <http://www.bwdocs.aalatg.com>, Bates Number 690155210-33.

5 From "The Perspective Of Philip Morris International On Smoking And Health Issues (Text of the discussion document used at the meeting of top management)," 29 March 1985; <http://www.pmdocs.com>, Bates Number 2023268329-49.

6 Philip Morris, "Draft Corporate Affairs Plan," 25 November 1987; <http://www.pmdocs.com/getallimg.asp?DOCID=2501254715/4723>

7 INFOTAB, Appendix I, "January 1989 Discussion Paper," 30 January 1989; <http://www.pmdocs.com/getallimg.asp?DOCID=2501045258/5268>; Bates Number 2501045258-5268.

8 J. Bloxidge, "Fax to Board Members, 11 October 1988," BAT Guildford Depository, Bates Number 502555416-7.

9 M. Oldman, "Letter to David Bacon Regarding Agro-Tobacco Services—A Proposal for a Consultancy Agreement," 1991, BAT Guildford Depository, Bates Number 502552645-54.

10 M. Oldman, "Letter to David Bacon from BAT, 29 March 1995," BAT Guildford Depository, Bates Number 502555220-6.

11 This section is drawn from "ITGA Uncovered: Unravelling the Spin - The Truth Behind The Claims," PATH Canada Briefing Paper, April 2001. Hallmark also devised and runs a new initiative called "Eliminating Child Labour" which brings together the ITGA, BAT and the IUF (the International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers Associations); see: <http://www.endchildlabour.org/>

12 T. Watson, "Letter to David Bacon, 21 March 1995," Bates Number 502555227-9, BAT Guildford Depository, quoted in "ITGA Uncovered: Unravelling the Spin - The Truth Behind The Claims," PATH Canada Briefing Paper, April 2001.

13 Hallmark Public Relations, Media Release, May 2000; <http://www.hallmarkpr.co.uk/News/tour.htm>

14 "Fighting To Be Heard," *Tobacco Journal International*, 11 December 2000.

15 Statement by Todd P. Haymore, Director of External Affairs, Universal Leaf Tobacco Company before the public meeting on the Framework Convention on Tobacco Control hosted by the US Department of Health and Human Services, 15 March 2000, Washington, DC; <http://www.cdc.gov/tobacco/fcte/fcte-transcript.pdf>

16 World Bank, *Curbing the Epidemic: Governments and the Economics of Tobacco Control*, 1999; <http://www1.worldbank.org/tobacco/reports.htm>

17 World Bank, *Curbing the Epidemic: Governments and the Economics of Tobacco Control*, 1999.

18 Kenneth Warner, "The Economics Of Tobacco: Myths And Realities," *Tobacco Control*, 2000, vol. 9.

19 Christopher Bickers, "Adversaries Now," *Tobacco International*, March 2000. For details of the suit, see <http://www.farmer-lawyer.com/tobacco.html>

20 Amended complaint, filed 24 July 2001, U.S. District Court, North Carolina.

21 See <http://tobaccofreekids.org/reports/false-friends/>

Conclusion

1 Madeley, op. cit.

CIGARETTE MANUFACTURERS & LEAF DEALERS: SUBSIDIARIES, AFFILIATES & LICENSING AGREEMENTS*

COUNTRY	BRITISH AMERICAN TOBACCO	PHILIP MORRIS	JAPAN TOBACCO	DIMON	STANDARD COMMERCIAL	UNIVERSAL LEAF
Andorra		Industries Montanya S.A.*				
Argentina	Nobleza-Piccardo S.A.I.C. y F.	Massalin Particulares S.A.	Nobleza-Piccardo S.A.I.C. y F.*	DIMON Argentina S.A.	Exportadora De Productos Agrarios S.A. Trans-Continental Leaf Tobacco	Catso, Inc. Tabacos Argentinos S.A.
Aruba		Superior Tobacco Co. N.V.*				
Australia	BAT Australasia Ltd.	Philip Morris Ltd.	Rothmans of Pall Mall (Australia) Ltd. *			
Austria		Austria Tabakwerke A.G.*	Austria Tabak*	DIMON Tabakhandelsgesellschaft M.G.H. DIMON International Services Ltd.		
Bangladesh	BAT Bangladesh Co. Ltd.					
Barbados	BAT Company (Barbados) Ltd.					
Belgium	BAT Belgium S.A. Tabacofina-Vander Elst N.V.*	Philip Morris Belgium S.A.				
Brazil	Souza Cruz S.A. Souza Cruz Trading S.A.	Philip Morris Brasil S.A.	JT International do Brasil Limitada Souza Cruz S.A.*	DIMON do Brasil Tabacos Ltda.	Meridional de Tabacos Ltda. Trans Continental Participacoes E. Empreendimentos Ltda.	Universal Leaf Tabacos Ltda. Ermor Tabarama-Tabacos Do Brasil Ltda.
Bolivia		Compania Industrial de Tabacos S.A.*				
Bulgaria	BAT Bulgaria EOOD	Philip Morris Services Bulgaria EOOD		DIMON Bulgaria EOOD		
Cambodia	BAT Cambodia Ltd.					
Cameroon	BAT Cameroun S.A.					
Canary Islands						
Canada	Imasco Ltd. (42%)	Rothmans, Benson & Hedges Inc.	JTI-MacDonald Corp.	DIMON International Canada Ltd.	Standard Commercial Tobacco Company of Canada Ltd.	Simcoe Leaf Tobacco Co. Ltd.
Chile	Compania Chilena de Tabaco S.A.			DIMON International		
China	BAT China Ltd. (Incorporated in the United Kingdom) British American Tobacco Co. (Hong Kong) Ltd.	Philip Morris Asia Ltd.	JT International (HK) Ltd. JTI China Ltd.	DIMON International China	Standard Commercial Services	Universal Leaf Far East Ltd. Handelsgesellschaft (GmbH & Co)
Colombia	BAT (South America) Ltd.					
Congo	British American Tobacco Congo SARL			DIMON Congo SPRL		
Costa Rica	Republic Tobacco Co.	Tabacalera Costarricense S.A.				
Croatia		Tvornica Duhana Rovinj*	Tvornica-Duhana Zagreb D.D.*			
Curacao		Superior Tobacco Co. of Curacao N.V.*				
Cyprus	BAT (Cyprus) Ltd.					
Czech Republic		Philip Morris CR a.s.	JT International Spol sro			
Denmark	Skandinavisk Tobakskompagni A/S (26%)					
Dominican Republic	British American Tobacco	E. Leon Jimenes C. por A.	Compañia Anonima Tabacalera (CAT)			Santo Domingo C. por A. Compania de Tabaco Kaubeck C. por A. Industria Exportadora de Tabaco C. por A. INETAB-Industria Exportadora de Tabacos Dominicanos C. por A.
Ecuador		Tabacalera Andina S.A.				
Egypt		Loufty Mansour International Distribuion Co.*				
El Salvador	Cigarrera Morazan S.A. de CV					
Fiji			Rothmans of Pall Mall (Australia) Ltd.*			
Finland	British American Tobacco Nordic Oy	Amer-Tupakka Oy*	JT International Finland OY			
France		Philip Morris France S.A.S.	JT International France S.A.			Itofin, S.A.
Germany	BAT (Germany GmbH) Rothmans Germany GmbH British American Tobacco Industrie GmbH BATIG Gesellschaft für Beteiligungen m.b.H.	Philip Morris GmbH	JT International Germany GmbH	DIMON Rotag AG-Rohtabake Intabex Germany Rohtabakwerk GmbH	Werkhof GmbH	Gebrüder Kulenkampf AG C.A. Bautz GmbH Kausse & Beckrö ge GmbH Handelsgesellschaft Frantz Kragh (GmbH & Co)

COUNTRY	BRITISH AMERICAN TOBACCO	PHILIP MORRIS	JAPAN TOBACCO	DIMON	STANDARD COMMERCIAL	UNIVERSAL LEAF
Ghana	British American Tobacco Ghana Ltd.					
Greece		Philip Morris Hellas S.A. Papastratos Cigarette Manufacturing Company *	JT International Hellas A.E.B.E. Karelias Tobacco Co.*	DIMON Hellas Tobacco S.A. Georges Allamanis Tobacco International S.A.		
Guatemala	Tabacalera Nacional S.A.	Tabacalera Centro-americana S.A.		DIMON Guatemala S.A.		Casa Export Ltd.
Guinea						
Guyana	Demerara Tobacco Co. Ltd.					
Honduras	Tabacalera Hondurenza S.A.				Exportadora De Tabaco De Honduras, S.A. De C.V.	
Hong Kong	BAT Co. (Hong Kong) Ltd. Rothmans Far East Ltd.	Philip Morris Asia Ltd.			Pacific Trading & Agency Company, Ltd.	Universal Leaf Far East Ltd.
Hungary	BAT Magyarország BAT Pecs Dohánygyár Kft. Dohány Kereskedelmi Kft.	Philip Morris Hungary Ltd.	Reemtsma Debreceni Dohánygyár Kft.*			Nyiregyhazó Tobacco Processing Co.
India	VST Industries Ltd. (30%) ITC Ltd. (30%)	Godfrey Phillips India Ltd.		DIMON International Services Ltd.	Trans Continental Tobacco India (Pvt) Ltd.	
Indonesia	P.T. BAT Indonesia Tbk/ PT Rothmans of Pall Mall Indonesia	P.T. Philip Morris Indonesia		DIMON Indonesia Representative Office		P.T. Gading Mas Indonesian Tobacco Inc. Universal Leaf Far East Ltd. Indoco Intl. Pandu Intl.
Ireland	P.J. Carroll & Co. Ltd. Hamburg Investment & Trading Co.					
Italy		Ente Tabacchi Italiana (ETI)*	JT International Italia s.r.l	DIMON Italia S.r.l.	Transcatlab SpA	Trestina Azienda Tabacchi SpA Tabacchi Greggi Italiana SpA Deltafina SpA
Ivory Coast		La Societe Ivoirienne de Tabac (SITAB)*				
Jamaica	Carreras Group Ltd. (50%)			DIMON		
Japan	Brown & Williamson (Japan) Inc. Rothmans Japan Ltd.	Philip Morris K.K. Japan Tobacco Inc.*	Japan Tobacco Inc.			
Jordan		International Tobacco & Cigarette Co. Ltd.*	JT International (Jordan) Ltd.			
Kazakhstan		OJSS Philip Morris Kazakhstan	JTI Central Asia			
Kenya	British American Tobacco Kenya Ltd.					
Korea, South	BAT Korea Ltd. Rothmans Korea Ltd.	Philip Morris Korea CH.	JT International Korea Inc.			
Kyrgyzstan				DIMON Kyrgyzstan		Universal Tobacco Kyrgystan Universal Tobacco Nookat
Liechtenstein					Trans-Continental Leaf Tobacco Corporation	
Lithuania		UAB Philip Morris Lietuva				
Macedonia		Philip Morris Skopje d.o.o. Tutunski Kombinat Prilep*		AD DIMON Gorica AD Jugtutun "Mara Dimova" DIMON Hellas Tobacco S.A.	Trans-Continental Leaf Tobacco Corporation	
Malawi	BAT (Malawi) Ltd.			DIMON (Malawi) Ltd.	Stancam Tobacco Co. (Malawi) Ltd. Tobacco Processors (Lilongwe) Ltd.	Limbe Leaf Tobacco Co. Ltd.
Malaysia	British American (Malaysia) Berhad	Philip Morris (Malaysia) Sdn. Bhd.	JT International Tobacco (M) Sdn. Bhd.	Dimon International Tabak B.V.		
Malta	Central Cigarette Co. Ltd. (50%)	Austria Tabakwerke A.G.*				
Mauritius	BAT (Mauritius) PLC (Incorporated in the United Kingdom)					
Mexico	Cigarrera La Moderna S.A. de C.V.	Cigarros La Tabacalera Mexicana S.A. de C.V. Philip Morris Mexico S.A. de C.V.	Cigarrera La Moderna, S.A. de C.V.*	DIMON Mexico S.A. de C.V.		Tabacos del Pacifico Norte S.A.
Moldova				DIMON International Moldova		
Mozambique				Tabacos de Manica		

COUNTRY	BRITISH AMERICAN TOBACCO	PHILIP MORRIS	JAPAN TOBACCO	DIMON	STANDARD COMMERCIAL	UNIVERSAL LEAF
Netherlands	B.A.T. Finance BV British American Tobacco International (Holdings)BV British American Tobacco The Netherlands BV British American Tobacco Manufacturing BV British American Tobacco Exports BV Rothmans Central & Eastern Europe BV Rothmans Far East BV Theodoris Niemeyer BV	Philip Morris Holland B.V.	JT International Company Netherlands B.V.	DIMON International Tabak B.V.		Gebrüder Kulenkampf AG B.V. Deli-HTL Tabak Maatschappij B.V. Deli Universal NV
New Zealand	British American Tobacco (New Zealand) Ltd.		Rothmans of Pall Mall (Australia) Ltd.*			
Nicaragua	Tabacalera Nicaraguense S.A.					
Nigeria	Nigerian Tobacco Co. Plc.					
Pakistan	Pakistan Tobacco Co. Ltd.	Lakson Tobacco Co. Ltd.				
Panama	Tabacalera Istmena S.A.	Tabacalera Nacional S.A.				
Papua New Guinea	British American Tobacco (PNG) Ltd.					
Paraguay						Tabacalera San Fernando
Peru			BAT (South America) Ltd.*			
Philippines		La Suerta Cigar and Cigarette Company*	JTI Company (Philippines) Inc. Fortune Tobacco Corp.*	DIMON Asia CDF Philippines		Lancaster Philippines Inc.
Poland	British American Tobacco Polska S.A.	Philip Morris Polska S.A.	JT International Company Poland Sp. z.o.o.	DIMON International Inc.		Universal Leaf Tobacco Poland Sp. Universal Trading Poland Ltd.
Portugal		Tabaqueira, S.A.				
Puerto Rico			JT International Manufacturing America Inc.			
Reunion	BAT La Reunion SARL	Philip Morris Reunion				
Romania	BAT (Romania) Trading SRL	Philip Morris Romania s.r.l.	JT International (Romania) S.R.L			
Russia	BAT STF OJSC BAT YAVA	AO Philip Morris Neva OAO Philip Morris Kuban AO Philip Morris Izhora Philip Morris Sales & Marketing Ltd.	OAO JT International Yelets OAO Petro Cres Neva Company Ltd.	DIMON International AG Intabex St. Petersburg	OAO T.K. Tabak	Casalee Tabak Universal Eastern Europe Ltd.
Senegal		La Manufacture de Tabacs de l'Quest Africain*				
Sierra Leone	Aureol Tobacco Co. Ltd.					
Singapore	British American Tobacco Co. (Singapore) Ltd. Rothmans Industries Limited	Philip Morris Pte. Ltd.	JT International (Singapore) Pte. Ltd.			
Slovakia		Philip Morris Slovakia s.r.o.				
Slovenia		Philip Morris Ljubljana d.o.o.				
South Africa	British American Tobacco Holdings South Africa (Pty) Ltd.	Rembrandt Group Ltd.*	JT International South Africa (Proprietary) Ltd. JT. International Iberia, S.L.	DIMON South Africa (Pty) Ltd.		
Spain	BAT Espana S.A.	Philip Morris Spain S.A. Altadis, S.A.*		Agro Expansion S.A. Compañía de Filipinas	World Wide Tobacco España S.A.	Taes S.A.
Sri Lanka	Ceylon Tobacco Co. Ltd.			DIMON Sri Lanka Liaison Office		
Suriname	Tobacco Co. of Suriname					
Sweden		Philip Morris AB				
Switzerland	BAT (Suisse) S.A. Rothmans of Pall Mall Ltd. FJ Burrus S.A.	Philip Morris Products S.A.	JT International S.A. JTI Trading S.A. JT International A.G. Dagmersellen	DIMON International A.G. DIMON international Tabak S.A. Intrabex S.A.	Spieler Freres & Cie SA	Itofin SA Touitiana SA Industria AG
Taiwan			JT International Taiwan Corp.			
Tanzania			Tanzania Cigarette Company Ltd.	DIMON Morogoro Tobacco Processors Ltd. DIMON Leaf (Thailand) Ltd.	Trans-Continental Leaf Tobacco Corp. Stancam Tobacco Services (Tanzania) Ltd. Adams International Ltd. Siam Tobacco Export Corp. Ltd.	Tanzania Leaf Tobacco Co.
Thailand			JT International (Thailand) Ltd.			
Trinidad	The West Indian Tobacco Co. Ltd.					
Tunisia			JT International Tunisia			

COUNTRY	BRITISH AMERICAN TOBACCO	PHILIP MORRIS	JAPAN TOBACCO	DIMON	STANDARD COMMERCIAL	UNIVERSAL LEAF
Turkey		PHILSA Philip Morris Sabanci Sigara ve Tütüncülük Sanayi ve Ticaret A.S. Philip Morris S.A., Philip Morris Sabanci Pazarlama ve Satis A.S.	JT International Tütün Urunleri Pazarlama A.S. JT International Tütün Sanayi A.S.	DIMON Turk Tütün A.S.	Spierer Tütün İhracat Sanayi Ticaret AS	
Uganda	British American Tobacco Uganda Ltd.					
Ukraine	A/T BAT Prilucky Tobacco Co.	JSC Philip Morris Ukraine	JT International Company Ukraine ZAT			
United Kingdom	B.A.T. Industries, p.l.c. British-American Tobacco (Holdings) Ltd. British American Tobacco (1998) Ltd. British American Tobacco (Investments) Ltd. B.A.T. (U.K. and Export) Ltd. B.A.T. International Finance p.l.c. BATMark Ltd. British American Tobacco (Brands) Ltd. Rothmans International Tobacco Ltd. Rothmans Finance p.l.c. BAT (CI) Finance Ltd. Weston Investment Co. Ltd. Tobacco Insurance Co. Ltd.	Rothmans (U.K.) Partnerships	JT International Limited	DIMON International Services Ltd.	Standard Commercial Tobacco Co. (U.K.) Ltd.	Universal Leaf (U.K.) Ltd. Universal Eastern Europe Ltd. Universal (U.K.) Ltd.
United States	Brown & Williamson Tobacco Corp. BATUS Holdings Inc. BAT Capital Corporation British American Tobacco (Brands) Inc.	Philip Morris USA		DIMON International Inc.	Standard Commercial Tobacco Co. Inc. Jas. I. Miller Tobacco Company Inc. Springfield Redrying Company W.A. Adams Co. Inc. Vetab International, Inc. Cres Tobacco Inc.	Universal Leaf Tobacco Co. Inc. Lancaster Leaf Tobacco Co. Inc. R.P. Watson Co. Inc. Virginia Tobacco Co. Inc. Southwestern Tobacco Co. J.P. Taylor Col. Inc. Deli-Universal Inc. Imperial Processing Corporation Thorpe & Ricks Inc. Thorpe-Greenville Export Tobacco Co. Southern Processors Inc.
Uruguay		Abal Hermanos S.A.				
Uzbekistan	UZBAT A.O.					
Venezuela	C.A. Cigarera Bigott Sucs	C.A. Tabacalera Nacional				
Vietnam	BAT Vietnam Ltd. (Incorporated in the United Kingdom)	Philip Morris Vietnam Inc.		DIMON Vietnam		
Yugoslavia			JT International			
Zambia				Zambia & Overseas Tobacco Co. DIMON Zambia DIMON Zimbabwe (Pvt.) Ltd. Tabex (Pvt.) Ltd.		
Zimbabwe	BAT Zimbabwe Ltd. Rothmans of Pall Mall (Zimbabwe) Ltd. (50%) Export leaf Tobacco Co. of Africa (Pvt.) Ltd. Tobacco Processors Zimbabwe (Pvt.) Ltd.				Stancom Tobacco (Pvt) Ltd. Tobacco Processors (Zimbabwe) (Pvt) Ltd.	Zimbabwe Leaf Tobacco Co. (Pvt) Ltd. Casalee Transtobac (Pvt) Ltd.

Source: Adapted from Tobacco Reporter, 17th Edition (International Leaf Merchants) and 33rd Edition (International Cigarette Manufacturers)

* Denotes licensing agreement.

CAMPAIGN for TOBACCO-FREE Kids

