Tobacco or Health

Tobacco in Africa
Derek Yach

Tobacco has been a common commodity in Africa for over three centuries. By 1993, some 500,000 tons of tobacco were being grown in 33 African countries, with only two countries exporting more than they import. Attempts to measure the current and potential impact of the tobacco business on health, society and the environment are still in their early stages, but the need for preventive action is already inescapably clear. Comprehensive control strategies are urgently required to prevent a major epidemic of tobacco-related disease in Africa.

Tobacco was introduced to Africa in the seventeenth century by the Ottoman conquests in the north and the slave trade. Cultivation spread rapidly throughout the continent. All commercial plants are variants of the same species, *Nicotiana tabacum*. On his first expedition to trace the course of the Niger in 1875, Mungo Park, a Scottish explorer, found tobacco in demand wherever he went, more for smoking than for snuff. A typical entry in his journal reads: “The natives of all descriptions take snuff and smoke tobacco. Their pipes are made of wood, with an earthen bowl of curious workmanship. Tobacco often served as a gift.”

The growth of the industry

*Nicotiana tabacum* was first produced in Zimbabwe by Father Boos at the Chisawasha Mission outside Harare in 1893. The tobacco industry grew rapidly in Zimbabwe. In 1900 a small Department of Agriculture was established, and its officials took immediate steps to encourage the production of tobacco in the new colony. As “Rhodesia” moved into the twentieth century, Earl Grey, a director of the British South Africa Company, charged with administration in the colony, saw the potential of tobacco production and sent one of his officials, a Mr Odhum, to the USA for a year to learn about it. On his return to the colony, Odulum pioneered Rhodesia’s first curing barn and the production of “some nice yellow leaf of decent texture”.

The first major tobacco manufacturing group can be traced back to 1880 when United

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Tobacco was set up in South Africa. The most important tobacco company in South Africa now is the Rembrandt group, which began in 1948. By the 1990s Rembrandt had estab-
lished one of the major multinationals, Richemont, based in Switzerland. Its luxury goods and media divisions complement the marketing and promotional activities of the major tobacco division, Rothmans International. They are poised for even further growth through the 1990s worldwide.

The world’s major tobacco trading companies are British American Tobacco (BAT), R.J. Reynolds, Philip Morris, Imperial Group, Rembrandt/Richemont, and France’s SEITA (Service d’exploitation industrielle des tabacs et allumettes), and they are all represented in Africa. Together these companies control 89–95% of the world’s leaf tobacco. They control all the essential aspects of the business:

- the supply of fertilizer, pesticides and machinery;
- the cultivation of crops;
- the processing, production, marketing and selling of the final product;
- tobacco prices.

By exercising this control and offering inducements to farmers, they have made tobacco the most widely grown non-food crop in many African countries (1).

In 1978, Muller warned that cigarettes were being pushed by high-pressure marketing to the most remote corners of the world, and that tobacco-related disease would constitute one of tomorrow’s major epidemics (2). His prediction is being fulfilled in Africa.

Agriculture and trade

The United States Department of Agriculture estimated that about 500,000 tons of tobacco were grown in 33 African countries in 1993. Of this, 90% was grown (in order of magnitude) in Zimbabwe, Malawi, South Africa, Kenya, United Republic of Tanzania and Nigeria, with the first two countries account-

ing for 74% of the total for the continent. The All Africa Tobacco Control Conference in Harare (1993) was regarded as a historic meeting between tobacco growers and public health professionals (3). A small success of the conference was to elicit a statement from Mr Henry Ntaba, head of the International Tobacco Growers’ Association, in which he conceded that he was “a farmer first, a tobacco farmer second”. This opened the door to a major discussion on diversification. Ronald Watts, an agricultural consultant from Zambia with 40 years’ experience in Africa, listed 53 alternative crops and ways of using the land. These included maize, export horticulture, fruit, nuts and fibre crops. He showed that the average return per dollar invested could be higher for several of the crops. However, the alternatives are limited for small-scale farmers without irrigation, such as most of the Malawi tobacco growers. No single crop should be considered as a replacement. Successful case studies of diversification are now appearing from the Congo, South Africa and Zimbabwe. These case studies and the whole effort to diversify need more support from the international community, particularly if Malawi and Zimbabwe are to reduce their national dependence on one crop.

At the Harare Conference the Zimbabwean Health Minister, Dr Timothy Stamps, observed that there was a need to separate the production and the consumption of a commodity when framing national policy on tobacco control. He also stated that he would not compromise his position as Minister of Health by failing to tackle tobacco control as a major public health problem. He suggested that farmers in Zimbabwe would be able to ensure their long-term livelihood far better if they were to accelerate diversification. Of the 44 countries which trade in Africa, only 50% export tobacco. Malawi (with over 75% of its export earnings coming from tobacco) and
Zimbabwe (with over 25%) are atypical of the continent, accounting for 94% of its entire export earnings from tobacco. Kenya and the United Republic of Tanzania contribute almost all the rest, and the other trading nations import more than they export. In 1992 Angola, Ethiopia, Nigeria, Senegal and South Africa reported negative annual tobacco trade balances of more than US$ 100 million. This loss deprives countries of precious foreign exchange (3).

**Environment**

A series of papers commissioned by the Panos Institute, an international environmental group based in London, have documented the environmental and social consequences of tobacco growing in Kenya, the United Republic of Tanzania and Uganda (4). This work provides detailed accounts of the extent and consequences of deforestation in relation to tobacco growing and curing. They show that the amount of surviving trees in reforestation projects had been vastly overestimated, particularly in Kenya, the United Republic of Tanzania and Uganda. For example, over the past 50 years Tanzania’s area of natural forest has been halved. Extensive use of wood fuel for curing tobacco leaves (500 000 to 750 000 m³ of solid wood in 1993) has contributed to this decline. Reforestation has fallen far behind these depletions.

There is also growing concern about the health of workers in the tobacco industry. Methyl bromide and ethylene dibromide, both extremely dangerous chemicals, are used extensively for fumigating seed-beds and other land. The use of ethylene dibromide for tobacco growing is illegal in the USA. According to a recent report, “Much of the equipment used for spraying chemicals is of poor quality. Workers often don’t wear protective clothing and are usually unaware of the potential health risk of their work” (4). Moves are being made to improve safety, but it is clear that tobacco is more dependent on hazardous chemicals than many other crops.

**Wealth, consumption and control**

The relation between gross national product, disposable income and cigarette consumption has been well documented globally. At the lowest economic levels, money is simply not available to buy cigarettes. Increases in income of 10% in low-income countries have been estimated by the World Bank to result in a 7% increase in consumption, while increases of 10% in even lower-income countries are associated with an increase in consumption of 13% (3).

The Food and Agriculture Organization of the United Nations projects that the level of tobacco consumption in Africa will grow to one of the highest in the world unless new national policies are introduced to change the trend. Between 1985 and 1990 the estimated annual increase in consumption for the developing world was 3.4%, and for Africa 2.4%. However, for the period 1995–2000 the estimated figure is 2.7% for the developing world and 3.2% for Africa, with a slight reduction for the developed world.

This growth in tobacco consumption is related to both demographic and socioeco-
nomic change. As more children survive and reach young adulthood, tobacco consumption increases. In Africa, infant mortality rates are continuing to decline. In addition, a combination of urbanization, westernization and increased disposable income has led to an increase in smoking. These changes are well advanced in many African countries. Other factors associated with increased smoking relate to the promotional and marketing strategies of the tobacco industry, particularly in most African countries where the absence of legislative controls and high levels of illiteracy make people more vulnerable to sales efforts.

Sub-Saharan countries can be broadly categorized into four groups as shown in the Table.

- In the richer countries the rate of increase in tobacco use is likely to continue to be rapid. In the case of South Africa and Mauritius, control measures including legislation, excise tax and the development of tobacco control organizations are advanced. In Botswana there is a complete ban on tobacco advertising, a ban on smoking in many public places, and a tobacco control office in the Ministry of Health. In Mauritius and South Africa there are bans on sales of cigarettes to children, increasing bans on smoking in public places, and the start of media campaigns against tobacco.

- In the middle-income countries there have been marked increases in cigarette consumption, especially in the West African francophone countries since the early 1980s. Legislation which exists is not implemented. There are signs of the development of strong tobacco control movements, particularly in the case of Senegal, where the Mouvement anti-tabac has focused on building a base for future tobacco control by targeting schoolchildren.

- In the poorer countries which export tobacco, the strength of the tobacogrowing fraternity and their influence on government have combined to prevent legislation from being introduced. However, there is evidence of growing nongovernmental tobacco control activity, for example by the Kenyan Medical Association.

### Relation between tobacco consumption and socioeconomic indicators in sub-Saharan Africa

<table>
<thead>
<tr>
<th></th>
<th>Richer countries</th>
<th>Middle-income countries</th>
<th>Poorer tobacco-exporting countries</th>
<th>Poorer countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross national product in 1992 (US$)</td>
<td>2000 +</td>
<td>c. 800</td>
<td>&lt; 600</td>
<td>60–750</td>
</tr>
<tr>
<td>Examples</td>
<td>Botswana</td>
<td>Cameroon</td>
<td>Malawi</td>
<td>Mozambique</td>
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<tr>
<td></td>
<td>Mauritius</td>
<td>Senegal</td>
<td>Zimbabwe</td>
<td>Zambia</td>
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<tr>
<td>Infant mortality rate, 1990–95 (per 100,000 live births)</td>
<td>&lt; 60</td>
<td>60–80</td>
<td>60–140</td>
<td>80–140</td>
</tr>
<tr>
<td>Adult literacy rate (%)</td>
<td>&gt; 60</td>
<td>c. 50</td>
<td>35–75</td>
<td>33–73</td>
</tr>
<tr>
<td>Cigarettes consumed per adult per year</td>
<td>1000–2000</td>
<td>c. 800</td>
<td>180–600</td>
<td>&lt; 350</td>
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</tbody>
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In the other poorer countries, tobacco marketing is less extensive, and the preventive potential is thus greater. It is significant that despite their relatively low levels of wealth, health ministries in several of these countries have already introduced legislation, for instance in Mozambique and Zambia, which bans certain forms of advertising. In Ghana the media emphasize the dangers of tobacco, and in Zambia the Anti-smoking Society, often in combination with the Zambian Medical Association, has been active in building up campaigns aimed at tobacco control.

In general, the aggressiveness of tobacco advertising and promotional activities in African countries seems to be increasing. In Ghana, there are lavish cigarette displays near tourist sites; free cigarettes are openly handed out in markets by the Embassy cigarette company; Embassy sponsors the Miss Ghana pageant; the support of tobacco companies for reforestation by farmers is publicized as an example of corporate responsibility by the industry; and tobacco advertisements are placed on road signs. Such efforts are seen in several African countries. Tobacco advertisements elsewhere range from scenes of football players and leaping tribemen to upwardly mobile young couples with sports cars and high fashion clothing. In Kenya, tobacconists’ shops are painted in the BAT colours and free mobile cinemas bring cigarette advertisements and free cigarettes to villagers.

Health impact of tobacco

There are four national cancer registries in Africa (Algeria, the Gambia, Mali and South Africa), and national mortality data are available only for Mauritius, São Tome and Príncipe, Seychelles and South Africa. Estimates of total mortality from cancer for western and eastern Africa are much lower than those for western Europe. The only countries in sub-Saharan Africa where there is solid evidence of rising mortality caused by tobacco are South Africa and Zimbabwe. For sub-Saharan Africa as a whole, lung cancer constitutes 5.8% of all cancers. This is in sharp contrast to the over 20% found in countries where the smoking habit has been practised for several decades. In southern Africa the proportion of lung cancer attributable to smoking is 86% for men and 39% for women. International experience shows that this figure could exceed 90% once tobacco use becomes more established. Because the current lung cancer rate is based on past consumption, often with a time lag of decades, the recent increase in consumption will cause an inevitable increase in illness in the future.

In Zimbabwe, lung cancer is now the third cause of neoplasm deaths among African men, and rates among African men equal those among Europeans. In the same country, the lung cancer rate in African women is one-third that of European women, reflecting the fact that smoking rates were low two decades ago.

Trends in South Africa indicate that among Whites, tobacco use has declined during the last 15 years, while it is rising among Blacks and continues, though to a lesser extent, to be high and rising among Coloureds. For the country as a whole, lung cancer already accounts for 24% of all deaths from cancer in men, and 10.6% of all such deaths in women. Cape Town researchers recently showed that lung cancer rates had increased by more than 100% among Coloureds of both sexes and among White women over the last two dec-
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ades. These trends were mirrored by trends in chronic obstructive lung disease mortality. Poor data precluded similar analyses for Blacks. However, since smoking rates among Black African men exceeded 50% in the late 1980s, an epidemic of lung cancer can certainly be expected early in the next century. Smoking rates among Black African women are still low but starting to increase in metropolitan areas (6).

The International Agency for Research on Cancer, using data from three locally based African cancer registries, has shown that a more than tenfold difference exists for the occurrence of lung cancer. The highest incidence in males is found in Setif, Wiloya at 11.7 per 100,000, compared to 2.6 in Bamako and 1.0 in the Gambia. Among women, lung cancer rates are still very low, from 0 in the Gambia to 2.6 in Bamako.

In 1982 a WHO meeting on tobacco control was held in Mbabane, Swaziland, and concluded that in most of Africa, health departments were still struggling to eliminate diseases of poverty such as tuberculosis, measles, malaria, trypanosomiasis and cholera. With the rise of tobacco consumption, health departments would be forced to siphon scarce financial and human resources into dealing with smoking-related diseases requiring the expensive diagnostic and therapeutic resources of large hospitals. This is in sharp contrast to nutritional and infectious diseases which require a relatively low-cost preventive community approach. Thus, acting vigorously now, particularly to prevent African women from starting to smoke, would yield long-term savings for the health system in the next century.

WHO’s Regional committee for Africa, which met in Gabon in September 1995, stressed the need for concerted action to prevent increases in tobacco use in Africa. Countries called for a ban on tobacco advertising, a regional effort to harmonize and increase tobacco excise duty, and improved educational programmes for children. Malawi’s Minister of Health appealed for international support for his country’s efforts to reduce its dependence on tobacco revenue.

Tobacco control

The World Bank has become so concerned about the health and economic impact of tobacco that it has adopted a policy which requires health sector work to include anti-tobacco activities, and prohibits the Bank from lending for producing, processing, importing or marketing tobacco, whether for domestic consumption or for export. Between 1974 and 1988 the World Bank provided loans to Benin, Malawi, Swaziland and the United Republic of Tanzania for agricultural projects supporting tobacco production, so this new policy represents a significant change.

Legislation

Roemer’s recent review of legislative action to control tobacco use shows that progress has been slow in introducing this approach in Africa (7). Only a few countries have introduced bans on sales to children (Mauritius in 1990, Botswana and South Africa in 1993); and only slightly more have introduced partial advertising bans. Senegal (1981) and the Gambia (1985) were among the earliest to do so, but the Senegalese legislation was later partly rescinded. Health warnings are required on advertisements in Ghana, Kenya, Nigeria and South Africa. However, in Ghana and Kenya the warnings are so small that they are barely visible. The new warnings required as of May 1995 in South Africa are among the strongest in the world and are backed by a strong media campaign. Countries like Botswana and Moz-
ambique have bans on broadcast advertising, but they are within the radio reception area of South Africa, which makes the bans ineffective. In Mauritius the ban on smoking in public places includes health, education and sports facilities.

Roemer recommends that a comprehensive approach to legislation should be developed to forestall epidemics of tobacco-related disease. She warns against entering into voluntary agreements with the tobacco industry, and the South African experience with such agreements supports this viewpoint. She also recommends that regional meetings should be held regularly for the exchange of scientific and technical information so that both national and regional approaches to tobacco control can be developed.

**International partnerships**

International agencies such as WHO, the World Bank, the United Nations (through its new Project on Tobacco or Health), and UNICEF could play a very significant role in controlling tobacco use in Africa, where such agencies are held in high esteem. Continental bodies such as the Organization for African Unity, health-related organizations such as the Pan-African Association of Cardiologists, the International Lung Association and the International Union against Cancer (Africa sections) have unique and complementary roles to play in helping countries plan and carry out tobacco control strategies.

**Excise tax**

Excise tax affects the affordability of cigarettes, especially for children and poor people, and is thus an important device for tobacco control. However, in Africa there are concerns about smuggling and shifting to high-tar homemade products which limit the scope for control by increasing taxes and require systematic study. Information is also needed on the level of excise tax (in relation to inflation) on tobacco products in each country, as well as the existence of regional preferential trade areas and their implications for the harmonization of excise tax. Information on the elasticity of demand in relation to price will be needed for a range of countries at varying levels of development. This involves gathering data on price changes in relation to consumption over time.

Here and in the area of legislation, shortage of human resources is a major impediment to progress. There is a dearth of health economists in Africa. For richer countries the use of excise tax to fund health promotion and reduce the dependence of sporting and cultural activities on tobacco should be considered. Initiatives of this kind are under way in South Africa.

**The role of women in tobacco control**

The role of women in tobacco control has become more clearly defined in recent years. It is now recognized that preventing women from starting to smoke can improve the health of their unborn children and children in the household, and curb long-term use of tobacco products. Proposed strategies for preventing smoking among women include making more use of women to lobby for legislation and enforce it through social pressure; promoting positive role models, such as successful women who do not smoke, to spread the message that it is smart not to smoke; and ensuring that health education programmes continuously reinforce anti-smoking attitudes and behaviour. Such strategies should include assertiveness training to strengthen self-confidence, so that women can change their position from relative powerlessness and take the lead in protecting their own health and that of their families.
Tobacco Control Commission for Africa

In 1994 the Tobacco Control Commission for Africa was set up in order to speed up the process of designing and implementing the necessary measures. Its specific objectives are as follows:

- to facilitate the training of tobacco control advocates in Africa and thereby build sustainable human and institutional capacity for long-term tobacco control;

- to identify data needs and research priorities in relation to all aspects of tobacco control (including biomedical, agricultural, economic, environmental, legislative and political issues) and assist in the funding and implementation of such research;

- with other agencies already active in tobacco control in Africa such as WHO, nongovernmental and government organizations, to provide advice to governments, continental, regional and international organizations about policy development in relation to tobacco control;

- to disseminate relevant information regularly to tobacco control groups and individuals in Africa or working with Africans;

- to develop long-term sustainable sources of funding through country-based tobacco excise taxes and other methods.

Political leadership

In recent years, ministers of health from several African countries have voiced their support for tobacco control as a crucial component of primary health care, and in 1994 Nelson Mandela announced his opposition to tobacco companies using his name to promote their campaigns. His statement was in response to a proposed “Benson and Hedges Nelson Mandela cricket tournament”. President Mandela said: “I personally discourage people from smoking and I therefore dissociate myself from any campaign using my name to promote this habit.” He said he would contact “concerned parties both in South Africa and abroad to ensure that any misrepresentation of this position is rectified”. He was successful in this, and Benson and Hedges will no longer be sponsoring cricket as of 1996.

In recognition of his contribution to tobacco control, President Mandela was awarded a WHO medal on World No Tobacco Day, 1995. Such political leadership in Africa bodes well for the future of tobacco control.

References


