

Malawi's Tobacco Sector

*Standing on One Strong Leg
is Better Than on None*

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Malawi's Tobacco Sector: *Standing on One Strong Leg is Better Than on None*
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Abstract

Tobacco plays a central role in Malawi's economy, accounting for 60% of its exports, 13% of its GDP, and 23% of its total tax base. One in five Malawian households rely substantially upon income from tobacco production or employment. Malawi, a small, land-locked country, is the world's leading exporter of burley tobacco leaf, having recently overtaken the exports of the United States. Despite international efforts to reduce cigarette use because of its adverse health effects, world demand for Malawi's tobacco should remain robust for many years as a result of the expected continued growth in consumption in many low and middle income countries and as a result of the favorable characteristics and competitive cost of Malawi's tobacco.

Still, Malawi faces substantial challenges in drawing sustained benefits from its relatively strong international market position. The liberalization of the sector during the early to mid-1990s resulted in a massive entry of smallholder farmers into tobacco production. While the income from production was formerly concentrated among a limited number of commercial estate owners, such income was now spread among some 350,000 households, with powerful multiplier effects in rural areas. There was an expectation that these developments would create an institutional and financial platform for the diversification of the rural and broader Malawian

economy. Initial signs of this were evident in the late 1990s.

Yet, this engine for growth and diversification has since stalled. The earlier flow of cash income into rural areas has slowed to a trickle in recent years as a result of sharp tobacco price declines (related to short-term international supply and demand conditions), reduced farm productivity and high and rising transaction and logistics costs in the tobacco marketing chain. Institutional limitations and conflicting interest within the industry have inhibited the development of an appropriate policy and operational response to the productivity problems and loss of profitability experienced by many Malawian growers. This paper highlights the challenges facing the industry and Malawian policy-makers and outlines options for moving forward in addressing those challenges. Malawi's capacity to achieve its ambitions for economic diversification depend, in part, on its ability to overcome the current challenges facing its dominant industry. It is a more profitable tobacco industry—rather than wishful thinking—which can serve as an effective spring board for move diversified patterns of investment, employment and trade in Malawi.

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INTRODUCTION

Background

The commercial cultivation of tobacco has a long history in Malawi, dating back to the 1890s.¹ By the 1920s, tobacco assumed a prominent place in the economy of what was then Nyasaland Protectorate. Its expansion and contractions remained a major feature of the colonial economy in Nyasaland. In the period following Malawi's independence in 1964, tobacco took on an even more central role in the political economy of the country, as large segments of the nation's political leadership and economic elite invested in the crop, backed by supportive policies, regulations and public resources. With the rapid expansion of the industry in the 1970s and 1980s, tobacco became the country's primary source of wealth, political patronage, (non-governmental) employment and foreign exchange earnings. The internal and cross-border migration of people to fulfill the labor requirements for the expanding industry even had a profound effect on national demographic patterns.²

Previous research has examined the performance and structural changes of Malawi's tobacco industry during the 1970s and 1980s as well as captured some of the early trends which emerged from the liberalization of the subsector in the early to mid-1990s. During the colonial period and from independence through to the late 1970s, participation in the lucrative cultivation of tobacco was restricted to an elite cadre of growers who owned or leased estates. These farmers were permitted to sell their tobacco directly to international buyers at officially recognized local auctions. Smallholder farmers were restricted in the varieties of tobacco which they could cultivate and were restricted to whom they could sell. For the most part, smallholder farmers were required to sell to government agencies³ and received prices well below prevailing market prices.

Most of the opportunities for smallholders to participate in the sector were as tenants or other types of laborers on the estates. With few remunerative opportunities available to this population, such labor contracts became widespread. The Special Crops Act (1964) maintained earlier restrictions on smallholder farmers, preventing them, with few exceptions, from the cultivation of the higher value burley and flue-cured varieties of tobacco. The system of production controls remained firmly in place through the 1970s and 1980s. This, together with a system of production quotas—ostensibly designed to control the overall size of the tobacco crop to approximate the committed demand of major international buyers—served as a primary means of allocating opportunities and distributing income and wealth in the country.

Apparently in recognition that the elite-centered growth model was fostering some dissent while also failing to foster the wider development of the economy, the political

¹ See Wilshaw's *A Century of Growth: Malawi's Tobacco Industry, 1893-1993*.

² Kydd and Christiansen (1982); Jaffee et al. (1991)

³ The Native Tobacco Board during the colonial period and ADMARC since independence.

leadership accommodated and in fact encouraged the emergence of an additional wave of Kulack-type entrepreneurs during the 1980s from the midst of the small business and small farmer communities. These families (or extended families) were enabled to acquire leases on formerly customary land and in establishing 'estates' (typically 10 to 20 hectares) these households were permitted to grow burley or flue-cured tobacco and permitted to sell their tobacco directly through the auctions rather than through a government agency.

Some 30,000 of these mini-estates were formed during the 1980s, with this development accounting for much of the growth that was recorded in the industry during that decade.⁴ Nevertheless, the bulk of Malawi's rural population and farmers were still prevented from directly participating in the expanding subsector other than as laborers, or, increasingly, as illegal growers who sold their crop cheaply over the farm-gate to estate owners and quota holders.

In 1993 a new government was elected in Malawi, following nearly three decades of one-party rule. The vision of the new government was one of more broadly based growth, with increased attention to be given to poverty alleviation. This orientation, together with strong pressures made by several development donors, resulted in steps to liberalize the tobacco subsector. The new government moved to amend the Special Crops Act, allocate (expanding) tobacco sales quotas to groups of smallholder farmers (who were organized into 'clubs'), and introduced a program of intermediate buyers in order to facilitate the logistics of bringing the smallholder crop to the auctions and to increase competition in the purchasing of the smallholder tobacco crop.

Vested interests within the estate sub-sector lobbied (unsuccessfully) against the tobacco-related reforms, fearing both future competition in the tobacco market as well as the potential loss of skilled laborers who might chose to take up tobacco cultivation on their own small plots. Arguments were made that smallholders would undermine the quality reputation of the Malawi tobacco crop. However, while a growing number of estates were experiencing financial and/or managerial problems (even in the face of favorable tobacco prices during the early 1990s), most stakeholders anticipated a gradual, long-term structural change within the industry and it was generally assumed that well-managed estates would continue to have a long-term future in the industry.⁵

Research carried out in the mid-to-late 1990s emphasized the relatively rapid and large initial response by smallholders to the policy reforms (with up to 200,000 smallholders taking up tobacco cultivation by 1996) and the significant effects which tobacco-derived incomes were beginning to have on household expenditures and savings and on rural communities within the main tobacco-growing areas.⁶ Related work demonstrated the relatively high profitability of tobacco cultivation in Malawi, compared with that for most other cash and food crops.⁷ These and other⁸ studies pointed to the divergent patterns of productivity and profitability within the

⁴ This process is analyzed in depth in Mkandawire et al. (1990).

⁵ As Banda et al. (1998) noted, it was assumed that there would be "gradual transformation without cataclysmic change."

⁶ Zeller (1997) and Jaffee (1997)

⁷ Keyser (1997)

⁸ Gossage et al. (1997)

estate sub-sector and suggested that significant numbers of estates might be unable to adjust and remain viable should tobacco prices decline significantly. At the same time, questions were raised about the sustainability of the smallholder tobacco boom and whether the underlying institutional arrangements governing production support services and tobacco marketing were adequate or even fully appropriate given the evolving structure of the industry.⁹

During the last few years, many of the concerns about estate viability and smallholder production sustainability have come to fruition. However, through much of this period there has been a state of policy paralysis characterized by an on-going struggle to maintain, undermine, or otherwise re-direct the earlier policy reforms within the industry. Many stakeholders have seemingly concluded that the best days of Malawi's tobacco industry are behind it and that the current game is a zero-sum one in which (reduced) incomes and opportunities must be fought over. All parties –farmers, intermediate buyers, tobacco buyers, the auctioning company, financial institutions, the government, etc.—have been subjected to accusations about how their actions or inactions have weakened the industry. It has not been a very productive dialogue and this has delayed concerted action to address the major underlying problems within the industry.

The problem has not simply been one of conflicting interests, although these and an imbalanced power structure within the industry have certainly been factors in the apparent paralysis. Another important factor has been the inadequacy, non-transparency, and asymmetric distribution of data and information regarding the performance of the industry and of different stakeholders therein. Most participating stakeholders have only partial information, few local players have comparative competitor country performance data, and significant parts of the official statistics for the industry—both on physical quantities and on an array of financial/economic matters may not provide an accurate picture of the prevailing situation. Performance monitoring arrangements and the underlying registration system for tobacco producers have simply not kept pace with the demands of a rapidly changing industry. Hence, for the most part, major stakeholders have not been working from the same sheet of music and there has been an inability to reach consensus on what is happening let alone on what needs to be done to improve the industry's competitiveness and viability.

Only in the past two years—years of particular difficulty within the industry—has there been a change in the tone and content of subsector consultations and policy dialogue, with some improvement in the mutual understanding among different stakeholders' constraints. As this paper will illustrate, the Malawi tobacco subsector lies at a critical juncture, facing major problems which threaten its sustainability and which pose a number of serious policy questions. Addressing these issues effectively will require the intensification of the type of constructive dialogue which has been apparent more recently.

The importance of tobacco to Malawi's economy cannot be exaggerated and there are relatively few examples elsewhere of a similar level of dependence on one sub-sector in a country's exports earnings, employment, and income flows. Tobacco accounts for some 60% of Malawi's merchandise exports, some 23% of its total tax base, and as much as 13% of its GDP. Many of Malawi's cities have been built by tobacco wealth while most of the few signs of

⁹ See, especially, Banda et al. (1998)

‘prosperity’ which one sees in rural Malawi (i.e. tin roofs, bicycles, radios) have like-wise been substantially generated by tobacco-related incomes.

Purpose and Content of the Paper

This paper seeks to provide a summary of major trends and developments within Malawi’s tobacco subsector since the mid-1990s and to elucidate the policy and institutional options seemingly available to address a range of constraints/problems currently facing the subsector. The paper is not based on extensive fieldwork, but rather on a limited range of interviews with major stakeholders and organizations, available data and position papers, and data and information on international and competitor country trends, derived from a variety of sources. The paper seeks to further stimulate and inform the on-going policy debates related to Malawi tobacco and its role in the wider economy there.

The leading questions addressed in this paper are the following:

- What are major trends in the international demand and supply of tobacco (and tobacco products) and what are the near and medium term prospects?
- How is Malawi positioned in that international market? Are concerns about this being a ‘sunset’ industry for Malawi well founded?
- What have been the patterns of tobacco-related structural change since the mid-1990s and what factors have driven such changes?¹⁰
- What has been the performance of the subsector during this period in terms of productivity, earnings, product quality, trade, etc.? How does this performance compare with that of other major tobacco-producing countries?
- What factors have influenced the underlying performance of the subsector? How effective have been the institutional arrangements which were put in place during the mid-1990s to complement the liberalization of the subsector?
- What are the main institutional and other constraints currently facing Malawi’s tobacco growers, especially smallholder farmers?
- What are the policy and other options for addressing these constraints and what are the possible benefits, costs and risks of adopting selected approaches?
- What measures are recommended for short and medium term action?

The paper is organized as follows. The next section provides an overview of trends in international supply and demand for tobacco, drawing upon FAO, USDA, and other sources. This is followed by a review and analysis of major trends occurring within Malawi’s tobacco subsector since the mid-1990s. This covers trends in production, exports, pricing, profitability,

¹⁰ Unfortunately, we are not in position to examine some of the medium-term impacts which tobacco production and sales have had on smallholder households and communities. Some work on this was undertaken in the mid-1990s, yet there have been little or no household/community studies done in recent years to expressly examine the impacts which the spread of tobacco cultivation (to nearly 20% of rural households) has had.

productivity, etc. The subsequent section then examines a range of policy questions and options that have been recently or are currently facing the subsector. Some recommendations are made. A short conclusions section follows.

The World Bank, Tobacco, and Economic Diversification

Since 1991, the World Bank has had a formal policy that it will not lend directly for, invest in, or guarantee investments or loans for tobacco production, processing, or marketing. Bank loans also cannot be used to finance imports of tobacco or tobacco products, tobacco processing machinery or other related equipment or services. Bank activities in the health sector discourage the use of tobacco products. The Bank has been an active participant in international efforts to reduce demand for tobacco products, especially in client countries and to induce countries to adopt policies which curb tobacco products use and internalize the externalities associated with their use.¹¹

This general policy poses a major challenge to the Bank's support to Malawi's economic development. Both the original (1991) and the recently updated (1999) "operational policy" on this issue notes that exceptions may be made for countries that are heavily dependent upon tobacco as a source of income and foreign exchange (i.e. more than 10% of exports). Only two client countries have such a high dependence on tobacco for foreign earnings—namely Zimbabwe (20%) and Malawi (60%).

Given the scale and spread of Malawi's industry any support for infrastructure development, financial systems development and even entrepreneurship development provides some backing to the tobacco sub-sector there. The same applies to support provided for agricultural research, extension, and policy planning. But, the Bank has gone further, recognizing in the late 1980s and early 1990s that promoting broad based growth and poverty reduction in Malawi was simply not possible without fostering more remunerative participation by the poor in this dominant industry.¹²

The Bank and other donor agencies have and will continue to provide support to facilitate the diversification of the rural and national economy in Malawi. However, given the tiny size of the domestic market, the country's land-locked position, and its human and natural resource base, this diversification will be a long-term process. Its success almost certainly depends upon

¹¹ The Bank's work on tobacco control is in close partnership with the WHO, the UN Foundation, the US CDC, PAHO, and others. Given the Bank's comparative advantage in economics and policy dialogue, its efforts have focused on the economics of tobacco control, including taxation and the economic and social impact of control measures. See www.worldbank.org/tobacco

¹² In its 1997 Growth Prospects Paper, the Bank recognized the importance of the tobacco liberalization process for fostering broad based growth in the near term via the direct incomes/employment and the multipliers expected from higher purchasing power by large numbers of smallholder households. Other, less certain, pillars for medium term growth were envisioned to include productivity gains in food crop agriculture, and possible investment in tourism and labor-intensive manufacturing. Since that time, Malawi's manufacturing sector has contracted and the country has had little success competing for regional and international tourists within the southern Africa tourism market. There have been some productivity gains in food crop production by smallholders, yet their magnitude is uncertain and some of the gains have been dependent upon the (donor-financed) free distribution of fertilizer and seeds.

the maintenance of a competitive and profitable tobacco subsector from which savings can be derived and invested in other economic activities. Malawi must therefore continue to exploit its comparative and competitive advantages in tobacco at least over the medium term. The country simply has no (realistic) choice.¹³

TRENDS IN INTERNATIONAL SUPPLY AND DEMAND FOR TOBACCO

Production Trends

Over the period from 1980 to 2001 world production of tobacco leaf increased from 5.26 million tons to 6.97 million tons, or at 1.02% per annum. Most of this growth occurred in the 1980s and the early 1990s. There was a slowdown thereafter, partly because of the build-up of excessive unsold stocks in several countries, including China, India, and Turkey. World production grew at 1.95% per annum during the 1980s, yet declined by 0.69% per annum over the 1990 to 2001 period.¹⁴

The expansion in production over this two-decade period was entirely accounted for by developing countries. Tobacco production in developed countries—including the United States, European Union and Japan—declined from 1.99 million tons to 1.29 million tons over this period. Production in these countries declined by 2.0% per annum during the 1980s and by 3.1% per annum in the period since 1990. In sharp contrast, tobacco production in developing countries increased from 3.26 million tons in 1980 to 5.68 million tons in 2001. Their share of global production therefore rose from 62% to 81% over this period. Developing country production grew by 3.8 % per annum during the 1980s, while recording no growth during the 1990s. The latter figure clouds a trend in which production in China leveled off or even declined in some years while output continued to expand in such countries as Brazil, India, Zimbabwe (until the past two years) and Malawi.

Major factors underpinning these divergent trends have included:

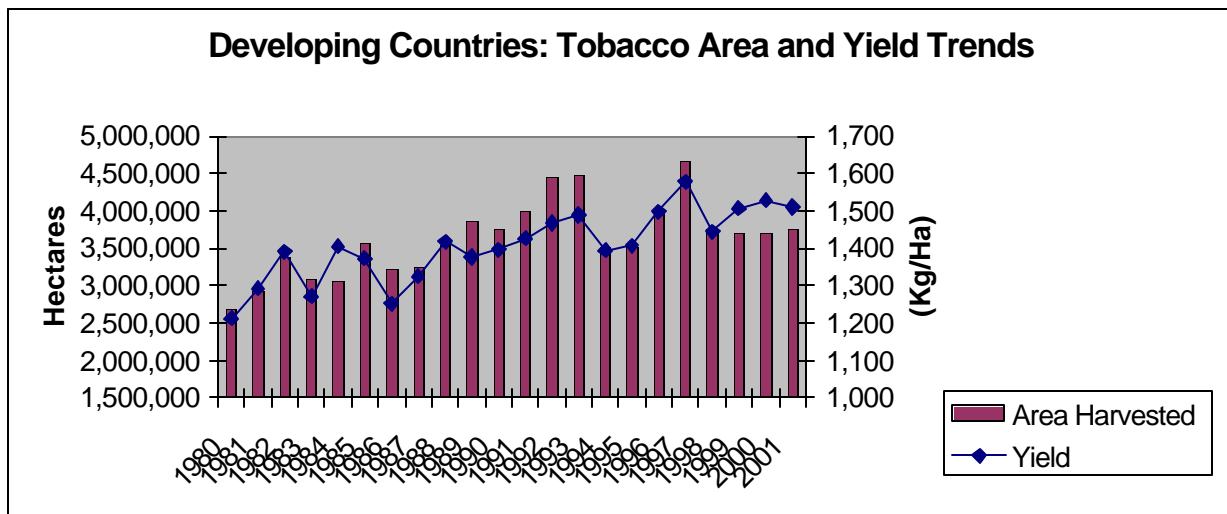
- Shifts in the locus of demand from developed to developing countries (see below)
- Declining political and taxpayer support for tobacco production in developed countries, including the United States and the European Union;
- The cost competitiveness of developing countries and the relatively high profitability of tobacco compared with that of many other crops in these countries;
- Direct technical and financial support for tobacco cultivation in several developing countries; and

¹³ Unless, perhaps, the international community is prepared to 'buy-out' Malawi's tobacco growers in a manner similar to the approach being used in the United States to wean tobacco growers (and regions) of their dependence on tobacco incomes and employment. Even if the international community were prepared to do this there still remains a question regarding the industries or subsectors in which Malawi could achieve a significant scale and position of international competitiveness within a medium term time frame.

¹⁴ Based on FAO Production Statistics.

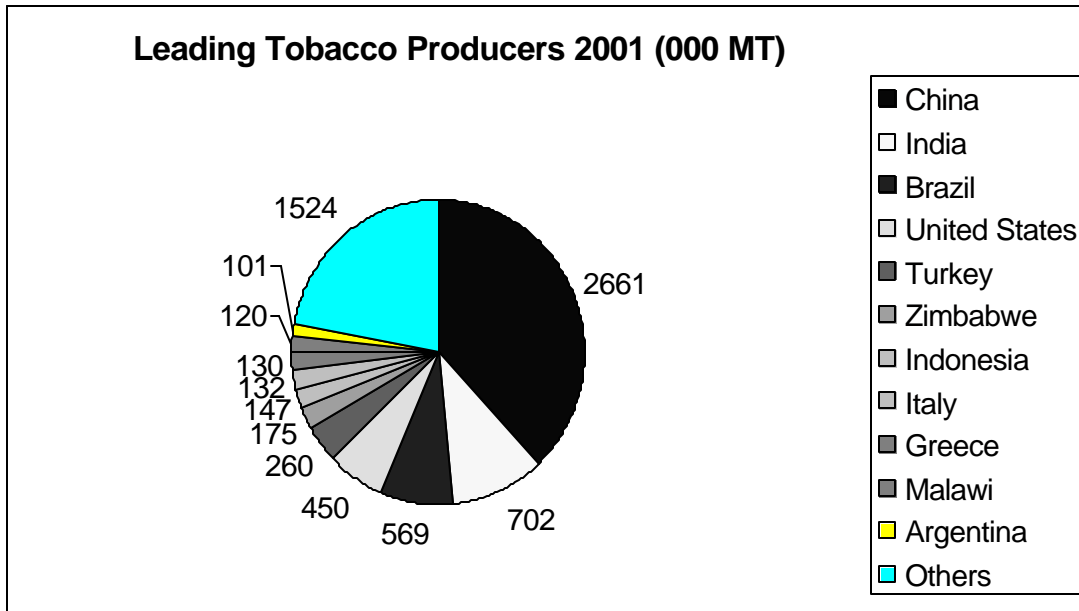
- Investment by international companies in the promotion of tobacco production and in cigarette manufacturing in selected developing countries.

The expansion of tobacco production in developing countries has occurred through a combination of area expansion (especially in China and Malawi) and productivity gains. Over the 1980 to 2001 period, the tobacco area harvested in developing countries increased by 1.46% per annum while yields grew at 0.87% per annum. During the more recent 1990 – 2001 period, developing country plantings actually contracted by 0.68% per annum, although production was maintained as a result of a 0.69% per annum increase in yields. These trends are summarized in the graph below.



Although many countries produce some tobacco leaf, world production is highly concentrated. China alone accounts for 38% of world production while three other countries—India, Brazil, and the United States—in combination account for another 25% of world production. Seven other countries—Turkey, Zimbabwe, Indonesia, Italy, Greece, Malawi, and Argentina—also produce more than 100,000 tons per year of tobacco leaf and have a combined global share of 15%. Hence, eleven countries account for nearly 80% of world tobacco production. See the graph below.

Many different varieties of tobacco leaf are produced and the concentration of production is even more evident for certain tobacco types. The most widely grown type of tobacco is Flue-cured Virginia, a flavorful tobacco which is cured in small ovens using wood or coal for fuel. Just under 60% of tobacco production is of varieties of this type. China accounts for more than half of the world’s production of flue-cured tobacco, with other major producers being the United States, Brazil, Zimbabwe, and India. Burley tobacco, an air-cured variety, accounts for just under 15% of global tobacco production. The largest producers of burley tobacco are the United States and Malawi, followed by China and Brazil. Oriental tobacco, with strong aromatic qualities, accounts for about 10% of total tobacco production. Turkey is the world leader (40% of the total), followed by Greece. Most of the balance of world production is accounted for by a number of other sun and air-cured varieties of tobacco which are generally used in hand-rolled cigarettes. These are widely produced in Asia, especially in India (for bidis) and in Indonesia (kretek).



Worldwide, probably between eleven and twelve million farmers cultivate tobacco, with about two-thirds of these being in China. While there are economies of scale in the processing and logistical management of tobacco leaf and in the manufacturing of cigarettes, there are few economies of scale in the actual cultivation of the crop. Tobacco requires very careful crop husbandry and the tobacco leaves are harvested by hand, on several occasions as the plant growth progresses. Only the land preparation stage is amenable to mechanization. Largely for these reasons, tobacco is typically cultivated on small family farms. On most such farms, the typical plantings of tobacco are a few hectares. In such countries as China, Turkey and (recently in) Malawi, the typical tobacco planting is 0.5 ha. or less. The structural patterns in seven of the leading tobacco producing countries are summarized in Table 1.

Conventional cigarettes are by far the largest form of tobacco use in the world. As with tobacco leaf, there has also occurred a significant shift in the locus of their production. Once manufactured predominantly in developing countries, since the mid-1980s there has been rapidly growing production in developing countries, both as a result of significant developments within China and the relocation by major multinationals to better position themselves in growing consumer markets.

Among cigarettes, there is an emerging trend toward greater consumption of American blend types which are produced with a mixture of Virginia, Burley, and Oriental tobaccos. According to industry sources, world cigarette production was essentially the same in 2000 (at 5.5 trillion units) as it was in 1990 (5.42 trillion units). However, over this period, the production of American blend cigarettes increased by 12%, while declines were recorded in the production of purely Virginia (-4%), oriental (-16%), and dark/Kretek-type (-9%) cigarettes. As a result, the share of American Blend cigarettes in the total world production of cigarettes increased from 33% to 43% over this period.

Table 1: Major Tobacco Producing Countries : Comparative Structural Features

	China	Brazil	USA	Zimbabwe	India	Turkey	Malawi
Production (000 MT)	2600	590	480	210	660	260	125
Planted Area (000 Ha)	1600	330	195	80	435	280	140
# of Growers (000)	8000	135	90	18	850	576	375
Average Size of 'Tobacco' Farm (Ha)	0.4	16.8	66	300+	2.5	4.9	1.0
Average Tobacco Planting (Ha)	0.2	2.6	4.2	40	1.3	0.5	0.2
Tobacco Varieties*	90% FCV 9% Bur	75% FCV 16% Bur	2/3 FCV 1/3 Bur	95% FCV	75% Non-cigarette varieties FCV + Bur 5%	95% Ori	92% Bur
* Flue-Cured Virginia (FCV); Burley (BUR); Oriental (ORI) Sources: USDA Attache Reports; Kasnakoglu and Cakmak (2000)							

Demand Trends

World demand for tobacco products continues to rise. Divergent patterns are again apparent with per capita and even absolute declines in consumption in developed countries and growth in developing countries. The growth in the latter countries has largely been fueled by population and income growth, together with the marketing efforts of cigarette manufacturers. Other factors influencing demand have been prices, habits, taxation, information on the health risks of tobacco use, and restrictions on smoking in certain countries. Developing countries now account for 70% of world consumption with China alone accounting for 44%.

According to Mergos (2001) world demand for tobacco products is expected to increase by 2% per annum between 1998 and 2005 and accelerate to a 2.3% per annum growth rate over the subsequent five years.¹⁵ The divergent trends between developed and developing countries are expected to continue. While tobacco consumption is expected to increase by 3.2% per annum this decade in developing countries, demand in developed countries is expected to fall by 0.7% per annum between 1998 and 2005 and by 0.3% between 2005 and 2010. The Asian region is expected to account for the bulk of the growth in world demand during the coming decade.

¹⁵ Mergos' projections should probably be regarded as the upper limit on expected growth in world demand. His projections appear to be extrapolated from trends in demand, prices, population growth, and income growth over the 1980 to 2000 period. In the latter part of the 1990s there was some slowdown in the growth rate of developing country tobacco demand. While some of this slowly was almost certainly due to the economic crisis in parts of Southeast Asia, it is possible that the slowdown also reflects some degree of effectiveness in country campaigns to increase awareness about the health risks of tobacco use.

As in the recent past, this growth in demand will be fueled significantly by population and income growth. These trends are expected to overwhelm the demand-depressing effects of increased taxes or non-financial programs (i.e. advertising bans) that may be implemented in developing countries, promoted by the WHO Framework Convention for Tobacco Control.^{16 17} Longer term, the number of smokers is expected to increase to 1.6 billion (from 1.1 billion today) by 2025.¹⁸

Trade Trends

During the 1980s and early 90s, some 22 to 24% of world tobacco leaf production was traded internationally. This share has increased somewhat in recent years, being just under 29% in 1998-1999. While in the 1980s, the volume and value of world tobacco leaf exports increased by 0.22% and 0.64% per annum, respectively, during the 1990s, annual growth in the volume of world leaf exports was just over 3% while the value of such trade increased by 2.5% per annum. As with production and demand, it has been developing countries which have achieved increased shares of world trade with the most prominent gains achieved by Brazil, Zimbabwe and Malawi, at the expense of traditional suppliers, including the United States, Greece, and Italy. These trends are summarized in the table below.

Table 2: Exports of Tobacco Leaf (000 MT)

<i>Countries</i>	<i>1980-82</i>	<i>1990-92</i>	<i>1997-99</i>
Developed	596	731	745
Developing	814	1011	1263
USA	265	235	212
Italy	73	128	96
Greece	64	119	68
Brazil	153	226	321
Zimbabwe	103	155	174
Turkey	107	102	149
Malawi	49	97	113
Source: FAO Trade Statistics			

During the 1980s, world tobacco (average export) prices remained within a relatively narrow range of \$2800 to \$3100/ton.¹⁹ During the 1990s there was somewhat more volatility in world tobacco prices, yet still such prices were far more stable than was the case for many other agricultural commodities, especially such important African export crops as coffee, cocoa, and

¹⁶ The Framework will be an international legal instrument intended to limit the harm to health caused by tobacco products. It is expected to address tobacco advertising and promotion, regulation, smuggling, excise tax levels, treatment of tobacco dependence, and smoke-free areas.

¹⁷ Many countries have been implementing tobacco control measures for decades, with varying levels of commitment and impact.

¹⁸ Mergos (2001)

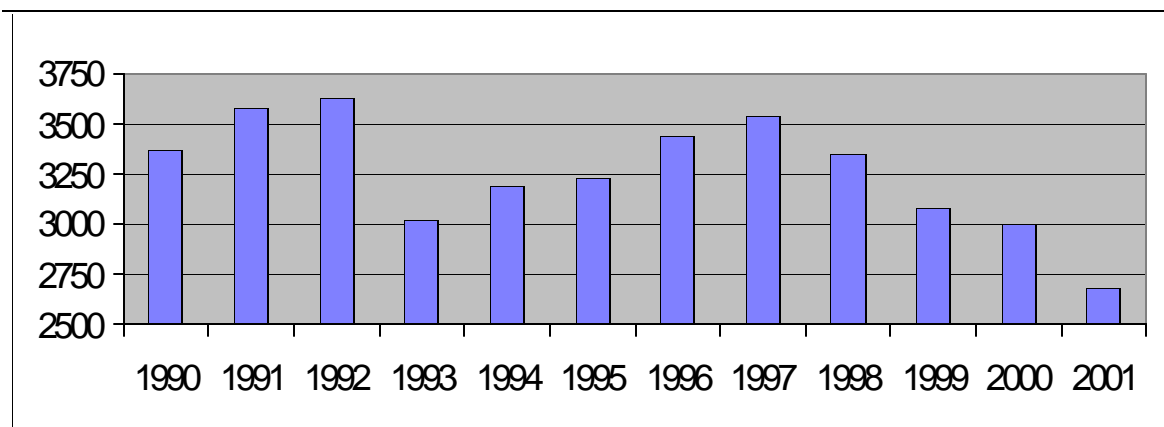
¹⁹ The only outlier years were 1982 and 1983 when the average values were \$3235 and \$3126/ton.

cotton. To illustrate this, over the 1990 to 2000 period, the coefficient of variation in international tobacco prices was 0.07, compared with 0.35, 0.18, and 0.19 for Arabica coffee, cocoa, and cotton, respectively.

Nevertheless, the graph below does indicate that in the period since 1997 there has been a major (i.e. 20%) decline in the average world price for exported tobacco leaf. During this period there was an overall imbalance in global supply and demand, partly due to the economic recession faced in many parts of the world (most significantly in Asia) and partly due to expanded production and, especially, the build up of large quantities of tobacco leaf stocks, most prominently in China, India, and Turkey. Uncertainty surrounding the legal proceedings against cigarette manufacturers and the financial restitutions which would come out of such proceedings may also have put downward pressures on international tobacco leaf prices.²⁰

With several countries destroying unsold stocks and cutting back on production (i.e. India's moratorium on flue-cured production for the 2001/2002 season) and with the disruption in production in Zimbabwe, the near-term situation appears to be more favorable than in the recent past with regards to the overall balance of international supply and demand. Some modest improvement in prices is therefore expected in the short-term.

Figure 1: Average World Price for Exported Tobacco Leaf (\$Per Ton)



Over the medium term, there is some uncertainty about the likely direction of international prices, although these are more likely to be stagnant or somewhat declining rather than experience an increase. Unless there is a massive unexpected decline in the production of one or more major producers, it is most unlikely that world prices will revisit the levels achieved in the early 1990s and again in 1996-97. On the supply side, there is an expectation that both US and EU tobacco production will contract (as price supports are cut back and possibly removed) as will their supplies into the international market. Considerable uncertainty relates to the future prospects for Zimbabwe as a tobacco producer/exporter as it is not clear whether the current instabilities there represent a temporary blip for the tobacco industry or will result in a long-term reduction in the capacities of that industry.

²⁰ Even though tobacco leaf itself accounts for only a small proportion of the cost and price of cigarettes.

Of the other major producers, the prospects are probably brightest for Brazil and China. Brazil produces a different style of tobacco than Malawi, yet any large future expansion in Brazil could impinge on Malawi's market position. China is a very large producer but not a regular exporter of tobacco. While the current thinking is that China will increase its tobacco imports (of particular styles and varieties) there remains a risk that China will, periodically, put large quantities of current production or accumulated stocks into the market, potentially depressing prices for others.

According to industry sources, Malawi is relatively well positioned in the international tobacco market. The country is the second largest producer and exporter of burley tobacco, behind the United States. It does not directly compete with the United States as that country produces a relatively high-quality and very high cost aromatic burley tobacco. Malawi produces a burley tobacco which has excellent 'filler' properties. It is amongst the cleanest tobaccos in the world because there is very little agro-chemical use in Malawi. Malawi's tobacco also has relatively low nicotine content, this being a valuable attribute for a 'filler-type' tobacco.

Malawi also does not directly compete with Brazil or with India as the former generally produces a high nicotine, flavored tobacco, while India produces very little burley tobacco and one which is generally of low quality. There are a number of countries which do produce styles of tobacco leaf similar to that of Malawi—including Thailand and Mexico—yet these countries generally produce for their domestic markets and have only limited exports. Zimbabwe is a major player in the flue-cured tobacco market and not in the burley market. Some up and coming producers, including Zambia and Mozambique, produce a similar style burley crop as Malawi, yet their production is currently quite small and they represent only a medium-term competitive threat.

MAJOR RECENT TRENDS IN MALAWI'S TOBACCO SUBSECTOR

Production Trends

Table 3 depicts the trend in tobacco production in Malawi since the mid-1990s. Following a severe drought in 1994, production recovered and continued to expand until reaching a peak in 1997. Since then production has leveled off, with year-to-year variations affected by the weather, prices, and the financial accessibility of farmers to fertilizer (either through savings, credit, or the diversion of free/subsidized fertilizer from food crops to tobacco production). Indeed, with the relaxation or unenforceability of restrictions on tobacco production, the above factors—together with the more general declining viability of much of the estate sub-sector—have largely driven tobacco output.

The official production figure for 2001 represents an undercount, probably of a minimum of 5000 tons and perhaps between ten and fifteen thousand tons. There is evidence that some significant quantity of tobacco—at least 5000 tons—was sold by farmers into neighboring countries and then re-imported into Malawi as 'Zambian' or 'Mozambican' tobacco in order to avoid the payment of Malawi auctioning fees and other institutional levies and in order to avoid

the overall logistical problems and transaction costs associated with conducting sales through the officially-recognized auction-linked channels.²¹ Taking these developments into account, overall tobacco production in Malawi in 2001 probably matched the levels of 1998 and 1999, yet fell short of the two peak years of production which were 1997 and 2000.

The rapid growth in Malawi's tobacco production which characterized the 1980s and first half of the 1990s has since given way to a leveling off, with year-to-year fluctuations. Production trends, however, vary significantly among different varieties of tobacco. Since the early 1990s, there has been a large and steady decline in the country's production of flue-cured tobacco, with this decline being most dramatic over the past two years. This crop is grown primarily by medium and especially large-scale estates and estate companies. Sharply reduced prices in the late 1990s rendered many such operations unviable, plus there have been additional concerns (and costs) associated with the diminishing availability of wood to fuel the curing process for this variety of tobacco. Several long-standing flue-cured tobacco growers ceased production altogether while others reduced their plantings.²² Currently, a belated effort is being made to revive Malawi's flue-cured tobacco production, based on finance which was internationally sourced and guaranteed by Malawi's leading tobacco buyers.

Table 3: Malawi Tobacco Production Trends (OOO Tons)

Year	Burley	Flue-Cured	Western Types	Total
1990-93 Ave.	85.3	27.3	11.9	124.5
1994	71.3	20.7	5.5	97.5
1995	101.4	19.9	8.8	130.1
1996	117.9	15.4	8.3	141.6
1997	133.9	14.9	9.3	158.1
1998	113.8	13.9	6.7	134.4
1999	111.4	14.3	8.8	134.5
2000	142.2	10.7	6.8	159.7
2001	115.3*	8.3	1.0	124.6*
2002	125.4	11.2	1.6	138.2
* Does not include 'diverted' crop, estimated at 5000 to 10,000 tons. Source: Tobacco Control Commission				

Also underpinning the wider trends has been a stagnation and more recent virtual collapse in production and sales of various so-called Western types of tobacco (i.e. dark-fired and sun-aided) with reduced support provided by the parastatal ADMARC, the historical promoter of these crops. The Malawi tobacco industry has increasingly become dominated by the burley crop, the output of which continued to rise until 1997 and has leveled off since then within a moderate range. Still, taking into account estimates of the 'diverted' burley crop in 2001, the volume of burley production was higher last year than in all years other than 1997 and 2000.

²¹ There is some suspicion, although no clear evidence, that some additional tobacco crop was sold directly by growers to the international buyers who operate in Malawi. Under current regulations this would have been illegal.

²² See the discussion on tobacco profitability for estates in Olney et al. (1998).

Continued Structural Change

The significant change in the structure of burley production which began in the early to mid-1990s has continued in recent years. Smallholder farmers—defined as those who own less than two (and normally one) hectares of land and generally cultivate only 0.1 to 0.3 hectares of tobacco—now account for some 70% of the total national tobacco crop. The share of the national crop of both small/medium estates and large estates has declined substantially and probably consistently since the mid-90s. (Table 4).²³

Many estates have simply ceased burley tobacco production altogether, having experienced problems of labor abandonment and the sale of their tobacco by farm tenants and/or hired estate managers to ‘intermediate buyers’ or others. The tenancy system, which historically and through to the early 1990s had been a prominent and controversial feature of burley production, has been widely eroded in recent years and many estate owners have had to abandon it altogether, shifting to a direct production system with hired labor.²⁴ A substantial number of estates have experienced more general financial and management problems in recent years.²⁵

While no hard statistics are available, we estimate that some 40-50% of the estates which had been producing tobacco in the early 1990s have since given up production altogether, while many others have scaled back their operations. Absentee-owned estates and larger estates with relatively high overheads have been most seriously affected by the liberalization of the sector and the changing economics of tobacco production. Small estates—the operations which had accounted for most of the growth in the industry during the period from the mid-1980s to the early 90s-- have also experienced a decline in recent years with many losing their regular access to credit, either due to their own loan defaults or to the general reductions in agricultural lending by Malawi’s commercial banks (see below).

²³ This analysis is based on the author’s estimates, although these are consistent with the smallholder crop estimates made annually by the Ministry of Agriculture and Irrigation. Tobacco ‘production’ data provided by the Tobacco Control Commission no longer reflect actual patterns as a large proportion of tobacco sales by registered estates is now of tobacco which they have purchased from smallholders or others, rather than directly produced themselves. The breakdown in the integrity of the registration system for tobacco production has undermined the reliability or meaning of official statistics.

²⁴ Similar to that which has always prevailed for flue-cured tobacco production in Malawi.

²⁵ Recent empirical analysis of Malawi’s estate sub-sector is lacking. The last substantial and quantitatively based piece of research on the estate sub-sector was the Estate Land Utilization Study of 1997. A more qualitative review of the ‘estate crisis’ was provided in 1998 by Olney et. al.

**Table 4: Structural Transformation of Malawi Burley Tobacco Production
(Author's Estimates)**

	Total National Crop (000 Tons)	Smallholder Production (000 Tons)	Small Estates (000 Tons)	Medium + Larger Estates (000 Tons)	Smallholder Share (%)	Small Estate Share (%)	Medium/Large Estate Share (%)
1994	71	11	30	30	16	42	42
1995	101	24	36	41	24	36	40
1996	118	46	37	35	39	31	30
1997	134	72	36	26	54	27	19
1998	114	73	23	18	64	20	16
1999	111	76	20	15	68	18	14
2000	142	94	25	23	66	18	16
2001	125**	88	20	17	70	16	14

*Estimates based upon smallholder club numbers, MOAI smallholder crop estimates, IB sales data, estimates of estate IB activity, etc. Between 1994 and 1998, it is estimated that 85% of sales by intermediate buyers was of smallholder production, the balance being crop sold by estate managers and tenants. From 1999 onwards 95% of the IB sales are assumed to be of smallholder origin. The proportion of the recorded 'estate' sales in the auctions which originated on smallholder farms is estimated to have risen from 10% in 1994, 15% in 1995, 30% in 1996, 40% in 1997, and 50% thereafter. All smallholder club sales are assumed to be smallholder origin crop, except in 2000 when an estimated 5% was of estates who registered as clubs to escape the withholding tax. All the resulting estimates for smallholder production are within 10%, plus or minus, from MOAI smallholder burley crop estimates.

** Includes some 10,000 tons which may have been sold across Malawi's borders illegally.

The number of smallholder farmers who are engaged in tobacco production seems to have reached a plateau after rising rapidly in the mid to late 1990s. It was previously estimated to have risen from 50,000 in 1994 to between 175,000 and 200,000 smallholders in 1996.²⁶ The 1997/98 Integrated Household Survey found that some 18.9% of smallholder households—equivalent to some 359,100--- were cultivating tobacco. Participation has since leveled off and probably declined somewhat.²⁷

In 2001, there were some 23,363 registered burley clubs although only 19,714 actually sold their tobacco on the auction floors. Tobacco Control Commission registration figures suggest an average of fifteen members per club. Assuming that some proportion (perhaps 5 to 10%) of registered clubs are fictitious or one/two person clubs (registered by estate owners, agricultural extension officers, or others), one can estimate that some 315,000 to 330,000 smallholders currently are producing tobacco. According to TCC data, just under one-third of registered tobacco club members are women.

²⁶ Jaffee 1997

²⁷ Some proportion of smallholder tobacco growers have shifted, at least in part, to the cultivation of paprika. This is also a high-value crop which derives from the same plant family as tobacco. According to the major exporting company some 75,000 farmers are growing paprika in the 2001/02 season, up from 40,000 the previous year

In the mid-to-late-1990s, continued smallholder entry was facilitated by a number of factors. One of these was strong economic incentives. At least during that period, tobacco cultivation was generally far more remunerative than most other crops grown by smallholders, plus the marketing system for this crop was far better developed than it was for virtually all other agricultural commodities.²⁸ A second important factor was the broad spread of technical knowledge about (at least aspects of) tobacco cultivation. Hundreds of thousands of rural Malawians had prior experience with tobacco--serving as laborers or tenants on estates, cultivating dark-fired or other 'Western' tobacco varieties, or cultivating burley tobacco illegally prior to the reforms.

Further facilitating the spread of smallholder burley production were three areas of institutional development. One involved the formation of 'burley clubs' both with the support of the Ministry of Agriculture and under the auspices of the USAID-supported Smallholder Agribusiness Development Project. These clubs—whose numbers grew from a few thousand to more than twenty thousand between the mid-1990s and 2000, have variously served to assist smallholder tobacco growers in procuring inputs, accessing credit, accessing technical assistance, and organizing the transport of their tobacco to the auction floors. The SADP has given rise to the formation of a National Association of Smallholder Farmers of Malawi, a very promising yet still fragile structure for organized lobbying and service delivery for smallholder farmers.

The second institutional development was the introduction of a program to license 'intermediate buyers' of tobacco. This complemented the formation/activities of 'burley clubs' as many clubs were (and are) rather weak and as farmers still require an intermediary between themselves and the (distant) auction floors. These intermediaries provided immediate cash for harvested/cured tobacco, albeit at highly discounted prices.²⁹ They also provided the logistical link for farmers who otherwise were not able to bring their tobacco to the auction floors. The IBs, which numbered at their peak some 4000, essentially competed with estates who both historically and currently purchased tobacco from smallholders and then sold that tobacco under their own grower names. The IB program proved to be controversial—and probably accelerated the demise of the tenancy system-- and was scaled back substantially during the last two seasons. More on this later.

The third institutional development was the availability of credit to smallholders, primarily provided by the Malawi Rural Finance Company.³⁰ This company was established in 1993/94 as an autonomous, though government-owned company. It received technical assistance and a line of credit under a World Bank project. MRFC was designed to provide loans and other services to smallholder farmers and small rural businesses. Although not originally anticipated, the company came to serve as the leading source of finance for smallholder tobacco growers who had been organized into burley clubs. Some two-thirds of MRFC's loan portfolio in the late 1990s was for inputs for mixed crop production—essentially tobacco and maize—and the company financed some 30-40% of smallholder burley growers during this period. Those

²⁸ Ibid. and Keyser (1996)

²⁹ Typically half of the auction floor prices.

³⁰ For the most part, Malawi's commercial banks have not financed smallholder agriculture, although periodically they have attempted small lending schemes with selected crops and growers.

growers who accessed credit typically outperformed other smallholders due to the improved quality and yield of their crop.

Significantly, parallel developments did not take place to strengthen the quality and availability of advisory services provided to the massive number of new entrants into the sector. The Ministry of Agriculture has a limited number of tobacco specialists, yet the overall field extension service has experienced problems of mobility and has given most priority to food crop matters and devoted little attention to tobacco cultivation and post-harvest matters. The center for research and advisory services for tobacco has been the Agricultural Research and Training Trust (ARET). While regarded as doing quality work, ARET's long-term focus has been on estate agriculture and the organization lacks the field presence to substantially impact on widespread smallholder production. Years of periodic discussions on how to synergize the efforts of the Ministry and of ARET to bring more effective advisory services to smallholder tobacco growers have thus far failed to result in a workable strategy and financial arrangements.

Trends in Prices, Quality, and Productivity

While Malawi's overall tobacco production has leveled off in recent years, the prices realized on its auction floors have declined sharply. This can be seen from the graph below. Both for burley and flue-cured tobacco, auction prices peaked in 1996, giving rise to the large (burley) production response the following year. For burley, prices subsequently fell, recovered somewhat, and then fell very substantially such that average prices in the past two seasons have been nearly one-third lower than those which prevailed in 1996-1997. For flue-cured tobacco, prices fell substantially from 1996 to 1998 and then leveled off at this lower position. For the 2001 season incentive prices were paid to flue-cured growers as the international buyers feared the total collapse of Malawi production of this crop—at the same time when their supplies from Zimbabwe have become extremely vulnerable to decline.

This movement in the auction prices in Malawi parallels the wider trend in the international market. At least in those countries where producer prices for tobacco are not affected by substantial price supports by government, there occurred a substantial erosion of producer prices between the mid-1990s and 2001. This can be seen in the graph below. The erosion in prices has been proportionally even greater in Brazil than it has been in Malawi. Structural imbalances in world supply and demand for burley tobacco—and the related build-up of unsold stocks and the need to find new (frequently lower priced) market outlets for available product—are the proximate cause for these general price developments.³¹

³¹ Another contributing factor may have been the uncertainty, faced by major cigarette manufacturers, regarding the extent of legal litigation which they would be facing as well as the size of the financial settlements which would be agreed to. Even though tobacco leaf itself accounts for a very small proportion of the overall costs and prices of cigarettes, these developments likely led the manufacturers and the tobacco brokers which supply them, to seek to reduce the costs of raw materials.

Figure 2: Recent Trends in Average Tobacco Auction Prices in Malawi

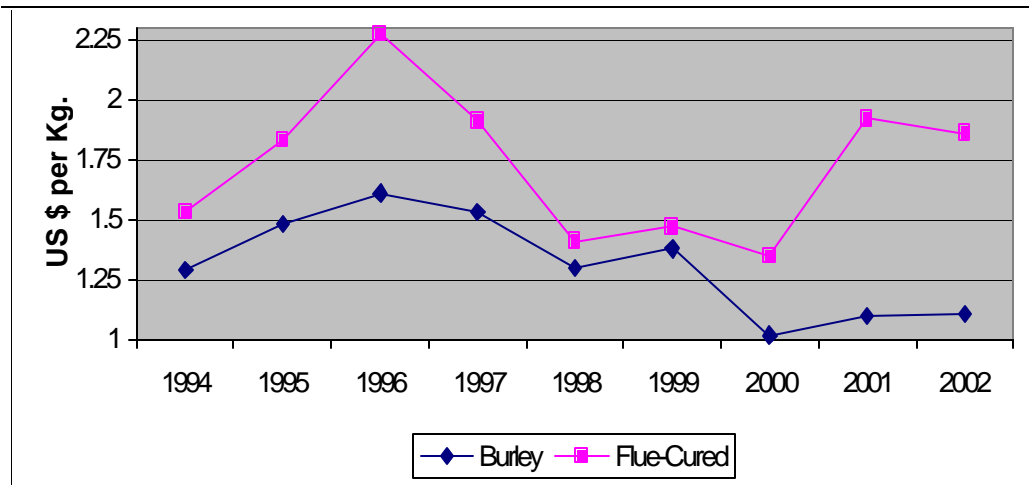
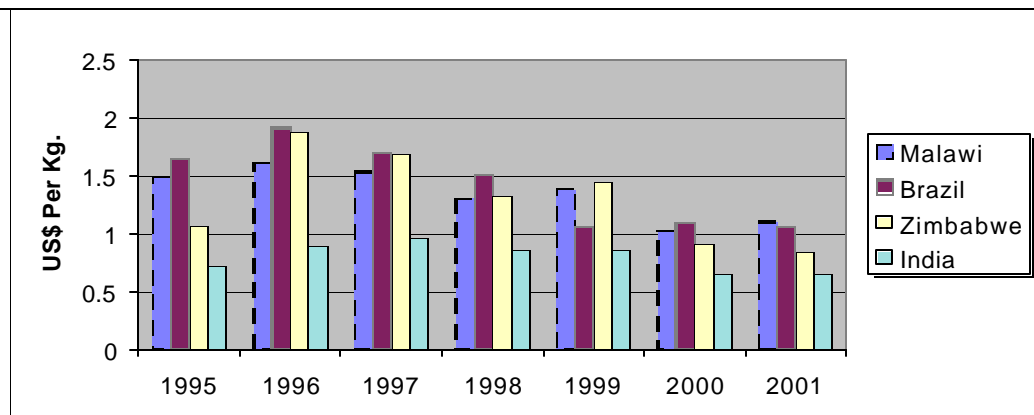


Figure 3: Producer Prices for Burley Tobacco



Somewhat exacerbating these general (global) price trends have been changes in the composition of the Malawi burley tobacco crop since the mid-1990s. While empirically demonstrating these changes is not possible with available data, there is a widely expressed view among industry stakeholders in Malawi that the overall quality of the burley crop has been somewhat reduced and that certain styles and grades of tobacco are no longer available in the desired quantities. While the international buyers indicate a need for a ‘balanced’ crop, comprising a wide spectrum of tobacco styles and grades—each with their own uses and market outlets—there is an expressed view that in some years the composition of the crop has not fully complied with market requirements and opportunities.

Whether this is in fact true or merely a convenient bargaining tool—by the buyers to rationalize lower prices and even by Malawi’s estate interests to heap scorn on the validity of the subsector reforms and the emerging dominance of smallholder farmers—is difficult to discern.

There are a number of factors which bring plausibility to the notion of quality reduction in Malawi's tobacco crop since the mid-to-late 1990s. These include:

- the rising proportion of the crop which is accounted for by highly undercapitalized smallholder farmers, typically growing the crop with own saved seed and with little or no fertilizer,
- growing environmental constraints, including the reduced availability of poles and thatch for proper curing barn construction;
- the entry and subsequent exit of large numbers of intermediate buyers, some proportion of which lacked prior tobacco experience and/or suitable facilities to grade and bale the purchased crop,
- continued logistical problems for the delivery of smallholder tobacco from rural areas to the auctions (based in Lilongwe, Mzuzu, and Limbe) and major problems of 'congestion' associated with deliveries to the Lilongwe auction; and
- a lack of strong financial incentives for farmers to produce a high quality crop, given the small premiums paid on Malawi's auctions during the mid-to-late 90s for the higher grade tobacco compared with the average or below average quality of tobacco.³²

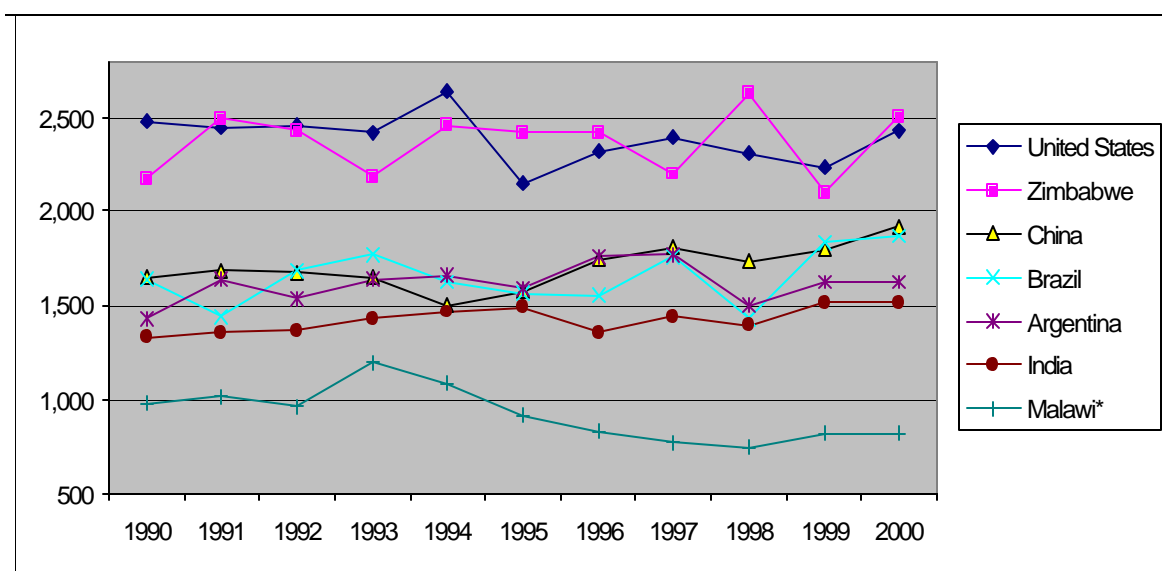
The only quality classification system that really counts is that of the international buyers of Malawi's tobacco. These classifications, however, seem to be regarded as something of a trade secret, and the underlying data on the quality mix of the Malawi crop is not available in the public domain. The only quality classification system for which data are publicly available is that conducted each year by the Tobacco Association of Malawi (TAMA), an association representing (primarily estate) growers. TAMA's tobacco classifiers operate on the auction floors, moving along the lines of bales, taking quick samples and assigning a style and quality grade to each bale. This system, although highly subjective and subject to a margin of error, is viewed as providing some value to growers in helping them relate auction prices to different types and qualities of tobacco leaf.

Time series data from the TAMA classification system (See Annex A) do not depict a generalized pattern of declining quality among Malawi's burley crop. Instead, those data point to: (i) a slight decline in the proportion of the crop classified as 1st or 2nd grade (from 28% in 1995 and 1997 to 21-24% in the past two years), (ii) considerable stability in the proportion of the crop classified as 4th or 5th grade (generally around 20%), (iii) a small increase in the share of the crop given the middle 3rd grade (now some 53-55%), (iv) a general improvement through the long-term reduction in the proportion of the crop which is classified as mouldy, and (v) an atypical situation for the 1999/2000 season crop which was qualitatively inferior, compared with the general pattern since the mid-1990s.

³² For example, in 1997 the average auction price for burley tobacco was \$1.53/kg.. The premium for 1st and 2nd grade tobacco was negligible (i.e. only \$0.05) while the reduction for low grade or even moldy tobacco was not substantial. Moldy tobacco, together with 4th and 5th grade tobacco earned the farmer \$1.29/kg. in that season. In the past two seasons, the international buyers have moved to more strongly reward high quality and penalize lower quality tobacco through their price offers in the auctions.

Over an extended period, Malawi's tobacco farmers has been experiencing a decline in productivity. According to the data of the Tobacco Control Commission, Malawi's average yields for burley tobacco production have fallen, more or less steadily, from 1150 kilograms per hectare in 1990 to 922 kilograms per hectare in 2001. Average yields have also fallen for flue-cured production from 1760 kg/ha in 1990 to 973 kg/ha in 2001. For these varieties of tobacco, such yields are extremely low by international standards, and, in recent years, approximately one half or less than the yields obtained in each of the major tobacco-producing countries with whom Malawi competes. This comparison of yields is summarized in the following graph.

Figure 4: Comparative Tobacco Yields (KG/HA)



Among the factors which have likely contributed to this decline in Malawi tobacco yields include:

- The decline in production or absolute exit from the sub-sector by many of the long-standing estates,
- Lack of adequate advisory services to smallholder farmers,
- Low and probably declining use of fertilizer and a more general decline in soil fertility,
- Widespread use of low-quality, own-saved seed,
- An increased incidence of disease and pest infestation due to inadequate crop rotations, and
- Significant post-harvest losses because of inadequate curing barn infrastructure, especially although not exclusively on smallholder farms.

Declining Profitability

In the face of sharply reduced prices and what have most likely been adverse movements in product quality and yields, the profitability of tobacco cultivation in Malawi has been sharply

reduced. While the contraction of profits first had a major adverse effect on the viability of estate production, the trends in the past two seasons have resulted in very marginal returns for smallholder farmers. An illustration of this is provided in Table 5.

This analysis is based on crop budgets from members of the National Association of Smallholder Farmers of Malawi (NASFAM). These farmers, who comprise some 15% of all smallholder tobacco growers, are more likely than the overall mix of smallholder growers to access credit, apply fertilizer, and obtain higher yields and somewhat higher prices than the national norm. These growers also incur somewhat lower logistics and transaction costs than non-NASFAM member smallholders because of the services and linkages provided by the association. For the purposes of this analysis we have assumed no change in average yields over the coverage period, suggesting a somewhat optimistic scenario.

The analysis suggests that over the 1997 to 1999 period, the net returns per kilo remained within a range of \$0.34 to 0.37 and that these ‘typical’ farmers—with an output of 300 kilograms of burley—obtained a net income from tobacco of just over \$100. While this is not a princely sum, such a level of cash income was substantial in rural Malawi. According to the 1997/98 Integrated Household Survey the mean cash income³³ for all rural households in 1998 was only \$114. That for ‘non-poor- households was \$155, while the mean cash income for ‘poor’ households was only \$71. Tobacco, therefore, continued to play a powerful role in the incomes of those smallholders who grew the crop.

Table 5: Net Returns for (NASFAM) Smallholder Burley Growers

	1997	1998	1999	2000	2001
Ave. Sales Price (\$/kg.)	1.56	1.30	1.42	1.05	1.10
Net Returns/Kg. (\$)	0.36	0.37	0.34	0.17	0.09
Net Returns Per Farmer (\$; Output =300 kg.)	108	111	102	51	26
Net Returns Per Hectare	540	555	510	255	130
Net Returns as % of Ave. Price	23	28	24	16	8
Source: NASFAM data					

The table starkly depicts the decline in profitability over the past two seasons, with the returns per kilogram falling by 50% in 2000 and then almost by half again in 2001. For the latter year, this implies a net profit for the ‘typical’ NASFAM member of only \$26. Among farmers employing low-input, low output practices it is almost certainly the case that their profits from tobacco cultivation have declined substantially as well.

In addition to price, quality, and productivity factors, several other factors have contributed to the erosion of profitability among Malawi’s tobacco growers. One such additional factor has been the movement (or management) of the exchange rate. In three of the past four years the pattern of exchange rate movements have been inconsistent with the interests of tobacco farmers. This is summarized in Table 6.

³³ Not including the value of home production (of food) which was consumed.

Purchased inputs for tobacco are obtained just before planting and reflect the exchange rate at that time. This is especially the case for fertilizer, the most costly purchased input. The exchange rate in October – November is used here as a proxy for the exchange rate determining input costs. Most sales of tobacco take place over the June to August months and the average exchange rate for this period is the proxy for converting dollar earnings at the auctions into Malawi Kwacha and their distribution to farmers. The three-month period after the auctioning of the tobacco is a time when much of the tobacco is exported.

As seen in the table, in both 1997/98 and 1999/00, a devaluation did take place between the time of planting and the farmer sale of tobacco. This benefited growers. However, in the three-month period immediately following the farmers’ sale there was an even more substantial devaluation of the Kwacha which provided no benefit for farmers. In fact, that steep devaluation of the Kwacha just after the closure of the tobacco auctions simply fed into higher input costs for the farmers during the subsequent seasons. For the most recent season, the Kwacha actually appreciated during the course of the tobacco growing and selling season, exacerbating the effects of low auction sales prices.

Table 6: Exchange Rate Movements Relevant to Tobacco Earnings

Season	Oct-Nov (inputs)	June -Aug (auction)	Sept-Nov (exports)
1997/98	17.7	27.93	42.0
1998/99	42.5	43.4	44.5
1999/00	45.0	57.2	75.1
2000/01	79	71.5	63.1

The profitability of tobacco production has been further weakened by the relatively high and rising costs associated with the transport, handling, and auctioning of Malawi’s tobacco. Tobacco, when transported internally, incurs charges which are well above the road transport freight rates applied on general goods. While NASFAM has been able to negotiate favorable rates for its members—typically on the order of US 5 cents/kg. –for transport from the rural areas to the auctions, most other smallholders—whose tobacco is first sent to satellite depots managed by TAMA—incur transport costs of US 10 cents or more.

International transport costs for the exports of Malawi tobacco are also relatively high since some two-thirds of the exported product is still transported by the long route of road and rail to Durban in South Africa. Efforts are being made to direct more freight traffic via rail to the Nacala port in Mozambique, yet there are still technical and management constraints on using this channel. The cost savings from more extensive use of this export channel might result in higher prices on the Malawi auctions by some US 7 to 10 cents (that is 7 – 10% of the recent average prices).

Malawi growers incur relatively high costs in selling their tobacco over the auction floors. For example, Auction Holdings Limited, the sole auctioning company, charges growers a fee of 3.95% of the gross revenue realized. This is very high by international standards. The comparable rate in Zimbabwe has been 2.4%. The fees charged by AHL to apply a stop-order for a financial institution are extremely high, being 3% of the loan amount, as compared with the fee

of only 0.14% of the loan amount charged under similar circumstances in Zimbabwe. While the AHL stop-order system has been reasonably effective as a basis for agricultural loan recoveries, it comes at high cost to growers.³⁴

In addition to the auction fees, Malawi growers pay a series of institutional cesses which are also deducted by AHL from the gross revenues obtained by farmers. These include a levies for ARET (1%), associations (0.85%), TAMA's classification system (0.5%), and the Tobacco Control Commission (0.13%), as well as a payment of US \$0.92 per bale to cover the cost of a hessian bag replacement scheme. These levies amount to some 3.58% of the farmer's gross revenues. This level of charges is very high by international standards.³⁵ In past years, the significance of these levies was relatively modest compared with the earnings potential from Malawi tobacco. With the recently depressed price structure, the size of these levies, (and the high fees charged by AHL) need to be re-evaluated with a view toward their downward revision.

Of additional yet not readily quantifiable significance, are the transaction costs which many tobacco growers incur which are associated with petty corruption, mismanagement, and other inefficiencies within the supply chain. Except for the 15-20% of smallholders whose clubs are members of NASFAM, 'direct' sales through the auctions are presently undertaken through a network of some 88 satellite depots managed by members or counselors of TAMA. In past years, there were widespread complaints about the mismanagement of such depots (essentially small warehouses) with 'first in-last-out' being practiced with tobacco bales, with bales going missing or being damaged, and/or with growers having to pay relatively high transport costs for the deliveries made to the auctions. Growers bore the brunt of these costs as no one was accountable for lost or damaged tobacco. While some improvements in these arrangements have been reported, inefficiencies remain and improving returns to farmers is certainly not the driving force for services provided.

These transaction costs are then magnified when tobacco from the satellite depots is delivered to the auction floors. While there has long existed a system of delivery quotas to bring an even flow of tobacco to the auctions, this system has been overwhelmed in recent years by the sheer number of growers and trucks conveying tobacco, together with the practice of prominent and well-connected growers ignoring their assigned delivery schedules and jumping the queue leading into the auctions. This problem is especially prominent at the Lilongwe auction and lines of 500 trucks or more are not uncommon during the period from June to August. These trucks essentially serve as warehouses, holding growers' tobacco in a semi-protected state for up to two weeks, during which time damage or 'leakages' may occur. Farmers wishing to observe the sale of their tobacco may have to come back and forth to the auction several times as the queue of delivery trucks moves forward.³⁶

³⁴ Given certain features of agricultural loans in Malawi—especially the need to deposit some 10-20% of the loan value into the financial institution and thus borrow 110-120% of the amount of one's intended loan—the actual cost of the stop-over fee to the grower tends to be 4.5% or more, raising the cost of finance by this amount.

³⁵ In Zimbabwe, the combined levy for research and for tobacco associations is 0.5%, while the hessian levy is 0.1%.

³⁶ The bottleneck at the Lilongwe auction may have more to do with the processing capacity and use of that capacity by the international buyers. More tobacco can be handled and sold on a daily basis at that auction than can be processed in the adjoining factories. In addition, the buyers also use those factories to process tobacco that is imported from Mozambique and then re-exported.

While it is not easy to quantify these transaction costs associated with the intermediation of smallholder tobacco to the ultimate buyers, they are not insubstantial. These inefficiencies and rents may have been tolerable in a context when tobacco prices were high and grower profit margins substantial. However, such costs are likely to serve as the difference between rather small profits and absolute losses by farmers in the context of compressed prices.

If these marketing and transaction costs were not enough, smallholder growers have recently been required to pay a 7% withholding tax on the revenues obtained through their auction sales. This withholding tax is essentially an installment payment for income tax. Currently, persons earning an income exceeding MK 30,000 are liable for income tax. This applies to few, if any, of the smallholder tobacco farmers, yet some of their clubs, as an entity, certainly obtain gross revenues exceeding this sum. For years, smallholders (clubs) were exempt from the withholding tax, yet this arrangement was soon abused by estate owners who registered themselves as 'clubs', giving a fictitious list of members. With the grower registration system in disarray, the 'solution' was to apply the withholding tax on smallholder clubs, yet make provision for them to claim back the tax. While the claim form is not exceptionally difficult, it is apparently very difficult for many of the less well organized clubs (and farmers) to organize their records and obtain the necessary representation (by an accountant, for example), to actual get back their withholding tax.

The combination of statutory levies, high auction fees, high transaction costs within the supply chain, and the re-imposition of the withholding tax has led a significant number of growers to by-pass the established marketing channels and seek to sell their tobacco directly to the international buyers. In several locations on or across the borders to Zambia and Mozambique, Malawi growers sold their tobacco to the international buyers, their representatives or others. While paid (in Malawi Kwacha) less than the prevailing auction prices, these farmers achieved enormous savings in logistics and transaction costs. As noted earlier, probably somewhere between five and ten percent of the burley tobacco crop was sold through these extra-legal channels in 2001. This represents something of a warning: a flashing yellow light that the present system of logistics and marketing for the smallholder crop entails intolerable risks and costs for many of the smallholder participants.

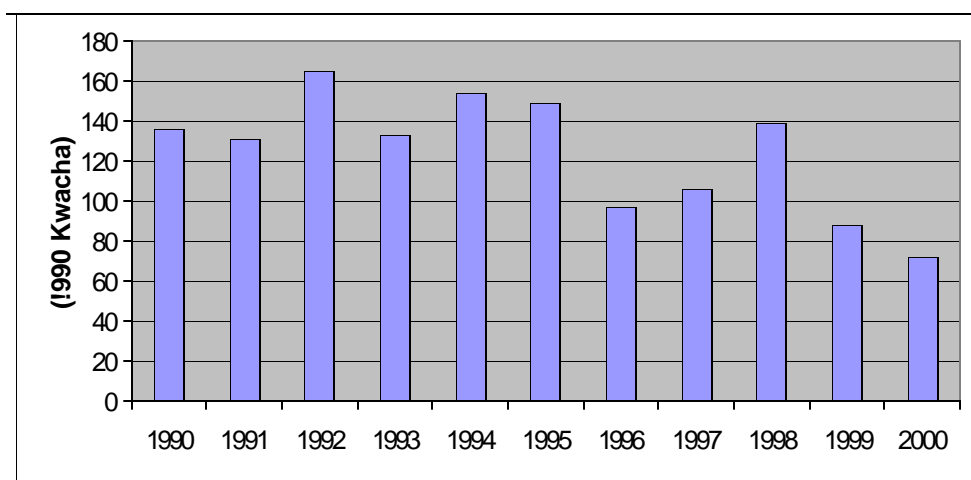
An additional 'strategy' employed by farmers to cope with the cost-price squeeze is to default on their agricultural loans, in part or in full. Credit repayment rates for tobacco growers have declined since the mid-1990s. For example, while in the 1996/97 and 1997/98 seasons MRFC obtained agricultural loan recoveries of around 90%, such loan recoveries have fallen to about 80% during the past three seasons. Some proportion of loan default involves farmers which fail to produce enough tobacco (revenue) to pay off the loan. A larger proportion of the loan default involves farmers whose profitability has declined and whose coping strategy has been to manipulate the tobacco registration system, obtaining multiple grower or seller numbers, and then selling the tobacco under the name(s) for which there are no stop-orders placed for their loans.

This process, occurring on a significant scale, has threatened the sustainability of agricultural/rural finance in Malawi and led to an array of *ad hoc* schemes by government to intervene in the credit market, including through the provision of credit repayment guarantees to

input companies. The credit repayment experiences of these government-backed schemes has been very poor, further eroding credit discipline in the sector.³⁷ More generally, the breakdown in credit discipline has resulted in a contraction in agricultural lending by Malawi's financial institutions. This is illustrated in the graph below which combines the agricultural lending of the commercial banks and of MRFC and deflates these by the CPI. For Malawi's commercial banks, agricultural lending declined by some 75% in real terms between 1990 and 2000. The increased lending of the Malawi Rural Finance Company has only partially cushioned the blow from this contraction in commercial bank lending to the sector.

To a considerable extent, a vicious circle has been formed in which low profitability leads to willful (or non-willful) loan default, resulting in lost access to commercially provided finance. This has led some farmers to reduce their fertilizer use and cut other corners in production, thereby reducing their yields and/or quality and the profitability of their crop. Those farmers lucky enough to gain access to the latest government credit scheme, generally under the false pretext that either they have not previously borrowed or are not a 'defaulter' can delay the on-set of this cycle by a year or two until they default again or the latest scheme collapses under the weight of massive default.

Figure 5: Commercial Lending for Agricultural in Real Terms



Production Cost Economies

While the decline in grower profitability over the past three to five years is very significant, that the crop remains profitable at all can be attributed to a reduction in production costs, amounting to some 25% between 1997 and 2001. Part of this cost reduction has been for fertilizer costs, reflecting, especially, the decline in international prices for urea.³⁸ The costs of

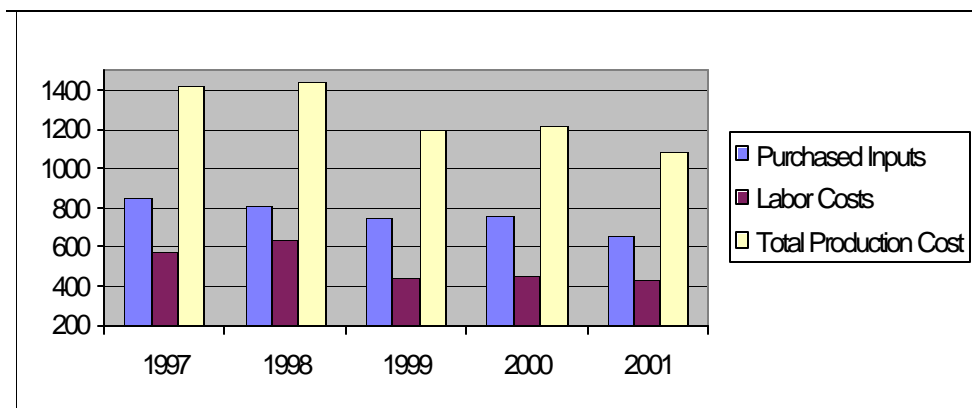
³⁷ The rate of loan default on the 1998 and 1999 'Agro-Input Schemes' was 25% and 34%, respectively.

³⁸ Still, fertilizer costs in Malawi are considerably higher than those in neighboring countries as a result of higher transaction costs, hedging against exchange rate uncertainty, limited competition, and other factors. In 1999, the wholesale prices for urea and CAN were 40-50% lower in Zambia and Tanzania than in Malawi. The wholesale price for urea in Zimbabwe was only one-third that of Malawi in that same year.

various farm implements have also declined in US\$ terms due to the increased volume of local sales and new entry and competition in the production and sale of such implements.

Labor costs in Kwacha terms have not kept pace with the devaluation of the currency, indicating that *farm labor has borne a considerable amount of the cost of adjustment to declining tobacco prices*. A serious reduction in labor costs seems to have taken place between 1998 and 1999, while labor costs have remained virtually steady (in US\$ terms) since then. This development needs to be examined further as it has significant implications for poverty in rural Malawi. The graph below illustrates these trends, indicating labor and purchased input costs per hectare since 1997.

Figure 6: Smallholder Burley Production Costs (US\$ per Hectare)



Direct comparisons in production costs between Malawi and other countries is limited by data availability and by the fact that different growers—especially in Malawi—are characterized by wide variations in their input use and productivity. For the comparison below we utilize the NASFAM crop budget for smallholders (assuming higher input use and much higher yields than the norm among such growers) and data from a large company with many estates which still produce burley tobacco.

Table 7: Comparative Production Costs for Burley Tobacco

Country	Cost/Hectare (US\$)	Cost/Kg. (US\$)
India	749	0.60
Brazil	1282	0.70
Thailand	1756	0.86
Malawi		
Smallholder (00/01)	1080	0.72
Large Estate (99/00)	2062	1.29
United States	8850	4.14
<i>Sources: USDA Attache Reports; ITGA Annual General Meeting; Correspondence; NASFAM Crop Budgets; Press Agriculture company data.</i>		

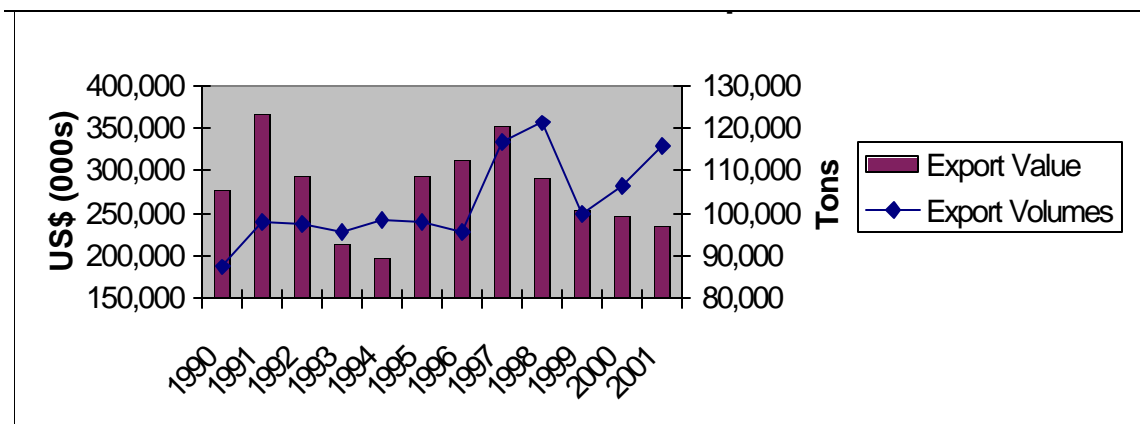
The table suggests that while Malawi's costs per hectare are competitive with those of other developing countries, its production costs per kilogram are somewhat higher as a result of its far lower yields. Comparative marketing and logistics costs are not available, yet given the nature of sales arrangements in many countries—now based largely on direct contracting—these

are expected to be considerably higher in Malawi.³⁹ The table also includes a reference to the underlying production costs for (high-quality) burley tobacco in the United States. What is evident is that the continuation of that production has only been possible as a result of support prices paid by the US government.

Exports and Gross Revenues

With the leveling off of production, the reduction in auction and export prices, and the decline in yields, the industry is witnessing a decline in export earnings, overall gross revenues and returns per hectare of land devoted to the crop. The trends for exports are summarized in the graph below.

Figure 7: Malawi Tobacco Leaf Exports

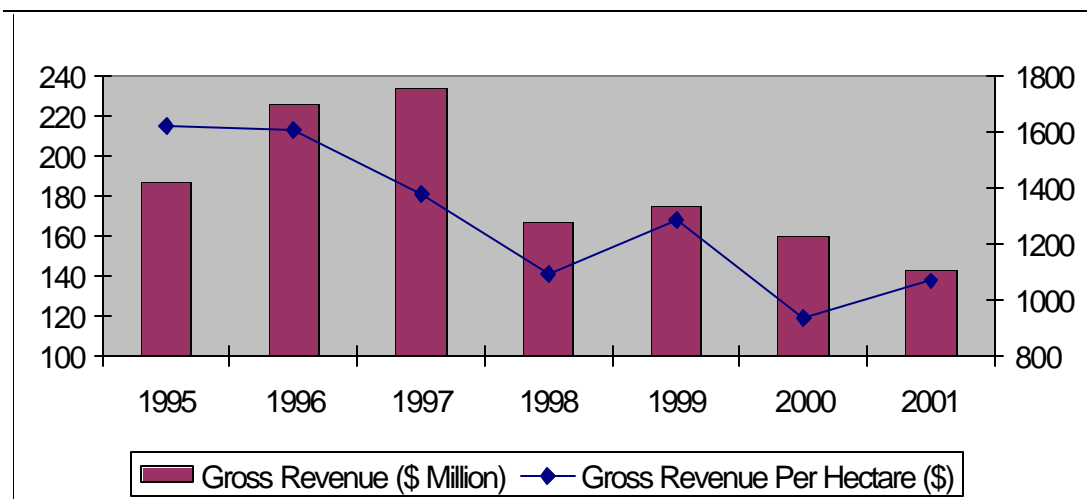


The graph below illustrates recent trends for gross revenues and gross revenues per hectare of tobacco planted. The bars for gross revenue are the value of the burley and flue-cured crops on the auction floors in Malawi. These revenues have declined substantially since the mid-1990s and—with declining profitability—no longer provide the large cash injection into rural areas which the industry once provided. These figures, divided by the planted area for these crops provides the line in the graph. Gross revenues per hectare have thus declined from about \$1600 in 1995 and 1996 to just over \$1000 in recent years.

Hence, the overall picture is a very mixed one. Over the past decade Malawi has retained or even increased its share of world production and trade of tobacco. It has done this despite the virtual implosion of its estate sub-sector, and in the course of a rapid and dramatic restructuring of the pattern of tobacco production. This restructuring of production resulted in a significant redistribution of income, likely a primary factor—through its multiplier effects—of that economic growth which did take place in Malawi during the mid to late 1990s.

³⁹ Additional work is needed to support this argument. However, Brazil’s tobacco industry has been experiencing a mini-boom in recent years despite producer prices and unit production costs both being similar to those prevailing in Malawi. The primary difference underpinning divergent paths in profitability is therefore likely to be marketing costs and other institutional deductions.

Figure 8: Declining Revenue Indicators: Burley + Flue Cured



On the other side of the ledger is a profound concern about the sustainability of the industry and of many of the institutions developed to govern and support tobacco production, marketing, and trade. Malawi is now devoting more of its relatively scarce land to a crop which is yielding less, not only in terms of physical product per area but also in terms of unit and absolute revenue, export earnings, and investable savings. Many former participants in the industry have been driven out while many others now find their returns to be quite marginal and their continued specialization in tobacco simply being a function of the lack of remunerative alternatives. Our estimates of smallholder tobacco production and profitability suggest that in each of the years 1997, 1998, and 1999 approximately \$26 million was generated in net profits from tobacco. In 2000, this aggregation of net income fell to \$16 million, before falling again to only \$8 million in 2001.

Malawi's participation in the international market for flue-cured and a variety of 'Western' tobacco varieties has been substantially reduced. The continued reliance upon the long-standing auction system for marketing Malawi's tobacco is now being questioned while its associated systems for grower registration and market delivery schedules are being abused to the point where they create as much uncertainty as proper governance. Other institutions, designed to support the liberalization of the tobacco subsector, are likewise under attack or under stress. A breaking point has not yet been reached, yet it is fast approaching.

In light of the mixed experience and the current plethora of problems facing Malawi's tobacco subsector, there are some who have argued that the liberalization of burley tobacco production in the early to mid-1990s was a mistake and that this has brought about a general decline in the industry, via an 'uncontrolled' expansion in production, a reduction in the quality of the crop, and resultant 'ruinous' prices which have rendered tobacco cultivation unprofitable for 'serious' producers. This line of argument confuses certain causes and effects. And, it assumes that the maintenance of the old system of production control was both politically and economically feasible, a doubtful proposition following the move to multi-party elections in the early 1990s. On the contrary, a rather strong case can be made that Malawi and its tobacco

industry would have been in a far weaker position today had the tobacco industry reforms not taken place when they did during the early to mid-1990s. (see Text Box 1)

Rather than an uncontrolled expansion of tobacco, what occurred in the late 1990s was simply the redistribution of production from estates to smallholders and, on a more micro-level, from smallholder households growing tobacco as tenants on estates to smallholder households growing the crop on their own behalf on their own land. Production expanded to the level (or, more accurately, to the range) of output which the international buyers have indicated is the level of demand for the Malawi product.

MAJOR ISSUES AND POLICY OPTIONS

The above trends of declining revenues, prices, and productivity have simultaneously created a sense of gloom about the role and prospects for the industry among policy-makers and perhaps the general public, while intensifying the dialogue among stakeholders within the industry and the search for solutions. This section explores some of the key questions and options facing policy-makers and industry stakeholders.

Diversify From a Strong Base

Malawi is highly dependent upon tobacco for its foreign exchange earnings. This dependence is dramatically higher than is the case for the world's other major tobacco producing and exporting countries. Table 8 brings out this stark contrast. This high dependency, coupled with perceptions that tobacco is somehow a sunset industry in the face of the WHO's Framework Convention on Tobacco Control, has set off alarm bells and urgent calls, both from within Malawi's government and from outside to accelerate the diversification of the country's economy.

Table 8: Leading Tobacco Leaf Exporters: Shares of National Exports

	Tobacco Leaf Exports (\$Million)	All Tobacco Product Exports (\$Million)	Leaf X as % of Tobacco Product X	Leaf X as % of Total Agricultural Exports	Tobacco Product X as % of Total Agricultural Exports	Leaf X as % of Total Merchandise Exports	Tobacco Product X as % of Total Merchandise Exports
USA	1301	5198	25	2	10	<1	<1
Brazil	893	961	93	7	7	2	2
Turkey	479	562	85	11	13	2	2
Zimbabwe	426	444	96	51	53	20	21
Greece	362	503	72	12	17	4	5
Malawi	274	274	100	75	75	57	57
India	215	260	83	5	6	<1	<1
China	209	338	62	2	3	<1	<1
Italy	185	194	95	1	1	<1	<1
Argentina	166	197	84	2	2	<1	<1

Source: FAO Trade Database

Box 1: Malawi without Burley Liberalization

What might have happened had burley liberalization not taken place in the early 1990s? There is some (limited) sentiment that things would have been better—both for the competitiveness of the industry itself and for the wider economy-- had the burley subsector not been liberalized and licensed production still restricted to ‘qualified growers’ (i.e. estates). Recall, however, the situation in the late 1980s and early 1990s when the subsectoral growth which had taken place was almost entirely among small-scale estates—essentially larger smallholdings-- plus a boost in illegal production amongst communal area smallholders who sold through estates (Mkandawire et al. 1990). The tenancy system was under strain and problems of labor and financial management were severe on many estates, especially medium and large scale estates whose owners were weekend farmers (Ibid.; ELUS (1997). Given that situation, together with the subsequent large reduction in international prices for tobacco, one can envision that in the absence of the burley reforms, the following types of developments might have taken place:

- continued growth in production of illegal tobacco, grown largely without fertilizer or technical support and thus a significant deterioration of the overall quality of the crop;
- widespread labor unrest on the estates and the possible spread to a wider destabilization of the economy;
- the failure to emerge of a viable smallholder club and association structure which did arise on the backs of the burley liberalization;
- the failure to emerge or sustain organizations such as MRFC whose primary customers through the mid to late 1990s had been smallholder burley growers;
- the likely peaking of burley production around the mid-1990s and a decline thereafter, resembling the pattern which did indeed take place for estate flue-cured tobacco;
- by the late 1990s and early 2000s, Malawi burley production would probably be in the range of 40,000 to 60,000 tons rather than the average of 120,000 which did occur over the 1998-2001 period. The loss in sales revenue (over the auction floors) would have been in the order of \$300 million over this period;
- The continued concentration of burley-related incomes would have denied to rural areas (and the wider economy) the growth multipliers which did indeed occur as a result of putting more money into the pockets of nearly two million people (i.e. 400,000 households);
- There would have been a modest diversification of the economy since some smallholders would have shifted to other cash crops, provided that downstream investment in processing and marketing would have taken place. However, with the specter of widespread labor unrest and with the adverse macroeconomic effects of a substantially lower burley crop, it is not obvious that Malawi would have provided an attractive investment environment during this period to support such diversification.

Box 2: Exit and Voice in Malawi's Tobacco Subsector

In 1970, Albert Hirschman laid out an interesting formulation on the various approaches which are taken to respond to the declining performance and services of firms, organizations, and even nation-states. Such deterioration of performance may either be in absolute terms or relative to that of other firms, organizations, etc.. Hirschman argued that the most common responses to deteriorating performance could be categorized into two categories, namely:

- *exit* --i.e. ceasing to buy the product, ceasing membership in an organization, withdrawing one's labor from a company, physically migrating) in order to compel changes to correct whatever faults led to the exit, or
- *voice* --i.e. expressing dissatisfaction to the management or to some other authority to which the management is subordinate in the hope of inducing changes to remedy the problems.

Exit and voice are portrayed as 'impersonations' of economics and politics, respectively. Strategies of exit and voice may be alternatives or may complement one another. Local and industry circumstances vary as do the effectiveness of either exit or voice to bring about the needed change. Exit is an especially viable strategy when there is widespread competition (i.e. in product markets, among political parties, among hiring firms, etc.). Hirschman notes that exit is more harsh and sometimes less reversible than voice and if stakeholders are sufficiently convinced that their voice will be effective, they may well postpone exit. In some cases, therefore, exit will be a reaction of last resort after voice has failed.

This conceptual framework is useful in considering the juncture to which Malawi's tobacco subsector has arrived and in considering the policy and other options which now present themselves. In the recent past, dialogue within the subsector has largely involved a cacophony of accusations, pointed at different stakeholders, each perceiving that their interests were significantly in conflict with those of others. The mechanism of 'voice' has been largely ineffective in a situation characterized by power imbalances, prolific rent-seeking (or more accurately, rent-maintenance), and a government unable to officiate among competing interests and adjust the support and governance system to meet emerging needs. In the face of ineffective or muted voice, various forms of exit and/or extra-legal activity have been deployed by stakeholders in order to secure whatever benefits one can from a system whose profits have been contracting.

Attempts at 'voice' have taken various forms—position papers, letters to government officials and/or donor agencies, interviews in the media, private meetings or letters written to various marketing and financial institutions, etc. This 'voice' has generally been ineffective, resulting both in frustration among stakeholders and a general inability to yield institutional improvements which contribute to the competitiveness of the subsector. Levels of frustration have grown to the point where during the past three seasons there have been protests and near riots by farmers at the auction floors in the face of what were perceived as inadequate prices being paid by the international buyers. There have been short periods where growers have essentially gone on strike, withholding their tobacco from sale on the auction floors.

Frustrated by the ineffectiveness of 'voice', some stakeholders are pursuing or threatening to pursue the option of 'exit'. Large numbers of growers have ceased to produce the crop. This initially took place among estates, but there is also evidence of smallholders now shifting away from tobacco. This may in fact be healthy for the industry on a longer term basis. Other forms of 'exit' may be less sanguine for the sustainability of the industry. One is the strategy of stealth production, obtaining numerous grower registration numbers and then directing sales to the auction in a manner which evades loan repayment, tax and levy payments, or other responsibilities. Another partial form of 'exit' emerged last season with the extra-legal cross-border sale of tobacco to avoid the Malawi auctions and associated transaction and other costs

There is certainly a need to foster the diversification of the Malawi economy and to encourage new forms of specialization, especially in areas which are labor intensive and can therefore offer the prospect for broad-based growth. Given the small size of the Malawi market much of this drive for growth and diversification will have to be export-oriented, focused on servicing the Southern Africa regional market as well as competing internationally. Trade agreements within COMESA and SADC as well as the U.S. AGOA initiative and the Everything But Arms initiative of the EU may provide some additional market opportunities to Malawi's would-be investors and exporters. However, this will be a medium to long term process, requiring improvements in infrastructure and the business environment, investments in human capital, and the attraction of foreign direct investment or other types of strategic partnerships.⁴⁰

Keeping in mind the longer term nature of the process of economic diversification and integration, Malawi must—in the near term, move to strengthen the competitiveness, improve the stream of incomes, and enhance the sustainability of its dominant tobacco subsector. Incomes from tobacco will continue to be important in generating savings and in providing some additional purchasing power within the domestic market. *Those resources already being put to use in tobacco cultivation and marketing must be made to yield a higher return by achieving productivity gains and by radically reducing transaction costs within the tobacco supply chain.*

In the near term, Malawi's most prominent engine of growth simply cannot be allowed to stall. The international market environment may well prove to be more challenging than in the pinnacle years of Malawi's industry. Future price prospects are probably not good. Still, Malawi's burley tobacco is well placed in the international market and there is certainly the potential to achieve a modest revival of the country's flue-cured tobacco production and exports. Even if the Framework Convention turns out to be very strong, the world tobacco market is not simply going to wither away and there will be significant demand for tobacco products for many years (decades).

Looking forward, it is unlikely that the country will ever achieve the value of tobacco exports which were recorded in 1997. Nevertheless, if the industry can achieve a partial recovery of flue-cured production (say to 15,000 tons) and generally meet the international demand for its styles and quality of burley tobacco (say in the range of 120,000 to 140,000 tons of green leaf equivalent), the country will likely be in a position to maintain a level of tobacco exports in the range of \$250 to 300 million per year.

⁴⁰ An upcoming study on "The Integration of Malawi into the World Trading System" will be exploring an array of policy, trade facilitation, and market access issues for Malawi and lay out a program of needed capacity building within the country to improve the country's trade performance and its impact on poverty.

Box 3: SWOT Analysis for Malawi's Tobacco Subsector

<p>Strengths</p> <p>Political stability Established customer base Experienced farmers and workers Modern processing facilities Good market information Price and cost competitive Biggest exporter of burley tobacco</p>	<p>Weaknesses</p> <p>Macroeconomic instability Land/population pressures Soil infertility Weak credit repayment discipline High transportation costs Absence of domestic market Vested interests against change</p>
<p>Opportunities</p> <p>Enhance productivity and quality Preference for low nicotine tobacco Revive flue-cured tobacco output Instability in Zimbabwe Reduce transport cost via Nacala Reduce marketing/transaction costs Improve subsector dialogue</p>	<p>Threats</p> <p>Pest and disease build up Lack of wood for curing Future erosion of MRFC Big expansion in Mozambique Brazil expands and permanently fills flue-cured market gap International health concerns</p>

Core Agenda Summarized

Whether it can do this and whether such exports can again spur growth multipliers and contribute once again to rural poverty reduction will depend upon effective improvements in support systems and in the efficiency of the supply chain, together with more general improvements in infrastructure and in economic management which lay beyond the scope of the tobacco sub-sector itself. The core agenda to improve the viability and sustainability of Malawi's tobacco sub-sector would include the following elements:

Transparency and Economic Stability

- Considerably increase the transparency in the structure and performance of the tobacco sub-sector, starting with the revamping of the grower registration system and putting in place an annual auditing and performance review system for the tobacco supply chain and each of its key constituent parts (including farmer clubs, satellite depots, intermediate buyer systems, the auction system, and the set of exporting operations).⁴¹ Part of this effort will require strengthening the statistical and monitoring capacities of the Tobacco Control Commission⁴²;
- Improve macroeconomic management, leading to a more predictable movement of the exchange rate and contributing to the reduction of interest rates;

⁴¹ Maintaining the confidentiality of certain private information need not hamper an overall drive to increase transparency in the industry

⁴² As well as balancing the representation on the board of the TCC to include more grower representation.

- Introduce a national identity card system which, in addition to its more general benefits, will help to underpin the revamped tobacco grower registration system and improve the management of agricultural credit. For the latter, an additional measure would be the development of a credit reporting system which has been long discussed but not acted upon.

Cost Reduction and Productivity Improvement

- Continued investments and management improvements within the Nacala corridor rail and port system, leading to a reduction in the transport costs both for imported inputs (e.g. fertilizer) and for Malawi's tobacco and other agricultural exports;
- Measures to drive down production costs, primarily the cost of fertilizer. This will require more research to devise fertilizer recommendations based on economic as well as technical factors plus other measures to reduce risk and increase the efficiency of the fertilizer distribution system⁴³;
- Measures to drive down financing costs. In addition to the national ID and credit reporting systems, this might include the introduction of special credit-related judicial processes, further capacity-building in revolving credit and savings societies, off-shore sourcing of finance by tobacco buyers to on-lend to growers, and 'moral suasion' by the GOM to reduce the high stop-order fees charged by AHL;
- Measures to drive down marketing and transaction costs in the tobacco supply chain, including government intervention to reduce the auctioning fees charged by AHL, a policy change to gradually permit the direct contracting of tobacco between growers and buyers, and a drive to professionalize or perhaps outsource the management of a system of satellite depots (and/or small decentralized marketplaces)
- Capacity-building in relation to producer associations, including additional support for the extension of the NASFAM system and the possible restructuring of TAMA and its merger with other associations to bring about a commercial farmer producer organization

The above set of initiatives will require a combination of government and private stakeholder action. They may also require the technical and financial assistance of the international development community and an active role by the latter to break the inertia which seems to have paralyzed the industry from taking the necessary steps to adjust to change and re-chart the industries future with a coherent strategic vision.

Below we elaborate on some of the recommended measures outlined above. Before doing so it is important to critically evaluate one policy option which has been embraced by some subsector stakeholders and which government appears to be moving to adopt. This is the policy option of changing the regulatory framework to allow (presumably licensed) tobacco growers to export their tobacco (green) leaf themselves and thereby bypass the local auctions and the international buyers who purchase the crop on those auctions. The premise behind this policy option is that Malawi growers are not being paid the proper or competitive price for their crop

⁴³ See Jungbluth and Hiwa (1999) and Westlake (1999) for a discussion of these measures.

and that profitability could be restored, on a more sustained basis, by by-passing existing buyers and finding alternative buyers or intermediaries with the international market.

Allowing Direct Exports by Growers: Is the Grass Greener on the Other Side?

There are long-standing concerns in Malawi that growers are not paid a fair or competitive price because the purchase of Malawian tobacco is dominated by three international companies—affiliates of Dimon, Standard Commercial, and Universal Leaf, all of the United States. These three companies account for well over 90% of the leaf purchases made at Malawi's auctions, the balance being purchased by a number of smaller private companies and the parastatal ADMARC. It is alleged that the 'share-out' arrangement among the three main buyers constrains any competition among them in purchasing the crop. These buyers purchase the tobacco substantially on behalf of the four or five large multinational corporations that dominate the international cigarette manufacturing industry. Some two-thirds of sales of Malawi tobacco are directed to these manufacturers. The balance is sold to an array of smaller manufacturers, including those based in 'secondary' markets such as Egypt, Eastern Europe, etc.

Because of the wide variations in the tobacco crop, it is difficult to make direct comparisons of the prices obtained by growers in different countries. Generally, Zimbabwean growers have obtained better prices than have Malawian growers for flue-cured tobacco, although there is a recognition that the Zimbabwean crop is of somewhat higher quality. The lower transportation costs of moving Zimbabwean tobacco to southern African ports has also been a contributing factor.

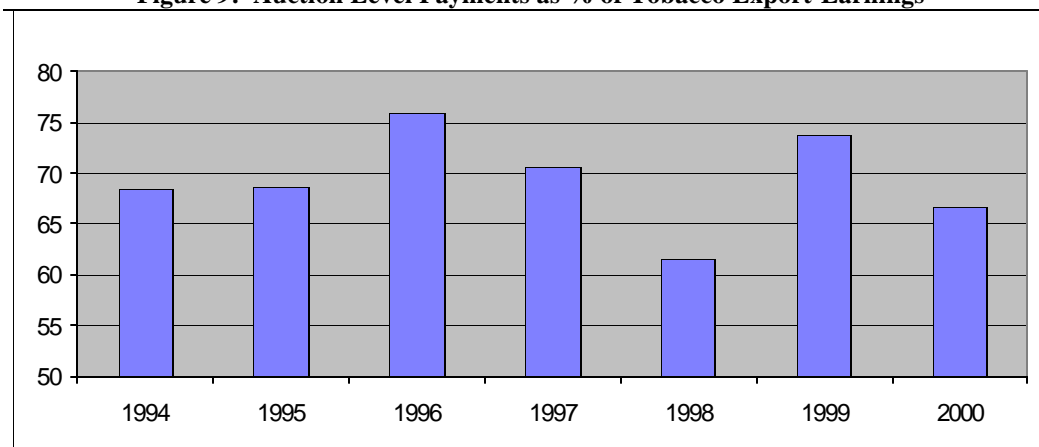
For burley tobacco, now the dominant part of the Malawi crop, we showed earlier that in recent years the 'average' prices paid by the international buyers have been similar in Brazil and Malawi. A similar price pattern and level is also observed for burley tobacco in Argentina, although the government there has provided price support payments over and above the prevailing market price. The data available do not enable price comparison between countries on a grade by grade basis.

However, given the fact that the Brazilian crop is considered to be of generally higher quality and value than the Malawi crop, the fact that Malawi auction prices are more or less similar to those paid in Brazil does not point to any large or particularly unusual 'exploitation' of the Malawi growers. The main differences between the Brazilian and Malawi situations is that the Brazilians obtain much higher yields (and thus have lower production costs per kg. of tobacco) and experience lower marketing and transaction costs due to their direct (contracted) links with buyers.

There are a couple of other ways of looking at this situation. One is to examine trends over time in the share of auction payments to growers as a proportion of Malawi's tobacco export earnings. Intervening variables, such as the carry-over of tobacco stocks from one calendar year to the next and the changing composition of the country's tobacco crop (among varieties and grades) put some limitations on year-to-year comparisons. Still, as the graph below indicates, this proportion has remained within a range of 65-75% since the mid-1990s with the exception of an outlier year of 1998 when there was an unexpected very large devaluation of the

Kwacha after the tobacco auctions had closed. The share of export values paid out to growers was essentially the same in 2000 (about 66%) as it was in 1994-95 (68%).⁴⁴

Figure 9: Auction Level Payments as % of Tobacco Export Earnings



An illustrative build-up of value-added of Malawi tobacco from its green leaf stage (sold at the auction) to its export value is provided in Table 9. A small majority of the purchases of the international buyers at the Malawi auctions is pre-committed and pre-sold and these prices are factored into their budgets for their buying operations on the auctions. A profit margin at or about 15% is sought by the firms.

Some growers offer the proposition that they could do better by bypassing the international buyers in Malawi and selling their tobacco themselves to downstream users. They could either sell green leaf to processors based elsewhere (i.e. South Africa or Zimbabwe) or obtain custom processing services elsewhere and sell the processed tobacco to manufacturers/other end users. In response to requests from these larger growers, the Malawi Cabinet issued a Directive in January 2001 to enable direct grower exports. The Tobacco Control Commission was instructed to develop the modalities to enable such exports to take place (including making provisions to collect the statutory levies, for ensuring quality control, and for ensuring the repatriation of foreign exchange earnings. Also in 2001, one of Malawi's largest tobacco growing companies applied for and received permission to undertake such direct exports, although it did not implement such action.

⁴⁴ One cannot make direct comparisons with other countries since the domestic market is a major outlet for most tobacco-producing countries and so correlations between grower prices and export values are invalid.

**Table 9: From Auction Floor to Overseas Market (2001):
Cost Build-up of Burley Tobacco (US Cents/kg.)**

Auction Floor Price	109.77
Buyer Overhead Costs	11.00
Short-term Storage Costs	2.00
Threshing Costs	15.00
<i>Sub-Total</i>	<i>137.77</i>
Yield (70%)	197.01
Re-drying and Packaging	25.00
Materials	11.00
Buyer Profit (10-15%)	19.70 – 29.55
Interest (3 months at 8.5% p.a.)	4.95
<i>Sub-Total</i>	<i>257.66 – 267.51</i>
Transport to Durban and Port Charges	15.00
Insurance	3.66
Ocean Freight to Europe	18.00
Cost on Arrival in Europe	294.32 – 304.17
<i>Notes</i>	
<i>Green Leaf Equivalent of Ex-factory Cost</i>	<i>180.36</i>
<i>Green Leaf Equivalent of Landed Cost</i>	<i>206.02</i>
*Estimated based on information provided by international tobacco company.	

This ‘free-market’ solution represents a policy option for the GOM and a practical option for Malawi growers. A number of factors are worth considering. What may be in the interests of a selected number of growers may not be in the wider national interest or consistent with the interests of the broader set of small and unorganized growers for whom direct exports—other than simple cross-border smuggling—is not a viable approach. In examining this policy option, one should consider a range of possible scenarios.

Under the hypothetical *best case scenario*, some of the larger and better organized growers do in fact arrange for direct sales and/or custom processing and find selected remunerative outlets for their crop. They save on the local auctioning costs plus also save a substantial proportion of the intermediary’s profit margin. More money flows back into the pockets of these growers. Malawi experiences a lower value-added on this tobacco (as it is processed elsewhere) yet its more capable farmers are better enabled to stay in (or even expand) production and perhaps gain multipliers through their investments. In this best case scenario, this direct export of green leaf takes some pressure off the local auctions (thereby reducing mid-season congestion), yet the auctions nonetheless carry on their business. In this scenario, the international buyers in Malawi seek to win back this directly exported crop by improving the prices which they pay for the higher grades of tobacco on the auction floors. A dynamic is set in place in which simply the opportunity to directly export enables Malawi’s (better organized) growers to ‘bargain’ for higher prices in the local auctions. Malawi growers as a whole would be beneficiaries.

There are a variety of *alternative scenarios* which could occur with a regulatory change allowing direct exporting by growers. One such scenario is that the change gives rise to widespread opportunistic behavior, with large numbers of growers and traders moving their tobacco across regional borders, engaging in under-declaring and under-invoicing of such exports, and more generally contributing to the fragmentation of Malawi's exports and an under-recording of incomes and foreign exchange earnings. In this scenario, there is the potential for the further breakdown of existing systems to monitor the quantity and quality of the crop, to ensure that exports comply with international quality and phytosanitary standards, and to ensure that growers contribute to the financing of the research and advisory services for the industry. In this scenario, a greatly reduced volume of tobacco might be sold over the auction floors, perhaps resulting in under-capacity utilization both there and in the state-of-the-art local processing facilities. The 'integrity' of the Malawian crop—at least in the eyes of the multinational cigarette manufacturers—could be degraded as supplies of Malawian tobacco are mixed with that of other countries from within and outside the southern African region.

Together with or separated from this latter scenario is another possible chain of efforts. Rather than adopting an accommodating stance to direct grower exports out of Malawi, one could envision a scenario whereby the international buyers and/or the downstream multinational cigarette makers adopt a more aggressive posture, threatening or actually undertaking to reduce their purchases of Malawian tobacco and to replace it with supplies from neighboring countries or elsewhere.⁴⁵ A supplemental step would be to sanction the 'dissident' crop by pressuring regional processors not to process the Malawi green leaf or risk losing business with these international companies. Whether for this reason or because the Malawian growers lack the range of contacts and logistical skills of the larger international trading companies, it is possible that the receipt of higher prices by Malawian direct exporter growers is a short-lived phenomenon.

Hence, the policy/regulatory framework to permit direct exports by growers entails certain opportunities as well as certain apparent risks for both growers themselves and the 'industry' as a whole. The downside risks appear to be considerable and in any case one does not envision a situation where the entire industry, or even one-third of the growers would be in a position, within the foreseeable future to export tobacco directly. Malawi is a major international supplier and not a niche market supplier. Eventually, the bulk of its crop will still find its way to the major multinational cigarette manufacturers. Such manufacturers substantially rely upon companies such as those who dominate Malawi's current processing and exports for the mix of tobacco types and varieties which they require. It is unrealistic or even naïve to believe that the downstream buyers will undermine the interests of the tobacco merchants simply to save a few cents on consignments of tobacco out of Malawi.

Based on this political economy perspective, it is not advisable for Malawi to change its regulations to enable large numbers of growers to export their (unprocessed) crop directly.

⁴⁵ The prime candidate for this would be Mozambique. That country's tobacco production has increased from very small quantities to up to 18,000 tons in recent years. A style of burley tobacco similar to that of Malawi's is grown there on land whose soil fertility is considerably higher. While Mozambique's tobacco has up until now been processed in Malawi and then re-exported, the feasibility of establishing a processing plant there is being assessed.

Should it be deemed desirable to pilot test such a policy change, then it is recommended that direct exports be permitted only for flue-cured tobacco, given the much smaller scale of this crop and the far fewer growers who are active in this crop. Direct exporters would need to be licensed and a system for monitoring this trade established.

Reducing Marketing, Logistical and Other Transaction Costs

The system of auctioning tobacco in Malawi at centralized sites dates back to the late 1930s. For many years, this system of sales has served the industry very well and very effectively accommodated the very large expansion in Malawi's tobacco production during the 1970s and 1980s. It provided a very transparent way for the several hundred, and later, several thousand tobacco growers to sell their crop.

Originally, all sales took place at the Limbe auction, just outside of Blantyre in the south of the country. However, as tobacco production in the center of the country increased, a new auction facility (and adjoining investments in processing plants by the international buyers) was put up at Kanengo (just outside of Lilongwe) in 1979. Subsequently, in 1993, an auction floor was set up in Mzuzu in the north of the country. With the shift in the locus of production to the central region, the Kanengo auction now accounts for the majority of auction sales.

According to current regulations (i.e. the Tobacco Act) all tobacco exported from Malawi must be sold over the auction floors. There is currently only one auctioning company, Auction Holdings Ltd. (AHL). Over the years, other parties have inquired about the possibility of starting a new auction, yet none has actually pursued this. While the formal requirements to obtain an auctioning license are not very difficult to meet, would-be investors have probably been deterred from doing so by the realization that some significant scale of operation would be needed to have the international buyers decentralize their purchasing operations. In addition, there has likely been some official discouragement for new auction investments given the large investments that the government had already made in the Kanengo and Mzuzu facilities.

AHL's largest shareholder is ADMARC, a government statutory body. As part of the country's privatization process, ADMARC's shareholding in AHL has been reduced to 47%. Part of those shares were divested to TAMA and to individual large tobacco growers, while some of those shares are held in trust for future purchase by other growers. The governing board of AHL consists of representatives from ADMARC and TAMA as well as a few larger growers. Smallholder farmers, who now represent some 70% of the country's tobacco crop are not represented.

Thus, there remains a *de facto* monopoly control of the auctioning function. Smallholder farmers are not represented in the management of this core institution. Among tobacco growers there is a widespread perception that AHL primary objective is profit-maximization rather than promoting the welfare of the growers and supporting the development of the industry as a

whole.⁴⁶ The relatively high auction fees and the fees charged to handle a credit stop-order contribute to this perception.

However, grower dislike and distrust of the 'auction system' has as much to do with the wider supply chain as with the operating functions of AHL itself. AHL can readily claim that this is not its fault and that many of the inefficiencies and much of the rent-seeking behavior and petty corruption occurs in the rural areas and far before AHL takes control of the tobacco. However, the requirements of the 'auction system' must certainly change in line with the structural transformation of tobacco production within the country. While once there were a few hundred and later a few thousand larger growers who each owned or rented trucks and had their own staff deliver the tobacco to the auction floors, the production of the crop is now done primarily by hundreds of thousands of very small farmers, none of whom owns a vehicle nor has any permanent employees.

Malawi's auction system is therefore much broader than the auction floors themselves and the associated sales and payment systems. Part and parcel of this auctioning function is also the grower registration system and the delivery quota system. The former has been overwhelmed by the massive new entry into the subsector and its abuse by some people in order to avoid the payment of levies, taxes, and/or financial debts. The delivery quota system still functions, yet is ignored by well-connected people and is overwhelmed by the needs of very poor growers to sell their tobacco as soon as possible in order to obtain cash for basic necessities. The result is 'congestion' at the Kanengo auction and all its attendant costs and impacts on product quality. The more effective functioning of the auction system requires, at a minimum, the re-vamping of the grower registration system and the enforcement of the delivery quota arrangement.

Still, the supply chain for the auction system starts earlier, in the rural areas. At present, the larger growers continue to deliver their tobacco direct to the auction floors while a minority of very well organized smallholder clubs, under the umbrella of NASFAM, effectively negotiate and hire transport services to bring their tobacco to the auctions. The NASFAM clubs have their own queue leading into the auction floors as do the larger growers. All other growers are presently required to bring their tobacco to the satellite depots which are located at eighty-eight sites around the country. These depots are owned and managed by individuals, typically counselors of TAMA or people selected by them. Farmers or clubs bring tobacco there, it is temporarily stored and then transported to the auctions. TAMA negotiates the transport rates.

While a proper evaluation of the satellite depot system has not been done, there have been widespread complaints among farmers. The performance of those depot operations is undoubtedly mixed, yet the interests of the growers and those involved in their intermediation functions do not, necessarily converge. For example, there is little incentive to negotiate the most favorable transport rates since the profits from such services can be shared between the transport operations and TAMA. In fact, this past season, NASFAM clubs were paying K350 per bale (75 to 100 kgs.) for transport in the same areas where farmers were being charged K600 per bale by satellite depots. This extra two to three US cents per kilogram is not insubstantial given current profit margins.

⁴⁶ In earlier years, AHL retained enough revenue to cover its operating cost and pay a small fixed dividend, distributing the remainder to growers in the form of a rebate.

In addition to and probably more problematic than the higher direct charges for intermediation functions, farmers are concerned about the lack of accountability associated with the satellite depot system. Periodically, tobacco is damaged or goes missing at the depots or in transit to the auctions, yet no one is held accountable for this and the farmers affected end the season without any earnings and perhaps with a defaulted loan.

Concerns about mismanagement and/or petty corruption in relation to the satellite depots led some stakeholders to demand that AHL assume the responsibility for managing this stage of the supply chain and be held accountable for the tobacco once it is delivered to the depot. AHL was reluctant to take on this function, while TAMA lobbied strongly to maintain its role in the storage and transport of the crop. While the government seemingly remained agnostic on the issue, those with the most interest at stake, the poorer and less well organized smallholder farmers, had no voice in the matter. Inertia prevailed and TAMA has retained this function.

With the liberalization of the sub-sector, the intermediation between smallholder farmers and the auctions was supposed to be done by a combination of farmer clubs/groups and 'intermediate buyers'. The development of farmer clubs is still a work in process as Malawi has no tradition of farmer cooperatives and groupings in the past were at the behest of agricultural extension officers to reduce the administrative cost of providing advisory services and/or government-provided agricultural credit. For many years, voluntary group formation and actions was discouraged (or even forbidden). This picture changed with the political change in the early 1990s. However, many of the former clubs created for extension purposes were not fully appropriate for joint tobacco-related service activities or for obtaining credit from the MRFC.

The Smallholder Agribusiness Development Project has made some considerable headway in bringing a commercial orientation to farmer clubs and in incrementally improving their management and record keeping. The functions handled by these clubs have been extended to include collective input procurement, collective transport of tobacco, and, in some cases, collective marketing of other crops. A stronger understanding about the value and underlying costs of borrowed finance has been developed among many such club members. This club structure has, in the past few years, been built upon to form regional groupings and a national association—NASFAM. Currently, NASFAM has some 93,500 members, including nearly 65,500 members whose lead cash crop is tobacco.

While the SADP and NASFAM have made impressive gains, these clubs still directly embrace only a small minority (i.e. about 20%) of Malawi's smallholder tobacco growers and an even smaller minority (i.e. about 5%) of the country's smallholder growers in general. Considerably more work is needed, either to expand the membership of NASFAM or to replicate models similar to it which embrace large numbers of other smallholder growers. The capacities and performance of the more than 20,000 non-NASFAM clubs which are active in the tobacco sub-sector have never been subjected to systematic analysis, yet the pattern is certainly a mixed one, with probably a majority of such clubs displaying major weaknesses which detract from their services to members.

The intermediate buyer system was introduced in 1994, essentially to supplement the farmer club system and provide a logistical bridge between smallholders and the auctions. Intermediate buyers were to buy the cured leaf from smallholders and then transport and put the crop onto the auction floors under their own registered seller names. It was assumed that only people with past experience with tobacco would get involved in this function, yet the barriers to entry were minimal and virtually anyone who paid the licensing fee could enter into the fraternity of intermediate buyers. No other special provisions were made. Assuming that the IBs would not be a very significant set of players, they were not required to adhere to a particular delivery schedule at the auctions.

The minimal entry requirements and the (lack of) delivery quota loop-hole contributed to a burgeoning of interest in IB registration. The number of licensed IBs rose rapidly over the 1995 to 1997, peaking in the latter year at just over 4000. Those licensed as IBs included a wide range of people and entities including small and larger traders, estates, extension agents, civil servants, and even smallholder tobacco clubs. Motivations for gaining IB licenses varied including straightforward profit motives, and objectives to bypass delivery quota restrictions, bypass credit repayment, and other objectives. Some and probably most licensed IBs had prior/on-going tobacco experience; a majority of IBs didn't have such experience or at least experience in tobacco grading and marketing.

As noted in Table 10 below, licensed IBs never accounted for a large share of the crop sold over the auction floors. The share of licensed IBs in the total national burley crop sales exceeded 10% only in two seasons—1997 and 1998. The share of IBs--other than ADMARC which was a major IB operator-- was less than 5% of the crop in every other season during which the program operated. After 1998, the share of non-ADMARC IBs never reached 3% of the total market.⁴⁷

Intermediate Buyers have been accused of undermining Malawi's tobacco industry, causing massive theft of the burley crop from grower-owners, undermining the agricultural credit system, weakening the overall quality of the burley crop through their purchases of unripe crop and their poor/lack of effective grading. The list of alleged ills is long and the IB program has seemingly found the spotlight of all concerns and challenges to vested interests which accompanied the liberalization of the tobacco market, enabling the entry of smallholders into production.

Most of the above accusations are inconsistent with available evidence—regardless of the periodic occurrence of this or that development involving particular IBs. According to the quality classification system done by TAMA, there is no evidence on a wide scale linking the rise of IB activity with a reduction in the quality of the crop (See Annex A). Years 1997 and 1998, when IBs played a prominent role, were totally unexceptional from a quality point of view. The mix of

⁴⁷ In this regard, it is important to note that the licensed IBs initially did and have since represented only a minority of the entities who in fact have served as intermediaries between smallholder and the auction floors. Prior to the revision of the Special Crops Act, smallholder farmers grew burley tobacco illegally and sold that tobacco to estates who subsequently sold the tobacco under their own names and licenses at the auctions. Following the liberalization, estates have continued to represent the majority of intermediaries between smallholders and the auctions. In many instances, estate owners had one or more licenses as estates and one or more licenses as IBs.

grades was no different than in the prior two years and the proportion of the crop rated as mouldy or of mixed grade was actually lower than in the previous years. In 2000 and 2001, once non-ADMARC IBs had largely ceased operating, the share of the total crop recorded as being of mixed grade was substantially higher than in all the years that IBS were more active.

The table below indicates that in most years the average price obtained by licensed IBs was very close to that of the national average. In most years, the difference was two or three cents. The biggest differences occurred in 1999 and 2000, yet this was entirely due to the poor performance of ADMARC. IBs other than ADMARC matched the overall market performance in 1999 and far outperformed others in 2000. This general performance is surprising given that the general assumption has been that IBs primarily purchase the crop of those very poor smallholders who do not have very effective clubs and who have less access to both credit and infrastructure. One would have expected IB sales to reflect a rather poorer mix of crop, especially if one adds that some of the IBs lacked tobacco grading experience.

As regards credit, there is no doubt that some IB purchases contributed to loan default as growers deliberately sold all or part of their tobacco through side channels (including the IBs and estates) in order to bypass their stop orders on the auction floors. However, the two seasons of most prominent IB purchases—1997 and 1998—were actually the two seasons when MRFC recorded its highest levels of loan recoveries –90%. In the last three years of more limited IB operations, MRFC loan recoveries have been substantially lower—at just under 80%. Hence, on the big picture, there is no correlation between IB operations and credit default, despite the periodic incidence of side-selling by willful defaulters. Even if licensed IBs never existed, the side-selling would probably have taken place anyway through estates, and indeed, most of the side-selling which has taken place has continued to occur in this manner.

The rising incidence of tobacco theft was probably associated with the increase in licensed IB participation. The most common form of this practice was for estate tenants and managers to sell the estate's tobacco off the farm and thereby deprive the estate's owner of the tobacco and the revenue stream thereof. This seems to have occurred on a substantial scale in the case of absentee owned estates, but also adversely affected owner-managed estates, including some of the better managed estates in the country. However, opportunism on the part of estate workers and managers didn't begin with the introduction of the IB system and won't end as long as returns to workers remain very low.

Hence, the IB system accelerated the decline in the burley tenancy, although weaknesses in that system were evident for a number of years prior to the introduction of IBs. The rise of non-legitimate sales of tobacco in rural areas occurred within a general climate of increased crime and theft in those areas during the mid-to-late 1990s. The IBs didn't cause this. Many of the IBs came from the same pool of people –estate owners—who were probably most adversely affected by the illegitimate sales. Given the difficult financial situation facing many estates, there is little reason to believe that their IB operations contributed either more or less to the incidence of theft than the IB operations of any other class of IBs.

The IB system was wound down in 2000, precisely at the wrong time. By that year, most of the excesses and abuses of the system had been eliminated and a more stable structure of a

few hundred more experienced IBs had emerged. Here and there people were still using their IB license to by-pass this or that responsibility, but, for the most part, the vast majority of fly-by-night operators had burnt their fingers and exited from the IB function. By 2000, the IB function was beginning to evolve with a sub-set of IB operators providing inputs on credit and selected other services to growers. That evolution ceased with the official announcement that the IB system would end.

In September 2000, the Cabinet Committee on the Economy directed the Ministry of Agriculture and Irrigation to introduce a new arrangement called the Designated Tobacco Buyers Scheme (DTBS).⁴⁸ This would be a modification of the IB program in that a more limited set of intermediate buyers would be licensed and they would be permitted to operate only at designated sites. Only persons or organizations with tobacco handling facilities—i.e. a baling press and certified scales—would be eligible to participate. Certain locations would be designated as tobacco selling sites, presumably in close vicinity to a local government (agricultural extension) office. A series of rules and regulations on permissible transactions would be devised and enforced by local DTBS Committees, comprised primarily of TAMA and government representatives.

The DTBS was designed to reduce some of the opportunistic behavior associated with the previous un-regulated IB system and to bring more transparency to the relationship between growers and intermediate buyers. There is some scope that the designated buyer sites could evolve into small marketplaces, where, provided there is a competition among multiple buyers, a mini-auction could develop. However, how the DTBS will develop would seem to depend primarily on localized power structures and whether the local ‘committees’ determine that the system should best serve growers rather than basically serve themselves and their designated buyer colleagues. At present, neither the Tobacco Control Commission nor the Ministry of Agriculture and Irrigation have the capacity to effectively monitor and police the functioning of these designated buyer mini-markets.

⁴⁸ This was in response to a cabinet paper on the subject submitted by the Ministry in January 2000 and then resubmitted in July 2000 after revisions were made. The uncertainty regarding the status of the IB program in the months leading up to the marketing season in 2000 contributed to the reduction of licensed IBs that season.

Table 10: Intermediate Buyers: Performance on Burley Tobacco Sales, 1994 – 2001

Year	# of Licensed Ibs	Quantity Sold (Tons)	Share of National Crop (%)	Average Sales Price for Ibs (US \$)	Average National Price (US\$)	IB Ave. Price/ National Ave. Price (%)
IBs excluding ADMARC						
1994	79	398	0.6	1.28	1.29	99.7
1995	1074	4854	4.8	1.42	1.48	95.5
1996	3106	3834	3.3	1.59	1.61	98.5
1997	4012	19287	14.4	1.51	1.53	98.7
1998	3239	13889	12.2	1.27	1.30	98.2
1999	1402	3089	2.8	1.38	1.38	100
2000	671	3547	2.5	1.30	1.02	127.8
2001	148	542	0.5	1.04	1.10	94.8
IBs including ADMARC						
1999	1405	8909	8.0	1.28	1.38	92.4
2000	674	8239	5.8	0.91	1.02	89.5
2001	154	1177	1.0	1.05	1.10	95.2
ADMARC IB Operation						
1999	3	5820	5.2	1.22	1.38	88.2
2000	3	4692	3.3	0.62	1.02	60.6
2001	6	635	0.6	1.05	1.10	95.6
<i>Source: Tobacco Control Commission</i>						

It has now been nearly two years since the Cabinet Directive on this issue, yet the DTBS is not yet in place⁴⁹, ostensibly because there is a lack of funds to undertake the set of planning meetings needed to elaborate the detailed arrangements for the scheme and put in place the local committees which will implement the program. These planning costs are not very high⁵⁰ and the failure to mobilize even the limited funds to set up the scheme does not inspire confidence about near term capacities to provide proper oversight and evaluation of the performance of the scheme. Once again, inertia prevails.

The current high costs of market intermediation and the failure of the existing system to give rise to innovative solutions to the logistics, cash flow, and other problems faced by the majority of smallholder tobacco growers indicate that 'business as usual' is not a viable strategy for the industry and that the on-going state of policy paralysis must end. There are no easy, quick fix solutions and the industry is not in a position to effectively negotiate a path of radical change in the system of marketing and supply chain management for the tobacco crop. However, it is imperative that a process be initiated which will yield the types of innovations that will radically reduce the marketing and transaction costs faced by Malawi's smallholder growers.

For this to happen, the Malawi government will need to act. Its first set of actions could include:

- Issuing an directive to AHL to reduce its auction fee and stop-order charge and to otherwise consider AHL as a regulated monopoly;
- Applying pressure—via the large shareholding by ADMARC in AHL-- in order to increase the representation of smallholder farmers on the board of AHL
- Issuing a directive for a time-bound re-assessment of the existing level of statutory levies being applied with a view to reducing these⁵¹;
- Directing the responsible agencies to revamp the tobacco grower registration system and to develop a modality by which the withholding (income) tax is assigned only to those estate growers who meet the income thresholds

The next set of actions require choices among various options. The responsibilities for the satellite depot system most likely need to be re-assigned. Government could either:

- Encourage AHL to take over this function and help negotiate a reasonable fee structure for this work; or
- Put the management of a national or regional/district system of satellite depots up for competitive tender, select suitable managers, and oversee their performance

The advantage of either of the above options over the current system is the potential for integrating into the satellite depot system a partial payment arrangement whereby farmers might

⁴⁹ This meant that in 2001 and 2002 there was a significant sale of smallholder tobacco to estates who acted as intermediate buyers, yet unlicensed ones.

⁵⁰ Estimated at approximately K500,000 or just under \$7,000 at the current exchange rate.

⁵¹ A possible exception might be the ARET levy, depending upon there being in place an agreed work program for research and advisory services. Initial proposals tabled in January 2003 to modify the levies would result in virtually no improvement in smallholder farmer incomes.

get paid 15-25% of the estimated value of their crop upon delivery to the depot. This will enable them to finance their most pressing cash needs (i.e. for funeral expenses, basic necessities). This arrangement would reduce the need for poor farmers to sell tobacco through an intermediate buyer, the primary advantage of which is the immediate cash payment. This partial payment could be linked into the AHL's grower database and payment system. Putting the satellite depot system under more professional management also provides the scope for the future evolution of these depots, perhaps to become off-farm tobacco curing sites, thereby economizing on wood pole and thatch requirements for individual farmers⁵² and possibly also cutting back on the theft of tobacco in rural areas.⁵³

There are other options available to government to stimulate competition and innovation in the existing tobacco supply chain. These include at least the following:

- Breaking up the monopoly structure in the auctioning function, perhaps by having AHL sell one or two of its auction floors to other companies, retaining the remainder for its own operations. This would stimulate competition among different auction floors, improving services and likely resulting in one or more auction companies moving to decentralize their operations, either to the level of satellite depots or by setting up some smaller auctions/market-places in their primary region; or
- Simply provide direct encouragement and support for the emergence of several smaller auction/marketplace facilities in areas such as Kasungu, Machinga, and other important production locales which are relatively distant from the existing auction floors.

Another option concerns permitting the sale of Malawi tobacco outside of the auctions. Malawi is one of the few major tobacco producing countries in which the bulk of sales are transacted through auctions. Only Zimbabwe and Canada rely primarily on auctions, while for India a small proportion of the crop is marketed in this way. Until two years ago, tobacco sales in the United States were almost entirely via auction. However, direct contracting was piloted in 2000 and by the subsequent year some 70% of the US tobacco crop was sold under contract between growers and cigarette manufacturers.

According to the USDA's Agricultural Marketing Service, in 1998, an estimated 80% of world flue-cured production and 50% of world burley production were marketed under contract, either through private companies or state-owned enterprises. With the more recent shift in the sales method for US tobacco, it is likely that the proportions of world flue-cured and burley tobacco production now marketed under contract exceeds 90% and 65%, respectively. Table 11 provides a summary of the primary modes for tobacco sales among major producing countries.

⁵² More permanent structures, including the use of plastics and other materials in place of wood poles, might be developed.

⁵³ A third option is to facilitate the development of a 'designated service provider' system whereby existing transporters, rural retail operators, and perhaps others would be supported in developing a diversified and integrated set of business services—including providing the functions of a satellite depot.

Table 11: Tobacco Marketing Arrangements for Leading World Producers

	Contract Farming	State Enterprise Procurement	Auction	Market Purchase
China		Monopsony		
India	Significant		For Export Varieties	Significant
Brazil	Primary			Residual
United States	Primary		Residual	
Turkey		Significant		Significant
Zimbabwe			Entire Crop	
Malawi			Entire Crop	
Mexico	Primary			Residual
Argentina	Primary			Residual
Korea		Monopsony		
Thailand	Residual	Up to Quota		Residual
Italy		Monopsony		

The modes of contracting differ among countries.⁵⁴ In the United States, the initial arrangements essentially are marketing contracts, involving a pricing and delivery schedule and a network of crop receiving and inspection stations set up by the buyers. The contracts do, however, make reference to certain production practices and other issues related to quality, use of only approved chemicals, grading procedures, etc.

In much of Latin America, the normal arrangement combines a marketing contract with the provision (on credit) of production inputs and also the provision of extension services by the buying companies. Producer and industry representatives typically negotiate a series of prices for various grades, taking into account the costs of production and the overall market situation. The contracts provided an assured market outlet for growers and typically entail some form of risk management arrangement in the event of crop loss (say, due to drought).

Access to inputs, production information, financing, and certain management skills are all limiting factors in Malawi. The capacity of its smallholder farmers to manage risks is also a major constraint. Some such elements could be incorporated into production/marketing contracts within Malawi, provided that an institutional framework were put in place to enable the buyers to effectively implement and enforce these contracts. Savings would also be achieved by growers on logistics and transaction costs since the buyers would likely arrange transport and as there would likely be a collective bargaining arrangement to work out standardized contracts and a price schedule.

In other contract farming contexts there are typically concerns about the unequal bargaining power between growers and the normally large agribusiness firms with whom they contract. Such unequal bargaining power can translate itself into unfavorable terms and conditions for the growers and the concentration of benefits—in terms of improved quality

⁵⁴ See, for example, Snell and Green (2000); and Tiller (2001)

control, supply management, etc.—to the buyers. In the Malawi context this unequal bargaining position certainly exists in an extreme proportion—to the point where the annual turnover of one of the parent companies of the major buyers is larger than the GDP of Malawi—yet this remains the case whether sales are conducted through the auctions or through direct contracting. It should therefore not be a factor in weighing this policy option.

It is not obvious that direct contracting is the most suitable arrangement for the Malawi tobacco industry as a whole given the fragmented structure of production. The three large international buyers are decidedly unenthusiastic about this option. While this is their normal mode of purchase in such countries as Brazil, Argentina, and Mexico, the companies have experienced massive problems of ‘side-selling’ in Tanzania and are deeply concerned about the breakdown of credit repayment discipline in Malawi. They perceive that the administrative costs of contracting large numbers of Malawian growers would be huge.

In this context, one might assume that the companies would ‘cherry pick’, initially entering into contracts with some larger growers and perhaps with parts of NASFAM. This would serve as their trial for direct contracting in Malawi. Already for the 2002/03 season the international buyers sourced finance for several larger growers of flue-cured tobacco, although ostensibly this tobacco was sold on the auctions rather than directly to the buyers. Among consenting adults, a direct grower –buyer relationship should be permitted.⁵⁵

The most likely (as well as the most favorable) scenario would feature a combination of selected contracting and the continuation of (an improved version of) the auction system. Large numbers of Malawian smallholders will continue to need to sell over the auction floors. And, if marketing and transaction costs are reduced, many estates will want to continue to sell over the auction floors, especially if they perceive that they can obtain higher prices than the prevailing contracted prices in any particular year. Some growers may choose to sell under both systems to take advantage of certain benefits of each. Selected direct contracting could contribute to the reduction of the congestion problem at the Kanengo floors, provided that the contracts specify delivery times to the buyers either before or after the main bottleneck period. Simply the threat of direct contracting will force AHL to act to reduce the costs and other problems associated with the auction-linked supply chain.

It is recommended that existing regulations be changed to permit the direct contracting of tobacco production. If there is any reason to believe that this might cause a major disruption in the marketing system, then steps should be taken to phase in this regulatory change, perhaps permitting direct contracting for flue-cured production in the 2003/2004 season and perhaps also for burley production within a specified pilot set of locations. Based on the monitored experiences, the more general permission for direct contracting could be put in place. This phased introduction of direct contracting will also provide some time to put in place other measures—such as the revamped grower registration system and a credit reporting system—which will help reduce breach of contractual terms.

⁵⁵ A draft Cabinet Paper in January 2003 proposed to ban contract farming in the industry, ostensibly to prevent farmers from being ‘exploited’. There is no reason why farmers would be any more ‘exploited’ under a contractual arrangement than they are now and very likely these farmers would have much greater predictability about their seasonal incomes.

The overall scope for cost reductions in the tobacco supply chain are significant and these can be achieved in a short period of time. At a minimum, one could achieve the following cost savings associated with the tobacco of smallholder farmers:

Source	Savings U.S. Cents/Kg. of Tobacco
Lower int'l transport costs via Nacala	8.0
Remove withholding tax for clubs	7.0
More competitive transport rates internally	3.0
Reduction of AHL auction fee	1.5
Reduction of AHL stop-order fee	1.5
Reduction of TAMA classification levy	0.25
Reduction of hessian levy	0.25
<i>Total</i>	<i>21.5</i>

Raising Productivity

While reducing marketing and transaction costs in the tobacco supply chain should be the central focus on policy-makers, the benefits which will accrue from this will not be sustained unless, over the medium term, the industry players can reverse the downward trend in tobacco yields. As noted earlier, low and declining tobacco yields in Malawi are a result of an array of factors, including soil infertility, low and frequently incorrect application of fertilizer, the build up of pests and diseases due to improper crop rotations, the use of recycled and low quality seed, poor construction/maintenance of tobacco curing barns, limitations of technical knowledge about the cultivation and curing of the crop, and labor-related problems—such as inappropriate timing of transplantation, insufficient weeding, delayed harvesting.

A multi-pronged approach is needed to address these problems and constraints, some of which (i.e. soil infertility) extend well beyond the issue of tobacco crop management itself. In the past, government and some other stakeholders have placed predominant emphasis on the problem of access to fertilizer, or more specifically, on the provision of credit for farmers to procure fertilizer. This is undoubtedly an important issue, yet the improvement of cultivation practices for the tobacco crop and developing more sustainable approaches to the curing of the tobacco leaf are of equal importance, yet have been given inadequate attention.

ARET is in the process of developing plans for a “Back to Basics” program of communications and advisory services, with an increased orientation to smallholder farmers. The organization lacks the necessary manpower to reach large numbers of smallholder growers and thus close collaboration with the extension staff of the Ministry of Agriculture and Irrigation will be necessary. There may also be the need to revamp part of ARET’s research program to put more emphasis on financial and economic constraints and to investigate improved cultural practices under typical smallholder farm conditions.

As regards credit, the challenge is to tackle the fundamental institutional infrastructure for a viable system, rather than simply develop new schemes from year-to-year to throw resources at past loan defaulters in the hope that this generates an additional crop and that some of that money is repaid. A credit repayment discipline needs to be re-established, yet this is precisely impossible in the face of new schemes popping up every year and enabling past defaulters to access new loans on the basis of clever misrepresentation of their past records or even of who they are.

A proper institutional framework needs to be (re-) established involving a national identity card, a credit reporting system, a re-vamped grower registration system, and perhaps, special courts to swiftly handle the loan recovery cases of financial institutions. When the basic foundations are put in place, financial institutions will be more able and willing to extend credit to the agricultural sector and agribusiness companies will do so as well. Without such foundations, the risks of lending are simply too high and the sector will simply bounce from one scheme to the next.

CONCLUSIONS

Malawi is one of the world's largest exporters of tobacco. Despite global and national efforts to control tobacco use because of its highly detrimental health effects, world demand for tobacco will likely continue to grow at least over the next decade and probably well beyond that. Ample market opportunities should be available to Malawi's industry. However, with the general shift in international demand from higher income to low and middle income countries, there is an expectation of some continued downward pressures on international tobacco prices. Hence, the challenge for Malawi is to raise its productivity and reduce its production and marketing costs so that it can remain competitive and generate a stream of profits even under a scenario of lower export prices.

Malawi's success in meeting this challenge is crucial to the overall development of its economy and to its ability to reduce poverty. Tobacco is Malawi's dominant industry and will remain so at least in the medium term (i.e. 5-7 years) even if concerted progress is made in attracting investment and diversifying the economy. Even this diversification will require, in part, the revitalization of the profitability of tobacco cultivation, given the wide participation in this activity and its scope for generating demand for other goods and services as well as investable savings.

This paper has highlighted some of the recent gains made in the Malawi tobacco subsector, yet also emphasized its precarious state as a result of declining productivity and profitability, widespread in-fighting among stakeholders, and a situation of policy paralysis. Many of the constraints and inefficiencies within the subsector derive from vested interests and from a lack of transparency and accountability regarding actions and performance. The policy paralysis needs to be broken and concerted action taken which results in more money going into the pockets of the country's tobacco growers. This paper has laid out an agenda or set of options for the main stakeholders—including the Government of Malawi—to pursue.

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**Annex: 1: Quality Results of TAMA Tobacco Classification System Results
for Burley Tobacco, 1992 to 2001**

Proportion (%) of the Crop Classified by Grade				
Year	1 st	2 nd	3 rd	4 th /5 th
1992	1.4	20.2	47.9	30.5
1993	0.6	15.9	45.1	38.5
1994	3.6	20.1	50.1	26.2
1995	4.6	24.2	51.6	19.6
1996	3.3	21.1	54.9	20.7
1997	3.6	24.6	53.2	18.7
1998	4.3	22.8	52.2	20.8
1999	3.7	24.1	53.0	19.2
2000	2.5	19.0	56.8	21.8
2001	3.6	22.8	52.7	20.9

Proportion (%) of the Crop Classified as Either Mouldy or Mixed Grade		
Year	Mouldy	Mixed Grade*
1992	19.7	10.7
1993	26.2	13.2
1994	14.6	11.3
1995	13.8	10.7
1996	20.5	7.6
1997	11.8	7.9
1998	9.6	9.0
1999	10.2	8.6
2000	9.7	13.8
2001	3.0	13.3

*Requiring re- grading and re-baling.

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