

INTERNATIONAL LABOUR ORGANIZATION

Employment trends in the tobacco sector: Challenges and prospects

**Report for discussion at the
Tripartite Meeting on the Future of Employment
in the Tobacco Sector**

Geneva, 2003

INTERNATIONAL LABOUR OFFICE GENEVA

Acknowledgements

The information for this report was drawn from a wide range of sources, although it should be emphasized that data on training and retraining as well as examples of social dialogue were scarce in the sector under review. Extensive use was made of various publications, press articles, and web sites. The report was prepared by Clara Foucault-Mohammed, Food, Drink and Tobacco Specialist, Sectoral Activities Department. Parts of the report incorporate information from papers commissioned by the Office and prepared by: Yongqing He, Maureen Kennedy, Gijsbert van Liemt, Yuko Maeda, Michael Mwasikakata, Marcelo Paixão, Dr. Roska Ivanovna Petkova, Professor Nurettin Yildirak and Yunling Zhang. Many of these research and field studies have already appeared as ILO working papers. Statistical advice and data were provided by Mr. Eivind Hoffmann and Mr. Messaoud Hammouya of the ILO Bureau of Statistics: most of the figures are based on statistics collected by the ILO, UNIDO and OECD. No less worthy of mention are all the colleagues in ILO field offices who lent their cooperation and support.

Contents

Acknowledgements	iii
Introduction	1
Background to the Meeting.....	5
1. Policy issues in the tobacco sector.....	7
1.1. Social and labour costs of tobacco control policies.....	7
1.2. The economic value of the product	7
1.3. Corporate social responsibility	9
1.4. Tobacco rich, tobacco poor	9
1.5. Tobacco a provider of welfare.....	10
1.6. Prospect of an uncertain future.....	11
1.7. The draft Framework Convention on Tobacco Control (FCTC).....	12
1.8. Tobacco control policies.....	13
1.9. Brazil: A case of dual tobacco policies	16
1.10. A coordinated economic and social policy.....	16
2. Consumption, production and international trade	18
2.1. Consumption.....	18
2.2. Production and international trade.....	25
3. Employment trends in the tobacco sector	31
3.1. Reducing overcapacity	31
3.2. A stabilized workforce	31
3.3. Tobacco growing: Agricultural policies and subsidies.....	31
3.4. Employment in growing: The figures.....	34
3.5. Child labour in tobacco growing	40
3.6. Tobacco manufacturing: A capital-intensive industry.....	41
3.7. Employment in manufacturing: The figures.....	43
4. Structure of the tobacco industry: Mergers, acquisitions, closures, privatization.....	48
4.1. Mergers and acquisitions.....	48
4.2. Towards an oligopoly	49
4.3. Eliminate overlapping operations.....	49
4.4. Voluntary retirement programmes, redeployment, indemnities and relocation	49
4.5. Rationalization of the supply chain	50
4.6. Product diversification and pursuit of efficiency.....	50
4.7. Preferential support for China's 36 key manufacturers.....	51
4.8. The strategy of partnerships	52

4.9.	Delocalization to low-wage countries	52
4.10.	Tobacco monopolies: Moves towards privatization	53
4.11.	Political sensitivities linked to privatization	55
4.12.	Restructuring of monopolies for better control	55
4.13.	Employment consequences of privatization	56
4.14.	Conclusion	56
5.	Factors driving changes in employment.....	57
5.1.	Polarizing trends and shrinking markets.....	57
5.2.	Increased productivity, new technology and changing markets	57
5.3.	National industry strategies: The Chinese case	60
5.4.	Tobacco control policies.....	61
5.5.	Fiscal policies	61
5.6.	Political issues and social policy	63
5.7.	Illicit and counterfeit trade	64
5.8.	Research and cigarette design.....	65
5.9.	Tobacco product regulation	66
5.10.	Litigation settlement costs	67
6.	Dealing with change.....	69
6.1.	Diversifying since the 1970s	69
6.2.	Diversification into non-farm opportunities	70
6.3.	Obstacles to alternatives in Turkey.....	72
6.4.	Shaping social policy: Ethnic minorities and migrant workers in Bulgaria	72
6.5.	Cambodia: Tobacco to the rescue of a post-crisis economy.....	74
6.6.	Absorbing shocks of market reforms: The case of China.....	74
6.7.	Alternative uses of tobacco in the Philippines.....	76
6.8.	Diversification efforts: The case of the United States	77
6.9.	The need for diversification: The case of a developing country.....	79
7.	Summary and suggested points for discussion.....	81
	Suggested points for discussion	82
	Bibliography	83
	Appendix: Special cases: Bidi and kretek	85
A.1.	The kretek sector in Indonesia.....	85
A.2.	The bidi sector in India.....	88

Tables

1.1. Tobacco-related tax revenues, United Kingdom, 1998	8
2.1. World's leading unmanufactured tobacco-producing, trading and consuming countries	19
2.2. Estimated number of smokers in the world (early 1990s)	21
2.3. Estimated smoking prevalence among men (selected countries)	22
2.4. Cigarette consumption in the European Union (1996)	23
2.5. World production of cigarettes, net exports (NE) and apparent consumption (AC) in selected countries and years	24
2.6. World production of unmanufactured tobacco by main regions and countries (selected years)	25
2.7. World production of cigarettes by main region and main producing country (selected years)	27
3.1. Numbers employed in tobacco farming in selected producing countries (different years)	32
3.2. Turkey: Number of villages where tobacco is grown and tobacco farmers, by region	35
3.3. Brazil: Number employed in the tobacco sector (1999/2000)	36
3.4. Bulgaria: Area cultivated, production, and number of tobacco growers (1994-2001)	39
3.5. Hourly remuneration of tobacco industry workers compared with that of workers in socially similar occupations in other sectors (latest available year)	42
3.6. Hourly remuneration of female workers in the tobacco industry compared with that of male workers (latest available year)	43
3.7. Employment in the tobacco industry (1990s)	44
3.8. Employment in the tobacco industry of selected OECD countries (1990-97)	45
5. 1. The status of tobacco: Production, area, yield, government revenue, employment and export earnings from tobacco, by selected countries, 1994/1995	62
5.2. Tobacco tax revenues as a share of total government revenues, selected countries	63
6.1. United States: Acres of row crops needed to replace gross income from 50 acres of flue-cured tobacco	77
A.1. Structure of the tobacco industry in India	88
A.2. Number of bidi workers, by state, 1997	89
A.3. Minimum wages for unskilled bidi workers in different states under India's Minimum Wages Act, 1948	92

A.4. Share of employment of enterprises manufacturing tobacco products in the unorganized sector of India	93
---	----

Figures

1.1. Employment trends in selected countries: Canada, Malaysia and the United States (1995-99).....	12
2.1. Average annual cigarette consumption per adult in industrialized countries (1920-90)	19
2.2. Unmanufactured tobacco production, selected countries	21
2.3. Trends in annual per adult cigarette consumption in developed and developing countries (1970-92).....	23
2.4. Output of unmanufactured tobacco in Yunnan province, China (1980-97)	26
2.5. Tobacco production by developed and developing countries (1975-98).....	26
2.6. Components of demand for United States cigarette production (1960-99)	28
2.7. United States cigarette exports (1995-2000)	28
2.8. Russian Federation: Expanded domestic production in the 1990s	29
3.1. CAP tobacco subsidies, 1997	33

Boxes

1.1. Ethical trade.....	9
1.2. Setting an international tobacco sector agenda.....	13
1.3. European Union tobacco product regulation	14
1.4. The ban on advertising and the value of the brand name	15
1.5. The Employment Policy Convention, 1964 (No. 122)	17
3.1. Joint statement by the ITGA-IUF	41
6.1. Bulgaria: Self-employment projects	73
6.2. Board particles, analgesics and animal feeds.....	76
6.3. United States: Crop alternatives to tobacco.....	78

Introduction

At the present economic juncture, any debate on the future of employment in the tobacco sector revolves around three main axes.

First, jobs in the tobacco sector in the industrialized countries and in some developing countries have either been stagnating or declining, although tobacco production, especially cigarettes, has been increasing due to higher demand worldwide supported by state-of-the-art technology and corporate consolidation. Anti-smoking policies, fostered by growing moral outrage and public outcry since the 1950s when the link was drawn between smoking and lung cancer, and by growing awareness of what has been termed by one source as the tobacco “epidemic”,¹ followed by a whirlwind of company mergers and acquisitions, globalization forces, class and individual litigation, national and international controversy, and a poor press, have all spurred on the leading multinational tobacco companies to explore and capture new markets in both developing countries and countries in transition, as well as in countries eager to find economic opportunities to cope with post-conflict recovery.

In turn, the many millions of tobacco growers and field workers depend on the goodwill of the tobacco manufacturing industry, on stable demand for leaf and the final manufactured product to the extent that, increasingly, tobacco appears to be an economic fatality. Employment and working conditions of tobacco farmers vary according to each country’s level of development and agricultural policies. In the United States, where for four centuries a tobacco grower could be certain of immediate prosperity, for the first time in history the tobacco-growing sector has had to adjust to drastic policy changes as product demand started to register a steady decline. Simultaneously, in the European Union, where tobacco subsidies had favoured the sector, agricultural policy changes are now in place to phase out such subsidies. All the same, tobacco growers and their representatives in these industrialized countries have been better prepared politically, either through social dialogue or through other forms of negotiation, to engage in a debate on proposals for economic diversification. A similar situation does not obtain in countries in transition or developing countries where entire communities of tobacco farmers, as in Brazil, Bulgaria, China, Malawi and Turkey, rely largely or solely on tobacco. The case of Malawi is often cited for its reliance on tobacco for as much as 66 per cent of its foreign exchange.

At the same time, expanded world trade is opening up new markets with implications for delocalization of production by multinational companies and increased competition as all companies target low-wage countries and growing markets. Within this context, following an uncertain interval of short duration in the 1970s and 1980s, tobacco companies began performing better than ever in the 1990s in spite of anti-smoking policies and legislation. At the same time, overcapacity has been clearly identified by tobacco companies as the only “disease” with which the industry needs to come to grips, an attitude which hardly augurs well for tobacco workers. Recent restructuring by tobacco companies points to better performance with fewer workers, even in countries where the leading companies have won new markets.

More alarmingly, a new note has been sounded in tobacco manufacturing: technological advances are pointing the way to a new era which will usher in a tobacco manufacturing industry which may abundantly meet consumer demand but dispense with workers altogether.

¹ World Bank, 1999.

In the Western industrialized countries where smoking, at least among the adult population, has been declining for the past 20 years, employment in the tobacco industry has registered a steady decline over the past three decades, although no correlation has been established between the decline in consumption and the decreasing rates of employment: in these countries, state-of-the-art technology largely accounts for the rationalization of the tobacco manufacturing workforce, both in core production and in ancillary processes. In the United Kingdom, for example, the tobacco industry has been rationalizing its workforce over the past four decades, largely as a result of mechanization and rationalization. At the same time, wages and salaries, owing to a high degree of specialization, are among the highest compared with the manufacturing industries.

Second, tobacco production, consumption and trade have represented one of the main pillars of fiscal policy and public revenue, essential for capital, reinvestment, leverage and economic diversification. Cigarettes are in general the highest taxed tobacco product as well as the highest taxed excisable good in most tobacco manufacturing countries. As an indication of the economic significance tobacco taxes represent with regard to the state budget, for the United Kingdom, to cite one example, the total amount of taxation raised by the tobacco industry from all sources was approximately £10,636 million for 1998, equivalent to almost half of that country's defence budget.

Although the aggregate of the workers employed in core tobacco manufacturing amounts to a mere 1.2 million, the relative value for the tobacco industry is disproportionately high, significantly higher than those for other industries. This is due, in part, to the high duty levied on tobacco products. However, it also indicates that the industry is more efficient as a result of major investment in high-speed machinery even if it is no creator of jobs, at least in those countries, for the most part OECD member countries, where they have been implanted for many decades. In the United Kingdom, for instance, 3 per cent more cigarettes were being produced in 1998 than in 1990 with 75 per cent less labour. So the aggregate number of employees interpreted in isolation is misleading in terms of the disproportionately high value of the industry in relation to its workforce.

Beyond any doubt, OECD countries owe no mean debt to their centuries of tobacco production, consumption and trade, and are bound to recognize the product's vital contribution to their economies as objective figures in their assets column. Yet, as reluctant as some may still be today to acknowledge the less visible liability column in terms of the burden of public health costs due to the escalating incidence of tobacco-related diseases, not to mention incommensurable social costs, latecomers adopting the Western economic development model based on free market forces have pounced on the windfalls of nascent and thriving tobacco industries to boost state coffers. Some tension has therefore been generated by the polarization between, at one end, the bloc of OECD countries where the tobacco industry has been pilloried in the press owing to the pressures brought to bear by a vigorous anti-smoking lobby, and where regulation of tobacco products is being shaped into law and, at the other, some developing countries and countries in transition where the tobacco industry either has been or is now recognized as a unique economic opportunity, one to be seized while there is still time. Some countries, like China, have strategically mobilized their tobacco industry's net profits and resources as leverage for developing other industries with profiles matching emerging domestic and world markets, taking into account their new trade opportunities as members of the World Trade Organization (WTO).

Third, tobacco as a product has never been more controversial than it is today. As with other products on the market, the public can only rely on independent scientific research and authoritative sources such as the World Health Organization (WHO), the United States Surgeon-General's *Report on tobacco and health* and the British Medical Association, among others, which have all led research on tobacco-related diseases, for

information on the harmful health effects of tobacco consumption. Such research, confirming empirical studies with regard to the prevalence of tobacco-related diseases, has been widely published and disseminated by public health and research institutions. Nor is controversy new to the tobacco industry: even in seventeenth-century Europe when tobacco was a novelty, it already had champions for its cause and fierce opponents who were silenced only by its potential to generate public revenue.

Positioning themselves, tobacco companies have either met with total silence or outrightly challenged such scientific findings, or squarely denied public health claims with regard to the dangers of tobacco consumption, even after damning court verdicts pronounced to their detriment involving financial settlements worth billions of dollars as payment for health costs assumed by the States parties to the Master Settlement Agreement (1998) in the United States, to cite the most outstanding instance of class litigation so far. Taking its cue from the record of class and individual litigation in the United States, a further spate of litigation as well as the ensuing proceedings and verdicts has attracted worldwide attention, particularly in the United States but also in Australia, Canada, China, France and the Russian Federation.

Nor are there any signs that the two camps are about to declare a truce: on the contrary, WHO member States are laying the ground for jurisprudence by shaping a draft international instrument entitled “Framework Convention on Tobacco Control”, while the tobacco companies labour in hot pursuit of new markets, all the while evolving new strategies to eliminate all risks with regard to the future of the industry and to secure markets for their products as they wait to see which way the wind blows in the ongoing public controversy with regard to tobacco control. Some companies are more openly combative than others: British American Tobacco (BAT), for example, announced its intention to attack the WHO’s proposals to limit tobacco use, arguing that the scientific arguments on which their tobacco control policies are based are “fundamentally flawed”² and ignore the legitimate interests of tobacco growers, producers and consumers. The world’s leading tobacco company, Philip Morris, has welcomed the United States Government’s proposal to adopt regulations on tobacco products, but other tobacco companies have criticized this stance, a rare breach in their ranks.

Internationally, the World Bank, in partnership with the WHO, has led key research on the economics of tobacco: tobacco-related diseases have been declared an epidemic. The Bank has issued warnings that if no effective tobacco control policies are applied now, by 2030 10 million people will be dying annually of tobacco-related diseases, low- and middle-income nations taking the heaviest toll. In other words, if current smoking patterns were to remain stable, about 500 million people alive today would eventually be killed by tobacco use. Reversing its policy of the 1980s which hinged on the necessity for developing countries to grow cash crops for export, tobacco in particular, to secure sufficient foreign exchange, the World Bank has been implementing a formal policy since 1991: in recognition of the harmful effects of tobacco consumption on health, the policy prohibits the Bank from lending on tobacco and encourages control efforts. The International Monetary Fund (IMF), aligned on the Bank’s tobacco control policies, has been similarly imposing conditionalities on loans, in particular the privatization of tobacco state monopolies, for example in the case of Turkey’s tobacco monopoly, TEKEL. As a result, many governments, NGOs and agencies within the United Nations system have been examining their own policies on tobacco control, on the basis of which they have been developing research and tobacco control programmes.

² *Tobacco Journal International* (Mainz, Rhein Main Publishing Group), No. 6, 2000.

The quest for a concerted approach to tobacco control issues was endorsed by the Organizational Committee of the Administrative Committee on Coordination, at Part II of its first regular session of 1999 on 12 April 1999. The United Nations Economic and Social Council (ECOSOC) resolution 1999/56 of 30 July 1999 later endorsed the establishment of a United Nations Ad Hoc Interagency Task Force on Tobacco Control of which the ILO has been a member since its inception. The World Health Organization, secretariat of the Task Force, is implementing a programme entitled Tobacco Free Initiative, which has spearheaded the drafting of the Framework Convention on Tobacco Control currently being negotiated by States parties in biennial sessions of the Intergovernmental Negotiating Body in Geneva since 1999 in view of its adoption by the World Health Assembly in 2003.

As a member of the Task Force, the Food and Agriculture Organization (FAO) of the United Nations has launched a project entitled "Tobacco supply, demand and trade by the year 2010: Policy options and adjustment". The project is funded by the World Bank, the United States Department of Agriculture (USDA), the Swedish International Development Agency (SIDA) and the International Development Research Centre (Canada). National case studies on alternative crops have been conducted on Brazil, China, India, Malawi, Turkey and Zimbabwe.³ In parallel, the WHO and the World Bank, as members of the Task Force, collaborated with the ILO in testing in selected countries (Armenia, Bulgaria, Egypt, Kenya and Viet Nam) a toolkit entitled *The health, social and economic impact of tobacco control*, produced by the World Bank.

How is the ILO positioned in relation to the ongoing controversy?

Within the ILO's organizational methodology, tobacco is a newcomer, attached to the food and drink sector in 1995 following the review of the 22 sectoral categories. Just as the food sector has faced severe crises in industrialized countries over the past decade leading to loss of confidence on the part of the public and high public and private costs, not to mention severe labour and social repercussions in the countries and regions affected, the tobacco industry, whose record of economic performance continues virtually unshaken, is nevertheless called upon today to review its accountability: the public, both smokers and non-smokers, is more and more confused by controversy as the anti-smoking lobbies bring to the fore more and more evidence of the health hazards of tobacco consumption, and is in doubt as to how it should interpret the silence of tobacco companies with regard to the attacks of tobacco control advocates on the industry, as well as the industry's continued advertising and sponsorship in countries where no regulation is in force; tobacco consumers are made to carry an unfair burden of guilt; tobacco industry workers, among the best paid of all manufacturing sectors have, in a number of cases, had no choice but to accept early retirement packages or relocation packages, or just to find other jobs; and tobacco growers are left in uncertainty as to the strategies and tactics they should adopt to secure their future livelihood. Since the few new jobs in the tobacco sector are only to be found in ancillary industries, particularly equipment supplies and advertising – not to mention the forward linkages of retail, distribution and transport, or anti-smoking NGOs and associations, as well as health institutions and the pharmaceutical industry leading research on tobacco – current developments in the sector carry heavy social and labour implications which need to be addressed through macropolicy intervention and social dialogue to ensure social cohesion.

³ The preliminary findings of these studies were presented at an international meeting in Kobe, Japan, on "Economic, social and health issues in tobacco control", held under the auspices of the WHO, 3-4 Dec. 2001.

However, this report will be concerned neither with the controversial aspects of tobacco products nor with public health questions per se, but will seek to establish how the sector is remodelling itself, whether employment in the industry is threatened and, if so, to what extent? In the affirmative, the scope for economic diversification and human resources development will be addressed. The forces operating change in the industry will be pinpointed and appraised in terms of their capacity to affect employment in the industry.

Although this report will address workers in the tobacco-growing and leaf-processing sector as well as in manufacturing, its terms of reference do not require analysis of distribution or ancillary industries, although reference will be made to them to the extent that they are germane.

Chapter 1 discusses the policy issues with which the tobacco sector is presently confronted. Chapter 2 gives an overview of consumption, production and international trade in tobacco products. Chapter 3 describes the employment trends in the tobacco sector. Chapter 4 examines the structure of the tobacco industry, in particular the trends towards mergers, acquisitions, closures and privatization. Chapter 5 provides an analysis of the factors driving changes in employment in the tobacco sector. Chapter 6 analyses the different options in dealing with change in the tobacco sector. Finally, Chapter 7 draws together the major points which have been made and contains a list of suggested points for discussion. An appendix provides information on the kretek industry in Indonesia and the bidi sector in India as special cases.

This Meeting is part of the ILO's Sectoral Activities Programme, the purpose of which is to facilitate the exchange of information among constituents on labour and social developments related to particular economic sectors, complemented by practically oriented research on topical sectoral issues. This objective has traditionally been pursued by the holding of tripartite sectoral meetings. Such meetings afford an opportunity for the exchange of ideas and experience with a view to fostering a broader understanding of sector-specific issues and problems, promoting an international tripartite consensus on sectoral concerns and providing guidance for national and international policies and measures to deal with the related issues and problems, promoting the harmonization of all ILO activities of a sectoral character, and acting as a focal point between the Office and its constituents. They also provide technical advice, practical assistance and concrete support to ILO constituents in their efforts to overcome problems.

Background to the Meeting

At the 279th Session of the Governing Body of the ILO in November 2000, the ILO's constituents selected *the future of employment in the tobacco sector* as the topic for a tripartite sectoral meeting. That decision was taken against a complex backdrop of converging forces: stagnating or dwindling numbers of jobs in the tobacco manufacturing industry; the threats posed to workers in the entire growing and processing chain by the anti-smoking policies being promoted globally; the exigencies of an international tobacco control instrument in the form of a Framework Convention on Tobacco Control expected to be adopted in 2003, backed by the WHO; and tobacco control policies already made law in a large number of countries and being adopted by others. Subsequent to the decisions of the 279th Session of November 2000, the Governing Body of the ILO decided at its 284th Session of June 2002 to extend the terms of reference of the Meeting to tobacco growing.

In the light of the number of tobacco-producing and manufacturing countries, it was decided that the Meeting would be open to the governments of all member States. In addition, 18 Employers' and Workers' representatives were to be chosen after consultation with their respective groups in the Governing Body. The purpose of the Meeting is to

review current employment trends in tobacco growing and manufacturing and to discuss future prospects in terms of the social and labour implications of these trends, as well as to provide guidance on measures to mitigate negative impacts of changes in employment levels and working conditions and examine the role of social dialogue, using a report prepared by the Office as the basis for its discussions; to adopt conclusions that include proposals for action by governments, by employers' and workers' organizations at the national level and by the ILO; and to adopt a report on its discussions. The Meeting may also adopt resolutions.

1. Policy issues in the tobacco sector

This chapter reviews the main trends in the tobacco sector today.

1.1. Social and labour costs of tobacco control policies

While in free market economies the market is largely left to regulate itself according to the laws of demand and supply, some economic sectors occasionally require government intervention in one or more forms. In the case of the tobacco sector, the World Bank, in a key report which clinches many decades of debate on the question of the health and social costs of smoking once and for all, has challenged policy-makers who have so far been reluctant to adopt anti-smoking measures.¹ The main concerns of this latter group revolve around the risk of incurring high social and economic costs as a consequence of such measures: reduced sales of cigarettes might mean the permanent loss of thousands of jobs and would result in lower government revenues, and higher prices would encourage massive levels of cigarette smuggling as well as foster more widespread use of other plant extracts in the form of narcotics or grey market tobacco products. Rising to defend its ground, the tobacco industry espoused the employment tack, allegedly warning policy-makers of the social and labour costs which would be incurred by tobacco control policies.² The World Bank report referred to poses the question whether smokers know the risks and bear the costs of their consumption choices, and explores the policy options for governments should they decide that intervention is justified. Notably, the World Bank sets out in the report to demonstrate that the economic fears that have deterred policy-makers from taking action are largely unfounded, that policies that reduce the demand for tobacco, such as a decision to increase tobacco taxes, would not cause long-term job losses in the vast majority of countries.

1.2. The economic value of the product

If tobacco had been the economic salvation of the early New World settlements, public policy has nevertheless throughout the history of modern civilization until the present day assigned a place of choice to tobacco in its economic policies. The issue of whether or not the product should be taxed was one which raged in Great Britain in the eighteenth century; the debate centred around the question whether tobacco was a luxury or a necessity. Its virtues as an appetite suppressant cum stimulant won support for its advocates who considered that it should be placed on a par with bread, since it was fundamentally life-sustaining.³ No doubt tobacco defeated economic laws and proved to be a necessary luxury for both rich and poor: those advocates lost their cause to the dictates of sheer necessity; hard-headed policy-makers lost no time in imposing taxes on tobacco which proved a veritable windfall in a Europe beset with wars that incurred exorbitant costs. In 1998 the contribution of tobacco taxes to the state budget of the United Kingdom amounted to almost half of the country's defence budget, an indication of the status of the tobacco industry in overall generation of public revenue (see table 1.1). The tobacco

¹ World Bank, 1999.

² WHO, 2000.

³ Gately, 2001.

industry is therefore no newcomer to modern economies but may even be said to have been the mainstay of the industrialized world, the cornerstone of capital accumulation on which were erected modern diversified economies.⁴

Table 1.1. Tobacco-related tax revenues, United Kingdom, 1998

Source	£ million	Percentage
Excise duties	8 320	78
VAT	1 765	17
Corporation tax	144	1
Rates	7	<1
Taxes on employment incomes	400	4
Total	10 636	100

Source: DTZ Pleda Consulting: *The economic significance of the UK tobacco industry in 1999*, a report prepared for the Tobacco Manufacturers' Association, Dec. 1999.

Throughout the United States taxes on cigarettes and other tobacco products vary from state to state. Tax revenues from cigarettes and other tobacco products contribute significantly to the federal and state treasuries. Smaller localities are not as likely to levy taxes on tobacco products. Some of the principal tobacco-producing states – Georgia, Kentucky and North Carolina – do not collect local taxes on tobacco. In Tennessee only Memphis charges a cigarette tax (1 cent). In northern Virginia, Arlington and Fairfax counties impose a tobacco tax, and 29 cities, mostly in the Tidewater area, also collect cigarette taxes. In the Commonwealth of Virginia, those localities that collect tobacco taxes are not located in the tobacco-growing areas.

How the tobacco industry generated and sustained wealth in the countries of the industrialized world is virtually an economic model for developing countries that are equally striving to raise public revenue and amass capital to speed up their development process. This is clear from China's approach to the development of its tobacco industry, in other countries where the tobacco industry is a latecomer, no less welcome, as in Cambodia, and in countries in transition where the fate of the tobacco sector will eventually be determined by the European Union's tobacco policies as those countries prepare to accede to EU membership.

Strange as it may seem today to anti-smoking militants, tobacco has been a collective life sustainer for centuries, a mighty pillar in the economic structures which were eventually to take shape in the West; in that bygone era, the notion of social costs did not appear in balance sheets.

Just as ancient civilizations had attributed magic powers to tobacco, this item of consumption in modern civilization has been set apart, has prospered unhampered in international trade by occasional spurts of moral outrage by Church, state or civil society; subsidies have been generously meted out, and the industry has flourished unlike any other, with the sole difference that the addictive property of its product has afforded it market stability and leverage of a nature enjoyed by no other. Conforming to a classic pattern of reaching for tobacco to float economies beset with crises, the World Bank was

⁴ *ibid.* The United States dollar had its origin in tobacco transfer notes; tobacco functioned as currency for a century after the first settlers in the New World practised tobacco monoculture as their livelihood. Value, then, meant value in tobacco, which was literally worth its weight in gold.

ready in the 1970s and 1980s with policies for developing countries based on export potential, tobacco taking pride of place in countries such as Brazil, Malawi, Pakistan, Paraguay, United Republic of Tanzania and Tunisia.⁵

1.3. Corporate social responsibility

While enterprises play an undisputed role in providing employment, generating wealth and raising the overall standard of living in the countries in which they operate, more and more employers today recognize the need to dispel doubt in the minds of their customers with regard to the safety of their products (see box 1.1). They are now adopting codes of conduct which can guide a company's behaviour in relation to the development of its human resources, environmental management and interaction with customers, clients, governments and the local community. A position paper on codes of conduct published by the International Organisation of Employers (IOE) recognizes that enterprises need acceptance by society, and are well advised to "register carefully any changes in the general perception of society. However, enterprises also have to realize that the sensitivity of society regarding the fundamental principles of social justice has grown. ... Enterprises must take part in this public debate worldwide".⁶

Box 1.1. Ethical trade

Ethical trade is one dimension of corporate social responsibility, bringing social issues into the mainstream of commercial supply chain management. Ethical trade focuses on workplace issues, requiring that suppliers in particular meet minimum employment, worker welfare and human rights standards. Similar management systems are well established for product safety and environmental issues, although the separation of social and environmental standards is increasingly artificial in global sourcing agreements. In 1999 no less than 233 company codes were on offer and that number has been rising. Industry-specific codes have also been developed. Tobacco companies, too, are keen to be perceived by the public as adhering to the concept of corporate social responsibility, as evidenced by their annual reports and their public relations campaigns. At least two of the leading tobacco companies have directly engaged with the concept of corporate social responsibility. They also sponsor youth anti-smoking campaigns.

Source: *Insights 36*, Mar. 2001, Department for International Development, United Kingdom (DFID). See <http://www.id21.org>, visited 30 Sep. 2002.

1.4. Tobacco rich, tobacco poor

If the tobacco sector once meant employment and wealth for many private individuals, it continues today to hold out at least a promise of a livelihood for many, both in factories where workers are the best paid among manufacturing industries, and in home-based piecework where bidi⁷ and kretek⁸ workers earn at best minimum wages. Policy-makers commonly extol the virtue of the bidi industry, in particular its capacity to absorb

⁵ Madeley, 1986, cited in Barnet and Cavanagh, 1995.

⁶ IOE, 1999.

⁷ A traditional form of hand-rolled cigarette produced in Bangladesh, India, Nepal, Pakistan and, to a lesser extent, in other Asian countries.

⁸ A traditional form of cigarette made with tobacco and cloves, wrapped in corn leaves, widely consumed in Indonesia.

4.5 million workers who would, as it appears, have no other means of livelihood.⁹ Undoubtedly, bidi cigarettes in India and kretek cigarettes in Indonesia have so far proved an economic haven for women workers who predominate in the industry as hand rollers. Women and children are also found in large numbers as family household help and farmworkers, often excluded from welfare benefits as a result of precarious labour contracts, if any (see appendix).

While the facile solution for policy-makers is to rationalize the perpetuation of hand-rolling bidi and kretek workers as a fatality, like tobacco growing, the working conditions and prospects for this corps of workers are well below the requirements of ILO standards in terms of worker protection.¹⁰ As for wealth, it flows in through excise taxes and fiscal returns and may or may not be redirected to alleviate pockets of poverty depending on the welfare policies in place. As in the early years of the New World settlements, there are many tobacco farming communities today in all regions of the world for which tobacco is still equated with economic salvation, but without the slightest promise of wealth. Often situated beyond the pale of policy and social safety nets, these farming communities turn to tobacco, to tobacco's ever secure markets, which in turn mean secure livelihoods. Today, the mandate of the international community is to decide whether or not the status quo is acceptable, or whether these tobacco-dependent communities have any economic options and, if so, how they are to be translated into opportunities within macroeconomic policy decisions.

1.5. Tobacco a provider of welfare

Faced with competition from multinationals as it prepared to become a WTO member, China set out to reduce its 155 cigarette factories to 100, starting by closing unprofitable companies and consolidating smaller cigarette units into group companies.¹¹ However, socialist welfare principles are still solidly anchored in Chinese society: tobacco factories not only manufacture cigarettes but also provide housing, health care, education and recreational facilities in their community.¹² In China the economy of some poor areas relies largely on their cigarette factories, and even small companies – often employing between 100 and 1,000 people – pay significant taxes.¹³ Local governments were understandably reluctant to cooperate when the China National Tobacco Corporation (CNTC) proposed closures of local cigarette factories.

The bidi sector in India is an example of tobacco workers who are protected by special legislation: while the Minimum Wages Act and the Provident Fund Act were both extended to bidi workers, three legislative instruments apply specifically to bidi workers.¹⁴

⁹ Some sources estimate that this figure may be as high as 10 million, but official figures record 4.5 million.

¹⁰ ILO, 2001.

¹¹ *ibid.*

¹² Barbeau and Levenstein, 1999.

¹³ *Tobacco Reporter* (Raleigh), Jan. 2001.

¹⁴ The Beedi Workers Welfare Fund Act, the Beedi Workers Welfare Cess Act (both of 1976), and the Beedi and Cigar Workers (Conditions of Employment) Act of 1966 (which is one of the few

Similarly, in Kudus, Indonesia, tobacco companies are active supporters of civic and charity projects. In Egypt, the Eastern Tobacco Company also provides a number of welfare benefits for its workers.

1.6. Prospect of an uncertain future

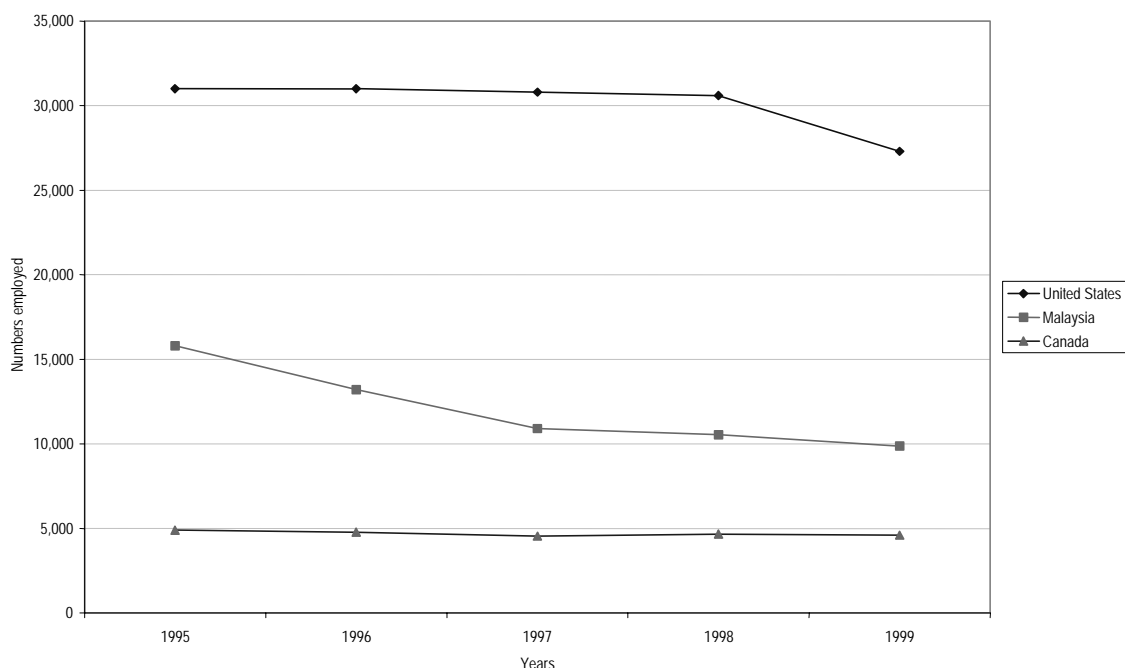
The still unresolved question today is whether or not tobacco is a fatality as it appears to be, given its uninterrupted development throughout the centuries in spite of an occasional flicker of controversy. A closer look unveils burning social and political issues with regard to those who create the added value in the tobacco industry. It brings to centre stage millions of ethnic and religious minorities as in Bulgaria; scheduled castes, scheduled tribes and religious minorities as in India; depressed communities caught in cycles of poverty as in Malawi; women workers as in India and Indonesia; migrant workers in the United States; child workers in tobacco plantations; poverty-stricken communities in Brazil often caught in cycles of debt bondage; and territorial conflict victims as in Lebanon, all eking out the meagerest living from tobacco leaf. Worse, these workers today and their families, in thrall to the tobacco sector for their livelihoods, are faced with the prospect of an uncertain future for their sector. If tobacco manufacturing workers are among the best paid in industry around the world, tobacco farmers in developing and some transition countries cannot be said to benefit from the high added value of the product; unorganized, they cannot avail themselves of bargaining mechanisms to negotiate wages and working conditions. On the question of migrant workers in the United States, the president of the Burley Tobacco Growers' Cooperative was cited on the future of the tobacco sector: "If you take the migrant workers out of Kentucky ... tobacco production would be gone."¹⁵ As for the tobacco manufacturing industry, especially in the OECD and some developing countries, it has, over the past two decades, registered either stagnation or a steady decline in the numbers of its employees, out of proportion to its ever expanding markets and increasing output (see figure 1.1).

Such trends merit close examination, carrying as they do implications not only for the role of business in international development, but for free trade policies, globalization, the role of the social partners, employment policies and poverty alleviation.

instruments of Indian legislation which specifically mention home-based workers as a category of workers).

¹⁵ *Lexington Herald* (Kentucky), 31 May 1998.

Figure 1.1. Employment trends in selected countries: Canada, Malaysia and the United States (1995-99)



Source: ILO: LABORSTA at <http://laborsta.ilo.org>, visited 30 Sep. 2002.

1.7. The draft Framework Convention on Tobacco Control (A/FCTC/INB5/2)

The draft Framework Convention on Tobacco Control, as of 25 June 2002, reads as follows:

...
Mindful of the social and economic difficulties that tobacco control measures may engender, in the medium and long term, particularly in some developing countries whose economies are dependent on tobacco growing and on manufacturing of tobacco products, and recognizing their need for access to the financial, economic and technological resources required to achieve sustainable development and to decrease their medium- and long-term economic dependence upon tobacco,

...
Article 4/7

...
The importance of identifying appropriate modalities to aid the economic transition of tobacco growers, workers and individual sellers who may be displaced as a future consequence of successful tobacco control programmes, particularly in developing country Parties, as well as Parties with transitional economies, should be recognized and addressed.

...
Article 17

Elimination of tobacco subsidies and provision of government support for other economically viable activities

Each Party undertakes to phase out, with the view to eliminating subsidies, including tax exemptions, loans and rebates, for tobacco growing and manufacturing of tobacco products. Each Party shall, in cooperation with other Parties and with competent international and regional intergovernmental organizations, promote, as appropriate, other economically viable alternatives for tobacco workers, growers and individual sellers.

...

Article 22/1

(b) The Parties shall cooperate directly or through competent international bodies to strengthen their capacity to fulfil the obligations arising from this Convention, taking into account the needs of developing country Parties and Parties with transitional economies ...

...

Article 23/4

The Conference of the Parties shall:

...

(h) take into consideration, where appropriate, the services and cooperation of, and information provided by, competent organizations and bodies of the United Nations system ...

Article 25

Relations between the Conference of the Parties and competent international and regional intergovernmental organizations

In order to provide technical and financial cooperation for achieving the objective of this Convention, the Conference of the Parties may request the cooperation of competent international and regional intergovernmental organizations.

It is therefore imperative that the ILO set in place mechanisms to foster social dialogue on policies and action programmes to identify and address the employment challenges which face the sector today and others which are yet in the making (see box 1.2). The United Nations Economic and Social Council (ECOSOC), in its resolution 1999/56, requested the Secretary-General to report on progress made by the United Nations Ad Hoc Interagency Task Force on Tobacco Control in the implementation of multisectoral collaboration on tobacco or health, “with particular emphasis on the development of appropriate strategies to address the social and economic implications of the impact of tobacco or health initiatives”.

Box 1.2. Setting an international tobacco sector agenda

The July 2000 Report of the Task Force to ECOSOC proposed that States members of ECOSOC can assist the work of the Task Force by:

- encouraging multisectoral collaboration on tobacco or health, with particular emphasis on the development of appropriate strategies to address the social and economic implications of the impact of tobacco or health initiatives;
- encouraging the establishment of multisectoral national institutions/commissions to facilitate actions to address the tobacco epidemic in developing countries;
- facilitating studies focusing on diversification and alternative livelihood options for those countries that are most dependent on tobacco farming and manufacturing;
- encouraging the dissemination of the Task Force's work to national policy-makers;
- reminding member States, United Nations organizations, major donors, non-governmental organizations and other elements of civil society, including the private sector, of the need for continued support for multisectoral initiatives to address the tobacco epidemic;
- increasing awareness with regard to WHO efforts to develop and negotiate a framework convention on tobacco control and related protocols focusing on transboundary issues, for example, smuggling.

The Task Force reported more recently to the 2002 Substantive Session of ECOSOC in July 2002.

1.8. Tobacco control policies

Industrialized countries, notably Canada, the European Union (see box 1.3) and the United States, have taken the lead with regard to tobacco control measures, but tobacco control policies in developing and transition countries have also made some headway.

Box 1.3. European Union tobacco product regulation

In 1989 the EU adopted regulations on the labelling of tobacco products and the prohibition of marketing of certain types of oral tobacco (89/622/EEC), and in 1990 a further Directive was passed placing limits on the tar yields of cigarettes (90/239/EEC). These regulations were amended in 1992 (Directive 92/41/EEC). Subsequently, the Labelling Directive (2001/37/EC) became law in May 2001 and was phased in from September 2002, imposing maximum limits on tar and nicotine and requiring larger health warnings to appear on all tobacco products. Tar levels are reduced from the current 12 mg per cigarette to 10 mg; a new ceiling on nicotine content per cigarette of 1 mg is set; and the upper limit of carbon monoxide is set at 10 mg.

Health warnings are increased from the current minimum 4 per cent to at least 30 per cent of the front and 40 per cent of the back surfaces of the pack. The warnings require black type on a white background, surrounded by a black border. As from December 2002, Member States were free to use coloured images in addition to written health warnings. The law also makes it compulsory for tobacco companies to disclose details of additives to tobacco products and their purpose. Descriptors such as "light" and "mild" are banned.

On 5 October 2000, the European Court of Justice annulled Directive 98/43/EC, which would have banned tobacco advertising and sponsorship across Europe. Then, on 30 May 2001, the Commission adopted a proposal for a Directive on the approximation of the laws, regulations and administrative provisions of the Member States relating to the advertising of tobacco products and related sponsorship.

Source: <http://www.doh.gov.uk/tobaccolabellingconsult>, site visited on 30 Sep. 2002.

Considerable economic and social benefits may well accrue from tobacco growing and processing, but the treatment of smoking-related illnesses is costly. Cigarette smoking causes cancer. It is addictive. The WHO estimates that tobacco products are directly responsible for around 3 million deaths per year. Cigarette smoking is the major cause of preventable mortality in developed countries. In the mid-1990s, about 25 per cent of all male deaths in developed countries were due to smoking. Among men aged 35-69 years, more than one-third of all deaths were caused by smoking. The costs of treating all these people are clearly exorbitant.¹⁶

So far, smoking has not had the same impact on mortality among women nor among people from developing countries. There is an approximate 30-40 year time lag between the onset of persistent smoking and deaths from smoking. The effects of the greater incidence of smoking among these two groups will thus be felt with a lag, but it seems reasonable to believe that its impact on them will not differ fundamentally from that on developed country males.

Governments are thus faced with conflicting pressures. How do they cope? In practice, governments have opted for several strategies (which are often followed simultaneously). A recent strategy consists of seeking compensation for the costs of treating smoking-related illnesses. It has been followed with success in the United States. Governments also set rules regarding the maximum content of hazardous substances in cigarettes. Most of all, however, governments try to discourage demand for what is, as the industry does not tire of telling us, essentially a legal product. This is done in a variety of ways, with some governments applying particular vigour and others taking a more relaxed approach. On the whole, however, the trend is clear: governments' rules on smoking are becoming ever more restrictive. The use of tobacco products is being discouraged in several ways:

Limitation of the space where smoking is allowed. Such measures are largely intended to protect non-smokers from involuntary exposure to tobacco smoke. Smoking is being prohibited in public places (particularly health-care and educational facilities) and in mass transport. Legislation requires restaurants to reserve space for non-smokers.

¹⁶ WHO, 1997.

Limitation by age group. It is prohibited to sell tobacco products to people under a certain age.

Limitations on points of sale. The use of vending machines is being restricted because these cannot discriminate against sales to young people.

Health warnings stating that tobacco is harmful to health have become obligatory. The warnings must be placed on packets and in advertisements, with the authorities prescribing the text and the minimum space allotted to the warning in the advertisement or on the packet.

Education. Governments sponsor education and public information programmes on smoking and health.

Advertising bans. Restrictions concern the location of advertisements, the media used (no billboards, no ads in the printed media or in cinemas), the images presented (no young people, no cigarette packets) and the time when broadcasting is allowed (not during hours when children watch television).

The manufacturers look askance at these restrictions, in particular the ban on advertising. In their view, it is not proven that such a ban discourages demand for cigarettes (as its proponents claim). They are concerned about its effect on the value of their prime asset, the brand name (see box 1.4).¹⁷

Box 1.4. The ban on advertising and the value of the brand name

The authorities of many countries restrict advertising in order to discourage demand for cigarettes. If anything, they expect the ban to discourage young people from starting to smoke. In Italy, direct and indirect tobacco advertising has been banned for a long time. In France, the 1991 *Loi Evrin* forbids all forms of tobacco advertising. The European Union intends to ban virtually all tobacco advertising by 2006.

Tobacco companies contest such bans. To them, advertising is a key means for maintaining loyalty to the brand and for persuading existing smokers to switch brands. Advertising does not increase overall consumption or cause anybody to start smoking.

Advertising is the key to the image of glamour, sophistication, freedom and healthy, outdoor living that the tobacco companies want their product to be associated with. It supports existing brands and is an essential tool for establishing new brands. The success of a tobacco company is driven by the power of its brand portfolio. As in other consumer goods industries, brands are often the company's most valuable asset. British American Tobacco (BAT) describes itself as "one of the world's largest trade mark owners". Philip Morris attributes its success to the power of its "global brand portfolio". The value of Marlboro, Philip Morris' most valuable and the world's leading cigarette brand, has been put at US\$21,000 million.

Advertising bans may have a negative effect on the value of existing brands, but their impact on potential new entrants (brands, companies) is even greater. It takes millions of US dollars to introduce a new tobacco product, so why do so when the name cannot be advertised?

In practice, tobacco companies have proved to be quite resourceful in compensating for the effects of the advertising bans (even though it is becoming steadily more difficult to do so). Their strategies range from quickly introducing new cigarette brands before a ban comes into effect; to "brand stretching" or "trademark diversification";¹ and "borrowing" an existing brand name that was not previously associated with cigarettes.² The sponsorship of sports and cultural events, particularly international sports events, has become popular. Formula One motor racing, which is followed by millions of people on television around the globe, is a very attractive tool for the marketing of existing and would-be worldwide brands.

¹ Such as "Marlboro country" or "Camel adventures". ² Reemstma sells BOSS and DAVIDOFF cigarettes and Altadis "Omar Sharif" and "Alain Delon" cigarettes.

Source: van Liemt, 2002.

¹⁷ van Liemt, 2002.

1.9. Brazil: A case of dual tobacco policies

Many tobacco-producing countries today are implementing policies which run counter to each other, boosting the tobacco sector through public financing while they set tobacco control measures in place. An example of parallel tobacco policies is Brazil where, alongside a spate of tobacco control legislation, the tobacco agro-industry has benefited considerably from public financing.

Subsequent to Laws 9.294 of 15 July 1996 and 10.167 of 27 December 2000, two further tobacco control measures were set in place in 2001, one determining maximum levels of tar, nicotine, and carbon monoxide in cigarettes sold in Brazil, the other prohibiting the use of resources of PRONAF (National Family Farming Programme) for tobacco production. Although these measures led to a decline in tobacco consumption in Brazil, they are still regarded as ineffective by anti-smoking advocates, who consider that both legislative instruments in question concentrate principally on reducing visibility in the form of advertising and places of consumption but that public authorities would fail to achieve any significant impact as long as they did not launch an action programme targeting higher cigarette prices (which in Brazil are among the lowest in the world), treatment of tobacco addicts, and legislation pertinent to smoking victims.¹⁸ Parallel to the adoption of the measures referred to, all three levels of government fostered the growth of the tobacco industry with public funding, allocating resources from BNDES (Brazilian Development Bank) and PRONAF along with other specific programmes promoted by state governments, principally Rio Grande do Sul and Bahia.¹⁹ While the amount allocated by the central Government to finance the tobacco agro-industry is admittedly much less than three years ago, the sum still remains considerable: for the years 2001 and 2002, 6 million reals was invested by BNDES in Brazil's tobacco industry.²⁰ On the other hand, the expansion and modernization of the tobacco industry, supported by public finance, occurred on the eve of stepped-up anti-tobacco measures. As these resources were allocated to investment in capital goods, for all practical purposes, and with support from the Government, the Brazilian tobacco industry is already capitalized, modernized and competitive, able to face the new restrictive laws by reducing prices (due to productivity increases), greater competitiveness abroad, or even vigorous opposition on the part of business lobbies in government circles.²¹

1.10. A coordinated economic and social policy

The ILO Employment Policy Convention, 1964 (No. 122),²² places emphasis on the need for a coordinated economic and social policy, but at the same time it recognizes that such a policy should “take due account of the stage and level of economic development and the mutual relationships between employment objectives and other economic and social objectives, and shall be pursued by methods that are appropriate to national conditions and practices” (see box 1.5). It remains to be seen therefore, first, if and to what

¹⁸ *Folha de São Paulo*, 2002, cited in Paixão, 2002.

¹⁹ INCA (Brazilian National Cancer Institute) at <http://www.inca.org.br/english/>, visited 30 Sep. 2002.

²⁰ BNDES at <http://www.bndes.gov.br/english/>, visited 30 Sep. 2002.

²¹ Paixão, 2002.

²² Ratified by 92 countries as of 31 May 2002.

extent economic and social policies related to the tobacco industry are genuinely conflicting and, second, to what extent labour policies and social dialogue can be instrumental in palliating the distress of workers who are uncertain of being able to preserve their well-paid jobs and often excellent welfare benefits in an industry which, some hope and say, may be approaching its twilight time (although no strong evidence corroborates this view: in 2001 cigarette firms were the best-performing industry in the stock market, in spite of crippling litigation settlements).

This phenomenon needs to be understood in terms of its meaning for society as globalization continues apace.

Who are tobacco consumers? Where are they found in the largest numbers? Are their numbers shifting from one region to another? Where are tobacco control measures most effective? Are coherent policies being formulated and implemented? These questions will be considered in the next chapters.

Box 1.5. The Employment Policy Convention, 1964 (No. 122)

...

Article 1

1. With a view to stimulating economic growth and development, raising levels of living, meeting manpower requirements and overcoming unemployment and underemployment, each Member shall declare and pursue, as a major goal, an active policy designed to promote full, productive and freely chosen employment.

2. The said policy shall aim at ensuring that –

- (a) there is work for all who are available for and seeking work;
- (b) such work is as productive as possible;
- (c) there is freedom of choice of employment and the fullest possible opportunity for each worker to qualify for, and to use his skills and endowments in, a job for which he is well suited, irrespective of race, colour, sex, religion, political opinion, national extraction or social origin.

3. The said policy shall take due account of the stage and level of economic development and the mutual relationships between employment objectives and other economic and social objectives, and shall be pursued by methods that are appropriate to national conditions and practices.

Article 2

Each Member shall, by such methods and to such extent as may be appropriate under national conditions –

- (a) decide on and keep under review, within the framework of a co-ordinated economic and social policy, the measures to be adopted for attaining the objectives specified in Article 1;
- (b) take such steps as may be needed, including when appropriate the establishment of programmes, for the application of these measures.

Article 3

In the application of this Convention, representatives of the persons affected by the measures to be taken, and in particular representatives of employers and workers, shall be consulted concerning employment policies, with a view to taking fully into account their experience and views and securing their full co-operation in formulating and enlisting support for such policies.

...

2. Consumption, production and international trade¹

In the world of tobacco and cigarettes many configurations coexist. Malawi is an important producer of tobacco, but it exports 98 per cent of its crop. The Netherlands grows no tobacco of its own yet is one of the world's top exporters of cigarettes and cigars. The United States is both a leading importer and exporter of tobacco as well as a leading exporter of cigarettes. China, for its part, is the world's largest producer of raw tobacco as well as the world's largest consumer and producer of cigarettes, yet its participation in world trade of tobacco and cigarettes is very modest. Whereas data on world tobacco consumption and world cigarette production by country are readily available, data on demand for cigarettes by country are more difficult to obtain. With the help of production and trade data, however, "apparent demand" can be calculated. The second part of this chapter considers production and international trade.

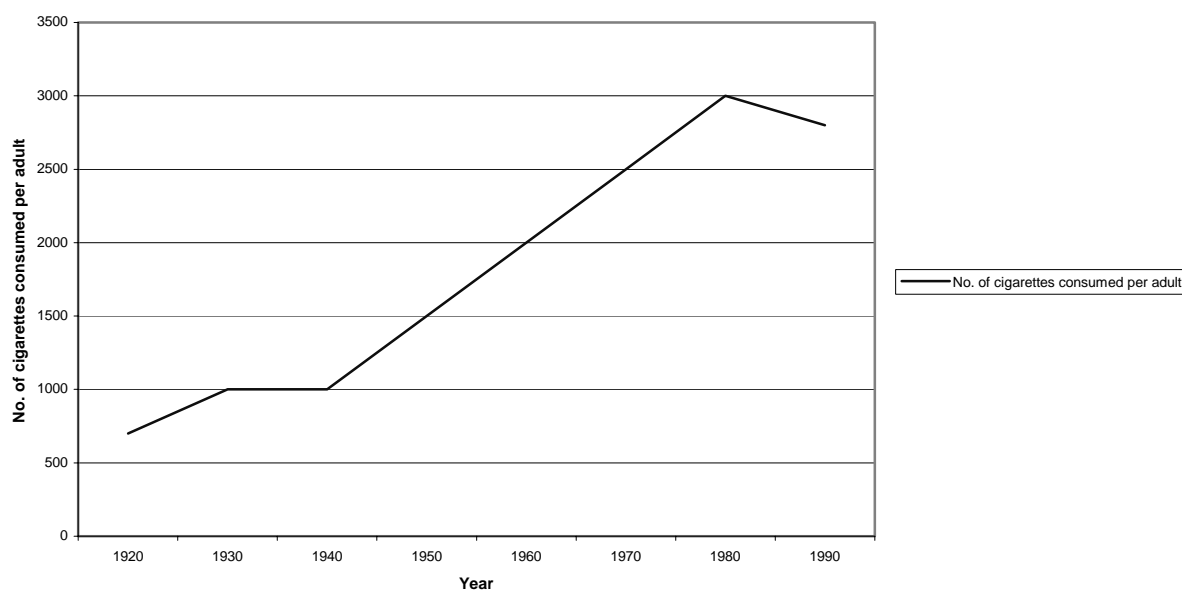
2.1. Consumption

Worldwide, the production of tobacco and the consumption of tobacco products increased steadily until the early 1990s. Between the early 1970s and the early 1990s tobacco production increased by around 50 per cent in volume; cigarette consumption and production increased at a slightly faster pace. Between 1990 and 1995 production of and demand for cigarettes grew at a more modest rate, and tobacco production reacted to this weakening of demand with a lag. After 1996 consumption appears to have declined. The Asian and the Russian crises dampened demand as did the drastic price increases in the United States following the Master Settlement Agreement. On balance, according to the United States Department of Agriculture (USDA), world tobacco consumption (at 6.5 million metric tons) and world cigarette production (at 5.5 million pieces) were no higher in 1999 than they were in 1991.

It should be kept in mind, however, that slow overall growth does not necessarily mean that demand growth for all countries or all categories of tobacco and cigarettes was slow. "American blend" cigarettes have gained in market share. As a result, demand for the tobaccos that make up the American blend has been above average. Per capita demand for cigarettes in the industrialized countries started to decline in the early 1980s (see figure 2.1). After 1995, demand growth in the countries outside the OECD area slowed down and no longer compensated for declining demand in the industrialized countries.

¹ This section is drawn from van Liemt, 2002.

Figure 2.1. Average annual cigarette consumption per adult in industrialized countries (1920-90)



Source: WHO, 1997.

On the whole, world demand and world production develop more or less in parallel. But this is clearer for cigarettes than it is for tobacco. Cigarettes are unsuitable for long-term stockholding. Their quality deteriorates rapidly and this is a powerful incentive for producers to adjust to changes in demand without too much delay. Other things being equal, trends in world cigarette production can act as a fair indicator of world cigarette demand.

However, the same does not apply to tobacco. Tobacco stocks at year-end can be as high as the volume of production in that year (see table 2.1 and figure 2.2), for several reasons. First, tobacco can be stocked for a longer period than cigarettes before its quality starts to decline. Second, tobacco is an agricultural product, which makes it difficult to predict with much precision the production volumes of different types and of different growing regions. Indeed, tobacco production volumes can vary considerably from one year to the next. Most manufacturers use a blend of different tobaccos in their product, so they cannot risk any shortages in a component part of their blend. They must secure sufficient stocks to tide them over from one harvest to the next. Lastly, stocks serve as a price-stabilization mechanism. Stocks do not just prevent supply shortages; they also prevent undue price increases following a poor harvest of a particular type of tobacco.

Table 2.1. World's leading unmanufactured tobacco-producing, trading and consuming countries (metric tons dry weight, calendar years)

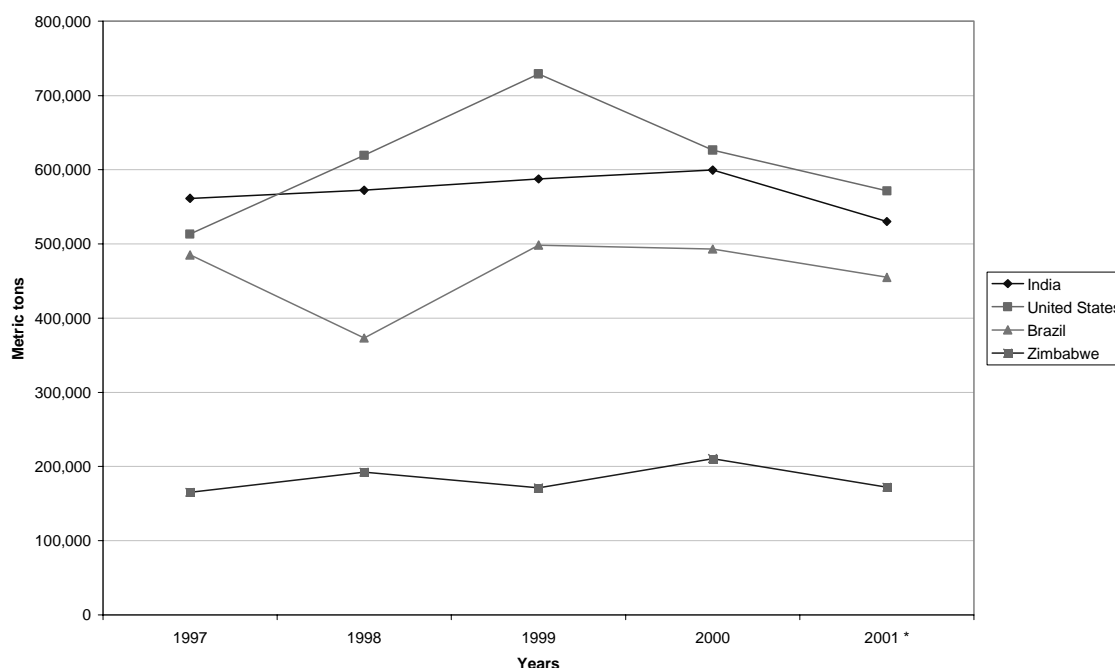
	1997	1998	1999	2000	2001*
Production					
World total	7 722 327	5 848 455	5 923 797	5 883 324	5 678 753
China	3 613 350	2 010 250	2 098 905	2 161 697	2 199 532
India	561 330	572 200	587 600	599 400	530 000
Brazil	485 100	373 150	498 400	493 100	454 900
United States	729 139	604 131	527 720	408 200	405 000
Zimbabwe	165 271	192 384	170 941	210 690	172 111
Indonesia	148 775	123 653	133 350	157 353	157 353

	1997	1998	1999	2000	2001*
Exports					
World total	2 004 455	1 920 389	2 069 950	1 965 828	1 951 091
Brazil	319 000	300 500	343 000	341 500	354 900
Zimbabwe	159 941	168 804	215 744	182 072	185 000
United States	221 512	211 917	189 379	182 517	185 000
India	117 900	81 790	119 643	123 185	125 000
China	77 796	92 173	113 259	113 594	115 080
Malawi	111 449	135 300	107 600	101 250	101 250
Imports					
World total	1 992 939	1 907 849	2 021 219	1 965 700	1 949 249
Russian Federation	184 900	200 900	264 670	285 000	299 800
Germany ¹	222 080	222 591	266 978	263 077	263 000
United States ²	306 838	246 762	241 065	196 596	215 000
United Kingdom	157 689	149 756	137 183	108 427	104 000
Japan	90 469	101 442	98 920	93 928	92 000
Netherlands	105 358	84 813	84 860	79 993	75 986
Consumption					
World total	6 511 187	6 282 690	6 368 524	6 284 934	6 303 036
China	2 289 834	2 342 220	2 410 545	2 484 946	2 523 737
United States	772 932	616 835	575 296	436 200	472 400
India	476 850	483 360	478 350	474 275	470 305
Russian Federation	175 100	180 460	265 700	301 480	301 500
Germany ²	158 000	142 651	163 500	184 304	184 300
Japan	184 100	172 700	184 112	169 455	173 500
Ending stocks					
World total	7 234 803	6 808 813	7 285 581	6 883 843	6 204 930
China	3 201 864	2 787 478	3 340 032	2 941 020	2 541 432
United States	1 583 749	1 605 890	1 610 000	1 596 079	1 558 679
Turkey	293 898	311 010	329 499	351 551	334 706
Brazil	231 500	162 950	212 130	266 980	264 930
Japan	285 818	272 700	247 500	226 350	198 550
Italy	141 900	140 922	151 464	151 274	157 474

*Estimate. ¹ Unified Germany. ² General imports (actual arrivals).

Source: United States Department of Agriculture (USDA), Foreign Agricultural Service (FAS): *Tobacco: World Markets and Trade* (Washington, DC), Dec. 2001.

Figure 2.2. Unmanufactured tobacco production, selected countries
(metric tons, dry weight, calendar years)



Note: * Estimate.

Source: Based on information contained in table 2.1 above.

For individual countries and regions, demand for cigarettes is determined by a number of factors, including price, real incomes, macroeconomic developments, government efforts to discourage consumption, as well as a range of structural and cultural factors. Retail price increases and a slowing economy have a negative effect on the demand for or the expenditure on tobacco products (but this sensitivity differs by each nation's level of development and by socio-economic group). It may, but it need not, lead to a reduction in the number of cigarettes consumed. People may simply buy cheaper cigarettes, a practice known as downtrading. They buy local instead of imported cigarettes, popular instead of premium brands.

Structural and cultural factors also play a role. Why do people smoke, and why do they smoke the number of cigarettes that they do? On the whole, the average cigarette smoker is more likely to be male rather than female, with a low rather than a high income, and with fewer rather than more years of education. Far more smokers are found in less developed than in more developed countries (see table 2.2).

Table 2.2. Estimated number of smokers in the world (early 1990s)
(millions)

Countries	Males	Females	Total
Developed countries	200	100	300
Developing countries	700	100	800
World	900	200	1 100

Source: WHO, 1997.

But in actual practice the situation is more complex than these stylized facts would lead one to believe, and the experience of many countries contradicts the picture described above. For instance, in Sweden and Denmark more women smoke than men do. In the Russian Federation there appears to be no relationship between smoking and either education or income among men.² Nor does any clear pattern take shape among the countries with the highest smoking prevalence, either by geographical region or by level of development. The highest smoking prevalence is found in such low-income countries as Cambodia and Viet Nam (see table 2.3). In the European Union there appears to be no strong relation between countries' average income level and cigarette consumption (table 2.4).

Table 2.3. Estimated smoking prevalence among men (selected countries)

Income group	Country	Smoking prevalence
Low income	Cambodia	80
	Viet Nam	73
	China	63
	Bangladesh	60
	Sri Lanka	55
Lower middle income	Latvia	67
	Russian Federation	67
	Dominican Republic	66
	Tonga	65
	Turkey	63
	Fiji	59
	Tunisia	58
	Panama	56
	Algeria	53
	Indonesia	53
	Samoa	53
	Estonia	52
	Lithuania	52
Bolivia	50	
Upper middle income	Saudi Arabia	53
	South Africa	52
	Seychelles	51
	Poland	51
High income	Korea, Rep. of	68
	Japan	59
	Kuwait	52

Source: Bobak et al., 2000, cited in van Liemt, 2002.

² Bobak et al., 2000, cited in van Liemt, 2002.

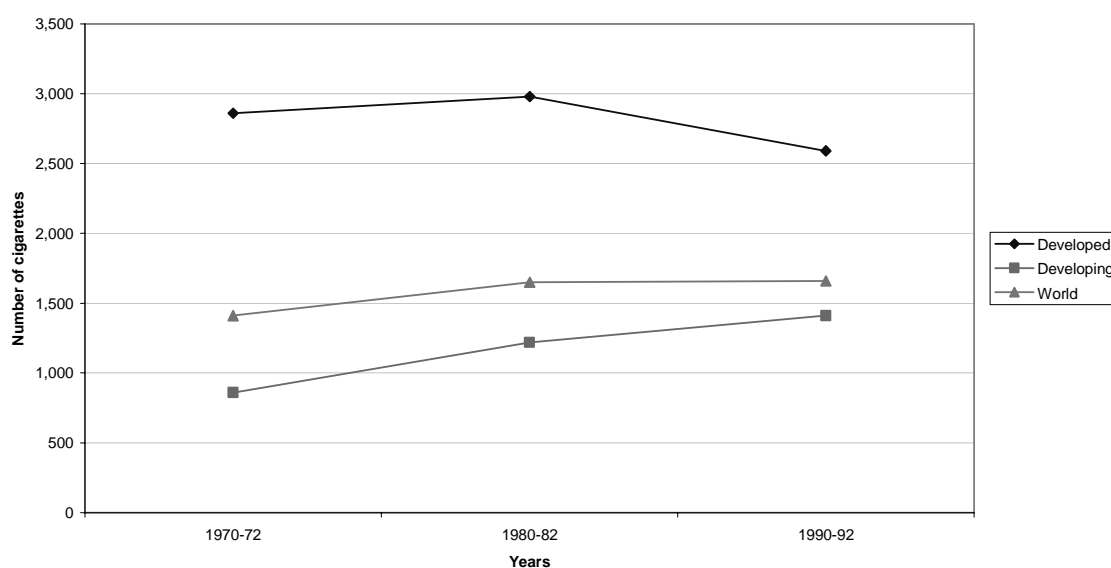
Table 2.4. Cigarette consumption in the European Union (1996)

Country	Average cigarette consumption per day by adults aged over 15
Greece	9.3
Ireland	6.4
Spain	6.1
Germany	5.5
Austria	5.4
Portugal	5.4
France	5.2
Italy	5.0
Belgium	4.9
United Kingdom	4.8
Denmark	4.2
Netherlands	3.4
Sweden	3.2
Finland	3.0

Source: van Liemt, 2002.

Something similar can be said for trends. More men may be smoking cigarettes than women, but prevalence among women is on the increase. In the industrialized world consumption per adult may be higher than in the developing world, but since the early 1980s it has been in decline and the gap between these two groups of countries is narrowing (figure 2.3). Between 1970 and 1990 per capita consumption grew particularly fast in the Far East, levelling off in the 1990s in China and the Republic of Korea.

Figure 2.3. Trends in annual per adult cigarette consumption in developed and developing countries (1970-92)



Source: Based on WHO, 1997.

As for demand in individual countries, in the absence of precise demand data “apparent demand” needs to be calculated by deducting net exports (i.e. gross exports less imports) from domestic production. However, this figure may differ from real demand for two reasons. First, it takes no account of the variation in year-end stocks held by cigarette traders, wholesalers and retailers. Second, and more important, “apparent” demand takes no account of the share of demand that is satisfied by illicit trade. Smuggled cigarettes take up a large share of the market in several countries.

Table 2.5 gives data on apparent demand for the world’s main markets. It shows that China is by far the largest market for cigarettes, followed by the United States, Japan, the Russian Federation, Indonesia, Germany, Turkey, Brazil, India and the Republic of Korea. Demand in Indonesia and Turkey is increasing fast.

Table 2.5. World production of cigarettes, net exports (NE) and apparent consumption (AC) in selected countries and years (1,000 million pieces)

Country	1985	1990	1995	1998	NE-98	AC-98
France	67	53	46	44	-40	84
Germany	165	164	221	178	40	138
Italy	78	65	50	52	-43	95
Netherlands	46	65	100	116	86	30
Spain	77	79	76	70	-12	82
United Kingdom	123	112	156	160	80	80
Switzerland	23	27	42	37	23	24
Bulgaria	92	82	74	46	15	31
Poland	90	81	101	95	3	91
USSR/Russian Federation	381	350	141	179	-52	231
Egypt	47	41	42	47	1	46
South Africa	28	32	37	36	-	36
Canada	63	46	51	50	1	49
Mexico	46	50	46	47	-	47
United States	665	670	746	716	197	519
Argentina	39	33	41	42	-	42
Brazil	146	160	173	178	73 ¹	105
China	1 178	1 650	1 735	1 675	20	1 655
India	80	85	95	106	1	105
Indonesia	106	155	186	214	17	197
Japan	303	268	262	250	-69	319
Korea, Rep. Of	75	86	87	96	-6	102
Pakistan	38	38	32	45	-3	48
Philippines	62	71	57	75	-	75
Turkey	61	62	99	114	8	105
Total	4 860	5 344	5 598	5 608		

¹ No import data available.
Source: van Liemt, 2002.

These data can be a poor indicator of value, though. Quality and price differ from one tobacco and from one cigarette to another. United States tobaccos, in particular, fetch high prices in the market. The quality of many Asian tobaccos, on the other hand, can be much lower, and their price may be one-half, or even one-third, of United States tobaccos. So in value terms the share of the United States is higher than the volume figures would seem to imply.

2.2. Production and international trade

Table 2.6 gives data on the share of major regions and countries in the volume of world production of unmanufactured tobacco. Asia, at around 60 per cent of the total, is the main tobacco-producing region, with China alone accounting for 36 per cent. China's share of world production, which had risen rapidly in the 1980s, was no higher in 1998 than it was in 1990 (figure 2.4). The shares of India, South America (mainly Brazil), and particularly Africa (Zimbabwe, Malawi) have not stopped increasing. The share of Europe (including Eastern Europe) declined (Italy's production dropped by one-third between 1990 and 1997) and that of the United States remained more or less the same. By 1997 the developing countries accounted for 80 per cent of world production, compared to 53 per cent 30 years earlier³ (figure 2.5).

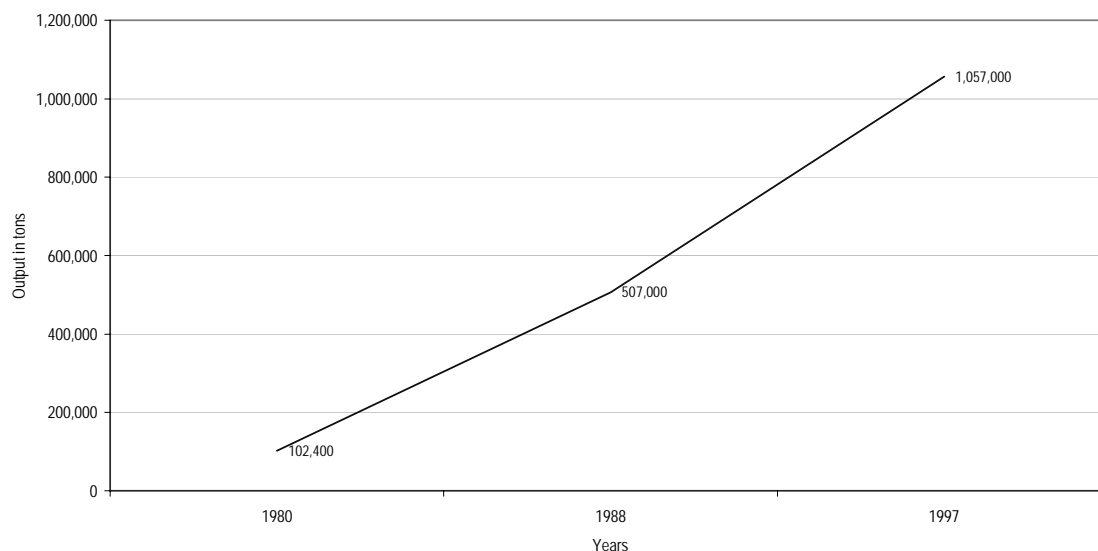
Table 2.6. World production of unmanufactured tobacco by main regions and countries (selected years) (percentages)

Region/country	1985	1990	1995	1998 *
Asia	56.9	61.0	62.8	59.9
(China)	(31.6)	(37.2)	(36.5)	(36.1)**
(India)	(6.9)	(8.0)	(8.9)	(9.1)**
(Turkey)	(2.6)	(4.3)	(3.6)	(3.8)**
Africa	4.4	5.2	7.5	7.5
(Zimbabwe)	(1.6)	(1.9)	(3.3)	(3.0)
(Malawi)	(1.1)	(1.4)	(2.1)	(2.0)
South America	7.7	8.2	8.8	9.2
(Brazil)	(5.7)	(6.2)	(6.3)	(6.2)
North America	13.5	13.1	12.4	14.1
(United States)	(10.0)	(10.4)	(9.0)	(10.4)
Europe (including former USSR)	17.1	12.7	9	10
Total	100	100	100	100
Million tonnes	6.85	7.106	6.354	7.066

* Provisional figures. ** 1997.
Source: van Liemt, 2002.

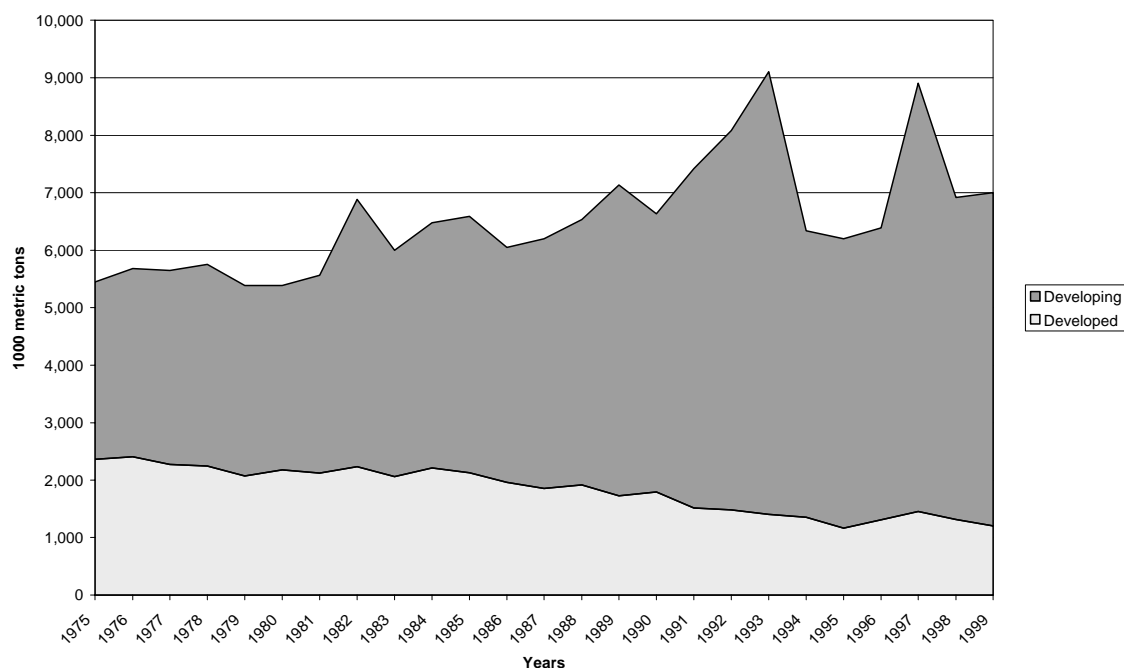
³ *Tobacco Journal International* (Mainz, Rhein Main Publishing Group), No. 5/1997.

Figure 2.4. Output of unmanufactured tobacco in Yunnan province, China (1980-97)



Source: Based on He et al., publication forthcoming.

Figure 2.5. Tobacco production by developed and developing countries (1975-98)



Source: Jacobs et al., 2000, cited in van Liemt, 2002.

Cigarette producers make intensive use of domestic tobaccos. Nonetheless, around 30 per cent of world tobacco production (mainly high quality tobaccos) is traded internationally. There are several reasons for this. First, some large tobacco-growing countries (Malawi, United Republic of Tanzania, Zimbabwe) manufacture very few tobacco products of their own. Second, some important cigarette and cigar-producing countries do not grow any tobacco domestically. The Netherlands (one of the world's top cigarette and cigar exporters) is a case in point. Others (Germany, Japan, Russian

Federation) do not produce enough to satisfy demand. A third reason is that most cigarettes sold today are blended cigarettes, i.e. they contain a mixture of different tobaccos. Few cigarette-producing countries grow all of these tobaccos.

Most cigarettes are now consumed and produced in Asia. This is no surprise in view of that region's high share of world population. Within Asia, China alone produces over 30 per cent of the world total. The increasing share of Asia has taken place at the expense of Europe and North America, which saw their share of the world total decline. The share of South America and Africa has remained stable since 1985 (table 2.7).

Table 2.7. World production of cigarettes by main region and main producing country (selected years) (percentages)

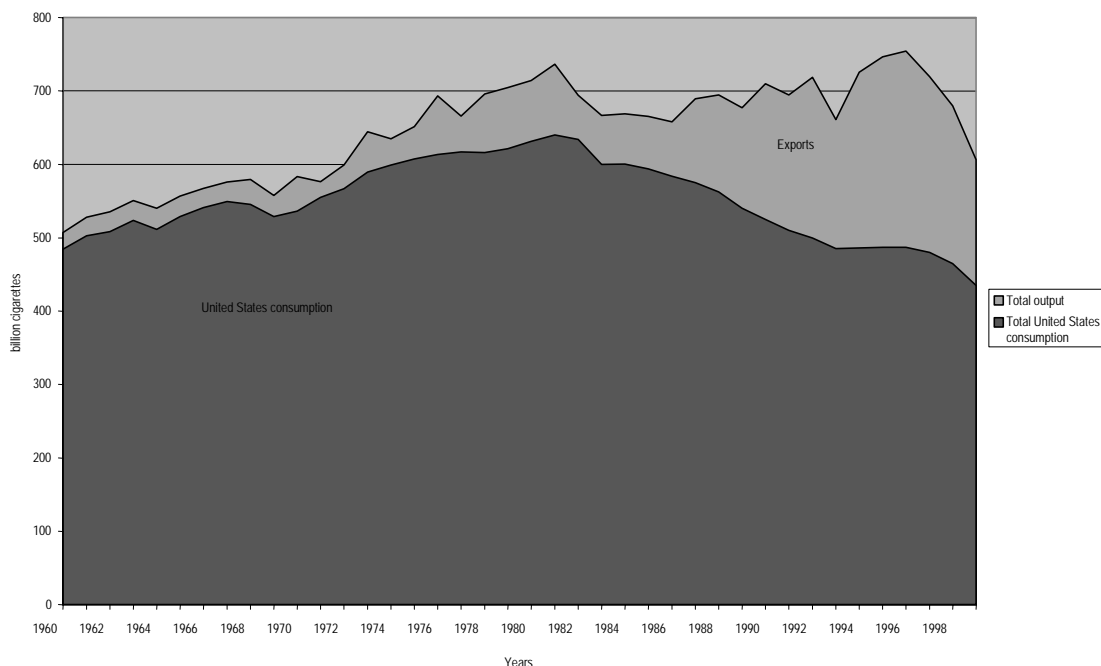
Region/country	1985	1990	1995	1998
Asia	43.5	49.8	50.4	50.9
(China)	(24.2)	(30.4)	(31)	(29.9)
Europe (including former USSR)	29.8	25.6	24.7	24.9
North America	16.9	15.6	15.7	15.1
(United States)	(13.6)	(13.1)	(13.3)	(12.8)
South America	5.2	5	5.1	5.2
Africa	3.6	3.4	3.4	3.5
Total	100	100	100	100

Source: van Liemt, 2002.

In China domestic demand for cigarettes is largely satisfied by domestic production. Official figures indicate that the country trades very little. Exports and imports make up less than 2 per cent of national demand or production. India is in a similar situation.

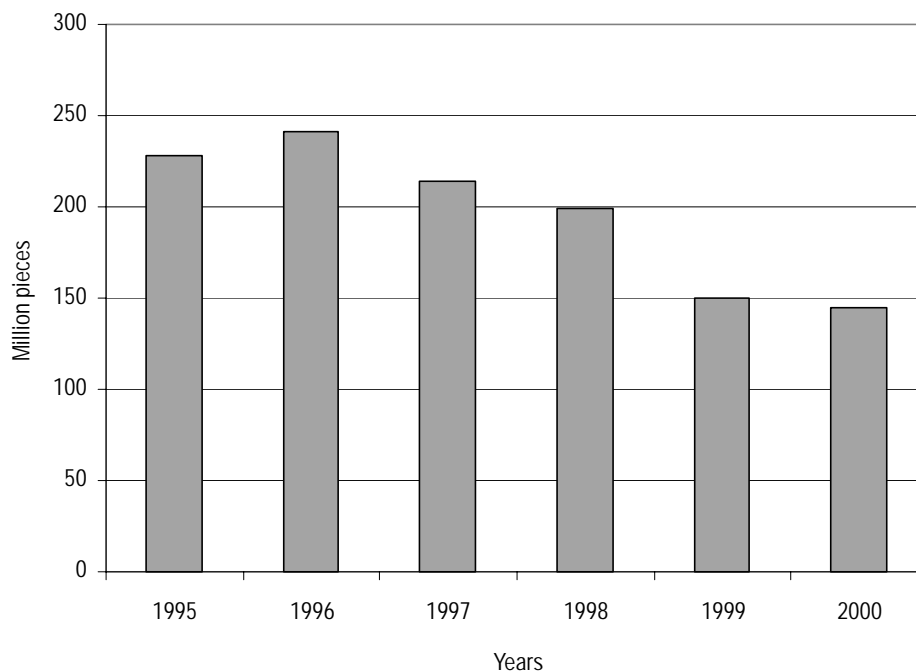
In other countries, domestic demand is also mainly satisfied by domestic production but, in addition, they are sizeable exporters. The United States is a good example. It imports few cigarettes, but it exports one-third of its production. It is the world's leading exporter, accounting for over 20 per cent of world exports. Exports became steadily more important for United States producers in the 1980s when domestic demand started its long decline (figure 2.6). In the late 1990s, however, United States producers of cigarettes (and farmers) came to face serious problems when cigarette exports weakened (following weak demand in East Asia and the Russian Federation and the relocation of some production to Europe) at a time when domestic demand was hit by the price hikes following the Master Settlement Agreement (figure 2.7).

Figure 2.6. Components of demand for United States cigarette production (1960-99)



Source: Gale et al., 2000, cited in van Liemt, 2002.

Figure 2.7. United States cigarette exports (1995-2000)



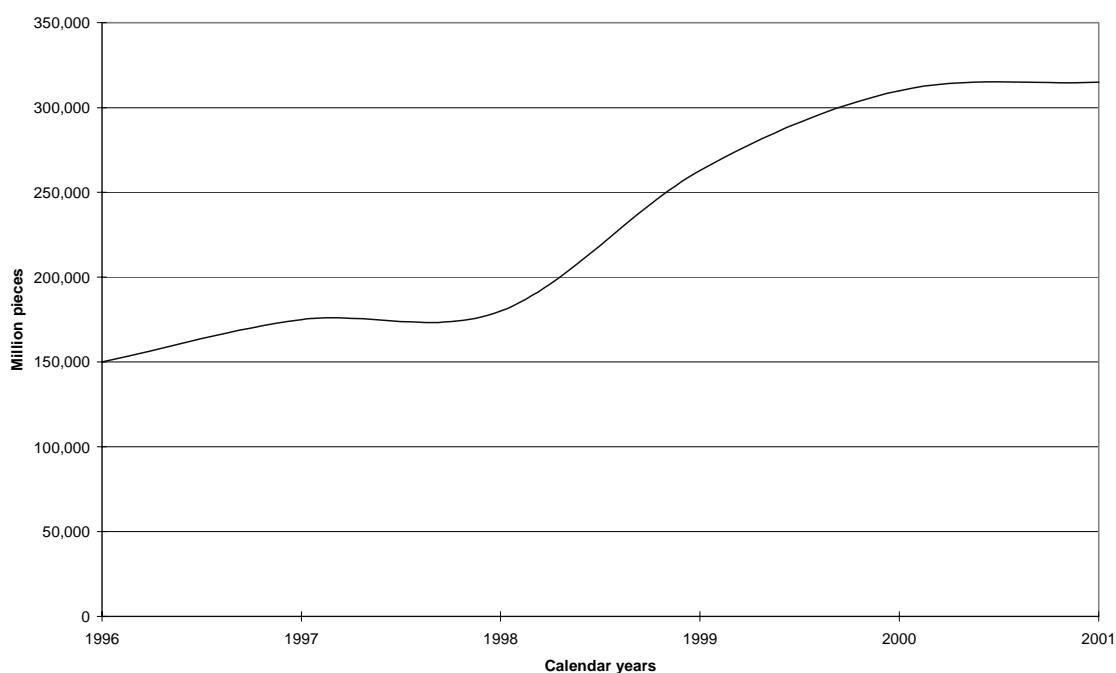
Source: United States Department of Agriculture (USDA) Foreign Agricultural Service (FAS), 2000.

Certain countries export most of their production. In 1998, United Kingdom production was 160 billion pieces; it exported 125 billion pieces in that year. The Netherlands exported 103 billion pieces out of a total production of 116 billion pieces.

A last category consists of countries that rely to a great extent on imports to satisfy domestic demand. Examples are the Russian Federation (in the 1990s), Japan (which also produces cigarettes domestically) and some countries in the Middle East (which do not have any production of their own).

International trade flows in cigarettes are explained by several factors. They can be the result of temporary supply mismatches: local producers may not produce the type or the quality of cigarettes that the market requires (more demand for the American blend, less for dark cigarettes). Or demand may be growing far away from where installed capacity is located (for example, because a market hitherto closed to imports is opening up), with output only slowly reacting to the new situation. In the Russian Federation, the multinational tobacco companies installed much new capacity in the 1990s. Slowly, expanded domestic production came to replace imports (figure 2.8). A worsened macroeconomic situation may lead to reduced volumes of demand for cigarettes, including demand for imported cigarettes. Sustained periods of prosperity may have the opposite effect. Official pressure may be another factor: pressure by the United States Trade Representative (USTR) is widely seen as having contributed to the opening up of the Japanese, Korean (Republic of), and Taiwanese markets to imported cigarettes. Or it may simply be cheaper to produce in certain locations, because local tobaccos are cheaper (an important factor given how many governments encourage manufacturers to use local tobaccos in their cigarettes), because local labour costs are lower, or because labour productivity is at a high level.

Figure 2.8. Russian Federation: Expanded domestic cigarette production in the 1990s



Source: United States Department of Agriculture (USDA) Foreign Agricultural Service (FAS), 2000.

Increasingly, however, trade flows are explained by corporate strategies. Barriers to international and regional trade and investment flows have come down, and continue to come down nearly everywhere. This enables the large companies to concentrate production

in fewer locations. In such circumstances, decisions by the large tobacco companies increasingly determine which market is being supplied by which producer/manufacturer.⁴

⁴ Reemstma, for example, internationalized its sales rapidly in the 1990s. From 35 per cent in 1991, international sales increased to 76 per cent of sales in 1999. Interestingly, in 1991 exports from Germany made up 64 per cent of those international sales. But by 1999 exports accounted for no more than 21 per cent of international sales, the balance being supplied from production at locations outside Germany (van Liemt, 2002).

3. Employment trends in the tobacco sector

This chapter reviews employment trends in the major tobacco-producing and manufacturing countries, including agricultural policy shifts in developing countries.

3.1. Reducing overcapacity

The need for rationalization has been publicly acknowledged by the industry. At one tobacco industry conference, the Chief Executive Officer of Rothmans International referred to overcapacity as “a cancer that is capable of sucking the lifeblood of the industry and potentially a major impediment to our continuing prosperity”. He went on to say that reducing overcapacity was “a painful, difficult and sensitive task, with serious implications for employment, but, if properly managed, it could in time provide great benefit”.¹

3.2. A stabilized workforce

The industry proper continues to provide employment for a more or less stabilized workforce of 1.2 million workers in manufacturing, some 40 million in growing and leaf processing, and a further 20 million are absorbed in home industries: principally Indonesia’s 10 million kretek cigarette workers and India’s 4.5 million hand-rolling bidi workers.² The aggregate of tobacco manufacturing workers is therefore small by comparison with other sectors, but the forward and backward linkages must also be taken into consideration although they are not the main focus here.

3.3. Tobacco growing: Agricultural policies and subsidies

Tobacco is grown in more than 120 countries. About 6 million tonnes of tobacco are produced each year around the world. In 2001, total production of the seven largest world tobacco growers stood at 5.7 million metric tons, of which 1.9 million tonnes (33 per cent) was exported from the leading producer countries.³ It is a labour-intensive crop that provides work and income to well over 40 million people (see table 3.1).

Over 80 per cent of world tobacco is produced in developing countries and regions. The share of these countries in world production and exports is growing, but it is a slow process since each producer has developed a tradition of particular blends and flavours. China, for example, has started importing more and more American blends from the United States to meet changing consumer preferences.

¹ A. Sandford and C. Bates: *Job losses in the tobacco industry: The impact of tobacco policies*, ASH (Action on Smoking and Health) Paper 4, Aug. 1998 at <http://www.ash.org.uk>, visited 15 Oct. 2002.

² Ministry of Labour, Government of India. Kaur and Sudarshan, 1999, cited in ILO, 2001, estimate that this figure is largely a result of undercounting.

³ International Tobacco Growers’ Association (ITGA): *Tobacco-world tobacco leaf data*, at <http://www.tobaccoland.org/Issues/worldprod.htm>, visited 30 Sep. 2002.

Table 3.1. Numbers employed in tobacco farming in selected producing countries (different years)

Country	Numbers employed in tobacco farming ¹	Year
Argentina	100 000	2000
Brazil	723 000	2001
Bulgaria	250 000	1990
Cambodia	45 000	2001
China	35 000 000	2001
India	850 000	2001
Kenya	87 000	2001
Malawi	586 000	1989/1990
Moldova	250 000	2001
Poland	40 000	1999
Turkey	586 616	2000
United States	146 927	1997
Viet Nam	150 000	2001
Zimbabwe	100 000	1998
Total	38 914 543	

¹ Numbers do not include leaf processing, support services or peripheral subsectors.
Source: Based on data from ILO, FAO, USDA, IUF, ITGA.

Since the rise of the nation States in the developing regions of the world, agriculture policy-makers have invariably been faced with the necessity of subsidizing cash crops as opposed to food crops in order to conform to the requirements of international development policy which imposes conditions of generating foreign exchange and competing on international markets. Tobacco, however, like any other cash crop, is not a fatality: in all tobacco-producing countries, other crops are grown.

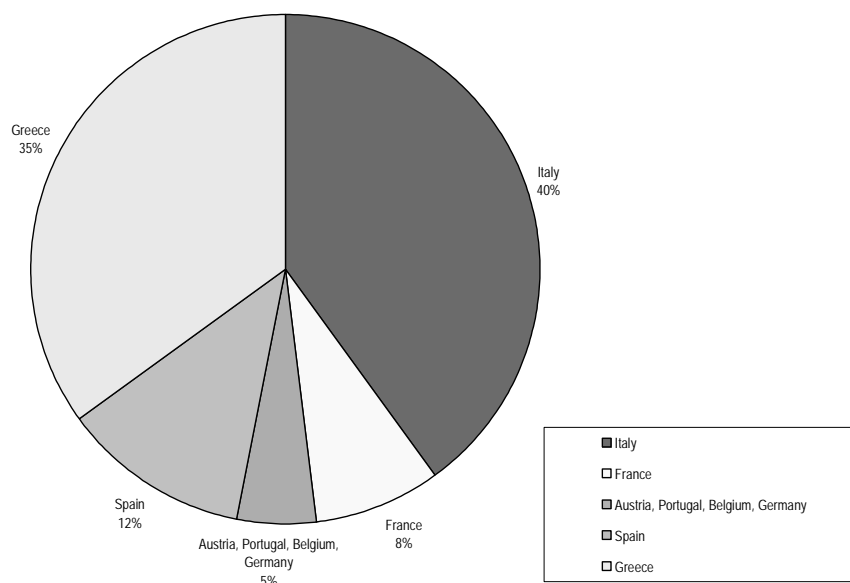
Governments eager to promote tobacco as an export crop have been ready with subsidies to encourage cultivation and trade. In the 1950s, the Philippine Government offered financial inducements to encourage tobacco cultivation with the aim of permitting farmers to earn from a hectare of tobacco about four times what they could earn from rice. The World Bank policy of the 1970s and 1980s, in conformity with ideas of export-led development, favoured assistance to small tobacco farmers in the form of rural development loans, with the result that some poor countries like Brazil, Malawi, Pakistan, Paraguay, United Republic of Tanzania and Tunisia became tobacco-dependent. From Costa Rica to India to Kenya, choice portions of scarce government and private finance are allocated to tobacco farmers; the returns per hectare are much higher than for food crops and tobacco is easy to store and transport.⁴

For several decades, the European Union has also been applying a policy of subsidizing tobacco growing. The eight producer member States under the EU tobacco regime are Austria, Belgium, France, Germany, Greece, Italy, Portugal and Spain. Through the Common Agricultural Policy (CAP), the tobacco growers in the EU, based mainly in Italy and Greece, received a subsidy of US\$809 million in 1998 (see figure 3.1). Tobacco

⁴ Barnet and Cavanagh, 1995.

is the most heavily subsidized crop per hectare, and accounts for less than 5 per cent of world output. In some areas, notably in Italy, farmers are claiming high subsidies while continuing to grow varieties of tobacco for which there is no demand within the EU. Most of this tobacco, much of it very high tar, is exported to Eastern Europe and the developing world. The European Commission recognizes that CAP subsidies need to be re-evaluated, and the system was being reviewed in 2002.

Figure 3.1. CAP tobacco subsidies, 1997



Source: Action on Smoking and Health (ASH): *Phasing out European Union tobacco subsidies*, July 2001, at <http://www.ash.org.uk/>, visited 25 Oct. 2002.

Tobacco growing, in contrast to manufacturing, still functions as a safety valve which safeguards livelihoods for millions of people who for the most part belong to vulnerable social groups. It continues to be a highly labour-intensive activity but as indicated earlier, although the scope for productivity increases in tobacco growing would appear to be more limited than those in tobacco processing, recent breakthroughs in soft drying leaf techniques in Turkey may well carry implications for employment in countries with a similar tobacco economy. So although tobacco growing will no doubt continue to occupy many thousands the world over, these new first-leaf processing techniques will very likely affect the numbers employed. All the same, how those numbers evolve in the future is difficult to forecast with precision at this stage. Stagnant demand for tobacco makes it likely that, worldwide, the number will diminish. Just where this occurs will depend on the circumstances of each country and region. People involved in the production of high-quality tobaccos at competitive cost of the type for which demand prospects are good would appear to be in a more favourable position than others. But whatever changes do take place, they are bound to occur slowly.⁵

Nonetheless, the authorities in many places are concerned about the effects that a drastic slowdown in demand for tobacco might entail. Often the question is raised whether tobacco can be replaced by an alternative crop that matches its earnings per hectare or per

⁵ van Liemt, 2002.

person, but so far the answer has been negative. Such questions must consider technical aspects (for instance, the sloping, rocky soils that are used for growing oriental tobaccos may be unsuitable for other crops); skill problems (farmers may have no experience in growing alternative crops); and “sunk costs” (farmers may have invested heavily in installations that are specific for tobacco).⁶ How easy or difficult is it to find alternative jobs for the people involved in tobacco growing? Is the tobacco crop a fatality? How are tobacco prices expected to develop compared to those of alternative crops? Some deeper insight has been provided in a collection of research papers published by the ILO which focus on tobacco-producing and processing regions in selected countries.⁷

3.4. Employment in growing: The figures

This section will provide some insight into employment levels and trends in a number of important tobacco-growing countries in different parts of the world.

In *China*, tobacco is grown on an area extending between 1.33 and 1.67 million hectares, and tobacco farmers number nearly 35 million. In Yunnan province alone, tobacco plantations cover more than 300,000 hectares every year, providing employment for nearly 10 million tobacco farmers.

India is the third largest producer of tobacco in the world. Tobacco in India generates nearly Rs20 billion of income per annum at the farm, state and central government levels. At the farm level, some 850,000 farmers grow tobacco. Almost 6 million farmers and workers depend on this sector for their sustenance, not to mention the number of direct and indirect livelihoods connected with the tobacco sector.

In *Turkey*, tobacco is a significant crop for the agriculture sector. It generates employment and is the primary means of subsistence for about 3.5 million people, including 580,000 tobacco farmers and those employed in transportation, marketing and processing. In 1994, when tobacco culture was still permitted on lowlands, 494,298 farmers in 5,065 villages were engaged in tobacco farming (see table 3.2). According to data for the year 2000, although there was a decline of 2.35 per cent (4,946) in the number of villages where tobacco farming was practised, there was actually an increase of 18.37 per cent (586,616) in the number of farmers growing tobacco. During 1994-2000, the greatest increase in the number of tobacco farming villages was observed in south-eastern Anatolia, while there was a decline of 39.23 per cent in the Marmara region for the same period.

During the same period, there was an increase of 18.37 per cent in the total number of tobacco farmers in Turkey (a 72.19 per cent increase in south-eastern Anatolia and a decline of 21.67 per cent in the Marmara region). The main reason for such a high increase in south-eastern Anatolia is that the region has more villages than any other engaged in tobacco farming and that the scope for alternative crops is rather limited given the constraints of the region. The high level of decline in the Marmara region can be explained by the fewer number of villages engaged in tobacco farming and the availability of alternative crops and other employment opportunities.

⁶ *ibid.*

⁷ These studies cover Bulgaria, Cambodia, China, India, Malawi, Turkey and the United States.

Table 3.2. Turkey: Number of villages where tobacco is grown and tobacco farmers, by region

Year	Aegean region				Marmara region				Black Sea region			
	Villages		Tobacco farmers		Villages		Tobacco farmers		Villages		Tobacco farmers	
	No.	Index*	No.	Index	No.	Index	No.	Index	No.	Index	No.	Index
1994	2 110	100.00	291 436	100.00	548	100.00	15 373	100.00	1 033	100.00	85 853	100.00
1995	2 129	100.9	308 491	105.85	469	85.58	15 836	103.01	1 027	99.42	94 805	110.43
1996	2 068	98.00	302 759	103.88	460	83.94	14 368	93.46	1 025	99.23	90 286	105.16
1997	2 089	99.00	300 756	103.90	502	91.61	16 379	106.64	1 033	100.00	91 107	106.12
1998	2 097	99.38	334 117	114.65	494	90.15	15 886	103.34	1 043	100.97	97 482	113.55
1999	2 632	124.74	296 143	101.62	526	95.99	14 202	92.34	1 077	104.26	90 880	105.86
2000	2 135	101.18	309 849	106.32	333	60.77	12 042	78.33	1 025	99.23	93 312	108.69

Year	Eastern Anatolia				South-eastern Anatolia				Total			
	Villages		Tobacco farmers		Villages		Tobacco farmers		Villages		Tobacco farmers	
	No.	Index	No.	Index	No.	Index	No.	Index	No.	Index	No.	Index
1994	213	100.00	17 387	100.00	1 161	100.00	84 249	100.00	5 065	100.00	494 298	100.00
1995	207	97.18	20 176	116.04	1 205	103.79	110 708	131.41	5 037	99.45	550 016	111.27
1996	221	103.76	21 615	124.32	1 224	105.43	117 643	139.64	4 998	98.68	546 671	110.60
1997	230	107.98	27 790	159.93	1 251	107.75	124 348	147.60	5 105	100.79	560 380	113.37
1998	229	107.51	28 634	164.69	1 213	104.48	145 944	173.23	5 076	100.22	622 063	125.85
1999	200	93.90	29 298	168.50	1 243	107.06	147 052	174.94	5 678	112.10	577 575	116.85
2000	210	98.59	26 346	130.58	1 243	107.06	165 067	172.19	4 946	97.65	586 616	118.37

*1994=100.

Source: Petkova and Yildirak, publication forthcoming.

Farmers engaged in tobacco farming and employees in tobacco industries constitute, together with their families, 5 per cent of the population of Turkey. In other words, there is a population of 3 to 3.5 million making their subsistence from tobacco farming and processing.

As from 1994 until the end of the 1990s, the numbers employed in tobacco growing in the *United States* have been fairly stable at around 140,000. Income from tobacco farming is broadly distributed among 568 counties, mostly in the south-east where tobacco is grown in most counties of Kentucky, North Carolina and Tennessee. Other major growing areas where tobacco is considered to be an important part of both the economic and social fabric of the community include southern Virginia, the coastal plain of South Carolina, Georgia and Florida, and the southern parts of Indiana, Ohio and Maryland.

North Carolina and Kentucky are by far the largest growers, respectively employing 53,755 and 44,809 full-time equivalent (FTE) workers in 1997. Nationwide, however, there were 146,927 FTE workers engaged in tobacco growing. The five principal tobacco-producing states, with 124,180 employees, account for 84.5 per cent of total tobacco-growing employees.⁸

⁸ Kennedy, publication forthcoming.

The economies of those states that grow, manufacture and export tobacco are placed in jeopardy by restrictions on the production and sale of tobacco products. Although Virginia ranks fifth in tobacco-producing states, tobacco is still the Commonwealth's leading cash crop, generating about 25 per cent of Virginia's total crop income. Approximately 8,400 farms in Virginia produce tobacco, which accounts for 79 per cent of all agricultural sales in some of the more dependent counties and generates higher profits per acre than other traditional crops; total farm-level receipts from tobacco were near US\$228 million for the 1997 season.

In 1999, the tobacco agro-industry in the south of *Brazil* accounted for revenue worth 7.5 billion reales (US\$3.19 billion), of which 6.422 billion reales (US\$2.73 billion) corresponded to the revenue of the industry and 1.078 billion reales (US\$458 million) to the agricultural revenue. This volume of revenue in the entire agro-industry of tobacco was equivalent to 0.77 per cent of GNP in 1999 and 2002.⁹

According to the Banco Nacional de Desenvolvimento Econômico e Social (BNDES), Brazil's tobacco sector was classified as one of the 24 key sectors of the Brazilian economy in terms of capacity to generate employment. Thus, for every million dollars circulating in this field of activity, 216 jobs are created.¹⁰ In table 3.3, we can observe the importance of the tobacco agro-industry as a generator of jobs. Thus, according to the table, this type of farming directly employs 740,000 workers: 723,000 farmers (around 4 per cent of the occupied rural workers in the country), and 17,000 workers in the related industry, of which some 5,000 are permanent and another 12,000 are croppers contracted temporarily. The indirect jobs generated by tobacco production employ over 1,450,000 in various types of occupation, such as on the production lines of agricultural raw materials, in the distribution and sale of these products and, principally, in transport and in cigarette retail sales outlets.¹¹

Table 3.3. Brazil: Number employed in the tobacco sector (1999-2000)

Occupation	No. employed	%
Agriculture	723 000	33.0
Industry	17 000	0.8
Indirect	1 450 000	66.2
Total	2 190 000	100.0

Source: Paixão, 2002.

Brazil is the world's biggest exporter of tobacco, the bulk of Brazilian tobacco being grown in the south. In 1998, Souza Cruz made a profit of £177 million. Interviews with some of the 47,000 contract farmers employed by the company brought to the fore the key information that tobacco cultivation is the only option for farmers. There is no market for alternative crops and farmers grow food only for their own consumption. So the 13 tobacco companies, including leading companies such as Philip Morris and Universal Leaf

⁹ Paixão, 2002.

¹⁰ *ibid.*

¹¹ *ibid.*

Tobacco, operate in a way which some describe as a universal cartel, promoting the same system of farming and paying the same prices for the crop.¹²

The average size of tobacco farms in southern Brazil is less than 2 hectares. Farmers sign a contract to produce an agreed quantity of tobacco for sale exclusively to one company. Farmers are also sold a technical package of inputs by the tobacco company which includes seed, fertilizer, pesticides, protective clothing and spraying apparatus. Rather than paying for this package in cash, since many farmers lack the means to do so, it is proposed to them as a loan to be paid off in tobacco when the crop is delivered. As contracted farmers, these workers receive none of the benefits and social security of being on a payroll.¹³

In terms of employment, tobacco is second only to the Government as a provider of employment for the population of *Malawi*. The Tobacco Control Commission estimates that there are over 39,000 tobacco tenant families and 56,000 workers in burley, NDDF (Northern Division Dark-Fired) and flue-cured tobacco estates in 2001. These estimates however exclude those estates not captured in the survey, the smallholders in clubs as well as outgrowers and intermediate buyers. By 1997, 4,197 licences had been issued to intermediate buyers. Over 200,000 smallholder households with a national average household of five people are involved in burley tobacco growing alone. In addition to tobacco farmers and farm workers, the tobacco industry creates employment for 13,200 graders, 6,500 processing workers, 1,200 workers in the storage business, 14,900 workers in the distribution business, 2,200 workers in other tobacco-related businesses.¹⁴ In 1989-90, it was estimated that a total of about 586,000 workers were living on tobacco estates, of which number 102,000 were registered as tenants. Employment on tobacco estates grew during the 1980s at a rate of 8 per cent per annum, compared with an expansion in the smallholder sector of 2.3 per cent.¹⁵ In rural areas, over 90 per cent of the working population are employed in agriculture.

Poverty alleviation strategies in Malawi have switched from emphasis on the smallholder sector to the commercial estate sector, and then back to the smallholder sector. The swing of the pendulum with regard to tobacco farm workers is a direct result of policy decisions applied to the tobacco sector over the past 40 years. During the 1961-68 period, in conformity with the international policy of the day, Malawi's agricultural policy placed emphasis on commercial tobacco agriculture, shifting away from the smallholder subsector, a decision motivated by the expectation that commercial estate tobacco would be in a better position to speed up the rate of economic growth and secure adequate public revenue, benefiting the nation as a whole through trickledown effects. In the labour market an income policy was instituted which froze wages and ensured a continued supply of cheap labour to the estate subsector. Malawi's agricultural production structure consisted therefore of two distinct sectors: the export-oriented large-scale plantation sector and the food security-oriented smallholder sector. The resultant sluggish growth and lack of labour absorption capacity in the smallholder subsector are in part due to policy biases with regard to land tenure, access to credit, and cash crop restriction, all concurring to tax the

¹² Curtis, 2001.

¹³ *ibid.*

¹⁴ Data from the Tobacco Exporters' Association of Malawi, 2001.

¹⁵ Bose and Livingstone, 1993.

smallholder to finance the estate sector.¹⁶ However, a new overall poverty alleviation strategy was set in place in 1994, liberalizing agricultural production and marketing, promoting smallholder agriculture, privatizing, deregulating and decentralizing the formal sector, the end in view being higher public savings, increasing government revenues, and rationalizing government expenditures.

With regard to the liberalization of burley tobacco, only few smallholders with relatively large holdings adopted the crop and reaped the benefits. From the point of view of mass poverty alleviation through redistributive growth, the World Bank recognizes that many of the early adopters of burley are middle-income smallholders who were former tenants or labourers on estates or former “illegal” outgrowers for estates. Many of them own over 1.5 hectares of land, have ample household labour and access to credit. The poorer households with 1 hectare or less have very small fields of burley tobacco, meaning less land for food crops; the adoption of burley growing crowds out maize and other food crops while the income obtained from tobacco grown on very small plots may not be sufficient to cover their food needs from the market.

Due to high turnover, estate owners mount recruitment expeditions on an annual basis. Estate owners go to labour supply districts like Dedza to recruit tenants and their families. Estate owners generally prefer tenants from afar in the belief that they will be more dedicated to their work and may not have the means to return with their families. There are accounts of estate owners going to places as far as Mulanje and Thyolo to recruit people. The recruiters only select people with families for purposes of ensuring stability of tenants on the estate but also, more importantly, to ensure that there is added labour in the form of unpaid family labour which is not employed by the estate owner.

In *Bulgaria*, before 1989, more than 300,000 people were employed in tobacco growing, or in practical terms 80,000 households. At the end of the 1990s these numbers dropped to 250,000 people or 65,000 households, which still account for 9 per cent of the total number of people employed in Bulgaria. In 2001, only 60,000 tobacco farmers were officially registered as deriving income solely from tobacco leaf growing, representing 2 per cent of total employment in Bulgaria.

If in 1989 the industry ranked third or fourth in volume of production and the numbers it employed in the agricultural sector, in 2001 the sector was virtually negligible in terms of its capacity to create new jobs, although it continues to have a certain regional importance. Tobacco-growing regions in Bulgaria are spread over 103 municipalities with more than 1,200 towns and villages (table 3.4).

¹⁶ Mwasikakata, publication forthcoming.

Table 3.4. Bulgaria: Area cultivated, production and number of tobacco growers (1994-2001)

Year	Areas under crop (decar*)	Quantities (metric tons)	No. of producers
1994	251 661	32 716	46 310
1995	144 638	18 803	36 611
1996	306 061	39 788	52 587
1997	471 530	61 299	88 310
1998	297 630	38 692	64 393
1999	265 192	34 475	47 801
2000	247 877	32 224	52 629
2001	297 692	38 700	55 878

* 1,000 m².

Source: Petkova and Yildirak, publication forthcoming.

The tobacco sector is vital not only to job creation and income for the population in more than one-third of the 28 administrative districts of Bulgaria (or 40 per cent of the municipalities), but also as an export commodity and for its share in government revenue in terms of tobacco and cigarette taxes. In the mountainous and hilly regions of the country with their shallow erosive soil, tobacco is suited to the land available since crops can be grown continuously on the same spot. In 1976, 142,600 metric tons of Oriental tobacco were produced and 25,000 metric tons of big-leafed brand. Mostly Oriental tobaccos are grown in southern Bulgaria, with 94 per cent concentrated in the regions of Blagoevgrad, Smolian, Kurdjali and Haskovo. More than 88 per cent of Bulgaria's tobacco is grown in those regions of central-southern and south-western Bulgaria, 67.5 per cent of this being Oriental. About 14 per cent is grown in the north-eastern parts of the country.

Tobacco had been Bulgaria's predominant crop until the early 1960s. Subsequently, workers in the regions found jobs in lead-zinc ore production, woodworking, stock-farming and mountain tourism. In the 1980s, textiles and dressmaking developed in units linked to bigger enterprises in central Bulgaria. In north-eastern Bulgaria (mainly in Razgrade, Targovishte and Shoumen regions), tobacco is only cultivated as a source of complementary income, unlike the southern regions where workers are totally dependent on it.

The crisis in tobacco growing also carried high social costs. According to analysts, the decline resulted from ethnic conflicts at the end of the 1980s. Traditionally, tobacco growing is the preserve of the Muslim community of Bulgaria, and the Zhivkov regime's harassment of the country's Turkish minority in the mid-1980s triggered an exodus of some 300,000 Muslim tobacco growers to Turkey. Although some have returned, the former levels of production have never again been reached.

In *Viet Nam*, the 1999 Tobacco Industry Report by the Ministry of Industry estimated that 150,000 people were working in tobacco cultivation or simple post-harvest processing. This is less than 0.5 per cent of the total agricultural labour force, or 136,000 full-time equivalent jobs. Approximately 400,000 households were involved in tobacco cultivation in 2001. Of those households, 25 per cent used less than 25 per cent of their agricultural land for tobacco production; no households used more than two-thirds of their land. Many

households therefore supplement their incomes with tobacco cultivation, but it is rarely the main source of income.¹⁷

3.5. Child labour in tobacco growing

In its overall effort to combat child labour practices, the ILO is currently implementing projects to eliminate child labour in tobacco plantations. In 1999, the International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Associations (IUF) signed a statement with the International Tobacco Growers' Association (ITGA) (see box 3.1). This statement, which was witnessed and fully supported by the ILO, recognized the need to contribute to the elimination of the use of child labour in the tobacco-growing sector in order to provide children with an upbringing that would give them the best chance to succeed in all aspects of life. Two basic principles were stated: that children have the right to schooling, a full family life and a safe and healthy upbringing; and that children under the minimum legal age or under the age recognized by the relevant ILO Convention should not be employed in the production of tobacco leaf.

Shortly after, a tobacco company, British American Tobacco, joined in what was to become the first-ever global initiative to fight against child labour in tobacco growing. In October 2000, a conference was held in Nairobi which brought together the three founding partners of this initiative as well as a high-level representative of the ILO. The foundations were laid for ongoing collaborative work to eliminate child labour and for widening the network of possible new partners. One year later, in October 2001, the Foundation for the Elimination of Child Labour in Tobacco Growing (ECLT Foundation) was established. Beside the three founding members, new partners from the corporate sector have joined: Gallaher Group; Imperial Tobacco; Japan Tobacco International; Philip Morris; and Scandinavian Tobacco. The three major international leaf processing companies (Dimon, Standard Commercial and Universal Leaf) have also become members of the ECLT Foundation, of which the ILO is the key adviser. Despite sometimes conflicting interests, these various sectors of the tobacco industry, representing agricultural waged workers, growers and the private sector, have joined in the same effort to fight for a common cause: to eliminate child labour.

The largest use of child labour worldwide is in the agricultural sector, and tobacco growing has its share. Rural children, in particular girls, tend to become economically active at an early age. These children are exposed not only to health risks associated with rural poverty but also to those associated with agricultural work. Overall, the effects for children are: denial of their human rights and well-being; deprivation of their right to health, safety, education and overall childhood; and denial of a decent future. To combat this situation, the ECLT Foundation supports and funds local and community-based initiatives.¹⁸

¹⁷ Van Kinh and Bales, 2001.

¹⁸ ILO, 2002.

Box 3.1. Joint statement by the ITGA-IUF

The ITGA and the IUF recognize the need to end the use of child labour in the tobacco-growing sector and to provide children with an upbringing that gives them the best chance to succeed in all aspects of life.

The ITGA and the IUF share the view that child labour results from a number of factors including the generally poor social and economic conditions faced by tenant farmers and labourers. These poor conditions are often compounded as a result of the deaths of family members arising from the prevalence of HIV/AIDS in rural communities in many developing countries where tobacco is grown.

The ITGA and the IUF are jointly committed to the achievement of best practice in relation to both agricultural production and internationally recognized employment standards and workers' rights.

The ITGA and the IUF agree that the needs of each country differ and local solutions should be found within a framework including the following principles:

- Children have a right to schooling, a full family life and a safe and healthy upbringing.
- Children under the minimum legal age or under the age recognized by the relevant ILO Convention should not be employed in the production of tobacco leaf.

Because many tobacco enterprises are family-run, it may be possible that children take part in routine chores as part of family life. However, this must not extend to potentially hazardous tasks using machinery and crop chemicals.

The ITGA and the IUF will work closely together to develop a research programme that covers child labour and the general social and economic standards of tenant farmers and labourers.

The ITGA and the IUF recognize that these issues may be difficult to resolve in the short term and will therefore require a long-term commitment from all parties concerned.

The ITGA and the IUF agree to establish a joint programme of research, information exchange and action in order that internationally recognized standards can be fostered in countries where tobacco and related crops are grown. Priority countries and a timetable for this programme will be developed and announced at a later date. This programme will include joint activity in relation to AIDS awareness and prevention programmes.

3.6. Tobacco manufacturing: A capital-intensive industry

The tobacco manufacturing industry proper today employs some 1.2 million workers, meaning workers who actually hold regular jobs with established companies. However, if the definition of industry is extended to non-factory workers and to the informal sector (or home industries as they are known in Indonesia), then some 4.5 million bidi workers (according to official figures) in India need to be added to that figure, not to mention those employed in distribution, advertising and ancillary industries. The leading kretek cigarette company in Indonesia alone employs 40,000 workers. The aggregate for workers in both processing and growing is some 40 million.¹⁹ However, due to a combination of slow demand growth, consolidation and higher productivity, this number is unlikely to increase significantly in the near future, although small increases may be expected in support industries like research and development and equipment supplies. Fewer and fewer workers are needed per unit of production. Strides in cigarette manufacturing technology continue apace, leading to drastic shrinking of the number of employees required to produce an ever greater volume.²⁰

At the turn of the century, workers hand-rolled cigarettes at the rate of four per minute. Productivity rose to 100 cigarettes per minute in the 1920s with automated

¹⁹ Calculated from ILO, UNIDO, OECD and FAO statistical databases, 1999-2000.

²⁰ van Liemt, 2002.

processes, to 8,000 per minute in 1990, and 16,000 per minute in 2000. Each new frontier meant fewer jobs. The industry is becoming less and less intensive in the use of labour.

Some of the best-paying jobs are to be found in the tobacco industry, particularly in the industrialized countries where companies have invested in high-technology plants (see tables 3.5 and 3.6).

Table 3.5. Hourly remuneration of tobacco industry workers compared with that of workers in socially similar occupations in other sectors (latest available year)

	Tobacco	Food/drink	Textiles	Wood	Paper	Chemicals	Rubber	Radio	Leather
Belgium	100	97	94	90	103	116	96	90	84
Brazil	100	49	52	29	77	123	67	126	35
Bulgaria	100	311	105	157	261	172	144	53	157
Canada	100	58	44	55	75	62	48	58	55
Czech Republic	100	128	86	143	143	138	105	–	113
Denmark	100	91	80	83	94	109	87	88	74
Egypt	100	112	69	69	75	152	762	111	56
Finland	100	93	76	81	106	101	85	100	61
France	100	74	65	66	85	92	76	75	64
Germany	100	81	74	84	91	101	85	91	68
Greece	100	83	87	95	84	88	88	79	83
Hungary	100	53	39	37	77	84	56	54	33
Ireland	100	79	74	–	93	106	84	71	67
Korea, Republic of	100	47	46	47	56	66	51	64	39
Mexico	100	81	59	80	89	130	74	102	65
Moldova	100	47	41	29	50	74	35	38	42
New Zealand	100	78	65	69	87	86	72	79	66
Poland	100	46	39	40	57	72	51	61	47
Portugal	100	64	55	56	111	179	98	101	60
Romania	100	43	34	32	44	63	50	56	32
Russian Federation	100	36	17	24	41	40	28	22	20
South Africa	100	42	61	27	76	134	63	42	33
Switzerland	100	75	68	68	80	101	77	–	55
Trinidad and Tobago	100	41	15	9	28	40	54	31	5
Turkey	100	78	77	63	82	88	79	72	78
United States	100	63	55	59	83	92	64	58	50
Zimbabwe	100	75	64	63	108	145	119	71	78

Source: ILO: LABORSTA, at <http://laborsta.ilo.org>, visited 30 Sep. 2002.

Table 3.6. Hourly remuneration of female workers in the tobacco industry compared with that of male workers (latest available year) (male workers = 100)

Country	Women
Belgium	86
Brazil	78
Bulgaria	83
Denmark	78
Egypt	75
Finland	115
Germany	78
Greece	90
Hungary	65
Ireland	54
Korea, Republic of	73
Mexico	59
New Zealand	68
Portugal	92
Switzerland	61
Turkey	98

Source: ILO: LABORSTA, at <http://laborsta.ilo.org>, visited 30 Sep. 2002.

3.7. Employment in manufacturing: The figures

Of the 1.2 million people employed in the world tobacco manufacturing industry, almost 70 per cent are employed in just three countries: China, India and Indonesia (table 3.7).²¹

National tobacco employment in China registered 484,431 workers in 2000, of whom 215,645 are to be found in rolled cigarette production. In Yunnan province alone, for 2000, a total of 65,116 workers were employed in the tobacco sector, including 23,875 seasonal contemporary workers, not counting retailers and salespersons. The workforce in all subsectors and peripheral services deriving income from the tobacco industry number some 40 million people make a living from tobacco, of whom 11 million live in Yunnan. Of these 40 million, the majority are tobacco farmers who do not rely on tobacco alone since they also grow other crops.²²

²¹ *ibid.*

²² He et al., publication forthcoming.

Table 3.7. Employment in the tobacco industry (1990s)

Albania	967	France	4 500	Nigeria	1 500
Algeria	–	Gabon	50	Norway	596
Argentina	2 700	Germany	12 000	Pakistan	40 000
Armenia	1 125	Ghana	1 121	Panama	180
Australia	1 600	Greece	2 800	Papua New Guinea	2 598
Austria	1 200	Grenada	17	Paraguay	–
Azerbaijan	1 497	Guatemala	500	Peru	400
Bangladesh	27 155	Haiti	–	Philippines	12 800
Belarus	–	Honduras	3 409	Poland	12 400
Belgium	3 000	Hungary	2 100	Portugal	1 200
Bolivia	205	India	415 000	Romania	5 200
Bosnia and Herzegovina	676	Indonesia	224 000	Russian Federation	12 900
Brazil	18 000	Iran, Islamic Rep. of	10 500	Senegal	–
Bulgaria	13 100	Ireland	1 000	Serbia and Montenegro	–
Burkina Faso	–	Israel	600	Sierra Leone	–
Burundi	181	Italy	14 100	Singapore	770
Cambodia	1 952	Jamaica	803	Slovak Republic	1 000
Cameroon	567	Japan	7 100	Slovenia	1 000
Canada	4 000	Jordan	1 000	South Africa	3 000
Cape Verde	40	Kazakhstan	–	Spain	9 300
Central African Republic	465	Kenya	916	Sri Lanka	3 500
Chad	–	Korea, Rep. of	4 300	Suriname	88
Chile	500	Kyrgyzstan	1 110	Sweden	800
China	280 000	Lao, Peoples Dem. Rep. of	–	Switzerland	–
Hong Kong, China	630	Latvia	358	Tajikistan	–
Colombia	1 100	Lebanon	–	Tanzania, United Rep. of	5 000
Congo	–	Lithuania	–	Thailand	31 708
Congo, Dem. Rep. of the	–	Macedonia, FYR of	6 000	Trinidad and Tobago	166
Costa Rica	600	Madagascar	–	Tunisia	2 669
Côte d'Ivoire	–	Malawi	6 000	Turkey	22 600
Croatia	2 680	Malaysia	5 200	Turkmenistan	–
Cuba	–	Mali	–	Uganda	–
Cyprus	280	Mauritius	189	Ukraine	3 000
Czech Republic	1 000	Mexico	4 700	United Kingdom	8 000
Denmark	1 400	Moldova	2 293	United States	31 000
Dominican Republic	–	Morocco	2 500	Uruguay	468
Ecuador	380	Mozambique	389	Uzbekistan	–
Egypt	18 300	Myanmar	2 000	Venezuela	2 861
El Salvador	250	Nepal	4 660	Viet Nam	–
Estonia	–	Netherlands	5 400	Yemen	961
Ethiopia	950	New Zealand	500	Zambia	961
Finland	700	Nicaragua	–	Zimbabwe	5 600

Source: van Liemt, 2002.

The large number employed in China comes as no surprise in view of the large number of cigarettes (one-third of the world's total) produced there, although the productivity gap with the United States is striking, at least until the end of 2001: China produced roughly three times as many cigarettes as the United States, but needed over nine times as many workers to produce them. In India and Indonesia, the scope for productivity improvements would appear to be even higher.²³

Table 3.8. Employment in the tobacco industry of selected OECD countries (1990-97)
(thousands of workers)

	Employment		Establishments		Annual cigarette production (1,000 million units)	
	1990	1997	1990	1997	1990	1997
Australia	2.9 ⁴	1.6 ⁸	–	–	32.7	30.7
Austria	1.4	1.2	15	13	15	20
Denmark	1.5 ⁵	1.4	17	12	11.4	12.3
France	5.2	4.5 ⁷	–	–	55.5	46.9
Germany	19.3 ¹	13	57	33	221.1	182
Hungary	3.4	2.1	13	8	28.2	27.1
Ireland	1.3 ¹	1.0 ⁷	6	6	7.9	7.9
Korea, Republic of	7.2	4.3	20	14	92	92.7
Netherlands	5.9 ³	5.4	15	11	81	116
New Zealand	0.6 ²	0.5 ⁸	4	7	6.3	6.3
Poland	11.0 ³	12.4 ⁷	–	–	86.6	95.2
Spain	10.6 ⁵	9.3	36	37	77.5	74.6
Sweden	1.1	0.8 ⁶	9	8	9.8	7.2
Turkey	32.1	22.6	50	37	60.5	112
United Kingdom	9 ⁵	8	43	25	126.5	170.2
United States	41	31.0	–	–	709.7	719

¹1991. ²1991-92. ³1992. ⁴1992-93. ⁵1993. ⁶1995. ⁷1996. ⁸1996-97.

Note: Only those countries were selected for which data for at least five consecutive years were available.

– = not available

Source: van Liemt, 2002

Table 3.8 provides employment data for selected OECD countries. These data show that, in the 1990s, employment in the tobacco industry declined in all cases (except for Poland which registered a small increase). In Australia, Germany, Hungary, the Republic of Korea and Turkey, employment declined by one-third or more in the seven-year period 1990-97. In most countries, the number of establishments in the industry also declined, in some cases quite substantially (Denmark, Germany, Hungary, the Republic of Korea, Turkey and the United Kingdom). The data given are for the tobacco industry as a whole (encompassing also in some cases other tobacco products than cigarettes, although the latter usually is its main component). Comparisons with cigarette production volumes are therefore not all that meaningful because they do not take account of changes in the volume of production in these other tobacco products. Nonetheless, it is noteworthy that in

²³ van Liemt, 2002.

many cases cigarette production decreased far less than employment in the tobacco industry. In some cases, employment declined when production increased, as in the Netherlands, Turkey, the United Kingdom and the United States. In the case of Poland, both employment and production increased.

This downward trend in employment barely changed after 1997. Demand in the OECD area has not grown, and consolidation of the industry even appears to be accelerating. More jobs have gone or are under threat. Consolidation is intended to enhance the competitiveness of the merged companies and usually involves plant closures and redundancies. Production (but also research and development) is being concentrated in fewer sites. Overlap in distribution can lead to considerable job cuts. In December 2000, Altadis, the company formed out of Seita of France and Tabacalera of Spain, announced the closure of eight of its 14 Spanish factories (and the construction of two new plants). Out of a total of 7,000 jobs, 2,000 would be lost. On the French side, Seita announced that 1,400 jobs, or one-third of its workforce, would be shed. In 1999, following its acquisition of Rothmans, British American Tobacco closed or announced the closure of factories in Australia, Malaysia, Nicaragua, Papua New Guinea, Singapore, South Africa Spain, Suriname, Switzerland and the United Kingdom. British American Tobacco plans to concentrate on fewer and bigger factories with greater manufacturing capacities. In December 1998, R.J.Reynolds, at the time the second biggest tobacco company in the United States, announced its decision to cut 3,900 more tobacco jobs worldwide, equivalent to 15.7 per cent of its cigarette workforce. The cuts announced included 1,000 jobs in the United States where fewer cigarettes were expected to be sold after the rise in cigarette prices.

Directly and indirectly, the combination of privatization and trade liberalization appears to accelerate this downward employment trend. In many countries, the tobacco companies are or were state-owned or state-controlled. Often they were monopolies with below average productivity due to high staffing levels, outdated equipment and/or idle capacity. When these companies are being privatized and prepared for operating in a more competitive environment, their employment levels tend to suffer.

Jobs in OECD area plants look particularly vulnerable because demand is stagnating or declining. Exports, which make up a significant share of production in certain countries, suffer when previous export markets expand their own production (the case of exports from the United States to the Russian Federation, for example). On the other hand, several of the OECD plants already produce at high levels of productivity.²⁴

In the United Kingdom, the tobacco industry has been steadily reducing its workforce over the past four decades, largely as a result of mechanization and rationalization. One study found that of the 19,400 jobs lost between 1963 and 1985, 16,000 (82 per cent) could be attributed to general factors such as productivity improvements. Of the 39,000 people employed in the industry in 1980, only 9,620 were registered in 1998.

In the United States, 420,000 people were employed in the “core” tobacco sectors: farming, auction warehousing, manufacturing, wholesale and retail trade. Nationwide employment data indicate that there have been fewer and fewer jobs in the sector since the 1980s. In manufacturing the number engaged in all areas of processing fell from 38,000 to 29,599 between 1964 and 1993, while the number of employees involved in production shows a proportionate decline from 31,600 to 22,200. No single factor led to the disappearance of those 10,000 jobs. Reduced domestic demand for tobacco products and increased competition for fewer domestic smokers led to market consolidation,

²⁴ *ibid.*

delocalization of companies and jobs to lower wage countries, and technological advances in production. The prevalence of smoking in the United States dropped from a high 45 per cent of adults in 1965 to 25.7 per cent in 1991. Public health researchers who applied economic models to determine how a decrease in domestic tobacco consumption might affect state and regional economies found that a doubling of the 2.5 per cent downward trend in tobacco consumption would result in the loss of 36,000 jobs in the core tobacco sector by the year 2000 in the south-east tobacco region alone in the United States.²⁵

²⁵ Barbeau and Levenstein, 1999.

4. Structure of the tobacco industry: Mergers, acquisitions, closures, privatization

The rate of mergers and acquisitions in the tobacco industry over the past five years leaves no doubt that the industry is a determined global player, bent on capturing new markets. Alongside such corporate consolidation, a parallel series of privatization launches characterizes the structural pattern of the tobacco industry today.

4.1. Mergers and acquisitions

In July 1997 Philip Morris and British American Tobacco (BAT) paid a combined US\$2.1 billion to purchase Mexico's two cigarette companies. With the opening of the economy to foreign investment, they have captured the world's 15th largest cigarette market where some 13 million smokers consume 60 billion cigarettes per year. The acquisitions are aimed at making Mexico an important cigarette exporter to other developing countries, particularly Asia. The two companies had been attracted by Mexico's low-cost labour, cheap supply of tobacco and special trade privileges with the United States. Mexico also abounds in inexpensive, high-quality tobacco leaf. Over the past few years Mexico has increased the amount of land devoted to tobacco cultivation by 20 per cent.¹

BAT paid US\$1.7 billion to purchase Mexico's biggest cigarette company, Cigarrera La Moderna (CLM), in one of the largest foreign investments ever made in Mexico. CLM controls 55 per cent of the market, exporting to Cambodia, Hong Kong (China), the Lao People's Democratic Republic, Myanmar and Panama and is negotiating further trade with China. BAT, which already controls 60 per cent of the Latin American market, plans to use its new acquisition in Mexico to boost exports to Asia, Latin America and the United States.

Mergers and takeovers have changed the face of the Swiss industry in recent years. First, Rothmans took over the local producer F.J. Burrus and merged it with its own affiliate in the country, which led to the closure of a factory. Then in 1999 BAT merged with Rothmans to be known as British American Tobacco Switzerland S.A. By January 2000 there were only three cigarette manufacturers in Switzerland: Philip Morris was the market leader in 1999 with a 47.14 per cent share. The cumulated share of BAT and Rothmans in 1999 was 43.52 per cent, giving the company a strong second place, while Japan Tobacco International (formerly R.J. Reynolds International) held 9.34 per cent. However, employment in the Swiss tobacco manufacturing industry still stood at 12,000 in 2000.²

Swedish Match acquired 64 per cent of General Cigar Holdings of the United States in 1999. In Europe the company declared its intention in 2000 to reduce its match production workforce by 135 people – 74 from Szeged in Hungary, 50 from Koslenek in Bulgaria, 11 from Valencia in Spain, and an undisclosed number from Tidaholm in

¹ R. Hammond: "Country case studies" in *Addicted to Profit: Big Tobacco's Expanding Global Reach*, at <http://www.essentialaction.org/addicted/country.html>, visited 30 Sep. 2002.

² *Tobacco Journal International* (Mainz, Rhein Main Publishing Group), No. 3/2000.

Sweden, as a result of withdrawal of unprofitable products from the market. In 1999 already the company had made significant reductions in Belgium, Brazil and India.

4.2. Towards an oligopoly

A shrinking domestic market, a maturation of the industry and acquisitions of smaller companies combined to produce a quasi oligopoly where only three companies controlled almost two-thirds of world cigarette production – CNTC with 30 per cent, Philip Morris with 17 per cent and BAT with 16 per cent. However, tobacco companies based in the United States, in particular Philip Morris, R.J. Reynolds and Brown & Williamson, a BAT subsidiary, did not take advantage of the opportunities of a fast expanding global market to place a brake on the rate of job cuts; instead, they pursued their economic interests by expanding their manufacturing capacity in lower wage countries.

For example, by 1999 R.J. Reynolds International, which has since been acquired by Japan Tobacco, had only two manufacturing facilities left in the United States, but had set up factories in 20 other countries where it was manufacturing its own products under licensing agreements.

4.3. Eliminate overlapping operations

The German-owned Reemstma was acquired by Imperial Tobacco (IT) in 2002. However, Reemstma had been put up for sale when its owners decided “to quit the tobacco business”.³ IT, which had made seven acquisitions since 1996, saw its international sales ranking in top position in the United Kingdom for the first time in 2000. IT’s acquisition of Reemstma will afford the company a larger presence in the lucrative markets of Eastern Europe and Asia, and allows IT new status as the fourth largest tobacco company in Europe in terms of sales, up from seventh. In order to finance the deal, IT intended to “eliminate overlapping operations at the combined companies”,⁴ although no direct reference was made to the implications for employees. Its international division’s sales rose by 16 per cent in western Europe, boosted by operations in Greece, Portugal and Spain. The sale of Reemstma capped a round of consolidation in the global tobacco industry in 2002 with Imperial Tobacco also acquiring Tobaccor of Africa, and Gallaher purchasing Austria Tabak.

4.4. Voluntary retirement programmes, redeployment, indemnities and relocation

Altadis, which was the result of a merger between Spain’s Tabacalera and the French tobacco group Seita SA on 5 October 1999, ranks fifth behind Philip Morris, BAT, JT and Gallaher. Spain is the main market for Cuban cigars abroad and received one-third of Habanos’ production in 1999. Altadis purchased a 50 per cent stake in Corporación Habanos for US\$500 million in 2000. With that move Altadis now has control over famous brands such as Monte Cristo, Cohiba, Romeo y Julieta and H. Upmann, all of which belong to the top premium cigar segment.

³ *Financial Times* (London), 11 Jan. 2002.

⁴ Imperial Tobacco, *Annual Report and Accounts, 2000*.

Altadis signed an agreement with trade unions for the company's restructuring plan in Spain, covering social facets of the plan and fulfilling their objective of offering a solution to all employees. Under the restructuring plan Altadis planned to close factories in Alicante, la Coruña, Gijón, Madrid, Málaga, San Sebastián, Santander and Valencia, and open two new production plants in Alicante and Cantabria. Under the agreement all employees below the age of 55, as of December 2002, in the factories to be closed were to be offered another job within the company, given a relocation bonus, and assisted in searching for new homes and schools. Employees below 55 with a minimum seniority of eight years had the option to leave the company with an indemnity payment. Those above 55 were to retire with a pension of between 71 and 79 per cent of gross salary.⁵

In France, in February 1999, Altadis announced a restructuring plan that would affect various areas of Altadis, leading to a total loss of 169 jobs. The company planned to cut 57 jobs in administration by the end of 2001, 53 in research and development by the end of 2000, and 18 due to plant closures in Montauban and Langon at the end of 2000 and 2001 respectively. Additional job cuts were to result from the change in company headquarters and restructuring of its commercial activities. At the time of these announcements Altadis was planning to introduce voluntary retirement programmes. In 2002 Seita/Altadis was also keeping a close eye on the privatization of tobacco companies in Italy, Morocco and Turkey.

4.5. Rationalization of the supply chain

Faced with a continuous decline in market share of its own brands, Italy's state tobacco monopoly, Amministrazione Autonoma dei Monopoli dello Stato (AAMS), a vertically integrated tobacco corporation which produces its own supplies (filters, papers and blends), set up a new holding company in December 1998, Ente Tabacchi Italiani (ETI). This development was perceived as a precursor to privatization, signs of which were in the air since the early 1990s. Promptly, AAMS set out to improve its performance by closure of plants in Rome, Turin and Venice, reducing them from 21 to 17. In the process AAMS introduced a strategic restructuring plan, the first task of which was to "tidy up" ETI through significant reorganization. Above all, the restructuring plan demanded rationalization of the supply chain via the drastic reduction of production sites from 16 to four by 2003, and the layoff of 3,300 employees to a planned level of 1,700 by the end of 2003. Factory closures were earmarked for 2000 in Cagliari, Catania, Florence and Palermo; for 2001 in Bari, Modena, Naples, Lungro and Verona; and for 2002 in Cava dei Tirreni, Rovereto, and Scafati.

4.6. Product diversification and pursuit of efficiency

Japan Tobacco (JT) acquired R.J. Reynolds International in 1999. As part of its privatization efforts in 2002, Japan's Ministry of Finance was divesting 16.7 per cent of its 66.7 per cent stake in JT, down to 50 per cent. In the first quarter of 2002 JT had a 74 per cent share of the domestic market and was seeing a gradual decline in domestic sales, forcing the company to look overseas in tobacco and to branch out into food and pharmaceuticals.⁶ The company was cutting jobs and streamlining domestic operations by closing factories and selling idle properties. At the same time, the Japanese Government

⁵ *Tobacco Reporter* (Raleigh), Jan. 2001.

⁶ *Financial Times*, 23 Apr. 2002.

was considering measures to increase tobacco taxes as part of an anti-smoking drive and at the same time generate much-needed revenue during the current period of recession.

In February 2000 the company unveiled a five-year business plan under which it aimed to cut costs by shedding a total of 4,500 jobs, or some 18 per cent of its global tobacco-related workforce of 25,000.⁷ JT also announced in early 2001 that it planned to launch full privatization, which it considered was the only way to cope with ever-increasing competition in the global tobacco business. Japanese law requires the government to retain a two-thirds holding. The company set up a task force to urge changes in the law to free it from government control and allow it to increase its independence and forge capital alliances with other firms.

At the beginning of 2002, JT tried to reassure its investors by declaring its intention to “pursue further efficiency to ensure continuing success in the long term”, an objective soon translated as a “major restructuring operation”. The company began an early retirement programme in its Japanese offices, proposing early retirement packages to office workers aged 40 to 59 years with more than 15 years service. The company also proposed additional allowances to those who accepted. Of the 9,200 workers who accepted the offer, 913 applied for early retirement and were expected to leave by the end of March 2002. JT said that the operation would cost the company about 29 billion yen in a one-time extraordinary loss. However, it expected to save approximately 10 billion yen per year because of the measure.⁸

4.7. Preferential support for China’s 36 key manufacturers

Of particular interest among national experiences is that of China where, in the course of bringing its tobacco manufacturing industry to maturation under the state monopoly, it strategically diversified its economy through mergers and closures in such a way that no worker was left unemployed, at least until January 2002.

The State Tobacco Monopoly Administration (STMA) planned at the beginning of 2002 to merge its 170 cigarette factories into 60 or 70 conglomerates. According to the STMA, there were at the time 92 units in China whose annual production quota was below 5 billion pieces. Those factories have either been closed or were to be closed. By the end of 2001, over 20 factories had either been merged, taken over or closed. Meanwhile, STMA/CNTC appointed 36 cigarette factories as China’s key manufacturers who would receive preferential support from the Government as regards production quotas and technical innovation. In 2001 Shandong-based Huaying Tobacco International Co. started manufacturing its own brand, Junzizhou. In the same year Hubei-based Sanxia Tobacco Co. Ltd. started the trial manufacturing of Schimmelpenninck cigars, a contracted brand of BAT’s subsidiary in the Netherlands.

In order to boost its exports China has restructured its exporting systems and established the China National Tobacco Import and Export Corporation (CNTIEC), which has 18 subsidiary companies in the country. In conformity with China’s monopoly law, all imports and exports of tobacco and tobacco-related products must be carried out by the CNTIEC and its subsidiaries. In addition, the CNTIEC now has six overseas companies or

⁷ *Tobacco Reporter*, Feb. 2001.

⁸ *Tobacco Reporter*, Mar. 2000.

representatives in Germany, Japan, the Netherlands, the Russian Federation and Zimbabwe, as well as Hong Kong.

Today, China still faces serious challenges of substantial overcapacity in its tobacco industry, too many brands with relatively small volumes, obsolete technology and, like so many other tobacco producers, the perennial scourge of counterfeit cigarettes. The CNTC, with 30 per cent of world cigarette market share, is almost equal in size to Philip Morris and BAT combined, producing annually 1.64 trillion cigarettes or one-third of world production and benefiting from its 300 million domestic market.⁹

Currently, China's tobacco sector is over-decentralized and subject to regional trade blockades. Within the next three to five years it is expected that foreign tobacco companies will first of all establish equity or contractual joint ventures with Chinese cigarette manufacturers. Tobacco analysts forecast that China's tobacco industry will effectively reform its structure so that its market concentration increases, targeting a more open and coordinated market operation model. The main drive for reform of China's tobacco industry is in response to sheer domestic necessity.

4.8. The strategy of partnerships

The Thai tobacco monopoly is resisting foreign competition. Overseas cigarette brands hold about 15 per cent of the 50 billion baht (US\$1.2 billion) cigarette market, growing rapidly during the 1990s from 0.2 per cent in 1991 to around 4 per cent in 1996 and 8 per cent in 1997.

Foreign cigarette brands in Thailand hold about 13 per cent of the domestic market. The Ministry of Finance has been trying to coerce foreign cigarette producers to pay local administration taxes of half a satang¹⁰ per pack. Most foreign cigarettes are sold in Bangkok which is exempt from taxes. The Deputy Finance Minister announced in 2000 that if foreign cigarettes began to show expanded growth, the Government would take new steps to protect the Thailand Tobacco Monopoly (TTM) against foreign competition. In its efforts to expand, JT announced in January 2001 that it was considering granting production contracts to TTM. Since the TTM's 87 per cent share of the US\$928 million Thai market is declining, it is likely that the Thai monopoly sees partnership with an overseas manufacturer as a way to boost revenues and technical expertise. As it waited for China to accede to WTO membership, JT also made an inroad into the Chinese market by signing an agreement with the Shanghai Gaoyang International Tobacco Company for production of two of JT's brands under license.

4.9. Delocalization to low-wage countries

In conformity with the eastward and southward drift of the leading tobacco multinational companies, in India, too, bidi tobacco workers, most of whom are women, have been facing a crisis in certain states owing to delocalization policies on the part of bidi manufacturers, which reportedly either move to other states in India or to Bangladesh or Nepal where lower wages can be paid. Employers either switch from a factory-based system of manufacturing to organization of work based on the intermediation of

⁹ *Tobacco Reporter*, Mar. 2001.

¹⁰ 100 satang = 1 baht = 2.3 US cents.

contractors, or relocate to those states where workers are less organized or are not in a position to press for better working conditions or higher wages (see Chapter 6).¹¹

In 1999 BAT announced the closure of its Costa Rica cigarette factory and the transfer of its operations to Honduras. The company explained that its decision to move concurred with optimum use of resources and the optimized business opportunities offered by the integration of the Central American economies. The transfer was expected to lead to the loss of 84 jobs at the affiliate, which was known as the Republic Tobacco Company.

Cifuentes y Cia, Jamaica's leading cigar factory and the maker of the well-known Macanudo brand, has been swept up in the globalization process: the company had been an affiliate of General Cigars since 1969, this latter recently acquired by Swedish Match, reflecting the ongoing concentration of the cigar industry. As a result of the acquisition, the company's workforce suffered a drastic cut from 1,200 to 250 employees between 1998 and 2000. These cuts came in the wake of General Cigars' decision in mid-1998 to move the manufacture of its machine-bunched, hand-rolled Macanudo Portofinos and Caviars from Jamaica to the Dominican Republic where labour costs are lower.¹²

4.10. Tobacco monopolies: Moves towards privatization

Former tobacco monopoly markets which have opened up in the last 15 years include Japan, Republic of Korea, Thailand and most countries in Central and Eastern Europe. In late 2000, despite an accelerated rate of privatization driven essentially by the opening up of the former COMECON, there still remained a number of monopolies. In Central and Eastern European countries, such as Bulgaria, Romania and members of the Commonwealth of Independent States (CIS), the tobacco industry was immediately identified as a key industry which would determine the eventual shape of the economies of the post-Soviet transition countries. Bulgaria and Romania launched the privatization of their tobacco monopolies in 2002, but in Asia, China and Viet Nam have maintained monopolies. As for the Middle East, Islamic Republic of Iran, Iraq and Lebanon still have their monopolies in place.

By the end of 2000, the most advanced privatization process in Africa was that of Egypt's Eastern Tobacco Company (ETC), though the public sector continued to maintain a monopoly on cigarette production. Egypt's tobacco industry is dominated by ETC, a joint-stock company established in 1920 and nationalized in 1956. The largest cigarette manufacturer in the Middle East, ETC has a monopoly on domestic production, controlling about 92 per cent of the Egyptian market. The company operates seven factories, selling 45 billion cigarettes domestically, and exporting 1 billion in 1996. Domestic cigarette brands comprise over 90 per cent of ETC's production, with its Cleopatra brand accounting for an estimated 80 per cent of total production.

There are 29 tobacco companies in Egypt. Although the state-run ETC has long dominated the market, it is beginning to lose ground to Philip Morris. During the mid-1990s, the Government began privatizing ETC, but Egyptian law currently prohibits majority ownership of certain firms by the private sector. The private sector also produces small amounts of moulassed and fine-cut tobaccos, and factories produce both local and foreign brands.

¹¹ ILO, 2001.

¹² *Tobacco Reporter*, Feb. 2000.

In Africa, five countries had not yet opened up to international investors by April 2002: Algeria, Egypt, Libyan Arab Jamahiriya, Mali and Tunisia. About 25,000 workers are employed in tobacco manufacturing in these countries, together with Morocco. In 2000, all of these monopolies were considering privatization within a time frame of two to five years. Morocco's entire tobacco sector is expected to be liberalized by 2004. In the meantime, the Ugandan Government sold its 10 per cent stake in British American Tobacco Uganda in 2000.

Although most of the former planned economies, such as the Czech Republic, Hungary and Poland, had already privatized their monopolies by the mid-1990s, countries like Bulgaria, the Republic of Moldova and Romania lagged behind, sharing common problems of low purchasing power, a high smuggling rate and a market dominated by cheaper cigarettes.

In Romania, before launching the privatization process, and faced with huge idle production capacity and a steadily increasing domestic market, the Government took drastic steps in restructuring the activity of its former tobacco monopoly (now called the National Company Romanian Tobacco or SNTR). Its first step in 1996 was to cut the workforce by 30-33 per cent, while productivity increased considerably and waste was reduced. In 2000 the company employed a workforce of 3,500.

In Bulgaria, too, the process of privatization of cigarette production is proceeding and will deeply affect the organization of tobacco leaf production and trade. At the beginning of 2002 Bulgaria's deputy prime minister declared that the Government planned to retain a golden share to ensure that they had a say in the future of the company. In 2001 Bulgartabak paid €153.39 million in excise duty and a further €1.81 million in VAT to the Treasury. Its tobacco manufacturing workforce was composed of 8,700 employees in 2001, including 7,000 blue-collar workers. By June 2001 Bulgartabak had nine cigarette plants, 12 processing plants and 21 tobacco manipulation centres. The company also owned a majority stake in eight joint ventures scattered all over the region: five in the Russian Federation, one in Ukraine, one in Romania, and another in Serbia, with a total production capacity close to 20 billion units per year. The Bulgarian Government reportedly has been planning to turn Bulgartabak into a multinational enterprise based in Bulgaria.

After the collapse of the Soviet bloc, the Republic of Moldova lost its Soviet market which until then had absorbed the country's full tobacco production, leading to a crisis in 1995-96. The Government, which still owns between 95 and 98 per cent of shares of all tobacco factories, has launched a tobacco industry development programme whose aim is to attract foreign investment.¹³

The first cash privatization in the history of Kazakhstan was the acquisition by Philip Morris of Almaty Tobacco Company (ATC) in 1993. The factory is now the largest cigarette manufacturing unit in Kazakhstan. Since then other multinationals have invested heavily in the domestic tobacco industry: R.J. Reynolds International (now JTI) turned the former chocolate factory Chimkent into a modern tobacco facility. Reemstma (now Imperial Tobacco) and Gallaher have also set up factories in the vicinity of ATC. Already in 1981 Almaty State Tobacco Combinat provided jobs for about 1,900 people, but today the Philip Morris-owned ATC is firmly established in Kazakhstan with a workforce of some 1,800 employees.

¹³ IUF, see <http://www.iuf.org.uk/en>, visited 30 Sep. 2002.

Finimpex Co. in Kazakhstan set up a processing facility in August 2000 and started processing 3,500 metric tons of tobacco per year. Owing to its success, the company was able to hire an additional 100 employees in 2001, no small contribution in the Chilik area of Kazakhstan where unemployment stood at about 10 per cent. The company also allocated more than US\$220,000 to the region in taxes and charity. Finimpex is involved in the full chain of tobacco production. The company continued to expand throughout the first months of 2002.

4.11. Political sensitivities linked to privatization

Sensitivities with regard to the liberalization of Turkey's tobacco industry do not stem only from the implications for the many thousands of workers dependent on the sector, but from political implications as well: farmers live in a number of sensitive constituencies. Politicians insisted that safeguards for tobacco workers be built into the new law governing the divestiture process, including useful grants and retraining programmes for all the small farmers who would soon be out of work. Not convinced of the adequacy of those safeguard measures, the President tried to veto the law, but Parliament overrode his veto in their concern to secure support from the IMF which had imposed the condition of TEKEL's privatization.¹⁴

In 2000 Turkey's state minister responsible for monopolies announced that the Government planned to extend the privatization process of TEKEL over four years, owing to the economic sensitivities of tobacco and the large number of people who make a living from the crop. Seven to 8 million Turks have close interests in tobacco, not to mention the 600,000 growers. The core manufacturing workforce is composed of 22,600 employees.

In late 2001 Turkey passed a new tobacco law intended to liberalize the tobacco sector. The leading manufacturing companies are the fully state-owned TEKEL, Philsa and R.J. Reynolds. There are nine active cigarette factories in Turkey, seven run by TEKEL (Adana, Bitlis, Istanbul, Izmir, Malatya, Samsun and Tokat) and the remaining two by the private sector (both in Torbali).

4.12. Restructuring of monopolies for better control

The Ministry of Industry in Viet Nam has been planning to consolidate tobacco companies into two or three national corporations to gain better control over the industry in order to guarantee better quality and reduce tax evasion. The policy to set up a state monopoly for cigarette production was included in Viet Nam's overall public policy. There is a likelihood that such restructuring may lead to the closure of some factories owing to poor quality output and running losses. It was expected that several of the enterprises which merely produced cigarettes among other products would be asked to transfer to other product lines and stop cigarette manufacturing. By 2000, the DaNang cigarette factory had virtually stopped producing cigarettes and was concentrating on expanding the growing area and processing raw materials. The restructuring of the industry was expected to have some impact on local labour markets, especially since most of the factories to be closed were in areas where labour markets were weak and absorption of the workers into the local economy would be difficult – even though the share of all workers in the industry to be affected was low.

¹⁴ *Tobacco Reporter*, Mar. 2002.

The Vietnamese Ben Thanh Cigarette Company announced in 2000 that it planned to build a 56.7 billion Vietnamese dong (about US\$3.8 million) cigarette plant at Tan Tao Industrial Park in Ho Chi Minh City. The company planned to install tobacco semi-processing equipment to avoid depending on another company for this production phase which was polluting; and in order to avoid such pollution in the urban area the company planned to relocate its two affiliated enterprises Cholon and Khanh Hoi to Tan Tao.¹⁵

4.13. Employment consequences of privatization

Many observers fear that privatization will have a negative impact on labour as governments prepare to divest and investors strive to raise productivity. Although opinion is divided on the question, some research sources indicate that while labour force reductions do often accompany the privatization and exposure to competition of large and inefficient firms, many enterprises have been sold with their labour force intact. Privatization has also led to the creation of new jobs as a result of new investments and dynamic expansion. However, little data are available on what happens to workers retrenched during privatization. For the purposes of the tobacco industry, research shows that while privatization may have a minimal effect on employment in countries which carry out labour reforms well before privatization, large employment reductions have often accompanied the privatization of state enterprises that were, in the past, heavily subsidized and protected from competition.¹⁶

4.14. Conclusion

In the restructuring measures which have come in the wake of the mergers and acquisitions outlined above, job layoffs have in some cases been anticipated and dealt with through pre-retirement packages, relocation and compensation packages, depending on the nature of the labour contracts in place. In the industrialized countries, however, much bitter resentment has been kindled among workers who take issue with their well-paid jobs being transferred to low-wage countries.

¹⁵ Van Kinh and Bales, 2001.

¹⁶ Kikeri, 1998.

5. Factors driving changes in employment

This chapter will review the impact of productivity and technological change in both manufacturing and growing, policy contradictions and formulation of social policy, tobacco product regulation, and the search for the “safe” cigarette.

5.1. Polarizing trends and shrinking markets

The tobacco map of the world today is a motley scenario with its contradictions, polarizing trends, shrinking markets, expanding markets, and company telescopes permanently riveted on the slightest move towards divestiture of the tobacco monopolies in the tobacco-producing countries of the developing world. While the workforce has been shrinking slowly but unmistakably in the industrialized countries since the 1980s, there has been revival and restructuring of the industry in the transition countries, a process still ongoing, while some post-crisis and reconstruction economies have welcomed nascent tobacco industries in the hope of boosting their state budget, creating employment and securing foreign exchange.

5.2. Increased productivity, new technology and changing markets

The cigarette industry has experienced spectacular productivity increases in the past century. The production capacity of the most modern cigarette machines increased from 250 cigarettes per minute (cpm) to 16,000 cpm in less than a century. But such high-speed machines alone cannot ensure high productivity increases. Or, to cite Mr. Ulrich Herter, BAT’s managing director: “... high speed is not an end in itself. It is important to get the right logistics around the machine ...”. The layout of the plant needs to be adjusted to ensure that such high volumes are actually achieved. Production is being concentrated in fewer plants. Reemstma’s Berlin plant produced annually 3.65 billion cigarettes when it was inaugurated in 1959. Today, it produces ten times that volume, with a little over three times the number of employees. Philip Morris’s modern facility at Bergen op Zoom in the Netherlands produces 90 billion cigarettes annually with just 1,900 people. If such high levels of productivity were to become the norm, there would appear to be considerable further scope for downward adjustment of employment in the world tobacco processing industry.¹

Certain factors necessarily apply more to some countries than to others. In the United Kingdom, for instance, where tobacco manufacturing is prevalent in eight of the 12 major planning regions, all regions recorded employment losses between 1996 and 1998 apart from the south-east where employment increased from 2,700 to 3,200 between 1996 and 1998. In that same interval all of the other seven regions recorded employment losses amounting to 30,000 jobs, or a 76 per cent decline on the 1980 level. Over the same period, total manufacturing fell by 35 per cent, indicating that employment losses in tobacco production were particularly dramatic. At the same time, 3 per cent more cigarettes were being produced in 1998 than in 1980 with 75 per cent less labour.

In developing and transition countries, where tobacco consumption has been rising by leaps and bounds, employment has either been declining or stagnating: in Eastern Europe

¹ van Liemt, 2002.

the large multinational companies have embarked on a programme of rationalization after taking over the former state-owned companies.

Industry reports suggest that in Viet Nam the smaller factories producing lower quality cigarettes are more labour-intensive than the larger factories, especially in the packaging phase of production. Rough estimates from these reports show output per worker on average to be about 214,000 packs. This varies considerably from the Saigon cigarette factory producing generally higher quality cigarettes with a productivity rate of 477,000 packs per worker, and from Nghe An with generally low-quality products and 32,000 packs per worker annually. In 1999, 17 of the 28 factories employed 200 or fewer workers. Only three factories had more than 1,000 workers, who all belonged to Vinataba.

In Egypt the Eastern Tobacco Company's chief strategy for promoting labour productivity is skills development, perceived as a response to the challenges posed by the increasing competition of the new world order. The company places emphasis on both administrative and technical training.

The Eastern Tobacco Company (ETC) totalled expenditure of 32.028 million Egyptian pounds (LE) on employee welfare services in 1998-99, compared with LE28.359 million in 1997-98, a 13 per cent increase. Such services were composed of labour meals, labour medical costs and labour social activities. ETC also issues a seasonal magazine which reflects labour views and vehicles information on future company strategies with regard to production, marketing, social services, productive expansions of the factories and export policy. The magazine stimulates labour participation in the company's development by keeping workers aware of all related local or international concerns.²

The private cigarette producers in Ukraine and Turkey made substantial investments in additional production capacity: Philip Morris invested US\$50 million and Reemstra US\$76 million in Ukraine. Philip Morris increased its production from 2 billion packs to 14 billion packs between 1993 and 2000 and Reemstra increased its production from 10 billion packs to 22 billion during the same period. Philip Morris invested US\$230 million in Turkey and increased its production from 12 to 30 billion pieces between 1993 and 2000. Most of the increase in cigarette production in Turkey since 1993 is due to private production, although TEKEL also increased output substantially in the 1990s.

Artificial fermenting of leaf tobacco, known as the "soft drying" method, saves time, storage and labour costs. This harsh method was resisted in Turkey for many decades owing to the delicate leaves of oriental tobacco, but has now been introduced just at the time when TEKEL is to be privatized.

In the light of Japan Tobacco's plans in 2000 to introduce more high-speed cigarette machines into its Japanese operations to increase productivity, factory closures seem inevitable. Since cost reduction was also a component of JT's restructuring, it set out to increase the efficiency of asset utilization by applying a new enterprise resource planning and enhanced management control. It remains to be seen what implications these management approaches carry for the company's employees.

In Brazil, all companies have been updating their plants; improved processing contributed to reduced component prices but jobs have been lost in the process.

According to information gathered in interviews with the major cigarette manufacturers, all companies have been pursuing modernization of processing technology.

² Nassar, 2001.

New machinery has been introduced in the last ten years. Improved processing to raise cigarette quality and to reduce waste contributed to reduce component prices. Tar and nicotine levels have been reduced through filterization, with less potential damage of smoking to health. Those advances in the technology of processing and cigarette quality followed the world trend of the industry, which strives to remain competitive and meet consumer preferences.

However, the small manufacturing companies have not kept pace with modernization of the leading industries. Besides the old-fashioned machinery, quality control of tobacco used is rather poor. Those small companies have resorted to price competitiveness to meet demand for relatively inexpensive cigarettes. As a consequence, due to the severe predatory competition of smuggled cigarettes, small companies have not been able to generate savings to invest in modern technology.

The increasing consolidation of cigarette companies at the end of the 1990s has meant considerable savings on their supplies (paper, filter and adhesives), with the result that the increasing globalization of the industry and a trend towards centralized, global purchasing have led suppliers to expand abroad. For instance, Filtrona, the leading independent filter manufacturer, opened a series of affiliates in India, Jordan and Venezuela, while typically local players expanded outside their borders in China and Malaysia.

In 2000 Imperial Tobacco Group, the UK-based company, acquired the German EFKA group (Efke Werke Fritz Kiehn GmbH) which manufactures and sells cigarette tubes and papers. EFKA has manufacturing facilities in Canada and Germany and holds about 9 per cent of world share in branded papers and cigarette tubes. The German company also manufactures and sells filling and rolling devices and filters.

Industrial tobacco suppliers, because of the high technological demands of the business, have become a highly specialized partner in the industry. Reduced demand for their products has generated mixed reactions and several cigarette paper machines, together with ancillary equipment, were expected to become idle during the first half of 2000. Depending on the ultimate reduction in sales, it was anticipated that the tobacco division's workforce would be reduced by as many as 300 people.

In countries of Eastern and Central Europe companies have also invested in new machinery which has made thousands of tobacco workers redundant. For example, a Reemstma factory near Poznan employs only about half the previous 2,200 workforce, and Philip Morris also reduced the workforce at its factory near Krakow.

Privatization is often accompanied by investments in updated and more efficient new technology. In Ukraine second-hand equipment was brought in by private cigarette enterprises which was better than the existing equipment. Private companies in Turkey invested in updated efficient technology and increased production capacity in one of the companies from 12 billion sticks a year in 1993 to more than 30 billion sticks in 2000.

In Kenya, technology is a major driving force in the tobacco industry, which is vertically integrated and somewhat ambivalent in the area of employment creation. It is labour-intensive in its agricultural operation but highly capital-intensive in its manufacturing stage. Employment in tobacco farming stood at six persons per hectare, but some 5.4 million Kenya shillings (about US\$68,700) worth of capital (property, plant, equipment) is invested per employee.

Primary Manufacturing Data (PMD) are now monitored by sophisticated control systems which replace the experts who could tell tobacco quality by feel. Similarly, in terms of fill value, Dry Ice Expanded Tobacco (DIET) is an invaluable aid in the composition of cigarettes designed to meet the lower tar and nicotine levels required by

recent legislation. Such research goes a long way in complying with tobacco control legislation and therefore safeguarding employment levels in the industry.

5.3. National industry strategies: The Chinese case

In China the demand for cigarettes has stabilized at a little more than 30 million boxes, so not much change is expected for the next ten to 20 years. As to the distribution of this volume between domestically produced and imported foreign cigarettes, and the market shares of each company, these are issues that would be determined by management strategies, product quality and the available marketing tools. In China, where tobacco is closely linked to local revenue, notwithstanding WTO rules, the Government at every level is not likely to give up the protection measures which apply to the sector. The main question for the time being is how workers in the tobacco industry, for their part, will respond to an employment crisis in a sector which is shrinking, and whether they are equipped to negotiate their conditions.

As indicated earlier, the overall tobacco sector employs some 40 million people, 11 million of whom live in Yunnan province. While tobacco does not require fertile soils and therefore is particularly well suited to the mountainous regions of China, the search for alternative crops has not yet yielded satisfactory results.³

As for the future of China's 500,000 full-time tobacco industry workers, China had developed a forward-looking strategy at the beginning of the early 1990s when the industry was at its peak, bringing together experts and scholars to lead research on the prospects of the tobacco industry. All reached the consensus that the tobacco industry was unique, the perfect formula to secure immediate capital accumulation, but that it would be an error to rely on it as an everlasting source of economic development. The research group advised that the industry was fated to shrink sooner or later. The only reasonable steps to be taken would be short and medium term. They recommended: (a) developing low-tar cigarettes, applying technology to reduce the hazardous materials in cigarettes to the minimum level until zero, and producing harmless cigarettes; and (b) taking advantage of the capital accumulated by the tobacco sector to invest in peripheral tobacco industries as well as in new, non-tobacco industries.

During the 1990s, this strategy was implemented with good results: the content of tar in Chinese cigarettes diminished from its former 20 mg to less than 15 mg per cigarette; blend cigarettes with low tar will be developed in the future; and investment in new industries as distinct from tobacco has made some headway. Integrated economic entities with diversified industries, as represented by Yunnan Hongta Group, have developed a strong base. Each invested in new sectors and developed tertiary industries, with good performance.

As a reflection of China's tobacco industry strategy, the revenue from the tobacco sector in Yunnan province increases year by year in volume, but its percentage declines year by year. In 2000 the tobacco industry contributed less than 60 per cent of provincial revenues. With the rise of newly emerged industries, the weight of tobacco in the economy and revenues of the province will further decline.

³ He et al., publication forthcoming.

5.4. Tobacco control policies

Since the 1970s numerous scientific studies have highlighted the need to control tobacco consumption. As a result, the WHO set up a programme entitled Tobacco Free Initiative and spearheaded an awareness-raising campaign to ensure that policy-makers all over the world acknowledged the need for such control. Many countries, with Canada, European Union and the United States in the forefront among the industrialized countries, the Czech Republic in Central Europe, and Brazil and Thailand among the developing countries, to cite only a few, have introduced tobacco control policy measures either designed to raise public awareness and educate the public on the dangers of tobacco consumption or to increase taxes on tobacco products.

The tobacco industry has warned that jobs will be lost as a result of anti-smoking legislation and bans on advertising, with the result that consumers will switch to cheaper brands or buy smuggled cigarettes once premium-priced cigarettes are no longer advertised. They claim that these developments will result in job losses.⁴

Policy changes such as the abolition of intra-EU duty-free shopping are having an impact. Similarly, the proposed European advertising ban, once in force, will affect the entire tobacco production-distribution chain in the years to come.

5.5. Fiscal policies

Implementing tobacco control policies inevitably brings into play a conflict of interests, in particular with regard to tobacco-producing and manufacturing countries. If all tobacco-related industries and processes are included, the estimated employment rises to almost 100 million – nearly 90 per cent of which is located in developing countries.⁵ In India alone the cigarette and bidi segments (see appendix) accounted for some 6 million jobs⁶ and generated income to the tune of Rs126.3 billion in 1994-95 (see table 5. 1).

Since tobacco is a significant foreign exchange earner in many developing countries and a significant source of state revenue, any tobacco control policy must first of all obey the economic imperatives imposed in public policy-making; in the interest of income, employment and securing state revenue, governments in tobacco-producing developing countries support the crop with subsidies and price/marketing support. The tide runs counter to such efforts if tax instruments designed to curb consumption are imposed. Sarma illustrates the case of India where the Ministry of Agriculture and the Ministry of Commerce take various measures to encourage production and export of tobacco while the Ministry of Finance levies high taxes that nullify their positive effects. In order to resolve such a conflict of interest, countries dependent on tobacco as a major provider of income, employment, foreign exchange and government revenue will have to find viable alternatives before any effective tobacco consumption control policy is set in place and enforced.

⁴ Tobacco Industry Documents, at <http://www.cdc.gov/tobacco/industrydocs/>, visited 30 Sep. 2002.

⁵ Sarma, 2000.

⁶ ILO, 2001.

Table 5. 1. The status of tobacco: Production, area, yield, government revenue, employment and export earnings from tobacco, by selected countries, 1994/1995

Country	Production (thousands of metric tons) 1995	Area (hectares) 1995	Yield 1995	Government revenue (US\$ billion) 1994	Employment (thousands)	Export earnings from tobacco	
						(US\$ '000) 1994	Share in total exports (%)
World	6 345	4 157	1 527	n.a.	40 000	21 473 921	0.52
India	587	391	1 501	0.866	7 400	81 134	0.31
Bangladesh	38	36	1 056	n.a.	837	n.a.	n.a.
China	2 327	1 475	1 577	6.548	n.a.	686 360	0.57
Indonesia	133	192	689	1.031	2 814	126 422	0.32
Japan	70	26	2 671	19.401	n.a.	273 305	0.07
Korea, Rep. of	84	32	2 602	3.028	364	35 701	0.04
Malaysia	10	10	1 043	0.331	607	31 440	0.05
Pakistan	81	47	1 706	0.351	1 265	n.a.	n.a.
Philippines	64	58	1 100	0.388	892	32 626	0.24
Thailand	56	42	1 312	0.663	1 530	87 621	0.19
Turkey	200	236	850	n.a.	592	423 675	2.34

n.a. = not available.
Source: Sarma, 2000.

Certain sources suggest that tax increases have important implications for policy-making. It would appear that changes in public policies with regard to tobacco control do influence price elasticities. Empirical evidence on Brazilian cigarette consumption patterns indicates that public awareness leads to a decline in cigarette consumption, which in turn affects employment in the industry.⁷

The Norwegian Government collects more than 9 billion Norwegian kroner from cigarette taxes each year. Hong Kong, China, increased tobacco excise taxes by 5 per cent in its 2001-02 budget. Similarly, Indonesia increased cigarette excise taxes by 15 to 30 per cent to help cover the budget deficit in 2001.⁸ JT reported a net profit of ¥34.2 billion (US\$310 million) for the first half of fiscal year 2000-01, up 14 per cent from the previous year. Revenue rose 5.3 per cent to ¥2.27 trillion. In 1992 China, for its part, collected 10 per cent of its annual tax income from tobacco taxes, or the equivalent of US\$5,000 million.

⁷ V. Costa e Silva: *The Brazilian cigarette industry: Propects for consumption reduction* (1998), in Paixão, 2002.

⁸ *Tobacco Reporter* (Raleigh), Apr. 2001.

Table 5.2. Tobacco tax revenues as a share of total government revenues, selected countries

	Percentage of total government revenues accounted for by tobacco taxes
Low-income countries	
China	9.05
India	1.81
Nepal	5.40
Zimbabwe	1.04
Lower middle-income countries	
Bulgaria	2.80
Colombia	0.73
Costa Rica	1.35
Egypt	0.78
Estonia	1.15
Upper middle-income countries	
Argentina	4.00
Brazil	4.88
Chile	3.38
Greece	7.72
High-income countries	
Australia	3.04
Denmark	1.73
Finland	1.73
Spain	2.20
United Kingdom	2.98
United States	0.41

Source: World Bank, cited in F. Chaloupka et al.: "The taxation of tobacco products", in F. Chaloupka and P. Jha (eds.): *Tobacco control in developing countries* (New York, Oxford University Press, 2000).

5.6. Political issues and social policy

The political crisis of the 1990s in many countries of Central and Eastern Europe was largely responsible for the tobacco industry's loss of its traditional markets. In Bulgaria, the sector gradually and irreversibly lost its former economic, financial and social significance. However, Bulgaria's experience in the tobacco sector testifies to certain structural links in policy formulation whose neglect leads to social exclusion, poverty cycles and macroeconomic policy failure.

Every year the Government of Bulgaria fixes the minimum tobacco purchase price. It is a common practice, however, that real average prices are lower than the minimum prices foreseen, because of poor-quality leaf. As a result, tobacco planters work at a loss. This has proven to be the main source of conflict for the past 12 years in the tobacco leaf cultivation sector. To solve the problem, the State introduced a mechanism of granting premiums to the tobacco planters. Premiums are paid for every kilogram of tobacco sold and the amount

varies from year to year. The premium is an additional benefit granted by the State directly to the tobacco planters, and is funded with 30 per cent of the total revenue derived from the trade of tobacco products. In addition to the premiums, and in compliance with the Tobacco and Tobacco Products Act, the planters can be granted targeted financial aid as part of the tobacco minimum purchase price.

Despite the transition from a centrally controlled to a market economy, the role of the State in the regulation of tobacco cultivation has been maintained in order to ensure that certain social policy decisions are in place and applied, for instance with regard to safeguarding the employment and incomes of the mainly Muslim and other ethnic minorities that predominate among the tobacco producers. Another reason for state intervention is the need to adjust Bulgarian production to European Union criteria and standards. In the light of European anti-tobacco legislation, the State would have to assume additional obligations with respect to quality control of tobacco leaf and cigarettes. Resolving this issue, however, will take many years. The first measure proposed by the Bulgarian Government experts at the start of the accession negotiations was to introduce a transition period with regard to quality control in tobacco products.

At the end of 2001, the Bulgarian Government drew up a national industrial development plan whereby it planned to stabilize and increase national tobacco leaf production so as to reach the level of 70,000 tonnes in 2007 and increase exports. This development plan carried major implications for the regions of southern Bulgaria where unemployment levels were still very high.

A fundamental employment issue at the core of the tobacco sector is the time lapse between the adoption of new economic and social policies and their implementation, as in Malawi, for instance, and in other tobacco-dependent economies or poverty pockets (bidi workers in Bangladesh, India and Nepal, and kretek home industry workers in Indonesia, for example).

5.7. Illicit and counterfeit trade

Although difficult to measure at this stage, the effect of smuggled and counterfeit cigarettes is not to be underestimated. In Ukraine, for example, in addition to the influx of cheap cigarettes from the Russian Federation, domestic underground production in small, poorly equipped workshops is estimated to account for 20 per cent of the black market (40 per cent according to some sources). Even premium brands from beyond the border of Western Europe are to be found among the contraband products in Ukraine.⁹ Although the smuggling of premium brands does not affect the business of local manufacturers since they are not operating in that price segment, it remains that the state budget is losing considerable revenue every year.

The contraband cigarette trade is a well-organized trade in every part of the world. According to one report, three tobacco companies have established a contraband cartel.¹⁰ A lawsuit is pending in the United States where the federal Government has accused Philip Morris, BAT and R.J. Reynolds of organized smuggling of cigarettes. The contraband

⁹ *Tobacco Journal International*, No. 4/2000.

¹⁰ *The Economist* (London), 5 July 2001.

cigarette trade is depressing cigarette prices and having a negative impact on employment.¹¹

5.8. Research and cigarette design

New tobacco laws currently being enacted in many countries aim to reduce the levels of carbon monoxide content in cigarettes. New regulations in Europe and Brazil will require a carbon monoxide-to-tar ratio of less than one. The industry is developing cigarette papers that selectively reduce carbon monoxide in cigarettes. Some developments, produced by patents, are being evaluated by cigarette companies. Ignition propensity is also a key area of tobacco research. Under the New York law, all cigarettes sold in that state will be required to pass an ignition propensity test which stipulates that the cigarette must extinguish itself within a certain amount of time if it has not been smoked. The regulation goes into effect on 1 July 2003, but by June 2002 no test method had yet been adopted.

Methods of reducing the content of and preventing the formation of carcinogenic nitrosamines in harvested tobacco plants have been disclosed. The methods involve subjecting the plant to microwave radiation at appropriate times in the cure cycle. Products considered suitable for human consumption can be manufactured with levels of tobacco-specific nitrosamines on a par with fresh-cut, green tobacco.¹²

Increased regulations around the world have prompted a lot of innovative efforts in cigarette design, with the result that the selective reduction of smoke components and the limitations of ignition propensity may prompt very large modifications to tobacco products within the next five years. Some analysts are of the view that the trend towards lower tar and lower nicotine cigarettes is inevitable and irreversible, but that while this trend benefits foreign investors it will drive many smaller producers out of the market.¹³

Cigarette design research targeting a “safe” cigarette has now launched on the market the bio-filter, which claims to reduce the health risks of smoking by drastically reducing the amount of harmful constituents in cigarette smoke by means of carbon cells with haemoglobin molecules. The bio-filter acts as an “artificial lung”: oxidative reactions take place in the filter rather than in the lung. The company which launched the product claims that it removes up to 70 per cent more toxic free radicals in cigarette smoke than do conventional filters, and 80 per cent more free radicals contained in the gas phase of cigarette smoke. The company also claims that the bio-filter reduces DNA damage more effectively than conventional filters.

While not proved scientifically, it has been argued that the absorbent virtue of charcoal could play a part in reducing the acknowledged risks associated with cigarette smoking. Though formerly neglected, the need to step up research into cigarette smoke control has now become commercially vital. The Vice-President of Research and Development of Santa Fe Natural Tobacco Company, Dr. Richard J.K. Shepperd, refers to an “X factor”:

¹¹ L. Joosens and M. Raw: “Cigarette smuggling in Europe: Who really benefits?”, in *Tobacco Control* (London, 1998), Vol. 7, at <http://tc.bmjournals.com/cgi/content/full/7/1/66>, visited 21 Oct. 2002.

¹² *Tobacco Reporter*, Mar. 2002.

¹³ *Tobacco Reporter*, winter bonus, 2001.

The X factor in the debate that is currently occurring within the industry and regulatory bodies will affect future developments. However, until there is agreement about what constitutes a reduced-risk cigarette, it is difficult to predict in which direction filter development will go. Given this lack of direction, it seems likely that the efforts to develop more and better selective filters will continue.¹⁴

In the same vein, the Government of the Philippines is supporting research into alternative uses for the tobacco plant for two main reasons: to keep the country's tobacco growers in business by providing an alternative use for their plants, and to develop downstream industries concerned with manufacturing products based on the tobacco plant.¹⁵

5.9. Tobacco product regulation

In the United States a consensus is already won with regard to the desirability of regulating tobacco products, in particular reduced-risk or the "safer" forms of tobacco products referred to above. According to one report, however, scientists do not even understand the mechanism by which tobacco smoke damages health.¹⁶ Smoking patterns vary and other health risk factors, such as poor diet, lack of exercise and, particularly in the case of developing countries, malnutrition, come into play. In 1999, the United States Food and Drug Administration (FDA) requested the Institute for Occupational Medicine (IOM) to develop a framework for assessing harm reduction products that allow smokers to continue smoking. The Institute, which is part of the National Academy of Sciences (NAS), a private, non-profit institution that provides health policy advice, set up a committee to prepare a report for the FDA that was released in February 2001. In conformity with scientific research published by tobacco companies, the committee confirmed that it was indeed possible to develop tobacco products that reduce risks to smokers by reducing exposure to tobacco toxicants. A solution is actively being sought which would serve the interests of the public as well as of the industry. The timing of such a solution is highly relevant: by the time the EU tobacco directives and the Framework Convention on Tobacco Control (if adopted as expected in 2003) come into force, it may reasonably be expected that a "safe" cigarette will be on the market.

However, since the market for tobacco products has thrived so far on nicotine addiction, the question remains to what extent the market for tobacco products will be affected if they are no longer addictive. Apart from medical sources, the issue of addiction has been glossed over in the research literature so far available on the search for the "safe" cigarette.

On the issue of regulation, the common front which the tobacco industry had cemented split for the first time in recent years: the enthusiasm with which Philip Morris greeted proposals by the United States Government for regulation of tobacco products was not welcomed by Brown and Williamson Tobacco Corporation, BAT's subsidiary in the United States.¹⁷ The company's enthusiasm may even be interpreted as a readiness to shift

¹⁴ *Tobacco Journal International* (Mainz, Rhein Main Publishing Group), No. 2/2002.

¹⁵ *ibid.*

¹⁶ B. Fisher: "Despite leaf market turbulence, standard commercial remains stable", in *Tobacco Reporter*, Apr. 2001.

¹⁷ *Tobacco Reporter*, Mar. 2002.

the burden of corporate social responsibility to the State which, in turn, is quite willing to shoulder it in tacit recognition of its huge debt to the industry.

How far the pendulum swings in the direction of state regulation of tobacco products worldwide will trigger repercussions on production, consumption, and employment.

5.10. Litigation settlement costs

In December 1998 R.J. Reynolds (RJR) announced its intention to lay off 1,000 workers in 1999 from one of its tobacco units in the United States and 2,900 worldwide in order to absorb the costs arising from competition and from a US\$206 billion tobacco settlement. After the cuts, RJR planned to employ a third of the estimated 15,500 workers in the Winston-Salem area. However, this was yet another episode in a decade of deregulation and corporate takeovers. Apart from textiles and a few manufacturing industries, Winston-Salem still relies on its tobacco industry for thousands of high-paying jobs. According to the *Charlotte Observer*, if these layoffs particularly aroused bitter criticism in the community, such criticism was directed at RJR's management. Employees traced the start of the company's problems to its acquisition of Nabisco, a leveraged buyout which swamped the company with debt and resulted in thousands of layoffs. The workers were faced with more and more job insecurity until they were ready to resort to trade union action. Like other tobacco companies, RJR, which had sponsored the Reynolda House, Museum of American Art, the Reynolds High School, a hospital and the restoration of Old Salem, is cutting such sponsorship: in the mid-1990s, for example, it cut its US\$220,000 annual gift to the Arts Council of Winston-Salem down to US\$150,000.¹⁸

Anti-tobacco lawsuits have crossed the Atlantic to Norwegian, French and Australian courtrooms, to cite only a few. Outside the United States and Australia, the tobacco companies have won all their cases and were found not liable for smokers' illnesses. In Norway, however, a case has recently been appealed and the tobacco industry is concerned that other similar cases will be filed in future. Apart from the Master Settlement Agreement (MSA), the tobacco companies in the United States hope to overturn those cases which have awarded damages to the plaintiffs. In Uganda there have been two attempts by smokers to sue the industry for injury claims. In France, in 1999, Seita (now Altadis) lost a case, but that ruling was later overturned. In Australia, a cancer victim successfully sued British American Tobacco in 2002 and was awarded A\$700,000 in damages. The question now posed is whether these instances of successful litigation reflect the start of a costly trend for the global tobacco industry and its future development. One Californian jury awarded a record US\$3 billion in punitive damages against Philip Morris, although that sum was subsequently cut to US\$100 million.¹⁹

In Brazil, by the end of 2001, 187 legal claims for compensation had been brought against Souza Cruz, of which 56 resulted in a decision favourable to the manufacturer, in some cases definitive, i.e. not open to appeal. In these legal actions 89 petitions were lodged for *antecipação de tutela*,²⁰ of which only 17 were granted by the Brazilian courts.

¹⁸ *The Charlotte Observer* (North Carolina), 20 Dec. 1998.

¹⁹ *Financial Times* (London), 12 Apr. 2002.

²⁰ A legal term which means that the judge may take action, at the end of the process, to ensure that the sentence has the practical result desired by the claimant. These decisions, complying with requests formulated by the claimants of some actions and involving cash deposits, are provisional and may be revoked. *Antecipação de tutela* takes place before the merit of the claim is assessed.

Of these only one, in 2002, remains in force, pending appeal.²¹ Philip Morris has also suffered 15 individual and three joint legal actions in Brazil; six of the former have been tried, and two of the latter quashed.

²¹ Paixão, 2002.

6. Dealing with change

6.1. Diversifying since the 1970s

Cigarette companies' internal documents make it clear that they have taken seriously the scientific evidence of health risks from the start. As early as 1956 Philip Morris' own scientists were writing memos to top executives confirming that carbon monoxide and nicotine cause "harm to the circulatory system as a result of smoking". In November 1961 a research director for Philip Morris wrote a memo for executives that listed 15 compounds in cigarette smoking "identified as carcinogens" and two others as "cancer promoters". Research even then showed that it was possible to develop a low carcinogen cigarette for about US\$10 million. However, the decision was made not to market the product because it would "raise questions about high-nicotine products that were the mainstay of the company, notably Marlboro".¹ The public position of the industry was that the smoking-cancer link was "inconclusive" because the data were merely "anecdotal". However, it would appear that the industry had strict internal guidelines about what sort of research it was willing to support. Specifically excluded were "developing new tests for carcinogenicity" and "conducting experiments ... to show addictive effects of smoking". By 1964 the Surgeon-General of the United States had released the first report on the hazards of smoking based on the 7,000 articles in the world biomedical literature already available. By 1972 a vice-president of the Tobacco Institute in the United States was advising a "brilliantly conceived and executed strategy" that made an "orderly retreat" possible.²

Since the 1970s when the tobacco industry was first challenged on health grounds, principally in the United States with the first threatened ban on television advertising, tobacco companies prudently incorporated diversification strategies into their investment policies.

In 2000, press reports announced that Philip Morris planned to diversify away from the tobacco business into luxury hotels, media or mobile phones, to make wider use of its Marlboro brand, its most valuable asset and independently valued at US\$21 billion. The key to the company's strategy was allegedly its ability to wield the economic power generated by cigarette profits.³

More recently, companies have been taking the cue from the larger global giants. Altadis has become one of Europe's largest logistics operators. Supplying more than 280,000 outlets in Spain, France and Portugal, the company's logistics subsidiary, Logista, generated a turnover of €333.5 million in the financial year of 2000, leaving it in 13th place among the largest logistics companies in Europe. In its latest move, the company also reached an agreement for the acquisition of Grupo Burgal, one of the leading companies in the Spanish logistics industry. With the new company, Logista will extend its portfolio by covering industrial parcels, courier and cold logistics services and pharmaceutical products. The group has also diversified its portfolio by supplying an increasing number of non-tobacco products. In both France and Spain it has entered the prepaid payphone market, while in Spain the group also distributes stamps and a range of

¹ Advertising a "harmless" cigarette would imply that the others are harmful.

² Barnet and Cavanagh, 1995.

³ *ibid.*

documents to more than 15,000 tobacconists, as well as publications to 30,000 kiosks, bookstores, stationers and supermarkets.⁴

Japan Tobacco has likewise responded to the signals in the industry: the company has been trying to diversify and it currently owns businesses in the pharmaceuticals, foods, agriculture, real estate, and engineering industries. In recent years JT used its vast liquid assets to diversify into the domestic food, beverages and pharmaceuticals market through a series of local takeovers amounting to 2 per cent of its overall equity.⁵ It announced plans to launch one new pharmaceutical product every year and to make its medical business break even on a consolidated basis in 2005-06. The company also predicted sales of ¥100 billion in the beverage business in 2001-02 and ¥150 billion in 2004-05. Some analysts expect that Japan Tobacco will try to diversify its business even more over the next few years. Yuji Fujimori, tobacco analyst at Goldman Sachs, declared to *Tobacco Reporter* that one of the reasons behind diversification to industries such as beverages and pharmaceuticals is that the tobacco market has matured: “We have witnessed a volume decline of more than 1 per cent of the overall Japanese cigarette market recently. Meanwhile, JT’s volumes are declining by 2.5 per cent. I expect this trend will continue due to the decreasing smoking ratio.”⁶

6.2. Diversification into non-farm opportunities

Diversification is a primary means by which many workers in the tobacco growing industry reduce risk.

Research on the concepts, dynamics and policy implications of non-farm diversification and household livelihood strategies in rural Africa all emphasize that non-farm activity is positively correlated with income and wealth and thus seems to offer a pathway out of poverty if non-farm activities can be seized by the rural poor. However, the positive correlation between wealth and non-farm activities may also suggest that those who begin poor in land and capital face an uphill battle to overcome entry barriers and steep investment requirements if they are to participate in non-farm activities capable of lifting them out of poverty.⁷

The study of diversification behaviour in the tobacco sector offers important insights into the sorts of intervention that might be effective in reducing poverty and vulnerability. Two methods might be applicable: identifying effective means of targeting transfers to the poor or to the food insecure, or identifying impediments to the smooth functioning of factor markets in labour, land, and capital that condition households’ on-farm and off-farm investment.

Incomplete or missing markets discourage diversification. For example, missing credit markets can impede diversification into activities or assets characterized by substantial barriers to entry. On the other hand, if non-farm or off-farm options can be accessed easily but credit markets are thin or missing, non-farm earnings can be a crucial

⁴ *Tobacco Journal International* (Mainz, Rhein Main Publishing Group), No. 1/2002.

⁵ *Tobacco Journal International*, No. 2/2000.

⁶ *Tobacco Reporter* (Raleigh), Mar. 2002.

⁷ Barrett et al., 2001.

means to overcome working capital constraints to purchasing variable inputs for farming or to make capital improvements to one's farm.

Diversification enables workers to cope with shocks to income and to have access to a degree of social security when no safety net is provided by either the governments, the community, or relief agencies.

There are causal dynamics that determine diversification into non-farm activity. Are attractive non-farm opportunities accessible only to a limited sub-population that is already relatively comfortable, and do higher incomes open the door to attractive non-farm opportunities? Can poor tobacco workers be targeted by government intervention? Even if they are reached, can they successfully exploit externally provided opportunities? Does the non-farm sector offer a ladder out of poverty, and, if so, is this escape route accessible to the rural poor? These are critical questions for the tobacco sector, as Malawi's experience has shown.

What are policy-makers to do? With enough time, the benefits of rapid growth among the better-off will likely trickle down to the poorer sub-populations initially excluded from the more lucrative non-farm subsectors, thanks to the increased demand for hired labour and increased availability of goods and services. Nonetheless, a laissez-faire approach to tobacco workers at the present economic juncture seems unlikely to generate substantial poverty reduction in the current generation since few poor, unskilled and uneducated workers from more remote areas are likely to participate.

The first step in designing an effective policy to make more attractive livelihood strategies available to the rural poor is to invest a tripartite body with responsibility for research and policy on the rural non-farm economy and for ensuring active and sustained social dialogue.

A second step is to stimulate rural financial, credit, insurance and savings arrangements and to channel them to historically underserved areas and households. Researchers nevertheless question the extent to which microfinancial institutions can help populations previously unable to undertake higher return non-farm activities to acquire sufficient working capital to permit productive non-farm investment. They stress that without more widespread access to savings and credit, working capital constraints will continue to trap the poorest sub-populations of rural Africa in low-return, high-risk livelihood strategies.

Compounding the problem is the difficulty of securing adequate post-crisis reconstruction investments in areas hit by shocks such as HIV/AIDS or natural disasters. The absence of institutions and skill-based diversification opportunities is rarely remedied by conventional rehabilitation packages. Yet new skills can be acquired in the context of upheaval, skills that may later be used to diversify household incomes in productive ways.

The decisive step is to improve market access, by which is meant not just improving the physical infrastructure of roads and maintenance but also introducing institutional innovations to reduce entry costs through the introduction of grades and standards and public price reporting systems, and the relaxation of burdensome licensing and regulatory requirements on microenterprises.⁸

⁸ *ibid.*

6.3. Obstacles to alternatives in Turkey

A survey conducted in 2000 in three of the foremost provinces in Turkey shows that tobacco farmers are also engaged in grains/cereals and vegetable culture as well as in animal husbandry. These other farming activities are only for domestic consumption rather than marketing, and only 29.5 per cent of family farms earn income from sales of crops other than tobacco, dependent as they are on access to irrigable land for growing cotton, cereal or vegetables. As for the preferences of tobacco-farming households, 49 per cent are engaged in tobacco farming because they have no other option; 28 per cent consider tobacco culture as the most profitable line of activity, and 11 per cent engage in tobacco farming to make use of their domestic family labour. In response to the question “What would you do other than grow tobacco?”, only 14 per cent of respondents cited barley-wheat and/or cotton farming. A large percentage of the farmers declared that they would give up tobacco farming if they could find a more profitable activity, but they were aware that any such alternative would require price supports, start-up credit with low interest rates, organization and training. If it became mandatory to switch to alternative livelihoods, most favoured animal husbandry and irrigated farming.⁹

A survey conducted in 1999 in Manisa, Aydin and Izmir in the Aegean region, to assess alternative lines of production, brought to the fore the fact that only 12.9 per cent of tobacco farmers farmed on irrigated land. The same survey estimated that these households derived 70 per cent of their agricultural returns from tobacco farming. About 75 per cent of the farmers in the regions indicated declared that tobacco farming was the most profitable activity, though 70.5 per cent of them were not satisfied with the quota system in effect since 1997 and voiced concerns for the future; 25 per cent of farming households sought other farming activities after the introduction of quotas, their preference being mainly for animal husbandry. As far as dry farming land was concerned, cereals are earmarked as the most appropriate alternative to tobacco farming. Nevertheless, farmers think that their returns from this activity will not be as high as from tobacco cultivation.¹⁰ Farming enterprises further state that the chances of cultivating alternative crops would be greater if irrigation were introduced. The basic finding of the survey is that even in the Aegean region, where prospects for other crops are much better because of geographical factors, tobacco farming remains crucial in terms of income and employment. The failure of studies so far conducted into the introduction of alternative crops makes it more difficult for farmers to switch to other crops and inclines them to be more pessimistic about their future.

6.4. Shaping social policy: Ethnic minorities and migrant workers in Bulgaria

In Bulgaria, the lack of skills is one of the obstacles to job creation in new industries and services. New programmes and targeted investments are required, especially for young people looking for employment. Special attention needs to be paid to ethnic minorities such as the Turks, Romas and Pomaks.

Between 1977 and 2001, the local governments of Blagoevgrad, Kurdjali and Smolian initiated regional economic development programmes which are vertically

⁹ Petkova and Yildirak, publication forthcoming.

¹⁰ *ibid.*

integrated at the national level, and some initiatives and projects are already being implemented.

After privatization of non-profitable enterprises, new entrepreneurs began to restructure and invest, and although the immediate outcome of privatization was job losses, several economic sectors successfully overcame recession, developed new products, and entered new markets. The garment industry has been particularly successful in absorbing displaced tobacco farmers. This sector has been developed under the new greenfield enterprises, attracting investors not only from Bulgaria but from neighbouring countries like Greece, Italy and Turkey. Now, more than 20,000 workers, mainly women, work in these greenfield enterprises in Blagoevgrad, 10,000 in Smolian, and 10,000 in Kurdjali. The problem in those settlements is to create jobs for male workers. Faced with rising unemployment, almost half of the inhabitants of Kurdjali migrated to Turkey, the central regions of Bulgaria and other countries. It is likely that the process of migration will continue and extend into other European countries.

Other sectors which have provided alternative employment to workers displaced from the tobacco sector are tourism (especially in Smolian and Blagoevgrad), food processing, beverages (mineral water), and balneotherapy.

Owing to the potential these southern regions offer by way of their mountainous territory rich in water resources and excellent climate, the Government of Bulgaria has also launched several investment projects in these tobacco growing regions: energy, mountain and alternative tourism; ecological and clean agricultural production; and infrastructure. It is calculated that as many as 30,000 temporary and permanent jobs could be created under these regional investment programmes (see box 6.1).

Box 6.1. Bulgaria: Self-employment projects

Self-employment projects are also being developed with the support of the central and local institutions, as follows:

First, in Smolian and Kurdjali a microcredit fund is functioning, financed by the Open Society Foundation. Within this scheme, small family business projects are given priority.

Second, a guarantee fund is already active in two regions, one of which (Razgrad) is a tobacco cultivating area. The resources of this fund are used for bank security for obtaining small investment loans and circulating credits among small entrepreneurs and the self-employed.

Third, regional alliances for new employment have been set up. These are trade companies established with the participation of municipalities and private companies from regions with high unemployment. Twenty-two municipalities, a third of which are in tobacco growing regions, are included in the scheme.

Fourth, in nine localities business incubators have been set up to develop entrepreneurship in the agricultural sector.

Fifth, and the most ambitious as an alternative employment scheme, is a public microcredit programme launched in 2002, for which 100 million leva (US\$50 million) of the state budget has been allocated. It is expected that this scheme will create 20,000 permanent jobs.

Source: Petkova and Yuldirak, publication forthcoming.

However, among the religious and ethnic minorities concentrated in the mountainous and semi-mountainous tobacco growing regions, unemployment rates have attained levels as high as 80 per cent and 90 per cent. In those regions, no other sources of income are available and the local people live on social benefits and the pensions of elderly family members as well as on irregular money transfers from their relatives who are migrant workers abroad.

Overcoming high unemployment and current social and economic problems in Bulgaria's tobacco sector demands more concerted efforts on the part of national and local institutions to attract resources from European pre-accession funds like SAPARD (Special Accession Programme for Agriculture and Rural Development) and ISPA (Instrument for Structural Policies for Pre-accession). Social and economic policy needs to focus on building institutions and creating programmes to support local entrepreneurs and administrators.

6.5. Cambodia: Tobacco to the rescue of a post-crisis economy

BAT Cambodia is an example of a mass producer investing in the entire tobacco production chain. As a result of the company's extensive input in local tobacco leaf, there are now two groups of farmers: contractors who receive considerable technical assistance and reasonable prices with a secure market for their products, and farmers who are subject to price fluctuations and insecure markets without any assistance or controls by the government agencies.

Although BAT's operations in Cambodia have unquestionably been positive in terms of income development in the tobacco sector for the workers it recruited, by December 2001 the company had still not recovered its initial investment and was struggling to compete with various foreign and domestic brand cigarettes as well as traditional hand-rolled tobacco. The domestic market for manufactured cigarettes appears saturated already at a time when Cambodia's public authorities are closely considering adopting tobacco control measures. A company representative was cited as saying that the company had reached the ceiling in terms of its purchase of local tobacco leaf and that the only way out would be to expand export markets.

Although the traditional tobacco sector will not lose its market in the near future, it is expected that Cambodia's tobacco economy will pick up some momentum to the extent that the economy as a whole improves, thereby alleviating poverty levels. It seems only a matter of time for traditional hand-rolling to disappear, when that sector will be superseded by mass industrial production unless economic policies are formulated to circumvent such a development. Traditional tobacco farmers in Kompong Cham province need to improve the quality of leaf to make it usable for other local mass manufacturers and to export it if they want to stay with tobacco, or switch to other products like cotton and rubber. The Manhattan Textile and Garment Corporation, an American, Cambodian and Chinese joint venture, recently started to buy cotton from local contracted farmers to produce garments in the centre of the province. It now has 300 hectares of cotton farms contracted along the Mekong River, the same region as tobacco, and plans to expand the farmland up to 1,000 hectares to secure a yield of 40,000 tons of cotton per annum. Cambodia intends to attract more agribusiness investors in soy beans and sugar cane to the Kompong Cham province which also grows rice, rubber, beans, sesame and corn, resources which all hold great potential for agribusiness. The question, once again, is how to ensure that tobacco farmers do not fall victims to the risks they incur in switching to other crops.

6.6. Absorbing shocks of market reforms: The case of China

In an effort to soften the social impact of market reforms, the CNTC has been encouraging profitable tobacco companies to diversify into new businesses which could

absorb laid-off cigarette workers.¹¹ By December 2001, CNTC's record of mergers and consolidations had proved successful with the added achievement that not a single worker was left without a job.¹²

Yunnan is a frontier province in China where as many as 25 ethnic minorities are concentrated. The mountainous areas exceed 93 per cent of the total. Only a few fields on the plains dot the valleys. These fields, which occupy less than 7 per cent of cultivable land, are the main crop producing sites. The crop yields of that area cannot sustain a population of 4.2 million. Yunnan's non-ferrous mineral resources proved disappointing in the past: according to China's development plan, in 2000, the taxes targeted for the mineral sector, including non-ferrous metals, iron and steel, chemical engineering and building materials, would generate no more than a meagre 7 billion yuan (Y) (US\$846 million), well below the level needed to support the economy of the province. Despite outstanding performances, the tourist sector, power industry and biological and chemical engineering industries, which all developed during the Ninth Five-Year Period with leverage from the tobacco sector, have not yet matured, but they may do so with continued support from the tobacco sector for at least one more decade.

The tobacco sector therefore represented the economic breakthrough for China's Yunnan province. In 1980 the revenue of the province was merely Y1.16 billion (US\$140.3 million); taxes and profits from tobacco amounted to Y370 million (US\$44 million), accounting for 31.9 per cent of public revenue. In 2000, the revenue of the province had climbed to Y43.3 billion (US\$5.2 billion), taxes from tobacco alone amounting to Y25.8 billion, or 60 per cent of total revenue. As the new industries develop rapidly, the single-pillar economic model is changing. However, the time when these sectors completely replace the dominant position of the tobacco sector is not yet in sight: from 1981 to 2000, the tobacco sector accounted for Y319.745 billion (US\$38.6 billion) in taxes and profits. Twenty years ago, Yunnan's revenue was placed only 22nd in China, to rise to fourth position in the mid-1990s (first position in west China), with tobacco as the engine for a wide array of industries: hydroelectric power, automobile, biological and chemical engineering, tourism, transportation, financial, cultural and sporting industries.

By 2000 the total investment of tobacco sector returns in other branches amounted to Y23 billion. Yuxi Hongta Tobacco Group alone invested more than Y13 billion in banking, securities, building materials, chemical engineering, automobiles and flowers. The returns in 2000 exceeded Y500 million, providing more than 30,000 jobs.

However, the tobacco sector's most significant impact was on the rural areas of Yunnan province, where farmers benefited from investments from the tobacco sector and developed the production of other crops and horticulture. Village and township enterprises also mushroomed, bringing the annual income of the province to well over Y100 billion. In 1985 the State Council estimated that Yunnan province contained 73 poverty counties and 506 villages in severe poverty, with a population of 150 million – accounting for nearly 50 per cent of the total rural population of the province. In 2000, 85 per cent of the former poor population have become well off, and more than 50 per cent are above the poverty line. Average income per capita rose from Y147.7 in 1980 to Y1,578 in 2000, a tenfold increase. There still remain 2.4 million poor people in need of support, but only 15 per cent of the population live in severe poverty-stricken areas – less than 7 per cent of the rural population of the province.

¹¹ *Tobacco Reporter*, Jan. 2001.

¹² He et al., publication forthcoming.

Yet a shadow hovers over the unchallengeable contribution of the tobacco sector to China's economy and its Yunnan province: the growing spectre of the exorbitant health costs of tobacco-related diseases and all the lives so lost, which carry their own share of social and economic burdens. In 1993 it was estimated that medical costs for smoking-related disease combined with the costs of fire damage due to smoking cost the country over US\$3,500 million.¹³ China, therefore, like so many other tobacco-dependent States, remains watchful as the Framework Convention on Tobacco Control takes shape in Geneva.

6.7. Alternative uses of tobacco in the Philippines

In order to safeguard jobs in the tobacco industry, the Philippines is conducting a research programme investigating alternative uses of tobacco. Potential products include food supplements, antibiotic ointments and skin creams, building materials, paints, pesticides and paper. The Government is hoping the alternative products will supplement a farming sector that could be under pressure from the international anti-smoking campaign. Since cigarette consumption is increasing in the Philippines by 2 per cent a year, the country's National Tobacco Administration recognizes that the phase-out, if at all, of tobacco as raw material for cigarettes will occur over many years, but nevertheless intends to take the precaution of ensuring markets for its 62,000 tobacco farmers. Official scientific testing determined that, in addition to the leaves, the plant's seeds, stalks and roots are of value. The Philippine Government is hoping that many more tobacco-derived products will be on supermarket shelves within two years. Some, especially particle board which has already passed building standards in Japan and the Philippines, need private sector funds to become viable. Paper made from tobacco stalks, which are normally discarded after harvesting the leaves, is the main non-nicotine product now generally available on the market (see box 6. 2).¹⁴

Box 6.2. Board particles, analgesics and animal feeds

Tobacco Journal International cites its interview with Dr. Reynaldo Castro, an agricultural researcher who pioneered the project: "If you know the crop, it's easy to think of alternative uses. For example, the stems are woody and very suitable for particle board and dissolving pulps. Tobacco was used as a medicine before it was used for smoking, indicating there must be many more useful medications which could be obtained. Although scientists in the United States, India, the United Kingdom and other countries have been experimenting for years with proteins from tobacco leaves, the Philippines was the first country in the world to research all parts of the plant, and I believe we are pioneers in the area. We are developing antibacterial, anti-fungal creams and tropical analgesics inspired by traditional poultices used to cover open wounds and insect bites. A pungent, minty-smelling oil pressed from seeds has been made into soaps and paints, while whole seeds, which are free of nicotine and high in protein, are ground and used as an ingredient in formulated animal feeds."

Dr. Perlita Baula, currently head of the tobacco research programme, also commented: "A major disadvantage when tobacco is grown to produce Virginia leaf for use in cigars and cigarettes is that plants must be grown in widely spaced rows to allow leaves to reach regulation size, and treated with many agro-chemicals to produce the high grade leaf required by manufacturers. However, if plants are put to alternative use, they can be grown much closer to yield a higher volume of plants on the same area of land, and without the extensive use of chemicals as appearance is less important."

Source: A. Ramos: "Making more out of tobacco", in *Tobacco Journal International*, No. 2/2002.

¹³ WHO, 1997.

¹⁴ *Tobacco Journal International*, No. 2/2002.

Similarly, the Auburn University in the United States has developed synthetic genes which can be applied to tobacco to produce polymers, useful in the production of biodegradable plastics.

6.8. Diversification efforts: The case of the United States

The Burley Buy-Out Act of 2001 was introduced in the United States House of Representatives by Congressman Hill from Indiana on 1 May 2001. The Bill is intended to eliminate the federal quota and price support programmes for burley tobacco and to compensate quota holders, producers and communities adversely affected by the elimination of these programmes.

Quota holders would receive one lump-sum payment in financial year 2002. Producers would be paid in five equal instalments from financial year 2002 until 2007. Communities would receive grant monies to promote on-farm diversification and alternatives to the production of tobacco and off-farm activities.

Some 20 organizations are involved in the search for alternative crops for tobacco growers. However, a systematic approach is being applied involving risk management: growers are asked to consider all the risks involved in diversifying away from tobacco. Crops such as those listed in table 6.1 provide returns (above variable costs) of between US\$40 and US\$140 for average yields and prices, while flue-cured tobacco provides a per acre average of US\$1,958 above variable costs. Tobacco requires more agricultural input (seed, chemicals, fertilizer, fuel, equipment, credit, insurance, etc.) than other crops. Tobacco also requires an average of US\$2,200 in variable input while corn, for example, requires just under US\$200.

Table 6.1. United States: Acres of row crops needed to replace gross income from 50 acres of flue-cured tobacco

Other traditional crops	No. of acres needed
Peanuts	235
Cotton	372
Corn	747
Soybeans	1 161
Wheat	1 442
Source: Kennedy, publication forthcoming.	

As in the Philippines, many are looking at tobacco itself, a very sturdy crop, as a medium for biogenetic research. In Virginia Tech and CropTech Corporation, a research firm recognized for its work on transgenic tobacco, is about to embark on an effort to raise funds to build two new facilities.

The tobacco Master Settlement Agreement places no restrictions on state spending of settlement payments. Most of the major tobacco-producing states have targeted some portion of their MSA funding to programmes related to agriculture and/or rural communities. In North Carolina possible uses include assisting tobacco farmers to convert curing barns to reduce nitrosamines and providing college scholarships for the children of tobacco farmers. The MSA also established a National Tobacco Growers' Settlement Trust, a fund which requires participating manufacturers to pay US\$5.15 billion into a

national tobacco grower trust over 12 years to be distributed among tobacco-growing states based on each state's share of 1998 tobacco quotas.

In North Carolina, Kentucky, Tennessee, the Commonwealth of Virginia and Georgia, as well as in all other tobacco-producing states, MSA payments will be made available to county agriculture councils for local uses, statewide agricultural development projects, agribusiness and industrial infrastructure, creation/expansion of agricultural processing facilities, agricultural marketing development and improved agricultural production efficiency and effectiveness, as well as educational programmes, with some allocations disbursed to tobacco growers and to quota owners.

Virginia passed legislation in early 1999 allocating 50 per cent of all settlement payments to a Tobacco Indemnification and Community Revitalization Fund, with a governing board that will compensate tobacco farmers for loss of assets and promote economic growth in tobacco dependent communities, setting up community colleges in south-west Virginia as well as an institute for research on using the tobacco plant in animal genetics and medicine.

Box 6.3. United States: Crop alternatives to tobacco

- Echineacea – a purple cornflower, grown mainly for its medicinal root. It has enjoyed success in the herbal medicinal market as an immune system builder.
- Pawpaws and maypops, which both bear delicious fruits and are native to tobacco-growing areas and are well adapted to the climates and soils thereof.
- Bell and specialty peppers.
- New and underused landscape plants in Kentucky.
- Blackberries for fresh fruit and processing markets.
- Greenhouse production of bedding plants, vegetables and herbs with controlled water table systems.
- Breeding soft wheat for specific protein content.
- Drying, storing and germination of specialty grains.
- Novel soybeans for specialty markets.
- Industrial hemp for paper and textile production.
- North Carolina and Kentucky are actively considering other crops to supplement tobacco production. Kenaf is actively being considered in Kentucky along with vegetable crops. Kenaf will yield much lower returns than tobacco. Estimates of net returns per acre for Kentucky crops show: tobacco (US\$1,050); tomatoes for processing (US\$775); wheat and soybeans (US\$175); hay and silage (US\$100); fibre hemp – low fibre price – yield (US\$200) and fibre hemp – high fibre price – yield (US\$500).
- Ten acres of herbs are being planted as a test this season (April 2001). Feverfew is a medicinal herb used to treat fever and headaches. Valerian, which is used as a sedative is being planted. Tobacco curing barns may be used to dry the herbs.
- Belgian endive, Christmas trees, fireplace logs made of compressed wheat or hay straw and baled pine straw for mulching in home lawns and gardens are being considered.
- Pick-your-own strawberries.
- Catfish farms in Kentucky.
- Virginia is looking into 30 different crops (herbs, melons, cotton, etc.) as alternatives to tobacco.

Source: Kennedy, publication forthcoming.

Maryland, Ohio, Florida, Indiana, Pennsylvania, Missouri, West Virginia and Alabama are all engaged in the same process as the major five tobacco-producing states (box 6.3).¹⁵

6.9. The need for diversification: The case of a developing country, Malawi

In Malawi, an economy characterized by a fast-growing population and labour force and a shrinking formal sector, tobacco alone and the agricultural sector cannot be expected to propel the economy from poverty into development. Over 80 per cent of the Malawian population earn their livelihood from agriculture and over 90 per cent depend on it in rural areas. Tobacco and agriculture in general cannot be expected to continue to provide employment and incomes in the long term. The solution lies outside agriculture: promoting a vibrant industrial formal sector. The World Bank evaluates Malawi's tobacco sector as follows:

Over the long term, it is clear that smallholder agriculture cannot provide rising incomes or employment for 80 per cent of an ever-increasing population in an already densely populated country ... The premise of the smallholder-oriented growth strategy is that, while the ultimate destination may be vibrant non-agricultural economy, the path to the destination leads through more emphasis on smallholder agriculture in the short run.¹⁶

As a way forward, therefore, Malawi has to pursue policies and strategies to ensure that:

- the liberalization of tobacco growing benefits the majority and not the already well-off farmers;
- the impact of burley tobacco on incomes and food security should be properly researched and analysed to ensure that food security is not jeopardized;
- mechanisms should be put in place to ensure that the working and living conditions of workers in the tobacco-growing industry meet minimum labour standards; and
- government and stakeholders should intensify efforts to ensure that tobacco production, processing and exporting, do not resort to the use of child labour.

Furthermore, current efforts to diversify the economic base should be stepped up. The adoption of other crops in Malawi is hindered by the absence of a conducive environment. While the Government promotes the growing of non-traditional cash crops, it has not yet set in place the dynamics which would empower farmers to venture into such businesses. For example, while horticulture is proving to be one of the fastest growing sectors in sub-Saharan Africa and while Malawi has a comparative advantage in many horticultural crops including paprika, chillies and macadamia nuts, there is currently no known horticultural policy as the sector is considered as an appendage to the crops department. Consequently, the sector has received little attention with respect to training of specialized staff, financial

¹⁵ K. Tiller: *Tobacco issues: Contracting and use of tobacco settlement payments* (University of Tennessee, 2001), cited in Kennedy, publication forthcoming.

¹⁶ World Bank: *Accelerating Malawi's growth: Long-term prospects and transitional problems*, Southern Africa Department (1997), cited in Mwasikakata, publication forthcoming.

and technical support, or market information.¹⁷ So what would otherwise have been potential alternatives to tobacco, like paprika, chillies and macadamia nuts, cannot yet prove viable crop options for farmers.

* * *

In dealing with change, tobacco-producing and manufacturing countries are all in the race to effect a transition out of the tobacco sector or at least diversify the tobacco production subsectors. Health issues are far outnumbered by economic and social concerns.

¹⁷ R. Kachule and T. Nakhumwa: *Promotion of horticulture: National Horticulture Strategy in Malawi* (University of Malawi, Lilongwe, 1998), cited in Mwasikakata, publication forthcoming.

7. Summary and suggested points for discussion

In Chapter 1, the main policy issues at the centre of the tobacco sector are outlined and discussed in the light of the economic value represented by tobacco, corporate social responsibility, and tobacco as a provider of welfare. Uncertainties with regard to the impact of tobacco control policies are considered, as well as new tobacco product regulations. The need to coordinate economic and health policies is also discussed.

Chapter 2 provides an analysis of consumption, production and international trade, comparing trends in output and consumption with trends in employment, by economic groupings. Data is provided for the world's leading unmanufactured tobacco-producing, trading and consuming countries, along with estimates of smoking prevalence, income levels and trends in annual per adult cigarette consumption in developed and developing countries. World cigarette production volume, net exports and apparent consumption are also reflected, while percentage data for cigarette production and world unmanufactured production are provided by main regions and countries. It is shown that trade flows are explained by corporate strategies, which have taken advantage of the removal of trade barriers to concentrate production in fewer locations.

Employment trends in the tobacco sector are observed in Chapter 3, in particular the industry's approach to overcapacity in manufacturing. Though the workforce in manufacturing appears to have stabilized, the tobacco growing sector is also being affected by agricultural policies which are being reviewed in the industrialized countries, in particular with regard to tobacco subsidies which are being phased out in the European Union. The current situation prevailing in the United States is the result of a combination of factors. Reduction in demand, market consolidation, delocalization of companies and jobs to lower wage countries and technological advances have all caused jobs to decline steadily since the 1980s. Agricultural policies in developing countries have placed emphasis on the promotion of smallholder tobacco production alongside estates, with interesting results in terms of policy appraisal. As for Central and Eastern Europe, they have had to resituate the tobacco sector within their new economic and social policies as transition countries, in particular setting in place new employment opportunities targeting the ethnic minorities that had constituted the tobacco farming workforce during the crisis years of the late 1980s. Productivity issues are also considered as a major factor leading to decline in employment, particularly in OECD countries where jobs are either stagnating or declining. The distribution of the industrial workforce and its concentration are also reflected.

Mergers, acquisitions and the general trend towards an oligopoly are described in Chapter 4, as are their impact on employment and the way the industry has been dealing with restructuring. Product diversification and pursuit of efficiency are also discussed. Tobacco monopolies and their move towards privatization is a key issue, particularly in countries of Central and Eastern Europe, where it only influences the structure of the industry and its workforce but sometimes arouses political sensitivities as well. In other cases, certain developing countries are keeping their tobacco sector under a monopoly for better control. The effect of privatization on employment is looked at in terms of labour reforms that are carried out well in time and of state enterprises that have always been protected from competition.

Chapter 5 examines the factors responsible for the changes occurring in the tobacco sector, notably polarizing trends and shrinking markets, increased productivity, new technology and changing markets. The particular case of China provides an insight into a national strategy which has led to spectacular development of the sector in the 1990s.

Tobacco control and fiscal and social policies are pinpointed as critical factors contributing to changes in the composition and location of the workforce. Illicit trade is also recognized as a contributing factor. The impact which product regulation and research and cigarette design may eventually have on the shape of the industry in the future is also considered in the light of its implications for jobs.

Lastly, Chapter 6 provides an overview of country experiences with crop and economic diversification.

The report includes an appendix entitled “Special cases: Bidi and kretek”. Although these traditional sectors carry the virtue of employing large cohorts, mostly of women, this section highlights their lack of organization and poor bargaining power (particularly in the bidi sector) and the gross abuse of labour laws, despite the fact that both kretek and bidi workers enjoy special protection under the law.

Suggested points for discussion

1. What are the current employment trends in tobacco manufacturing? In tobacco growing?
2. What are the forces driving developments that have a bearing on employment in the tobacco sector?
3. What are the implications of these developments on employment and working conditions in the tobacco sector?
4. What should the social partners at all levels as well as governments do to mitigate any negative impacts of changes in employment levels, and to tackle the challenges for the future?
5. What measures should the social partners and governments take to promote decent work in the bidi and kretek industries?
6. What can the ILO do to assist?

Bibliography

Barbeau, E.; Levenstein, C. 1999. "Feeling the heat: Displaced tobacco workers in North Carolina", in *New solutions: A journal of environmental and occupational health policy*, (Lakewood, Baywood Publishing Co.), Vol. 9(1), pp. 65-80.

Barnet, R.; Cavanagh, J. 1995. *Global dreams: Imperial corporations and the new world order* (New York, Touchstone).

Barrett, C.B.; Reardon, T.; Webb, P. 2001. "Nonfarm income diversification and household livelihood strategies in rural Africa: Concepts, dynamics and policy implications", in *Food policy* (Guildford), Vol. 26, No. 4, pp. 315-331.

Bose, R.; Livingstone, I. 1993. *The labour market and wages policy in Malawi*, report prepared for the Government of Malawi (Lilongwe).

Curtis, M. 2001. *Trade for life: Making trade work for poor people* (London, Christian Aid).

Gately, I. 2001. *Tobacco: The story of how tobacco seduced the world* (New York, Grove Press).

Hanusz, M. 2000. *Kretek: The culture and heritage of Indonesia's clove cigarettes* (Jakarta, Equinox Publishing).

He, Y.; Maeda, Y.; Zhang, Y. Publication forthcoming. *A study of the tobacco sector in selected provinces of Cambodia and China*, Working Paper No. 185, Sectoral Activities Programme (Geneva, ILO).

ILO. 2001. *Making ends meet: Bidi workers in India today. A study of four States*, Working Paper, Sectoral Activities Programme (Geneva), provisional edition.

-. 2002. *Bitter harvest: Child labour in agriculture*, Bureau for Workers' Activities (Geneva).

IOE. 1999. *Codes of conduct*, position paper of the International Organisation of Employers (Geneva).

Kennedy, M. Publication forthcoming. *The tobacco sector in the United States: A study of five states*, Working Paper No. 183, Sectoral Activities Programme (Geneva, ILO).

Kikeri, S. 1998. *Privatization and labor: What happens to workers when governments divest?* (Washington, DC, World Bank).

Mwasikakata, M. Publication forthcoming. *Tobacco: An economic lifeline? The case of tobacco farming in the Kasungu Agricultural Development Division, Malawi*, Working Paper No. 184, Sectoral Activities Programme (Geneva, ILO).

Nassar, H. 2001. "Employment issues in tobacco manufacturing", discussion paper presented at the WHO International Meeting on Economic, Social and Health Issues in Tobacco Control, Kobe, Japan, 3-4 December.

Paixão, M.J.P. 2002. *Produção de fumo no Brasil: Evolução econômica recente e caracterização das Relações de Trabalho* (Rio de Janeiro, ILO), Final Research Report, Project BRA/EXC/079/2001, July.

Petkova, R.I.; Yildirak, N. Publication forthcoming. *Employment trends in the tobacco sector: Bulgaria and Turkey. Selected provinces*, Working Paper, Sectoral Activities Programme (Geneva, ILO).

Sarma, A. 2000. "Regulating tobacco use: Role of taxes", in *Economic and Political Weekly* (Bombay), 30 Dec. 2000, pp. 4613-4615.

The Economist: "Tobacco industry: The price is not quite right", 7 July 2001.

Tobacco Journal International, several issues.

Tobacco Reporter, several issues.

Van Kinh, H.; Bales, S. 2001. *Employment issued in tobacco manufacturing: Viet Nam*, discussion paper presented at the WHO International Meeting on Economic, Social and Health Issues in Tobacco Control, Kobe, Japan, 3-4 Dec.

van Liemt, G. 2002. *The world tobacco industry: Trends and prospects*, Working Paper No. 179, Sectoral Activities Programme (Geneva, ILO).

WHO. 2000. *Tobacco company strategies to undermine tobacco control activities at the World Health Organization*, Report of the Committee of Experts on Tobacco Industry Documents (Geneva), July.

-. 1997. *Tobacco or health: A global status report* (Geneva).

World Bank. 1999. *Curbing the epidemic: Governments and the economics of tobacco control* (Washington, DC.).

Appendix

Special cases: Bidi and kretek

In Indonesia, traditional clove-flavoured cigarettes known as kretek are widely consumed, like bidi in India. Today, the kretek cigarette industry supports an estimated 10 million people, the aggregate for tobacco and clove farmers, hand rollers, as well as factory workers if the entire supply chain is considered. Indonesia's 210 million people consumed an estimated 200 billion kreteks in 2001. Some 2,000 brands are produced by about 500 companies.¹ In India 4.5 million workers are employed in the bidi sector, but bidis also absorb considerable numbers of workers in Bangladesh and Nepal.

Hand-rolling kreteks for the commercial market is a vitally important cottage industry for many people in remote rural areas because of its low start-up costs and its labour-intensive production. It was one industry which actually maintained its employment levels during the Asian financial crisis of 1997.

A.1. The kretek sector in Indonesia

The Indonesian market is one of the few markets where multinational tobacco companies have failed to prosper. Only about one smoker in ten prefers "whites" (standard cigarettes). As in the bidi sector in India, women predominate in the kretek workforce where most kreteks are hand-rolled by some 200,000 women all over Indonesia, who work with incredible speed to keep up with demand, even rolling 12,000 in one day.

The Association of Indonesian Cigarette Producers recorded for 1997 that in Kudus, central Java, where kretek production is concentrated, there are 25 medium-sized and large cigarette factories and 61 small-scale manufacturers, mostly home industry. Some of them have been operating since the 1920s, exporting to several European countries. Data provided by the Kudus administration shows that the total average production of all the factories exceeds 35.8 billion cigarettes a year, consisting of 20.9 billion manually rolled and 14.9 billion machine-rolled clove cigarettes, as well as 47.8 million klobot cigarettes (tobacco wrapped in dried cornleaf). The tobacco industry in Kudus, an area of 425 km², the smallest regency in central Java, is able to pay the central Government more than Rp2 billion (US\$250,000) in taxes per day. However, excise tax is not channelled into local government.²

In 1999 several high-tar brands of cigarettes were withdrawn from the Australian market, including filter kretek cigarettes, on the grounds that they failed to meet the requirements of the Consumer Product Information Standard for Tobacco. According to the Australian Competition and Consumer Commission (ACCC), the cigarettes contained very high levels of tar, nicotine and carbon monoxide which were not disclosed on the packets, and there were no health warnings displayed on the packets. The ACCC took the view that kretek have a pleasant aroma of cloves and that there was a chance of consumers being under the mistaken impression that they were less harmful than others.

Structure and production

According to the Association of Indonesian Cigarette Producers, there were 730 registered kretek cigarette producers in Indonesia, most of them located in Java.³ Of that number, over 70 per

¹ S. Mydans: "But a good cigarette is a fantasy of flavor", in *The New York Times* (New York), 3 Sep. 2001.

² *Jakarta Post* (Jakarta), 6 May 1998.

³ *Indonesian Commercial Newsletter DC/ICN* (Jakarta), No. 272, 27 July 1999.

cent are small scale and can be categorized as home industries, with a combined production capacity of 250 billion bars per annum.

The largest is PT Gudang Garam Tbk, with a capacity of 100 billion bars of hand-rolled cigarettes, machine-rolled kretek cigarettes, and klobot cigarettes. The second largest in 1999 was PT Djarum with a capacity of 40 billion bars per annum, followed by HM Sampoerna with 10 billion bars per annum. All other cigarette producers in the country have an annual production capacity of less than 6 billion bars each. In 1997 Gudang Garam turned out 94.46 billion sticks of machine-rolled and hand-rolled cigarettes, which accounted for over half of Indonesia's total cigarette production for the same year.

On 31 March 1999 the Government revoked article 6 of Act No. 5 regarding the ban on monopolistic practices and unsound business practices and this had an effect on the expansion of the cigarette industry. The revoked article stipulated that a cigarette producer shall not have either a direct or an indirect relationship with a similar producer in terms of capital, production, marketing and management. In short, until then it was against the law for a cigarette producer in Indonesia to establish or operate another cigarette factory or to contract out its production to another producer. Some small-scale producers were therefore worried that the revocation of the said article would pose a threat to their survival, since new cigarette brands had started emerging on the market, both kretek and white. The restriction had been primarily intended to prevent large-scale cigarette producers from withholding payment of duty bands by having some of their production handled by other producers. However, it also protected small-scale producers from being taken over by large-scale ones. In Indonesia the duty band to be paid by a cigarette producer depends on the production rate: the higher the production rate, the higher the duty band.

It was not until the introduction of kretek-rolling machines in the mid-1970s that white cigarettes lost ground to their clove-filled competitors. Once the machine-made kretek were accepted by consumers, manufacturers mechanized their entire production lines, leading to mass layoffs. However, in order to save jobs, a decree of 7 April 1979 that came to be known as *Kebijaksanaan 2-1* required that for every two machine-made kreteks produced, each company was obliged to roll one by hand. At the same time, the decree was also designed to protect small and medium-sized kretek companies which were still obliged to continue manufacturing their kreteks by hand. It was considered that constraints on the production of machine-made kreteks would allow these smaller businesses a fair share of the market.⁴

Eventually, the regulation was ignored, and the Government set in place a tiered system of taxation which taxed machine-made kretek at a much higher rate than their hand-rolled competitors, so that the price of machine-made kreteks was increased but the price of hand-rolled kreteks kept relatively low. By the end of 1999 two-thirds of all kreteks were made by machine. In times of crisis consumers switch to the cheaper hand-rolled variety.

A government regulation passed in the early 1970s made it compulsory for kretek companies to provide benches and tables for their rollers, although klobot are still produced by workers who sit on the floor in circles.

Raw materials

Indonesian cigarettes, which have not yet found an international market, add other substances to tobacco: cloves, flavours, aromas, and sauces, which all appeal to customers' tastes. In the case of kretek cigarettes, tobacco demand is met mostly by domestic production, which amounts to 140,000 tons annually, but complemented with imports from the United States and China. In 1997 Indonesia imported 52,020 tons of tobacco worth US\$205.9 million. The country imports mostly Virginia tobacco for white cigarettes.

Nearly every job in a kretek factory is segregated by gender. Whereas the delicate hand-rolling process is left to women, men typically attend to the rougher aspects of kretek production, such as operating the machines and driving the trucks.

⁴ Hanusz, 2000.

Cigarette companies as sponsors and providers of jobs

As elsewhere in the world, the cigarette companies in Kudus have supported an environmental programme and are the leading sponsors in sporting events. They are also active supporters of civic and charity projects. However, the tobacco industry's chief contribution is as a provider of jobs: of the 666,216 inhabitants, 42,939 (6.4 per cent) of the population of the area work in cigarette factories. The same pattern applies to Kediri regency in East Java, another clove cigarette-producing area. Whereas there were about 100 cigarette factories in Kediri in 1969, only 11 were in place by 1998, including the largest in Indonesia, Gudang Garam, which employs 30,500 female and 12,250 male workers. Its annual tax contribution amounts to Rp1,768 billion (US\$205 million). The company also assists the regional administration by contributing building permit tax and property tax. Apart from official contributions for development programmes and public facilities, cigarette factories also openly pay tributes (*upeti* in Bahasa Indonesian) as part of their attempt to foster good relations. Cigarette companies in Indonesia, therefore, enjoy good standing, which empowers them to codetermine the formation of the administration's apparatus in the regency. As a reflection of the status of the tobacco industry in the country, the election of the cigarette factories' branch president of the All Indonesia Workers' Union is often a closely contested struggle. Until 1998 the tobacco sector had retained its level of significance as outlined.

Growing consumer awareness

On 6 February 2002 the Board of Directors of PT Gudang Garam Tbk posted its decision to acquire the privately financed assets of a newly constructed cigarette factory valued at US\$75 million, with a capacity of 13 billion sticks annually, to manufacture light kretek cigarettes. "Lights" accounted in 2002 for about 10 per cent of the total kretek market in Indonesia. Prior to the construction and ultimate acquisition of the factory, the company had recognized the significant long-term potential of low-tar, low-nicotine kreteks. From virtually no sales in 1994, this market segment has ballooned to almost 7 per cent of the market in May 1999. As elsewhere, the tobacco industry in Indonesia is also concentrating on lower nicotine and tar content in their products, owing to growing consumer awareness about the negative effects of high tar and nicotine intake. The transaction provides Gudang Garam with the means to make a timely and speedy entry into a new market without incurring the risks of foreign exchange exposure associated with such a project. Working capital has been conserved to give the company maximum leverage in replenishing its clove and tobacco stocks during a period of volatile raw material prices.

Kretek reportedly contains no less nicotine and tar than regular "white" cigarettes. Most men smoke what has been termed in one report as "the impossibly noxious kretek cigarettes ... and many will die early from smoking-related diseases".⁵

Poor market for white cigarettes

Indonesia's cigarette production registered an upward curve in 2000, and one clear trend in the industry is the move away from white cigarettes. The white cigarette market share decreased from around 40 per cent at its height in the 1980s to roughly 13 per cent in 1999. Production of white cigarettes fell by almost 7 per cent in 1999 to 28.3 billion sticks as minimum price regulations placed white cigarettes out of the range of many consumers. Kretek sales increased 3 per cent in 1999 and were expected to climb further to 6 per cent or even 7 per cent in 2000 to 203.8 billion sticks. Hand-rolled cigarettes are cheaper.⁶ Excise tax is proportionate to annual production and technology: the higher the annual production and the more sophisticated the machinery used, the higher the excise tax. However, a new system has been proposed which would favour multinational tobacco manufacturers of regular cigarettes at the expense of local and labour-intensive producers.

⁵ R. Brazier: "Opening access to economic opportunity in Indonesia: Nine key policy areas", in *Jakarta Post* (Jakarta), 4-5 Jan. 2001.

⁶ United States Department of Agriculture (USDA) Foreign Agricultural Service (FAS): *Indonesia: Tobacco and Products Annual Report* (Washington, DC), 14 June 2000.

Labour unrest

On 31 March 2000 more than 2,000 workers of Indonesia's largest cigarette factory, PT Gudang Garam Tbk, led a strike in protest against dismissals. It attacked its main factory and laid hands on a company official. In East Java recently, when a kretek manufacturer shut its workers out of the factory because of a labour dispute, the Government compelled the company to reopen for business; not only were the workers not getting paid but the whole town depended on the kretek factory for its livelihood. On 4 December 2001 some 1,700 women workers from the Djagung cigarette company in Malang, East Java, staged a protest demanding an increase of Rp56,000 in their holiday bonuses from Rp400,000 to Rp456,000. Workers were represented by the local trade union, the Food, Beverage, Tobacco and Cigarette Federation Trade Unions (FSP RTMM) affiliated to the Workers' Confederation of All Indonesian Trade Unions (KSPSI). The management stated that they would not increase workers' holiday bonuses and threatened to reduce the number of workers if they continued to expect the higher amount.⁷

A.2. The bidi sector in India⁸

*An urgent call for action*⁹

The structure of India's tobacco industry shown in table A.1 shows just how important is the manufacture of bidis.

Table A.1. Structure of the tobacco industry in India

Code No. ¹	Activity	Gross value of output (US\$)	Percentage share in the total output of the tobacco industry	Employment	Percentage share in total employment in the tobacco industry
2260	Manufacture of bidis	613 130	47.40	4 423 100	88.85
2271	Manufacture of cigarettes and cigarette tobacco	364 382	28.17	16 152	3.20
2250	Tobacco stemming, redrying and all other operations connected with the preparation of raw leaf production	192 382	14.87	37 309	0.07
2282	Manufacture of zarda ²	56 484	43.67	4 352	0.87
2283	Manufacture of chewing tobacco (excluding zarda)	45 848	35.44	2 150	0.43
2281	Manufacture of snuff	9 691	0.749	832	0.17
2272	Manufacture of cigars and cheroots	820	0.063	482	0.10

⁷ Harian Analisa, 4 Dec. 2001, at <http://www.analisadaily.com>, visited 24 Oct. 2002.

⁸ This section is drawn from ILO, 2001.

⁹ A component of an ILO Dutch-funded project is currently being implemented in India, under the ILO's Gender Promotion Programme, entitled "Improving working conditions and employment opportunities for women in the bidi industry in India".

Code No. ¹	Activity	Gross value of output (US\$)	Percentage share in the total output of the tobacco industry	Employment	Percentage share in total employment in the tobacco industry
2289	Manufacture of tobacco products not elsewhere classified	10 782	0.833	2 948	0.59

¹ Code numbers refer to National Industrial Classification Code, 1987. ² Zarda is a perfumery compound of tobacco. Its main ingredients are raw leaf, tobacco, flavouring essence, silver leaves, colours, lime, perfumes, saffron, etc. It is a form of chewing tobacco. Source: *Annual Survey of Industries (ASI)*, 1994-95, Central Statistical Organization, cited in ILO, 2001.

Bidis are made by rolling about 0.2 grams of tobacco flakes in tendu leaf. In India bidis account for 34 per cent of tobacco consumption, snuff and chewing tobacco for 35 per cent, and cigarettes for 22 per cent. The size of the market for bidis is therefore considerably larger than that for standard cigarettes. The total number of bidi smokers was estimated to be around 100 million in 1994-95, the majority of whom were adult males. The total number of cigarette smokers was 25 million. In 1996 annual bidi consumption was estimated to be 700 billion sticks. The total number of cigarette sticks sold in 1996-97 was 102 billion. Smokers mainly in the low-income categories consume bidis while standard cigarettes tend to be consumed by the higher income brackets. The markets for bidis and cigarettes therefore do not overlap significantly.

Bidis cater primarily to the domestic market though they are also exported in small quantities. In 1997-98 1.1 million kg of bidis worth US\$6.5 million were exported to 36 countries. About half of the total exports went to the United Arab Emirates (49 per cent) followed by the United States (10 per cent), Singapore (7 per cent), Afghanistan (6 per cent), Saudi Arabia (5 per cent) and Panama (4 per cent). These six countries accounted for an 82 per cent share of exports with the remaining 30 sharing 18 per cent.¹⁰

The manufacture of bidis is a highly labour-intensive process, and employs large numbers of unskilled workers. According to the Economic Census of the Government of India, 1.5 million workers were employed in bidi making in 1990. According to the data on the number of workers in the bidi industry released by India's Ministry of Labour,¹¹ the number of bidi workers recorded in mid-1997 was over 4.3 million (see table A.2).

Table A.2. Number of bidi workers, by state, 1997

State	Total number of bidi workers	Percentage share of each state
Madhya Pradesh	750 000	17.0
Tamil Nadu	621 000	14.0
Andhra Pradesh	600 000	14.0
West Bengal	475 000	11.0
Uttar Pradesh	450 000	10.0
Bihar	391 000	9.0
Karnataka	360 876	8.0
Maharashtra	256 000	6.0
Orissa	160 000	4.0

¹⁰ India's export of unmanufactured tobacco far exceeds that of manufactured tobacco. In 1997-98 India exported US\$247 million worth of unmanufactured tobacco against US\$41 million in exports of manufactured tobacco. Exports of Virginia tobacco had the lion's share of exports of unmanufactured tobacco (US\$125 million). Within the category of manufactured tobacco, exports of cigarettes were worth US\$16 million, more than double the value of bidis.

¹¹ Reply to parliamentary Question No. 445, 7 May 1997.

State	Total number of bidi workers	Percentage share of each state
Kerala	136 419	3.0
Rajasthan	100 000	2.0
Gujarat	50 000	1.0
Assam	7 725	0.2
Tripura	5 000	0.1
Total	4 363 520	99.3

Source: Reply to parliamentary Question No. 445, May 1997, cited in ILO, 2001.

This number does not include employment in related activities like those of cultivators, wholesalers, retailers, etc. According to a 1996 survey conducted by the Indian Market Research Bureau (IMRB),¹² the breakdown of employment in the bidi industry in 1994-95 was as follows: cultivators: 290,000; processors: 44,000; manufacturers: 4,461,000; wholesalers: 83,000; retailers: 757,000; total: 5,635,000.

Thus, between 1990 and the end of 1997 the number of workers in the bidi industry grew almost threefold. It has been alleged, however, that the employment figures released by the Ministry of Labour are an underestimation since employers under-report the size of the workforce. One source states that 900 billion bidis are produced annually by some 10 million workers.¹³

In the bidi industry a large number of unregistered and home-based enterprises coexist with factory-based manufacturing enterprises.

A stagnation and even decline in employment has been registered in the sector in the four states surveyed and this is attributable principally to competition with other tobacco-based products, namely mini-cigarettes and chewing tobacco; competition among bidi brands; social dumping; and the influx of migrant workers. In the case of Madhya Pradesh government policy with regard to tendu leaves, intended to protect tribal populations who were the pluckers of tendu leaves, has proved to be a further contributing factor. However, production statistics show an increase. This apparent discrepancy may be accounted for by the following developments: the gap in demand and supply is widening; cheaper labour is available on the market; manufacturers are turning more and more to hidden forms of labour; and the manufacture of illegal bidi, known as *vardi*, is on the rise.

Decent work for vulnerable groups

The manufacture of standard cigarettes falls within the organized sector where the production process is factory-based, capital-intensive and dominated by the presence of a few multinationals or big companies like ITC Limited, Godfrey Philips, and Vazir Sultan Tobacco Limited. The bidi industry, on the other hand, is domestically owned. The production process is highly labour-intensive and relies on the availability of cheap labour.

However, the conditions of work in the bidi industry raise serious concerns about certain labour practices which run contrary to the spirit of the ILO Declaration on Fundamental Principles and Rights at Work. Isolated case studies and media reports indicate that the bidi industry employs large numbers of women and children in inhospitable and exploitative conditions. Labour laws are grossly abused: most of the protective legislation requires proving the employer-employee relationship, which is becoming more and more difficult. As shown in previous chapters, the tobacco-growing sector hosts vulnerable segments of the population, whether ethnic minorities, migrants, children or the poor for whom tobacco farm work is the only survival option. India's bidi sector, similarly, is host to scheduled tribes and castes, as well as religious minorities.

¹² ILO, 2001.

¹³ Kaur and Sudarshan, 1999, cited in ILO, 2001.

Sustaining the equilibrium of exploitation

ILO research shows that the industry grew amid rampant exploitation of labour.¹⁴ Exploitation was internalized via a social mechanism of the mutually compatible socio-economic interests of employers, workers, the community and poor households.

A number of factors combine to impart stability and sustainability to the exploitative production relations that prevail in the bidi industry. Both economic and sociological factors help to maintain a state of equilibrium, which brooks no interference either by legislative authorities or the organized trade union movement. ILO research shows that employers have clear-cut vested interests in perpetuating exploitative practices through wilful concealment of facts and manipulative organizational methods. Records are not kept. The role of the middlemen or intermediaries is an ambivalent one: they provide work to far-flung rural villages, but at the same time replicate an exploitative system by transferring the burdens of certain industry costs to the workers.

Lack of exposure of workers to the outside world and knowledge of their own rights and entitlements stand in the way of organizing them. Workers often cannot pay union dues. Connivance between the shop owners and the local authorities has been a further obstacle to trade union organization. There have been negligible instances of industrial disputes. Welfare provisions are difficult to implement because of the difficulties involved in identifying beneficiaries. Identification cards are not always provided to workers even if they are entitled to them. Workers are plagued by supposedly tobacco-related and other occupational diseases, although no rigorous research studies support these findings.

The social partners have still to bring bidi workers high on their agenda if any significant change is to be effected in production relations.

In short, social acceptance of informal production relations and internalization of such relations within the existing mode of social institutions perpetuate exploitation in the sector without any significant resistance. Personal relationships within production relations hinder development of consciousness on the basis of class, so that production relations and skill formation are endogenized within families, where production is a collective process with participation of individual family members according to their abilities. Labour laws treat individuals as labourers and are not modelled to treat a family or a household as a unit of production. The social milieu in bidi-producing villages has evolved norms to accept such production relations without organized conflict.

A further phenomenon which needs to be clearly understood in terms of its social policy implications is the close link between legality and informality, which, though not explicit, is brought to the fore in the bidi sector. The impact on the organization of production in the sector and the associated deterioration of the quality of jobs are not only direct outcomes of the proliferation of informal or unregistered bidi production units, but are equally due to the introduction of labour and social benefits provisions in favour of bidi workers. Specific legislation applies to the bidi sector, covering minimum wages, conditions of work, and social insurance, but such provisions are only partially implemented on industrial premises and factory sheds, and are widely flouted with respect to homeworkers (see table A.3).

¹⁴ ILO, 2001.

Table A.3. Minimum wages for unskilled bidi workers in different states under India's Minimum Wages Act, 1948

Serial No.	State	Minimum wage per 1,000 bidis rolled (in rupees) ¹
1	Andhra Pradesh	18.65 (max.) and 16.70 (min.)
2	Assam	38.20
3	Bihar	41.81
4	Gujarat	56.50 (max.) and 56.20 (min.) per day
5	Karnataka	43.42 per day
6	Kerala	54.42
7	Madhya Pradesh	32.42
8	Maharashtra	41.00 per day
9	Orissa	30.00
10	Rajasthan	32.00 (max.) and 27 (min.)
11	Tamil Nadu	37.68
12	Uttar Pradesh	59.62
13	West Bengal	64.51 (max.) and 55.31 (min.)

¹ In some states, the prescribed minimum wage rate is on a "per day" basis. Normally, an average worker can roll 800 bidis daily. Source: ILO, 2001.

Bidi workers therefore fall into the category of vulnerable workers whose dependence on the tobacco sector is structurally at fault from the point of view of employment policies and social protection. The ILO's decent work agenda urgently needs to be applied to the communities referred to so as to mobilize the social partners and the international community to develop action programmes and effect change.

The draft provisions of the international Framework Convention on Tobacco Control provide for such cooperation and pooling of international development expertise. Such cooperation would facilitate setting in place appropriate mechanisms for reviewing social and economic policies aimed at breaking the secular cycle of poverty, vulnerability and tobacco dependence.

At the present time the importation of cigarettes is prohibited in conformity with India's export-import policy. However, the bidi industry will be severely at risk if cigarette imports are liberalized in the near future as a part of India's commitment to the World Trade Organization. The extent to which the liberalization of imports of cigarettes into India can affect the market for bidi depends upon whether the cigarette manufacturers can target the poorer market segment: a pack of mini cigarettes containing 10 sticks already sells in India at approximately the same price as a packet of 25 bidis. Dumping cigarettes at cheaper prices will easily destroy the domestic manufacturing base of bidi.

The eventuality of liberalized cigarette imports will open the way for India's liberalization of foreign direct investment in the cigarette industry. Foreign investment is always a preferred route because it creates income and employment in the host country. The fact remains, however, that the extent to which foreign investment in cigarettes can be a threat to the bidi industry depends on how cheaply cigarettes can be manufactured. Allegedly, smuggling 1.5 billion cigarettes per year into India has already started affecting the domestic market for cigarettes.

An ILO study has, with some difficulty, established that the industry seems doomed to disappear, if only in the long term. Therefore the social and economic implications for the displaced bidi workers will be a major challenge, at both the microeconomic and the macroeconomic levels.

Competition with standard cigarettes, in particular mini-cigarettes, is likely to be fierce when restrictions on imports of cigarettes into India are withdrawn, in compliance with WTO requirements. Any real threat to this industry has very serious implications in terms of loss of income and earning opportunities for millions of poor unskilled workers with hardly any savings, asset base or social protection. The ILO has already mobilized modest resources targeting bidi

workers in India, but vigilance needs to be exercised regarding future developments in the tobacco sector nationally and internationally.

Employment characteristics in the unorganized sector

Estimates of employment in the unorganized sector published by the National Sample Survey Organization (NSSO) show that, like the factory sector, the bidi industry provides the bulk of the employment in the tobacco industry in the unorganized sector too. Table A.4 shows the percentage contribution of the various tobacco products in terms of employment in the unorganized sector.¹⁵

Table A.4. Share of employment of enterprises manufacturing tobacco products in the unorganized sector of India, 1998

Activity	Percentage share of employment in the tobacco industry
Tobacco stemming, redrying and all other operations connected with preparing raw leaf tobacco	5.0
Manufacture of bidi	93.0
Manufacture of cigars, cigarettes, cheroots and cigarette tobacco	0.7
Manufacture of snuff, zarda, chewing tobacco and other tobacco products not elsewhere classified	0.6

Source: Estimated from National Sample Survey Organization (NSSO) data, 1998.

The manufacture of bidis absorbs 93 per cent of employment in the tobacco industry in the unorganized sector. Preparation of raw leaf tobacco accounts for 5 per cent. Other products contribute less than 1 per cent of employment each. Concern for employment in the unorganized sector in the tobacco industry, therefore, needs to be focused mainly on issues relating to the bidi industry.

According to the NSSO survey¹⁶ (reference period July 1994-June 1995) of unorganized manufacturing enterprises, 85 per cent of the workers¹⁷ were in full-time employment.¹⁸ However,

¹⁵ ILO, 2001.

¹⁶ The estimated number of workers according to this survey was 2.14 million. This differs from data reported by the Ministry of Labour in response to parliamentary Question No. 225 on 24 February 1997, according to which the number of bidi workers in 1994-95 was 4.3 million.

¹⁷ Workers are all persons, households or non-household, paid or unpaid, directly or indirectly associated with or incidental to manufacturing and/or repairing activities of an enterprise. Part-time workers are also taken as workers of the enterprise so long as they are engaged on a fairly regular basis. The workers directly engaged in or incidental to the manufacturing and/or repairing activities of an enterprise have been divided into three categories, namely: (i) hired workers (other than household workers); (ii) paid household workers; and (iii) unpaid household workers. The remaining workers, i.e. the workers who are indirectly associated with or incidental to manufacturing are classified as "other workers". Other workers include all persons directly associated with or incidental to the manufacturing process of a manufacturing and/or repairing enterprise. This category includes persons holding the position of supervision and management, clerks, store-keepers, sweepers, etc.

¹⁸ There are no fixed universal norms regarding the number of hours which measure full-time work. Normal daily working hours vary extensively from enterprise to enterprise. If any worker in an enterprise is working for half the period or less of what is considered normal daily working hours in that enterprise, the worker is deemed to be a part-time worker. If he/she is working for more than half the normal working hours he/she is considered a full-time worker.

the industry employs very few hired workers¹⁹ on a regular basis. Hired workers, excluding paid household workers, constitute 3.3 per cent of the total number of workers. The bulk of the enterprises run without hired workers. Own-Account Manufacturing Enterprises (OAME),²⁰ which run without hired workers, engage 95 per cent of the workers in this industry. The industry has a large rural base. A very high percentage of workers (78 per cent) come from the rural areas. Another important employment characteristic of this industry is the preponderance of women workers who account for 65 per cent of the total. According to Government of India figures, 74 per cent of the total number of workers in the factory sector of the bidi industry are women.

Households²¹ absorb 46 per cent of the total number of workers. Household workers are mainly unpaid workers (99.7 per cent), i.e. they work without regular salary or wages. Female workers constitute 81 per cent of the total number of household workers.

Child workers²² account for 11 per cent of the total number of workers, within which girls account for 93 per cent. The majority (73 per cent) are in the household sector and 95 per cent of them are girls. Among the child workers 27 per cent are hired. Unpaid child workers constitute 17 per cent of the total number of child workers. Unpaid household child workers account for 24 per cent of the total number of household child workers. Among the unpaid household child workers 80 per cent are girls.

¹⁹ A hired worker is a person employed, directly or through an agency, on payment of a regular wage or salary. Apprentices, paid or unpaid, are taken as hired workers. Paid household workers, servants and resident workers working for an enterprise are also considered hired workers.

²⁰ OAME is defined as a manufacturing and/or repairing enterprise run without any hired worker employed on a fairly regular basis, i.e. during the major part of time of operation of the enterprise in the reference period of the survey.

²¹ All workers belonging to the household of the proprietor or the household of the partners, who work in or for an enterprise, are household workers.

²² Age not exceeding 14 years.