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Guindon, G. Emmanuel

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Publication Date

2003-03-01



H N P D I S C U S S I O N P A P E R

Economics of Tobacco Control Paper No. 6

Past, Current and Future Trends in Tobacco Use

G. Emmanuel Guindon and David Boisclair

February 2003

Tobacco Free Initiative
World Health Organization



**PAST, CURRENT AND FUTURE TRENDS
IN TOBACCO USE**

G. EMMANUEL GUINDON AND DAVID BOISCLAIR

MARCH 2003

Health, Nutrition and Population (HNP) Discussion Paper

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The editors for the Economics of Tobacco Control papers are: Joy de Beyer (jdebeyer@worldbank.org), Emmanuel Guindon (guindone@who.int) and Ayda Yurekli (ayurekli@worldbank.org).

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ISBN 1-932126-66-X

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Health, Nutrition and Population (HNP) Discussion Paper
ECONOMICS OF TOBACCO CONTROL PAPER NO. 6
PAST, CURRENT AND FUTURE TRENDS IN TOBACCO USE

G. Emmanuel Guindon^a and David Boisclair^a

^aTobacco Free Initiative, World Health Organization, Geneva, Switzerland

Paper prepared for the World Health Organization's Tobacco Free Initiative

Abstract: This paper first estimates the number of tobacco users in 2000 and cigarette consumption from 1970 to 2000 by regions and levels of development and briefly discusses the advantages and disadvantages of estimating tobacco use on the basis of prevalence surveys or aggregate data. Secondly, prevalence (and its associated number of smokers) and cigarette consumption (total and per capita) are projected in the future using several scenarios of changes in tobacco use (prevalence and cigarette consumption), as well as different assumptions about population and income growth. The results show that even if all countries immediately implement a comprehensive set of tobacco control policies, the reduction in the number of tobacco users and the total consumption of cigarettes will be gradual. This should give comfort to farmers and others who fear the impact of tobacco control on their livelihoods. It is however, discouraging news for public health, since it implies that the number of tobacco-attributable deaths will continue to rise for decades to come.

Keywords: tobacco, cigarette; consumption; trends; economics of tobacco; economics of tobacco control; smoking; tobacco policy; demand for cigarettes.

Disclaimer: The findings, interpretations and conclusions expressed in the paper are entirely those of the authors, and do not represent the views of the World Bank or the World Health Organization, their Executive Directors, or the countries they represent.

Correspondence Details: G. Emmanuel Guindon, Tobacco Free Initiative, World Health Organization, Geneva, Switzerland, tel: 41-22-791-1111; fax: 41-22-791-4832; email: guindone@who.int

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FOREWORD

In 1999, the World Bank published “Curbing the Epidemic: governments and the economics of tobacco control”, which summarizes the trends in global tobacco use and the resulting immense and growing burden of disease and premature death. By 1999, there were already 4 million deaths from tobacco each year. This number is projected to grow to 10 million per year by 2030, given present trends in tobacco consumption. Already about half of these deaths are in high-income countries, but recent and continued increases in tobacco use in the developing world is causing the tobacco-related burden to shift increasingly to low- and middle-income countries. By 2030, seven of every ten tobacco-attributable deaths will be in developing countries. “Curbing the Epidemic” also summarizes the evidence on the policies and interventions that have proved to be effective and cost-effective in reducing tobacco use in countries around the world.

Raising taxes to increase the price of tobacco products is the the most effective way to reduce tobacco use, and the single most cost-effective intervention. It is also the most effective way to persuade young people to quit or not take up smoking. This is because young people, like others with low incomes, tend to be highly sensitive to price increases.

Why are these proven cost effective tobacco control measures not adopted or implemented more strongly by governments? Many governments hesitate to act decisively to reduce tobacco use because they fear that tax increases and other tobacco control measures might harm the economy by reducing the economic benefits their country gains from growing, processing, manufacturing, exporting and taxing tobacco. The argument that tobacco contributes revenues, jobs and incomes is a formidable barrier to tobacco control in many countries. Are these fears supported by the facts?

In fact, these fears turn out to be largely unfounded when the data and evidence on the economics of tobacco and tobacco control are examined. A team of about 30 internationally recognized experts in economics, epidemiology and other relevant disciplines who contributed to the analysis presented in “Curbing the Epidemic” reviewed a large body of existing evidence. The team concluded that in most countries tobacco control would not lead to a net loss of jobs and could, in many circumstances actually generate new jobs. Tax increases would increase (not decrease) total tax revenues, even if cigarette smuggling increased to some extent. Furthermore, the evidence shows that cigarette smuggling is caused at least as much by general corruption as by high tobacco product tax and price differentials. The team recommended that governments not forego the benefits of tobacco tax increases because they feared the possible impact on smuggling. Rather, they should act to deter, detect and punish smuggling.

Much of the evidence presented and summarized in “Curbing the Epidemic” was from high-income countries. However, the main battleground against tobacco use is now in low- and middle-income countries. If needless disease and millions of premature deaths are to be prevented, then it is crucial that developing countries raise tobacco taxes,

introduce comprehensive bans on advertising and promotion of tobacco products, ban smoking in public places, inform their citizens about the harm that tobacco causes and the benefits of quitting, and provide advice and support to help people quit.

In talking to policy-makers in developing countries, it became clear there was a great need for country-specific analytic work to provide a basis for policy making within a sound economic framework. The World Bank and WHO's Tobacco Free Initiative (as well as several other organizations, acting in partnership or independently) began to commission and support analysis of the economics of tobacco and tobacco control in many countries around the world.

The report presented in this paper makes a valuable contribution to our understanding of the issues and likely economic impact of tobacco control. Our hope is that the information, analysis and recommendations contained herein will prove helpful to policy makers and result in stronger policies to reduce the unnecessary harm caused by tobacco use.

Joy de Beyer

Tobacco Control Coordinator
Health, Nutrition and Population
World Bank

ACKNOWLEDGMENTS

The authors would like to thank Joy de Beyer for her comments, Gael Kernen and Gisele Biyoo for their formatting assistance and Jean-Philippe Meloche for his formidable programming skills. The authors alone are responsible for the remaining errors in this paper.

The authors are also grateful to the World Bank for publishing the report as an HNP Discussion Paper.

INTRODUCTION

There is little debate surrounding the health hazards associated with the use of tobacco products. Evidence implicating tobacco as a potential health hazard emerged in the early 1950s (Doll and Hill 1954, 1956; Wynder and Graham 1950). There are now more than 70,000 scientific articles that link smoking with a pervasive range of health problems (USDHHS 1994). Recent epidemiological studies performed in China summarize the magnitude of the tobacco epidemic. If current smoking patterns persist, about 100 million of the 300 million Chinese males now aged 0-29 will die as a result of tobacco use (Liu et al. 1998). Currently, an estimated 4.9 million deaths per year are caused by tobacco. Without further action, it is predicted that in 2020 the mortality burden attributable to tobacco will nearly double (WHO 2002).

However, there are signs of hope: effective policies and interventions exist that can make a difference. The World Health Organization recently examined the cost-effectiveness of various tobacco control interventions for population health through the impact of reduced tobacco use on the incidence of cardiovascular disease, respiratory disease and various forms of cancer (WHO 2002). The combination of higher tobacco prices through taxation, comprehensive bans on advertising and promotion and information campaigns in the form of package and labelling measures or counter-advertising was found to be affordable and cost-effective in the majority of subregions examined. Including smoking restrictions in public places resulted in even greater improvements in health, albeit at a higher cost. These results tally with an influential World Bank report that examined the effectiveness of an array of interventions and concluded that both price (taxes) and non-price (advertising bans, information campaigns, smoking restrictions, etc.) measures can reduce the demand for cigarettes (World Bank 1999).

Despite the increasing evidence that tobacco use kills, many governments still fail to act because of fears that tobacco control interventions might hurt their country's economic development. The World Bank examined concerns such as loss of employment, tax revenues and export earnings and concluded that tobacco control policies could bring unprecedented health benefits without harming economies. This paper will attempt to show that even if all countries immediately implement a comprehensive set of tobacco control policies, the reduction in the number of tobacco users and the total consumption of cigarettes will be gradual at best. To this end, this paper first estimates the number of tobacco users in 2000 as well as cigarette consumption from 1970 to 2000 by WHO regions and levels of development. The paper briefly discusses the advantages and disadvantages of estimating tobacco use on the basis of prevalence surveys or aggregate data. Secondly, prevalence (and its associated number of smokers) and cigarette consumption (total and per capita) are projected in the future using several scenarios of changes in tobacco use (prevalence and cigarette consumption), population increases and changes in income levels.

SOURCES AND METHODS

Estimating tobacco use

Estimates of consumption and prevalence of use of tobacco products can originate from various types of data. First, they can be based on (self-reported) tobacco use prevalence surveys. Prevalence surveys provide information on the proportion of tobacco users in a given population. Prevalence data combined with tobacco use intensity data can also yield total consumption estimates. Secondly, consumption can be derived from aggregate production and trade statistics. Production plus imports minus exports will yield 'apparent' consumption estimates. Thirdly, consumption can also be estimated from national cigarette sales data based on tax records.

Prevalence surveys can provide important insights into patterns of – and changes in – consumption according to gender, age, income and education (Warner 1977). They also allow distinguishing between a change in the *number of smokers* and changes in *consumption per smoker* (Warner 1977). On the other hand, consumption data (the number of cigarettes consumed) based on surveys suffer from significant underreporting (Haziandreu et al. 1989; Jackson and Beaglehole 1985). Moreover, it has been argued that increased awareness of the health consequences associated with tobacco use and the increased social undesirability of tobacco use may lead to higher underreporting of cigarette consumption, making trend data less reliable (Warner 1978). Another potential inconvenience is the infrequent unavailability of trend data. The subjective nature of surveys and differences in survey methodology (questions, definitions, languages, etc.) also make comparison of estimates across countries difficult.

Aggregate production and trade statistics are objective data that eliminate the underreporting problem inherent in data based on subjective survey responses (Warner 1977). These data are also readily available across time and countries. This feature, as well as the availability of centralized data sources using common methodologies, allows for good comparability. However, most of these large-scale tobacco statistics are only available for manufactured cigarettes. Although about 80 percent of all tobacco consumed in the world is in the form of cigarettes (Chapman and Lazarus 1992), other forms of tobacco use are significant in some countries such as India and Norway (Chapman 1992).

The major problem with aggregate data is perhaps that, unlike prevalence survey-based data, they cannot be used for analysing changes in gender, age, income and education distribution and they do not permit a distinction between a change in the number of smokers and changes in consumption per smoker (Warner 1977). Other important problems include illicit trade in cigarettes, which may lead to under- or over-estimating consumption of tobacco products (WHO 1998)¹, as well as the question of measurement

¹ 'Apparent' consumption will under-estimate true consumption in countries where tobacco products are illegally imported and consumed while it will over-estimate true consumption where tobacco products are illegally exported to another country.

units yielding diverging trends² and biased point estimates³. Production data can be used at the global level as a proxy for world consumption. Production data will be a poor proxy for consumption in most countries, but as world exports must equal world imports, aggregating cigarette production for all countries would do away with the problems associated with smuggling and attenuate the problems associated with measurement units. Unfortunately, because of unequal data availability through time, adding all production data points in a particular year can lead to severe underestimation.

The problem of stockpiling may also emerge, as not all cigarettes will be consumed in the year they are produced or imported. If this stockpiling is significant it may bias consumption estimates. However, stockpiling is unlikely to affect trends since it is not likely to vary from year to year – although tobacco companies have been known to time cigarette stockpiling against health measures so that they appear less effective (WHO 1998). Finally, transient populations will affect aggregate trade and production statistics to a varying degree: ‘apparent’ consumption will over-estimate true consumption in countries with large transient populations (for example tourists or military) and small indigenous populations such as Malta and the Maldives.

Sales data based on tax records are also aggregate data and hence present the same general advantages and disadvantages as those described for production and trade statistics. It should be noted, however, that sales data are not as readily available across countries and are not available in centralized databases. On the other hand, they do not suffer from the limitations associated with measuring and reporting units or stockpiling. They also present the advantage (unlike estimates obtained from trade and production statistics) of yielding consumption estimates that exclude duty-free sales⁴, most of which are to non-residents and are not consumed in the country.

Computing consumption

Due mainly to data availability issues, and bearing in mind the important advantages and disadvantages presented above, the next section presents cigarette consumption figures calculated using production, import and export statistics found in various databases and

² Trade and production data can be reported in weight or in physical units. In countries where cigarette weights have not remained constant over time, cigarette consumption expressed in units and in weight can show diverging trends. For example, Australian cigarettes became progressively lighter in the late 1980s. When expressed in grams per capita, cigarette consumption in Australia fell by 4.9 percent between 1986 and 1990 while it increased by 5 percent when expressed in units (Chapman 1992).

³ Trade and production statistics for an individual country can also be reported in different units. For example, manufactured cigarette imports and exports are often reported in metric tons while production is expressed in units. When this is the case, it can be assumed in the calculations that one cigarette weighs one gram. But this assumption may not hold and thus bias consumption estimates. The direction of the bias will depend on two factors: (1) the true ‘conversion factor’, and (2) the respective size of imports and exports. For example if, in a country where production statistics are expressed in units while trade statistics are expressed in metric tons one cigarette weighs 0.8 gram, assuming that one gram of cigarette equals one cigarette will over-estimate true consumption if the country is a net importer of cigarettes, and under-estimate it if the country is a net exporter.

⁴ Sales statistics are typically based on tax receipts.

publications. The best source for each country's indicators is selected according to the following process. Production and trade data from these trade and production data sources are compared and contrasted: ERC Statistics International, FAOStat Statistical databases, Official Statistics of the countries of the Commonwealth of Independent States (CIS), United Nations Industrial Commodity Production Statistics Database, Commodity Trade Statistics Data Base (COMTRADE), and United States Department of Agriculture databases (USDA). Where they are available, data from national sources are also considered. When the data are identical or very similar, the most complete source (the one with the most data points) is used. On some occasions similar data from different sources have been merged to expand data coverage.

When data from any of the sources conflict with another, they are compared and contrasted with data reported in *Tobacco or Health: A Global Status Report*, the Pan American Health Organization's *Tobacco or Health: Status in the Americas*, Market Tracking International, OECD Health Data 2000, and the International Tobacco Guide. If no consensus emerges, the data are not reported. On rare occasions, cigarette consumption calculations may yield unrealistic estimates (for instance, negative consumption numbers). These estimates are also not reported. For the purposes of the calculations, when cigarette production and trade are expressed in weight, one gramme in weight is converted to one cigarette stick, with the results presented above.

United Nations databases use international classifications (albeit different ones) to group commodities. The following commodity codes are used to identify the relevant data: United Nations Industrial Commodity Production Statistics Database. International Standard Industrial Classification of all Economic Activities (Revision 2): Code 3140-07. United Nations Statistics Division. Commodity Trade Statistics Data Base (COMTRADE); Standard International Trade Classification (Revision 2): Code 1222. FAO Cigarettes (includes cigarettes of tobacco substitutes): Code 0828.

The formula used for computing consumption is the following:

$$\text{Total cigarette consumption} = \text{Production} + \text{Imports} - \text{Exports}$$

Regional and global estimates of past cigarette consumption are derived assuming that countries for which data are unavailable for a particular year or number of years experience a pattern of consumption equal to that of the region and the world over that period.

Population adjustments

Total cigarette consumption can be useful to gauge the size of a tobacco market, but it does not allow for comparison across time and across countries. To achieve the latter, total cigarette consumption or sales can be weighted by population in order to provide an indicator of individual consumption, usually by dividing total cigarette consumption by the population aged 15 years and above. The age group 0-14 is normally omitted because of its limited contribution to tobacco use (Chapman 1992). However, differences between

countries in demographic distribution and tobacco use prevalence in the 10-20 age group can be significant and diminish comparability. In the present case the formula used to obtain per capita consumption figures is simply:

$$\text{Per capita cigarette consumption} = (\text{Production} + \text{Imports} - \text{Exports}) / (\text{Population } 15+)$$

where the population figures are taken from the United Nations Population Division. This formula is applied to observations where consumption *and* population data are available, and then weighted to obtain the group estimates presented below.

Computing prevalence

In order to obtain prevalence figures, 131 male and 131 female prevalence estimates taken from the American Cancer Society prevalence database, the WHO EURO tobacco control database and the WHO EMRO country profiles on tobacco control and covering about 95 percent of the world's population were used to produce regional estimates.⁵

These regional estimates of smoking prevalence are derived under the assumption that all studies report current daily and occasional smoking among persons aged 15 years and older, and that they reflect the smoking status of the populations in 2000. The gender-specific prevalence estimates for each country are weighted by the size of the male and female populations aged 15 years and above. The values are averaged so as to obtain weighted adult prevalence estimates by geographical or economic regions. Each of these is assumed to apply to the entire grouping. The number of smokers in each group is estimated by multiplying the adult prevalence by the total population aged 15 years and above.

Scenario analyses

Prevalence (and its associated number of smokers) and cigarette consumption (total and per capita) are projected in the future using several scenarios of changes in tobacco use (prevalence and consumption), population increases and changes in income levels. The starting point for these projections is the year 2000.

Prevalence and cigarette consumption

Many jurisdictions of all development levels and geographical locations have implemented comprehensive tobacco control policies, some of them with great success. It is assumed here that *all* countries and areas implement effective and comprehensive tobacco control programmes starting in 2000, and achieve results similar to those obtained by the following countries or states, which have been among the most successful in this regard.

⁵ For more information on the methodology used by the American Cancer Society, please see Corrao et al. 2000a and Corrao et al. 2000b.

United States

tobacco control experiences over the past decade. Bitton et al. (2001), using data from state and federal sources, estimate the average rate of decline in prevalence in the four states. The authors find that on average the four programmes produced a rate of decline in adult prevalence of 1 percent a year over their duration. With respect to annual per capita cigarette consumption, California experienced dramatic declines. The US States of California, Massachusetts, Arizona and Oregon have had highly successful (60%) between 1988 and 2001, while consumption decreased by 34 percent in the whole of the United States (including California). In other words, since 1988 per capita cigarette consumption in California has been declining at an average annual rate of about 6.7 percent (3.2 percent in the United States) (California Department of Health Services 2002).

South Africa

Within a relatively short period of time the South African government enacted one of the most comprehensive packages of tobacco control policies. This included large tax increases, tobacco advertising and sponsorship bans, a ban on smoking in all public places (including workplaces) and a ban on the sale of tobacco to minors. Between 1991 and 2001, total per capita cigarette consumption fell by more than 40 percent. Per capita cigarette consumption fell 11 years in a row at an average annual rate of 5.7 percent. Similarly, smoking rates have fallen in all age groups. Adult prevalence has decreased at an average annual rate of around 1.8 percent, from 33 percent in the early 1990s to 27 percent in 2001 (Van Walbeek, forthcoming).

Thailand

In 1992, partly as a response to the multinationals entering the market, the Thai government enacted some of the strictest tobacco control policies around. As a result, smoking prevalence among males and females fell from 46.6 and 3.8 percent in 1991 to 38.4 and 2.4 percent respectively in 1999. On average, total prevalence fell by about 3 percent per year (Vateesatokit et al. 2000). During the same period per capita cigarette consumption fell by close to 25 percent, or about 2.9 percent per year.

In order to examine the potential impact of implementing comprehensive tobacco control programmes on future numbers of tobacco users and consumption of tobacco products, three scenarios are retained for both variables. The first scenario is that of constant prevalence rates or consumption patterns, which is also the “baseline” scenario. The other two scenarios reflect different degrees of optimism, given the results obtained by the countries presented above. The three scenarios are thus the following:

Prevalence: no change, -1.0 percent per year, and -3.0 percent per year.

Per capita consumption: no change, -3.0 percent per year, and -6.0 percent per year.

Population

The low, medium and high variants of projected population from the United Nations World Population Prospects (2000 Revision) are used to project the number of smokers as well as total cigarette consumption to 2010 and 2025. The medium variant is used as the baseline. We report these two years mainly because of 1) the relative proximity of 2010, which nevertheless allows some of the cumulated reduction effect to kick in; and 2) the period up until 2025 is likely to be of greatest interest to the current generation of tobacco workers and growers, because by 2025 a large proportion of them will no longer be involved in the tobacco sector because of death or retirement. We then multiply these population projections by our own projections of per capita consumption and prevalence rates.

Income

It is generally accepted that world income (GDP) per capita will continue to grow over the next decades. This might affect tobacco use and consumption insofar as these variables have an income elasticity different from zero, which is certainly the case, as argued below.

The world real GDP has been growing at an average annual rate of more than 3 percent over the past 30 years (IMF 2002). When looking at real GDP per capita however, the average for the period 1970-2001 was about one percentage point lower due to population growth. Since the two exhibit a similarly upward trend, it does not seem unreasonable to assume that the latter will grow at an average annual rate of 2 percent in the next two decades, the IMF itself predicting the trend to be above 3 percent by 2007. In particular, the latest detailed projections of *total* GDP growth published by the IMF stood, for 2003, at 2.5 percent for the industrialized world and 5.2 percent for developing countries. Thus, as our baseline we retain the conservative assumption of an average annual growth rate of the real GDP per capita of 2 percent. This assumption is applied evenly to the regional and development groupings. To test the sensitivity of this assumption, we also use an average annual growth rate of the real GDP per capita of 5 percent.

Because aggregate data are used here, only the income elasticity of total cigarette consumption should be of interest to determine the final impact that the above changes in income will have on cigarette consumption. The hypothesis we make here will be crucial to determine the impact of a change in income on tobacco consumption, since it is the income elasticity that describes the link between a change in income and a change in consumption. This income elasticity will thus be combined with the assumption on the evolution of per capita income to predict the future number of smokers and total cigarette consumption.

As Gallet and List report, estimates of income elasticity of cigarette demand vary widely, ranging from -0.80 to 3.03 in their meta-analysis (Gallet and List forthcoming). The 86 articles they review find a mean income elasticity of 0.42 from a total of 375 different estimates, the vast majority of which were obtained at country level. In a brief review of

the literature pertaining to developing countries, as defined by the classification used by the United Nations, WHO finds estimates ranging from 0.11 to 2.00. The review of 19 articles from 15 countries yields an average income elasticity of approximately 0.69 (WHO, forthcoming). In any case, income elasticity of cigarette demand is clearly different from zero.

Thus it seems reasonable to assume, as our baseline, a conservative income elasticity of per capita cigarette demand of 0.3 throughout the projection period, translating the 2 percent income growth into a 0.6 percent annual growth in per capita consumption. Awareness of the dangers of tobacco use may well rise over time as a result of the comprehensive programmes assumed to be implemented in our different scenarios, but we work under the assumption that this income elasticity of 0.3 will be the mean elasticity over the period. We also use an income elasticity of 0.75 to test the sensitivity of our assumption.

A further assumption we need to make for the prevalence analysis is on the portion of the income elasticity that comes from a change in the *number of smokers* (participation income elasticity), as opposed to a change in the *consumption of existing smokers* (consumption income elasticity). A participation elasticity of 0.15 which translates into an income effect of 0.3 percent of annual growth in prevalence is assumed.

One should note that the assumptions on the evolution and effect of income are made independently from the ones on the evolution of prevalence and per capita consumption, even though they will evidently affect these two variables, as just described. That is to say, we first assume that, for instance, prevalence will decrease by 1.0 percent per year *ceteris paribus* – all other things being equal (including income). *Then* we add an income effect derived from a 2 percent annual growth in GDP per capita, which translates in a 0.3 percent increase in prevalence. Thus we assume that the 1.0 percent annual decrease in prevalence we use is the “real” effect of the tobacco control programmes implemented, i.e. it is net of income effects. This means that our assumptions are even more conservative, because in our analysis the income effect pulls prevalence (and per capita consumption) in the direction opposite to the tobacco control scenarios, whereas the “real situations” described above as justifications for the latter already included this small counter-effect – and thereby under-estimate the total effect of the policies alone.

RESULTS: PAST, CURRENT AND FUTURE TRENDS IN TOBACCO USE⁶

Cigarette consumption

Tables 1 and 2 show per capita and total cigarette consumption by WHO regions and levels of development.⁷ As Table 1 shows, the world per capita consumption of cigarettes increased until the middle of the 1980s and has remained fairly stable since the mid-1990s, after a slight decrease. Per capita cigarette consumption peaked in 1986 at 1590 pieces and then decreased at an average rate of about 1.2 percent per year. However Table 2 indicates that – due mainly to population growth – the world total cigarette consumption has continued to increase over the past 30 years after a short slowdown and a light dip in the early 1990s. In the interest of transparency, Appendix A, B and C present cigarette production, imports and exports by country for the years 1970, 1980, 1990 and 1995 to 2000. Appendix D presents the source of each individual country data point. Appendix E and F present total and per capita cigarette consumption trends by country.

It is clear from Table 1 that the WHO regions with the highest per capita cigarette consumption are Europe and the Western Pacific. The latter switched position with the Americas over the past three decades, most likely around the late 1980s. The Eastern Mediterranean and Africa, with rather poor and very poor data availability respectively, seem to have experienced a sizeable drop in the late 1980s and early 1990s, followed by a slight increase and relative stability thereafter⁸. The situation in South-East Asia, where a large proportion of the population is known to use smokeless tobacco, has deteriorated in phases since the 1970s with regard to cigarettes.

⁶ The estimates of prevalence and consumption in this section are not, and should not be considered “official” WHO or World Bank data.

⁷ It is important to note that there is no established convention for the designation of “developed” and “developing” countries or areas in the United Nations system. In this paper, Japan, Canada, the United States, Australia, New Zealand and Western Europe are considered “developed” while “countries in transition from centrally planned to market economies” are labeled “transition”. All other countries fall into the “developing” category.

⁸ The situation of Africa, in particular, should be interpreted cautiously in light of the very limited data available.

Table 1: Per capita cigarette consumption, 1970-2000, by WHO regions and levels of development

	1970	1975	1980	1985	1990	1995	1996	1997	1998	1999	2000
WHO Regions											
African region	593	677	712	716	534	421	484	480	557	570	595
Pop. Covered	51.8%	52.6%	50.5%	48.4%	64.1%	67.4%	49.9%	45.1%	33.3%	29.0%	25.6%
Nb. of countries	17	20	20	19	17	17	15	14	10	8	7
Region of the Americas	2,613	2,700	2,561	2,270	1,884	1,582	1,554	1,518	1,454	1,402	1,408
Pop. Covered	92.2%	90.5%	93.4%	92.0%	92.7%	94.5%	91.9%	89.5%	90.5%	91.0%	86.9%
Nb. of countries	21	19	21	20	19	19	17	13	14	15	12
Eastern Mediterranean region	747	931	1,088	1,138	811	836	855	866	899	884	878
Pop. Covered	64.9%	71.4%	73.3%	66.3%	76.0%	75.4%	75.3%	74.3%	56.3%	56.2%	56.1%
Nb. of countries	7	8	9	7	9	9	9	8	6	6	6
European region	2,272	2,421	2,363	2,347	2,144	2,116	1,948	1,952	2,030	2,063	2,058
Pop. Covered	96.4%	96.9%	92.4%	96.9%	96.9%	69.9%	95.1%	94.6%	92.2%	86.0%	85.9%
Nb. of countries	25	26	25	25	25	30	36	35	35	35	35
South-East Asia region	285	296	351	348	322	357	369	374	369	361	355
Pop. Covered	94.9%	94.9%	95.0%	95.0%	95.0%	95.0%	95.1%	95.1%	95.1%	95.1%	95.2%
Nb. of countries	6	6	6	6	6	6	6	6	6	6	6
Western-Pacific region	1,150	1,301	1,569	1,822	2,081	1,979	1,955	1,935	1,906	1,891	1,897
Pop. Covered	95.2%	95.2%	95.3%	95.1%	94.6%	98.2%	98.1%	98.1%	98.1%	98.0%	93.9%
Nb. of countries	10	10	10	9	8	9	9	9	9	9	8
Levels of development											
Developed	2,811	3,021	2,991	2,762	2,484	2,363	2,298	2,254	2,220	2,188	2,148
Pop. Covered	99.4%	99.9%	95.3%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Nb. of countries	22	23	22	22	22	22	22	22	22	22	22
Developing	712	792	960	1,091	1,147	1,081	1,086	1,074	1,076	1,047	1,041
Pop. Covered	87.0%	87.3%	87.9%	86.8%	89.0%	91.0%	88.6%	87.3%	84.5%	82.6%	79.8%
Nb. of countries	58	60	63	58	56	57	53	46	41	39	34
Transition	2,300	2,414	2,390	2,403	2,099	2,082	1,851	1,929	2,087	2,168	2,154
Pop. Covered	93.6%	93.6%	93.7%	93.6%	93.5%	35.6%	89.6%	89.8%	84.7%	85.5%	85.5%
Nb. of countries	6	6	6	6	6	11	17	17	17	18	18
World	1,410	1,498	1,548	1,575	1,497	1,366	1,376	1,366	1,373	1,355	1,346
Pop. Covered	90.4%	90.6%	89.9%	89.8%	91.3%	87.9%	90.5%	89.5%	87.0%	85.6%	83.4%
Nb. of countries	86	89	91	86	84	90	92	85	80	79	74

Sources: See Appendices A, B, C, D, E and F.

Despite the fact that per capita consumption remains much higher in the developed world than in developing countries, the trends indicate that the situation in the latter is much worse today than it was 20 or 30 years ago, while the former experienced a continued decline since the 1975 peak. It thus seems fallacious to pretend that tobacco use is a “developed world problem”, all the more so because the population of developing countries as a whole is increasing at a much faster pace. Table 2 reflects this reality. It shows that total cigarette consumption has been increasing rapidly in this group as well as in the countries in transition over the past few years, while it has been massively decreasing in the group of developed countries over the past 20 years.

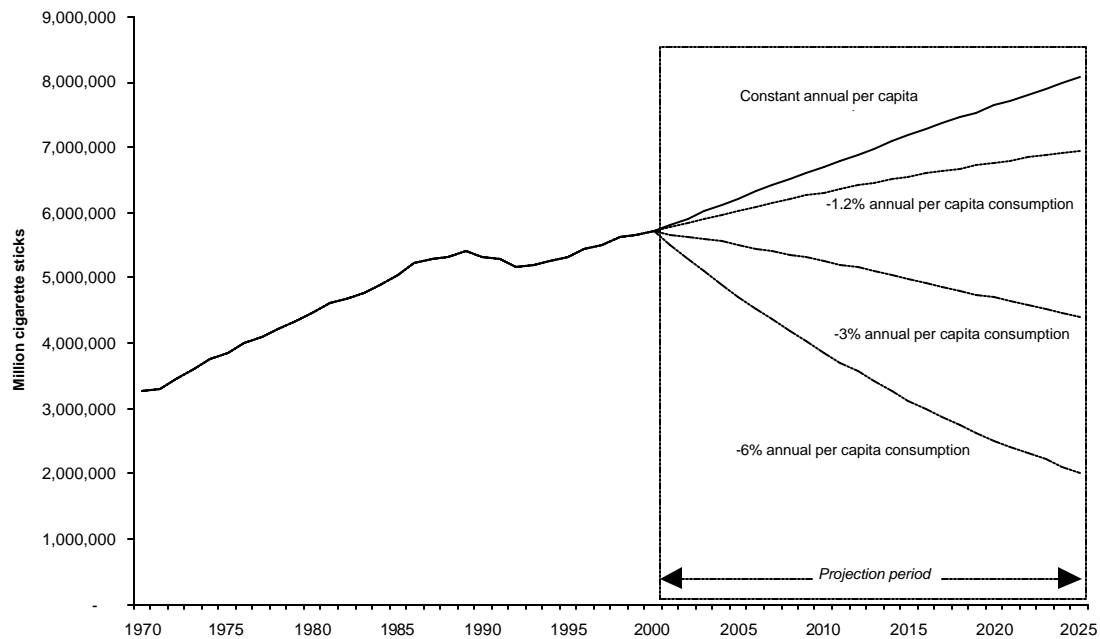
Table 2: Total cigarette consumption, 1970-2000, by WHO regions and levels of development (million sticks)

	1970	1975	1980	1985	1990	1995	2000
WHO regions							
African region	91,232	118,237	142,351	165,782	143,670	131,181	212,788
Region of the Americas	859,470	998,786	1,062,204	1,039,338	944,886	868,425	845,337
Eastern Mediterranean region	89,952	128,347	175,647	214,387	176,720	208,379	255,519
European region	1,225,941	1,386,955	1,428,740	1,479,376	1,407,677	1,437,932	1,442,862
South-East Asia region	141,345	166,335	223,919	252,155	263,513	327,672	363,787
Western Pacific region	771,961	977,672	1,339,491	1,780,948	2,270,555	2,326,746	2,392,557
Levels of development							
Developed	1,462,484	1,671,140	1,755,758	1,705,064	1,604,389	1,588,411	1,496,606
Developing	1,093,936	1,381,203	1,917,390	2,503,841	2,982,487	3,126,193	3,344,068
Transition	580,797	656,639	687,635	715,036	647,541	659,302	703,195
World	3,261,565	3,853,906	4,452,619	5,060,363	5,328,264	5,308,016	5,710,889

Sources: See Appendices A, B, C, D, E and F.

Figure 1 presents different scenarios for the future evolution of cigarette consumption, assuming a 2% annual income increase, 0.3 income elasticity and medium variant population projection. The scenarios described above are first applied to the per capita consumption rates, which are then multiplied by the medium variant of the United Nations Population Division's latest projections. It is clear from Figure 1 that the most probable scenario is that of constant per capita cigarette consumption if one uses the past 30 years as a predictor of future trends. A 3 percent annual decrease in per capita cigarette consumption seems very optimistic but perhaps not impossible while a 6 percent annual reduction implies quite a dramatic break in the time series.

Figure 1: Total cigarette consumption, 1970-2000, per capita consumption scenarios (2% annual income increase, medium variant population projection)



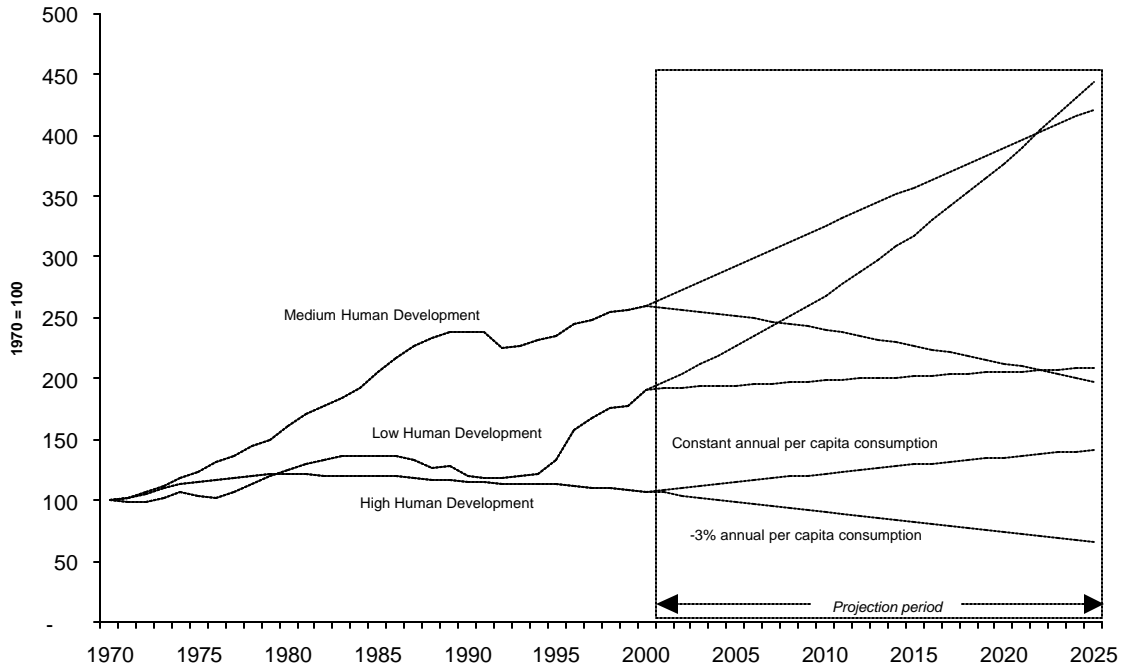
Source: Authors' projections

As Figure 1 suggests, total consumption would only decline if we assume a reduction in per capita consumption. With an unchanged situation in that regard, using today's rate we see a sharp increase in world total cigarette consumption. However it is interesting to note that even with a hard-to-attain reduction of 3% per year of per capita consumption everywhere in the world and starting in 2000, total consumption would be in 2025 – more than 20 years from now – just below the 1985 level. This illustrates the gradual nature of changes in tobacco consumption and of ensuing modifications in the economy.

Figure 2 presents two scenarios of future total cigarette consumption, by levels of human development⁹, assuming a 2% annual income increase and a medium variant population projection. Trends between 1970 and 2000 clearly show the different rates of growth in cigarette consumption. Total cigarette consumption has steadily increased in countries of medium human development while consumption has steadily decreased in countries of high human development. Consumption in countries at a low level of human development was fairly stable in the 1970s and 1980s but increased quite significantly in the 1990s. Figure 2 clearly shows that a 3 percent annual decrease in per capita cigarette consumption is not an impossibility for high human development countries. However, a 3 percent annual decrease for low and medium human development countries would imply a dramatic change.

⁹ Levels of human development are defined using the UNDP's Human Development Index (HDI).

Figure 2: Total cigarette consumption, 1970-2025, by levels of human development (2% annual income increase, medium variant population projection)



Source: Authors' projections

Prevalence of tobacco use

Table 3 presents tobacco use prevalence and the number of adult smokers by WHO regions and levels of development for the year 2000. Men were almost five times as likely to use tobacco as women, yet more than 18 percent of females were smokers in the Americas and in the European region. These estimates clearly show that most tobacco users reside in developing countries. Out of the 1.22 billion tobacco users, more than 1 billion lived in developing countries or in transitional economies. When presented by human development category, most tobacco users reside in countries that have reached a 'medium' level of human development. A quick extrapolation to the year 2003 indicates that there are about 1.3 billion smokers today.

Table 3: Tobacco use prevalence and number of smokers, 2000 by WHO regions and levels of development (% of the population aged 15 years and older and thousand smokers)

	<u>Prevalence</u>			<u>Number of tobacco users</u>		
	Male	Female	Total	Male	Female	Total
WHO Regions						
African region	0.294	0.074	0.184	51,967	13,420	65,387
Pop. Covered	69.1%	67.5%	68.3%			
Nb. of countries	19	19				
Region of the Americas	0.320	0.209	0.263	94,035	64,072	158,107
Pop. Covered	95.1%	95.0%	95.0%			
Nb. of countries	24	24				
Eastern Mediterranean region	0.353	0.061	0.210	52,543	8,670	61,213
Pop. Covered	93.0%	93.0%	93.0%			
Nb. of countries	19	19				
European region	0.449	0.187	0.312	150,628	68,545	219,173
Pop. Covered	97.5%	97.6%	97.6%			
Nb. of countries	44	44				
South-East Asia region	0.481	0.053	0.273	251,699	26,484	278,183
Pop. Covered	98.3%	96.9%	97.6%			
Nb. of countries	7	6				
Western-Pacific region	0.612	0.057	0.338	390,362	35,784	426,146
Pop. Covered	99.9%	100.0%	99.9%			
Nb. of countries	18	19				
Levels of development						
Developed	0.339	0.212	0.274	114,783	75,891	190,673
Pop. Covered	100.0%	100.0%	100.0%			
Nb. of countries	24	24				
Developing	0.498	0.072	0.289	809,725	114,718	924,443
Pop. covered	94.5%	93.7%	94.1%			
Nb. of countries	84	84				
Transition	0.541	0.139	0.327	82,837	24,153	106,989
Pop. covered	94.6%	95.0%	94.8%			
Nb. of countries	23	23				
Human development						
High	0.356	0.203	0.278	149,073	89,442	238,515
Pop. covered	96.9%	96.8%	96.8%			
Nb. of countries	46	46				
Medium	0.524	0.077	0.302	747,951	108,326	856,277
Pop. covered	99.1%	98.6%	98.9%			
Nb. of countries	63	63				
Low	0.367	0.067	0.219	87,057	15,865	102,922
Pop. covered	79.7%	77.9%	78.8%			
Nb. of countries	18	18				
World	0.475	0.103	0.289	1,005,927	217,755	1,223,682
Pop. covered	95.3%	94.8%	95.0%			
Nb. of countries	131	131				

Source: Authors' estimates using data from ACS 2003, WHO EMRO 2002 and WHO EURO 2003

Table 4: number of smokers: tobacco use prevalence scenarios (+2% income, medium population variant; thousands)

<u>-1% annual prevalence</u>	<u>2010</u>			<u>2020</u>			<u>2025</u>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
WHO regions									
African region	63,359	16,137	79,730	77,287	19,480	96,750	85,357	21,438	106,662
Region of the Americas	102,749	70,064	172,846	108,538	74,155	182,765	110,356	75,512	185,972
Eastern Mediterranean region	64,684	10,789	75,754	76,673	12,858	90,032	82,736	13,916	97,294
European region	146,689	66,362	212,730	137,957	62,177	199,677	132,848	59,812	192,178
South-East Asia region	286,327	30,266	318,993	312,907	33,295	349,738	321,962	34,408	360,634
Western Pacific region	414,159	38,138	453,105	416,106	38,626	457,049	412,973	38,514	454,664
Levels of development									
Developed	113,821	75,036	188,793	110,142	72,636	182,724	107,415	70,926	178,313
Developing	914,829	130,031	1,049,563	995,271	142,129	1,144,508	1,028,454	147,310	1,184,435
Transition	79,831	23,178	102,717	73,260	21,210	94,122	70,053	20,246	89,918
Human Development									
High	148,858	89,041	237,812	144,590	86,532	231,054	141,289	84,674	225,938
Medium	821,890	119,269	943,602	862,102	125,621	991,807	872,900	127,582	1,005,754
Low	107,634	19,571	128,118	132,731	24,059	157,749	146,815	26,591	174,419
World	1,102,160	238,439	1,342,786	1,168,104	253,074	1,424,167	1,193,198	258,926	1,455,933
<i>Prevalence</i>	<i>44.3%</i>	<i>9.6%</i>	<i>26.9%</i>	<i>41.3%</i>	<i>8.9%</i>	<i>25.1%</i>	<i>39.8%</i>	<i>8.6%</i>	<i>24.2%</i>
<u>-2% annual prevalence</u>	<u>2010</u>			<u>2020</u>			<u>2025</u>		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
WHO regions									
African region	57,260	14,584	72,055	63,124	15,910	79,020	66,274	16,645	82,816
Region of the Americas	92,858	63,319	156,207	88,648	60,566	149,272	85,684	58,631	144,396
Eastern Mediterranean region	58,458	9,751	68,461	62,622	10,502	73,533	64,239	10,805	75,543
European region	132,568	59,974	192,252	112,676	50,783	163,085	103,148	46,441	149,215
South-East Asia region	258,765	27,352	288,286	255,565	27,193	285,646	249,983	26,716	280,010
Western Pacific region	374,291	34,467	409,488	339,851	31,547	373,292	320,648	29,904	353,018
Levels of development									
Developed	102,864	67,813	170,619	89,958	59,325	149,238	83,401	55,069	138,449
Developing	826,766	117,514	948,530	812,880	116,083	934,769	798,531	114,377	919,640
Transition	72,146	20,947	92,829	59,834	17,323	76,873	54,392	15,720	69,816
Human Development									
High	134,528	80,470	214,919	118,093	70,675	188,711	109,702	65,744	175,427
Medium	742,773	107,788	852,769	704,116	102,600	810,051	677,753	99,060	780,905
Low	97,273	17,687	115,786	108,407	19,650	128,840	113,993	20,647	135,426
World	996,064	215,486	1,213,527	954,041	206,696	1,163,178	926,444	201,040	1,130,441
<i>Prevalence</i>	<i>40.0%</i>	<i>8.6%</i>	<i>24.3%</i>	<i>33.7%</i>	<i>7.3%</i>	<i>20.5%</i>	<i>30.9%</i>	<i>6.7%</i>	<i>18.8%</i>

Source: Authors' projections

Table 4 presents two different scenarios for future tobacco use prevalence. On the assumption that there will be no change in prevalence in the next 10 and 25 years, it is predicted there will be close to 1.45 billion smokers in 2010 and more than 1.7 billion in

2025 (nearly 1.5 and 1.9 billion when assuming a modest increase in income per capita). When assuming that prevalence decreases at an annual rate of 1 per cent and a that there is a modest increase in income of 2 percent for the next 10 and 25 years, the total predicted number of smokers still stands at more than 1.3 billion in 2010 and 2025. Even the most optimistic scenario of a reduction in annual prevalence of 2 percent in every country every year for 10 and 25 years in a row, there would still be 1.2 billion smokers in 2010 and more than 1.1 billion in 2025.

In other words, if countries achieve successes in excess of the scale experienced in the US states of California, Massachusetts, Arizona and Oregon, and similar to that of South Africa and Thailand, the number of smokers in 10 and 25 years time will be similar to that at the beginning of the century. It is important to note that the 2 per cent scenario would represent a formidable success in the battle to improve health by reducing the prevalence of tobacco use. Such a sustained decrease would lead to a global prevalence of just 18.8 percent in 2025.

DISCUSSION

Data quality and reliability and sensitivity of assumptions

After presenting such a detailed analysis, it is worth pointing out that a large amount of the data published and available are of poor quality. In particular, the trade data reported by the USDA, UNSD and the FAO sometimes differ widely, as explained above. This makes it important to use the best available data by carrying out the selection process described.

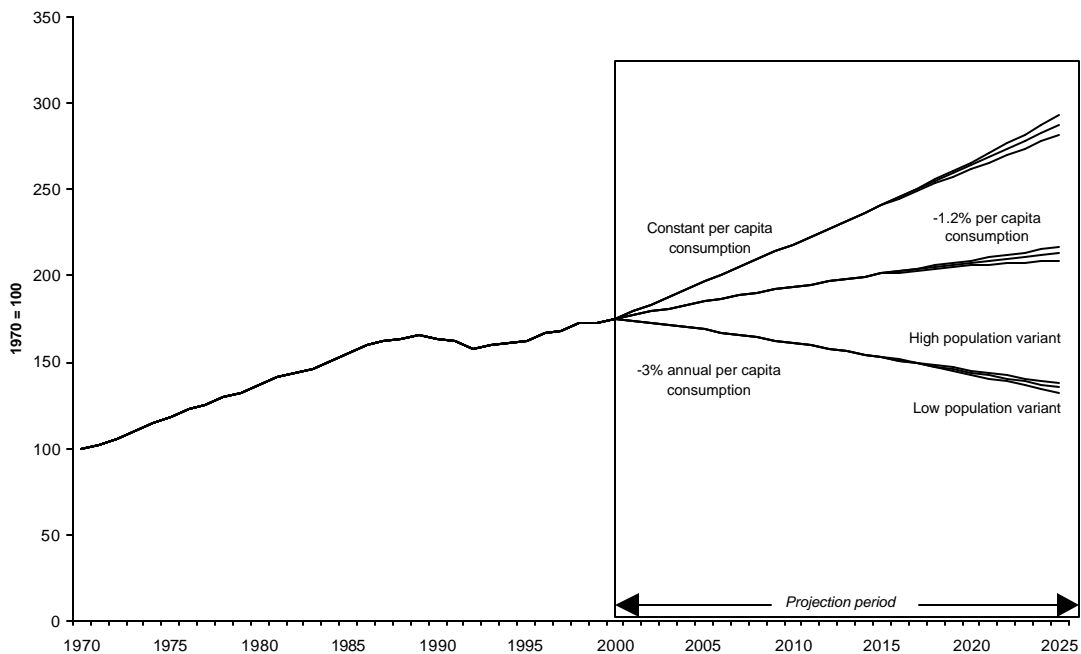
There is also a more general argument to make in underscoring what seem like greatly implausible differences. For instance, the USDA's world trade and production estimates in 2000 yield a net trade balance (global exports minus global imports) of 18.9% of all cigarettes traded or 5.3% of all cigarettes produced. Using the same production data but replacing the trade data with the FAO's world figure (the FAO does not publish production data), we find the corresponding figures of 12.3% and 3.7% respectively. Thus the USDA-only estimates of what is often interpreted as the size of the smuggling problem turn out to be 45% to 55% higher, leading to a rather different picture of the situation. And although these discrepancies have been greatest in the second half of the last decade, there have always been smaller (albeit occasionally significant) differences between the two sources over the past 30 years. It is also important to note that country data published by the USDA are often significantly different from those published by other organizations such as the United Nations Statistical Division and the FAO or by national statistical agencies. For a great number of developing countries (e.g. Albania, Algeria, Bangladesh, Bolivia, Ecuador, Jordan, Lebanon and Viet Nam), USDA cigarette production and trade data appear at best to be an extrapolation based on a "guesstimate". For these reasons, it is strongly suggested to use published USDA data for developing countries with great caution.

It is also vital to note that when grouped by either WHO regions or levels of development, the calculated estimates depend significantly on the data from large countries such as China and India.

As Figure 3 shows, using the different UN projections for future population to 2025 hardly makes a difference in the consumption (and prevalence) projections as they are similar to the year 2010, differing only slightly thereafter.

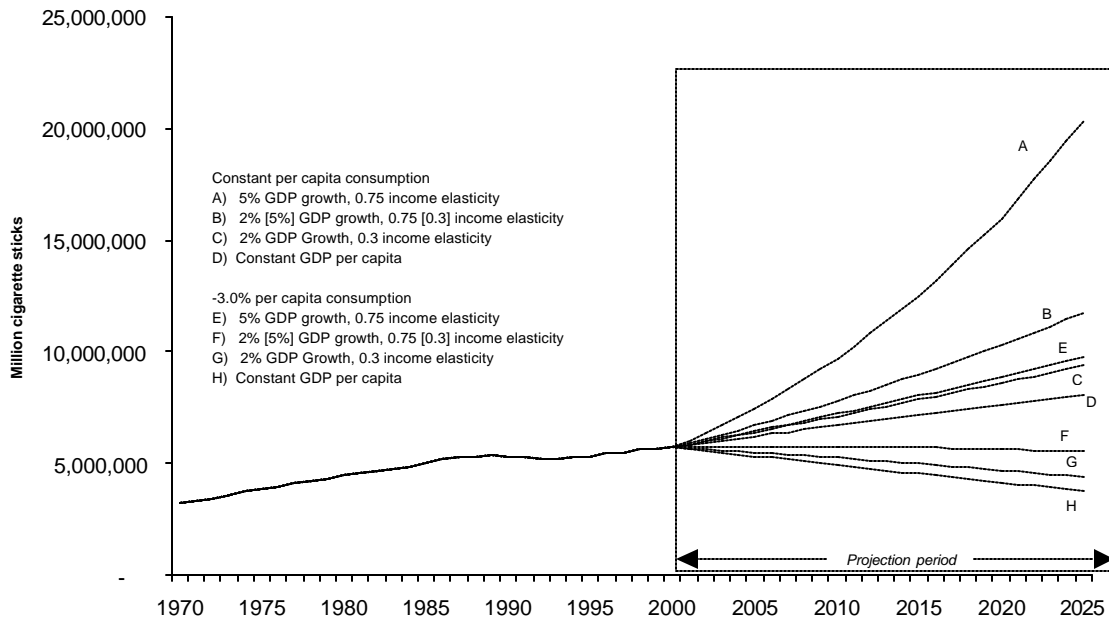
Figure 4 presents five combinations of income elasticities and GDP per capita annual growth rates with two scenarios of per capita consumption. It is apparent from comparing together the constant income assumption with a 2 percent annual GDP per capita increase that the income assumption does not have a significant effect until late in the projection period. However, high income elasticity and GDP per capita growth rates can have a large impact on the predicted future total consumption of cigarettes.

Figure 3: Total cigarette consumption, 1970-2025 (2% annual income increase, low, medium, high variant population projection)



Source: Authors' projections

Figure 4: Total cigarette consumption, 1970-2025, sensitivity of income assumptions (*medium variant population projection*)



Source: Authors' projections.

Strong tobacco control measures will not lead to massive job losses and poverty

From the results presented above it appears that any reduction in the number of smokers and in total tobacco consumption over the next 20 years would be very gradual, even assuming conservative growth of incomes and population and income elasticity, as well as the worldwide, immediate implementation of comprehensive tobacco control measures. This is to say that the current generations of tobacco farmers and workers have nothing to fear from tobacco control, as the shift towards other livelihoods will involve a slow process over several generations.

That is not to say that tobacco farmers and workers are not economically vulnerable. Tobacco control is only one of many determinants of the profitability of tobacco farming and manufacturing. Other factors may significantly impact tobacco employment. As Jaffee reports for Malawi for example, the fall in tobacco auction prices in 2000 and 2001 has had adverse consequences for tobacco farmers (particularly smallholders), driving down the crop's profitability by as much as 50% compared with the previous year (Jaffee 2002). The FAO argues that decreased export demand and an influx of inexperienced farmers, leading to a poorer product quality, are the main sources of these changes which took place in a quasi buyers' market (FAO 2001a). Although partially offset by a reduction in production costs, this process may in the absence of reform have led – or

lead in the future – a number of tobacco growers to leave the business, independently of any government intervention in the farming or trading sectors. The FAO has also highlighted a somewhat similar case for China, the world’s largest producer and consumer of tobacco products. The Chinese example is also striking because it was the result of a decision made by the public authorities that does not seem to have had unbearable adverse consequences for the sector or the farmers most directly affected. From 1997 to 1999, the area under tobacco cultivation in China dropped by 43% from 2.1 to 1.2 million hectares as a result of a large decrease in the number of farming contracts passed between the State and the farmers. The farmers left out of the tobacco contracting process were forced to shift to other crops in the context of a planned economy; although they disappeared from the tobacco employment statistics within a relatively short period, the switching process was reported to be quick and easy (FAO 2001b).

The vulnerability of tobacco farmers and workers should not be dismissed; people who live on the edge of poverty may be very vulnerable to fairly small movements in crop prices. However, the catastrophic scenarios that are predicted occasionally in the media or propagated by the tobacco industry are pure fiction. For instance, the Framework Convention on Tobacco Control negotiated under the auspices of WHO does not, as it has been reported, “relate to the survival of millions of people whose livelihood is derived from tobacco farming” (Africa News Service, 2 October 2000). Even the most optimistic –and very unlikely– tobacco control scenario of a 3% per capita reduction in cigarette consumption every year for 25 years would merely bring total consumption of cigarettes to that of the early 1980s. It is also important to note that money no longer spent on tobacco will not disappear from the economy but will be spent on other goods and services. This increased demand for other goods and services will in turn create new employment opportunities. Thus for the foreseeable future, irrespective of tobacco control scenarios, tobacco production can and will remain an important part of some countries’ economies. Hence strong tobacco policies should be implemented without delay; fears that farmers and workers may suffer from the direct effects of these policies are unwarranted.

CONCLUSION

The detailed cigarette consumption and prevalence estimates presented above demonstrate the urgency of the situation. Today, almost 1.3 billion adults use tobacco. If prevalence and per capita cigarette consumption remain unchanged, we predict that there will be close to 1.9 billion users in 2025 consuming more than 9 trillion cigarettes. As stressed by Gro Harlem Brundtland, Director-General of WHO, the reason to control the tobacco epidemic is its impact on health, poverty and development (Brundtland 2003). Currently, 4.9 million people die every year because of tobacco use. Without further action, it is predicted that the burden attributed to tobacco use will almost double by 2020 (WHO 2002). Further, since the impact of future consumption will lead to excess deaths well beyond 2020, action today could reap one of the greatest prevention dividends in public health history. The impact of tobacco control policies on the future of tobacco

farmers and workers should no longer be an acceptable excuse to prevent the implementation of comprehensive tobacco control policies that can save millions of lives.

APPENDICES

Appendix 1: Cigarette production 1970-2000, selected years (*million pieces*)

	1970	1980	1990	1995	1996	1997	1998	1999	2000
Afghanistan	...	...	...	...	...	...	...	...	...
Albania	...	4,950	4,947	685	483	414	764	63	62
Algeria	6,063	15,444	18,775	16,419	15,840	15,543	17,891	18,324	17,058
Andorra	...	...	...	...	...	...	...	...	...
Angola	2,016	...	...	...	...	...	...	...	...
Antigua and Barbuda	...	...	...	...	...	...	...	...	...
Argentina	30,219	37,972	33,472	42,009	41,208	42,100	42,200	42,500	40,400
Armenia	...	9,776	8,102	1,043	152	815	2,490	3,132	2,096
Australia	26,848	35,185	35,575	31,271	30,767	30,035	29,939	28,018	23,576
Austria	12,617	15,260	14,961	16,297	19,366	19,973	22,512	24,370	25,400
Azerbaijan	...	7,673	6,520	1,970	788	800	200	416	2,126
Bahamas	...	...	...	...	...	...	...	...	...
Bahrain	...	...	...	...	...	...	...	...	...
Bangladesh	17,787	13,830	12,289	17,379	16,222	18,601	19,889	19,558	19,732
Barbados	162	224	135	65	...	...	...	...	...
Belarus	...	19,229	16,399	6,228	6,267	6,787	7,296	9,259	10,356
Belgium	19,727	28,167	27,758	18,826	17,471	18,061	17,519	14,712	12,625
Belize	80	63	101	95	79	88	94	91	84
Benin	...	...	...	...	...	...	...	...	...
Bhutan	...	...	...	...	...	...	...	...	...
Bolivia	730	...	97	170	...	...	...	...	...
Bosnia and Herzegovina	...	...	9,208	1,500	2,000	3,032	3,717	4,945	4,670
Botswana	...	...	...	...	...	...	...	...	...
Brazil	73,000	142,700	173,987	173,694	182,300	182,800	170,000	111,400	104,900
Brunei Darussalam	...	...	...	...	...	...	...	...	...
Bulgaria	55,082	85,214	75,812	74,603	57,238	43,315	33,181	25,715	26,681
Burkina Faso	...	957	822	949	920	1,206	...	...	...
Burundi	...	123	384	...	...	...	...	...	...
Cambodia	3,874	...	...	...	...	...	...	...	...
Cameroon	975	1,340	...	...	...	...	...	...	...
Canada	50,170	67,180	46,111	50,775	49,362	47,263	48,730	46,908	45,252
Cape Verde	...	...	...	...	...	...	...	...	...
Central African Republic	...	409	25	30	...	...	...	...	...
Chad	33	349	248	569	...	...	...	...	...
Chile	6,590	10,510	10,198	10,891	11,569	12,522	12,904	13,271	13,796
China	391,500	760,000	1,645,000	1,735,000	1,700,323	1,683,550	1,683,550	1,674,650	1,698,500
China, Hong Kong SAR	6,402	4,234	21,700	22,767	21,386	20,929	13,470	6,637	9,859
China, Macao SAR	...	...	500	450	450	...	...	...	...
Colombia	19,080	21,200	14,490	10,491	11,700	11,662	12,473	10,965	12,824
Comoros	...	...	...	...	...	...	...	...	...
Congo	989	706	645	...	...	...	...	...	...
Congo, Democratic Republic of	3,753	2,739	3,600	3,240	3,425	3,200	2,300	2,300	2,100
Cook Islands	...	...	...	...	...	...	...	...	...
Costa Rica	...	...	...	...	...	...	...	...	...
Côte d'Ivoire	2,000	3,480	2,070	2,465	2,667	2,814	2,878	3,112	3,268
Croatia	...	...	12,437	12,110	11,548	11,416	11,987	12,785	13,692
Cuba	19,806	15,109	16,026	...	...	...	...	...	...
Cyprus	851	2,901	4,601	2,528	2,728	3,662	4,362	4,783	4,980
Czech Republic	...	14,805	18,119	22,000	23,400	23,950	30,200	...	...
Denmark	8,298	9,390	11,387	11,902	11,804	12,262	12,392	11,749	11,413
Djibouti	...	...	...	...	...	...	...	...	...
Dominica	...	33	...	...	...	...	...	...	...
Dominican Republic	2,125	3,375	4,535	4,092	4,192	3,972	4,098	4,005	...
Ecuador	1,295	3,858	...	1,734	1,745	1,678	1,997	2,178	...
Egypt	12,153	35,570	39,837	42,469	46,000	50,000	52,000	51,000	53,000
El Salvador	1,441	2,570	...	1,701	1,756	...	...	...	...
Equatorial Guinea	...	...	...	...	...	...	...	...	...
Eritrea	...	...	...	...	...	...	...	...	...
Estonia	...	...	4,165	1,864	954	...	...	...	...
Ethiopia	870	1,458	2,258	1,583	1,862	2,024	2,029	1,829	1,931
Fiji	389	549	531	437	439	450	410	446	396
Finland	6,476	9,162	8,974	6,542	5,910	6,743	5,510	4,030	3,459
France	69,903	72,478	55,495	46,361	46,931	45,020	43,304	42,406	38,242

	1970	1980	1990	1995	1996	1997	1998	1999	2000
Gabon	-	315	328	297	...	...	...	...	...
Gambia	...	...	...	...	...	...	...	...	...
Georgia	...	17,626	11,191	1,839	1,054	917	595	1,327	296
Germany	138,878	183,908	204,651	221,000	193,300	182,000	181,904	204,831	206,770
Ghana	1,536	2,028	1,805	1,713	1,747	1,764	...	...	...
Greece	17,011	24,889	29,438	38,617	39,152	38,500	35,800	34,322	34,381
Grenada	...	20	22	...	...	...	...	...	...
Guatemala	2,986	2,699	...	2,616	1,725	2,198	4,184	4,376	4,262
Guinea	...	...	...	...	...	...	...	...	...
Guinea-Bissau	...	...	...	...	...	...	...	...	...
Guyana	474	578	247	...	...	...	...	...	...
Haiti	421	1,094	1,027	...	...	...	...	...	...
Honduras	1,266	2,475	2,690	2,410	2,109	2,603	3,814	4,586	5,655
Hungary	22,050	27,158	28,212	25,709	27,594	26,057	26,849	22,985	21,608
Iceland	...	...	...	...	...	...	...	...	...
India	62,930	77,376	61,162	69,589	73,841	83,162	79,313	82,504	75,085
Indonesia	32,530	83,900	155,300	186,200	211,823	225,385	216,200	225,417	232,467
Iran, Islamic Republic of	11,898	12,884	12,319	9,787	11,860	10,304	14,335	...	...
Iraq	...	...	...	...	...	...	...	...	...
Ireland	5,550	9,660	6,505	7,700	7,400	5,700	6,050	6,350	6,720
Israel	3,868	5,337	5,440	4,933	4,793	...	...	...	...
Italy	71,618	73,105	61,746	50,203	51,481	51,900	50,681	45,065	44,218
Jamaica	1,261	1,284	1,380	1,216	1,219	1,175	1,160	1,078	991
Japan	221,039	303,177	270,055	262,788	271,032	254,567	267,050	263,154	257,965
Jordan	1,610	4,188	3,185	3,675	4,738	...	...	...	...
Kazakhstan	...	11,966	12,485	12,080	19,121	24,109	21,747	18,773	19,293
Kenya	2,426	4,556	6,647	7,932	8,436	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...	...
Korea, Democratic People's Republic of	...	...	...	...	...	...	...	...	...
Korea, Republic of	39,632	70,357	92,000	87,509	93,001	94,252	103,586	97,135	98,286
Kuwait	...	...	...	...	...	...	...	...	...
Kyrgyzstan	...	3,818	3,974	1,332	975	716	862	2,103	3,169
Lao People's Democratic Republic	361	...	...	1,062	...	...	...	...	...
Latvia	...	...	5,209	2,101	1,876	1,775	2,018	1,916	...
Lebanon	1,281	...	...	535	539	793	672	945	1,009
Lesotho	...	...	...	...	...	...	...	...	...
Liberia	...	20	...	...	...	...	...	...	...
Libyan Arab Jamahiriya	1,639	2,134	...	...	...	...	...	...	...
Lithuania	...	...	6,654	4,876	4,538	5,755	7,427	8,217	7,207
Luxembourg	...	...	...	...	...	...	...	...	...
Macedonia, The former Yugoslav Republic of	...	...	16,328	9,664	10,229	8,825	7,418	8,149	9,181
Madagascar	951	1,983	1,476	2,354	2,957	2,826	3,303	...	...
Malawi	444	630	1,061	1,160	975	731	501	...	...
Malaysia	7,566	13,529	18,430	21,827	23,000	27,400	29,190	30,567	28,390
Maldives	...	...	...	...	...	...	...	...	...
Mali	...	...	17	22	21	...	...	...	...
Malta	509	1,115	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...
Mauritania	...	...	...	...	...	...	...	...	...
Mauritius	590	959	1,000	1,215	1,193	1,144	1,034	979	976
Mexico	40,633	54,520	55,380	56,821	59,907	57,618	60,407	59,492	56,383
Micronesia, Federated States of	...	...	...	...	...	...	...	...	...
Moldova, Republic of	...	7,559	9,088	7,108	9,657	9,539	7,512	8,731	9,262
Monaco	...	...	...	...	...	...	...	...	...
Mongolia	...	...	...	...	...	...	...	...	...
Morocco	...	11,491	12,797	12,139	12,769	12,642	12,600	11,916	11,800
Mozambique	...	1,100	1,030	106	250	250	950	1,084	1,417
Myanmar	1,513	2,724	979	752	1,727	1,991	2,040	2,270	2,559
Namibia	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...
Nepal	1,135	1,811	6,691	8,067	7,944	8,127	7,315	6,584	6,979
Netherlands	22,930	40,705	78,345	100,603	111,239	116,255	116,263	119,983	123,071
New Zealand	5,364	6,276	4,489	3,338	3,660	3,449	3,263	3,010	2,700
Nicaragua	...	...	...	...	...	...	...	...	...
Niger	...	...	...	...	...	...	...	...	...
Nigeria	...	...	10,380	9,413	...	...	...	...	...
Niue	...	...	...	...	...	...	...	...	...
Norway	...	820	1,491	1,328	1,756	1,776	1,649	1,683	1,380

	1970	1980	1990	1995	1996	1997	1998	1999	2000
Oman	...	...	...	...	...	...	...	...	...
Pakistan	22,369	34,647	32,279	32,747	45,506	46,101	48,215	51,579	46,976
Palau	...	...	...	...	...	...	...	...	...
Panama	1,011	1,084	810	1,136	663	752	320	...	...
Poland	69,193	93,446	91,500	101,000	95,200	95,842	96,741	94,600	83,440
Portugal	8,724	13,281	17,547	13,215	12,780	13,234	15,781	17,742	21,377
Puerto Rico	...	...	...	...	...	...	...	...	...
Qatar	...	...	...	...	...	...	...	...	...
Romania	...	...	18,090	14,747	16,536	25,943	...	...	...
Russian Federation	...	181,345	150,533	140,973	137,214	176,146	210,730	266,031	333,953
Rwanda	...	...	...	...	...	...	...	...	...
Saint Kitts and Nevis	...	...	...	...	...	...	...	...	...
Saint Lucia	...	...	...	...	...	...	...	...	...
Saint Vincent and the Grenadines	...	...	...	...	...	...	...	...	...
Samoa	...	...	...	...	...	...	...	...	...
San Marino	...	...	...	...	...	...	...	...	...
Sao Tome and Principe	...	...	...	...	...	...	...	...	...
Saudi Arabia	...	...	...	...	...	...	...	...	...
Senegal	1,647	2,703	...	2,129	1,566	1,556	...	...	...
Seychelles	-	31	67	56	62	70	61	60	40
Sierra Leone	490	1,711	...	467	...	...	...	...	...
Singapore	2,787	3,147	...	...	...	...	...	...	...
Slovakia	...	...	8,589	7,410	7,184	7,955	8,313	8,500	6,500
Slovenia	...	...	5,179	4,543	4,909	5,767	7,555	8,032	7,855
Solomon Islands	...	...	...	...	...	...	...	...	...
Somalia	...	...	...	...	...	...	...	...	...
South Africa	16,430	28,791	40,792	37,332	36,518	31,985	29,963	25,891	27,196
Spain	50,494	...	75,995	78,676	77,675	77,315	81,940	74,873	74,799
Sri Lanka	3,035	5,225	5,621	5,822	6,160	5,712	5,797	5,333	4,889
Sudan	734	...	...	...	...	...	...	...	...
Suriname	187	379	487	472	483	...	...	...	...
Swaziland	...	...	...	...	...	...	...	...	...
Sweden	8,975	10,933	9,648	7,193	7,251	6,237	5,692	6,060	5,958
Switzerland	29,229	31,264	31,771	41,976	42,955	37,638	34,453	32,139	34,299
Syrian Arab Republic	2,429	6,943	6,855	9,699	8,528	10,137	10,398	10,991	11,097
Tajikistan	...	4,728	5,022	964	604	153	191	209	667
Tanzania, United Republic of	2,599	4,735	3,742	3,699	3,733	4,710	...	...	...
Thailand	15,291	30,783	38,180	43,020	48,173	43,387	34,585	31,146	30,732
Timor Leste	...	...	...	...	...	...	...	...	...
Togo	...	...	...	...	...	...	...	...	...
Tokelau	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...	...
Trinidad and Tobago	825	849	701	920	1,102	1,386	1,680	1,945	2,050
Tunisia	3,286	4,419	6,852	7,421	7,159	7,735	9,813	11,066	12,231
Turkey	37,253	51,977	60,427	99,939	105,066	103,153	105,443	...	...
Turkmenistan	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...
Uganda	1,536	636	1,290	1,576	1,702	1,864	1,866	1,688	...
Ukraine	...	78,084	69,397	48,033	44,900	54,488	59,275	54,052	58,679
United Arab Emirates	...	...	...	...	...	...	...	...	...
United Kingdom	145,530	155,618	126,017	155,103	166,496	167,670	152,998	143,794	139,125
United States	583,200	714,100	709,700	746,270	758,000	719,600	680,000	606,600	594,700
Uruguay	3,121	...	2,765	3,561	6,044	10,732	10,187	11,161	10,894
Uzbekistan	...	4,148	4,370	2,742	5,172	8,521	7,700	10,695	7,768
Vanuatu	...	...	...	...	...	...	...	...	...
Venezuela, Bolivarian Republic of	10,463	21,300	23,560	27,806	22,522	23,270	27,000	...	...
Viet Nam	...	7,920	25,000	42,940	43,200	42,660	43,900	42,580	...
Yemen	...	...	5,968	6,540	6,740	6,800	...	...	...
Yugoslavia	...	...	...	12,686	13,176	10,988	14,597	13,126	14,451
Zambia	1,145	1,283	...	...	...	...	...	...	...
Zimbabwe	3,625	3,571	2,600	3,036	3,230	3,523	3,390	3,790	3,900
Czechoslovakia (Former)	20,472	22,543	26,708	...	...	...	...	...	...
USSR (Former)	322,687	363,971	313,082	293,000	...	...	...	...	...
Yugoslavia (Former Socialist Federal Republic)	32,072	59,103	58,200	...	...	...	...	...	...

Appendix 2: Cigarette imports, 1970-2000, selected years (*metric tons / million pieces*)

	1970	1980	1990	1995	1996	1997	1998	1999	2000
Afghanistan	76	...	...	...	...	...	...	...	...
Albania	...	...	...	...	969	117	584	2,132	2,260
Algeria	191	218	1	2,170	1,068	57	...	...	...
Andorra	...	...	...	...	1,924	3,488	1,032	632	541
Angola	473	...	...	...	...	...	...	...	...
Antigua and Barbuda	...	...	...	...	...	...	...	36	...
Argentina	46	603	5	13	25	183	26	7	102
Armenia	...	...	...	1,752	1,516	1,731	1,000	1,473	1,520
Australia	606	796	537	830	774	580	640	1,013	1,444
Austria	731	854	476	1,562	1,136	1,246	1,630	1,837	1,880
Azerbaijan	...	...	...	1,447	1,999	3,197	2,708	5,159	1,580
Bahamas	200	200	75	55	45	63	40	130	536
Bahrain	637	1,436	859	1,022	1,109	...	...	...	1,003
Bangladesh	...	177	86	70	18	90	52	...	...
Barbados	51	28	60	82	185	184	115	200	190
Belarus	...	...	...	...	...	...	11,645	12,630	7,237
Belgium	2,399	2,575	3,885	12,750	8,968	8,657	9,648	11,610	12,215
Belize	41	113	22	97	148	100	35	35	29
Benin	805	1,354	...	...	...	...	3,664	182	114
Bhutan	...	...	...	...	...	...	5	5	...
Bolivia	7	4	37	108	9	6	...	1	1,883
Bosnia and Herzegovina	...	...	...	...	...	84	116	116	25
Botswana	...	500	678	590	416	383	383	383	350
Brazil	...	...	...	11	92	579	57	42	60
Brunei Darussalam	216	342	382	...	...	135	97	...	...
Bulgaria	114	643	485	244	260	165	58	81	184
Burkina Faso	82	277	250	28	12	132	400	...	...
Burundi	90	44	...	1	7	-	-	...	1
Cambodia	...	...	...	...	...	...	...	...	...
Cameroon	13	26	5	118	789	151	888	179	400
Canada	204	706	297	372	332	361	481	480	503
Cape Verde	23	111	1	1	1	4	4	30	41
Central African Republic	10	20	26	43	187	...	...	...	...
Chad	244	40	50	11	25	40	30	30	55
Chile	2	1,010	29	506	148	173	184	...	...
China	70	5,829	10,551	26,372	30,567	22,210	20,647	21,885	25,353
China, Hong Kong SAR	4,650	9,175	48,119	59,017	62,805	29,801	27,520	22,964	22,293
China, Macao SAR	550	699	1,787	4,096	2,227	1,774	1,135	1,562	1,097
Colombia	1,713	2,323	12	857	1,367	2,399	3,770	8,476	5,700
Comoros	...	...	...	134	102	91	71	88	39
Congo	14	8	7	1	1	1	1	1	1
Congo, Democratic Republic of	56	...	...	...	...	259	259	610	630
Cook Islands	...	20	1	10	10	10	9	11	11
Costa Rica	88	10	...	4	4	9	11	11	601
Côte d'Ivoire	468	...	...	7	5	8	12	8	9
Croatia	...	...	...	12	11	12	1	6	34
Cuba	...	...	...	...	...	...	...	...	...
Cyprus	102	239	3,584	24,577	40,463	36,931	22,225	21,549	25,855
Czech Republic	...	...	...	6,688	4,312	4,338	3,667	3,466	2,728
Denmark	792	173	178	710	438	689	524	473	854
Djibouti	921	1,102	492	...	...	...	...	...	...
Dominica	5	3	4	19	6	4	...	10	4
Dominican Republic	14	5	15	25	50	40	30	30	30
Ecuador	119	...	...	18	25	49	44	41	55
Egypt	49	1,156	138	11	8	25	10	6	-
El Salvador	532	20	2	728	630	617	1,117	1,159	1,251
Equatorial Guinea	...	...	...	...	...	...	...	...	...
Eritrea	...	...	...	...	...	...	...	...	...
Estonia	...	...	...	676	1,677	3,635	2,904	2,620	2,749
Ethiopia	...	...	...	11	...	13	100	28	76
Fiji	14	12	11	55	30	50	40	30	16
Finland	6	100	69	444	1,314	999	1,205	1,664	1,761
France	4,509	26,782	48,010	58,296	58,055	60,900	60,156	62,349	52,906

	1970	1980	1990	1995	1996	1997	1998	1999	2000
Gabon	10	140	40	33	40	160	180	180	160
Gambia	164	250	...	335	202	537	2,568	1,111	281
Georgia	...	...	...	847	433	1,949	390	2,266	...
Germany	6,141	7,308	10,224	16,485	14,204	26,793	29,269	26,236	33,291
Ghana	13	41	...	...	75	87	3	...	1,982
Greece	21	593	4,862	11,747	12,343	11,405	13,240	12,787	11,066
Grenada	16	5	4	30	35	67	67	60	85
Guatemala	11	10	...	539	556	802	767	244	498
Guinea	...	...	...	2,809	1,645	1,988	3,697	7,641	8,390
Guinea-Bissau	91	96	20	40	40	60	60	90	90
Israel	130	400	2,041	3,600	3,000	3,080	3,255	4,276	4,317
Italy	3,583	30,320	34,483	38,566	39,372	41,479	43,182	50,562	56,626
Jamaica	26	2	2	12	17	8	20	36	33
Japan	1,740	5,054	41,405	57,530	77,192	77,581	80,594	82,651	83,520
Jordan	13	113	87	167	41	179	289	594	428
Kazakhstan	...	...	...	2,400	3,000	3,000	1,800	1,264	3,770
Kenya	60	74	144	70	54	192	1,070	50	42
Kiribati	...	...	...	13	12	13	13	13	90
Korea, Democratic People's Republic of	...	...	200	312	1,918	699	1,000	920	760
Korea, Republic of	49	10	4,473	13,953	12,544	11,324	4,896	6,319	9,991
Kuwait	2,739	3,994	1,674	2,916	2,984	2,685	2,715	2,966	1,678
Kyrgyzstan	...	...	...	204	1,385	...	1,068	1,162	...
Lao People's Democratic Republic	99	...	...	...	...	...	...	...	864
Latvia	...	...	...	185	624	1,748	2,499	3,553	2,882
Lebanon	668	...	...	...	...	10,479	12,418	6,985	5,554
Lesotho	...	...	...	...	...	...	...	...	...
Liberia	202	292	100	135	200	455	370	360	200
Libyan Arab Jamahiriya	336	4,277	96	14	222	919	1,197	...	...
Lithuania	...	...	...	1,806	2,694	3,271	2,666	2,007	1,107
Luxembourg	...	...	...	...	...	...	...	4,937	5,970
Macedonia, The former Yugoslav Republic of	...	...	...	218	188	459	202	289	130
Madagascar	346	119	21	16	16	15	30	14	24
Malawi	15	2	...	24	64	205	786	...	18
Malaysia	2,470	2,891	991	2,090	964	1,460	1,062	1,011	1,434
Maldives	...	...	...	232	274	335	...	...	...
Mali	6	233	1,030	...	169	261	...	...	...
Malta	91	81	79	163	357	3,709	319	383	346
Marshall Islands	...	...	...	...	...	...	...	...	...
Mauritania	27	...	70	408	450	450	450	450	1,916
Mauritius	11	10	11	44	29	48	46	151	210
Mexico	...	...	1	68	50	170	75	166	747
Micronesia, Federated States of	...	...	...	...	...	...	...	...	...
Moldova, Republic of	...	...	...	132	628	...	132	159	3,427
Monaco	...	...	...	...	...	...	...	...	...
Mongolia	...	...	...	...	673	...	...	...	...
Morocco	207	989	1,355	1,953	1,780	1,775	1,933	1,899	2,024
Mozambique	31	...	...	...	...	...	...	...	...
Myanmar	...	...	...	56	44	127	306	502	...
Namibia	...	...	...	...	...	...	...	...	1,420
Nauru	...	...	...	...	...	...	...	...	...
Nepal	...	40	4	70	100	50	110	80	90
Netherlands	1,765	19,173	14,239	17,468	20,221	18,424	17,519	15,833	16,732
New Zealand	52	62	32	89	106	143	167	282	387
Nicaragua	134	1	...	25	24	37	100	1,051	1,924
Niger	266	544	541	1,013	2,851	1,090	1,203	...	...
Nigeria	20	60	198	846	1,332	920	5,513	1,599	2,966
Niue	...	...	...	...	...	...	...	...	...
Norway	1,593	1,877	1,522	1,363	992	1,021	919	1,058	1,217

	1970	1980	1990	1995	1996	1997	1998	1999	2000
Oman	80	3,067	1,402	22,395	17,077	17,526	25,488	30,831	34,749
Pakistan	130	3	3	8	2	126	27	30	14
Palau	...	...	...	...	...	...	...	...	...
Panama	1	2	-	-	9	41	789	961	778
Papua New Guinea	188	15	5	13	50	50	50	50	-
Paraguay	1,252	1,911	1,807	22,811	33,762	36,937	35,452	16,659	10,336
Peru	1	1	...	125	183	278	531	499	624
Philippines	112	281	476	4,413	1,154	1,575	4,693	2,526	2,739
Poland	...	1,413	5,032	1,550	701	500	387	554	87
Portugal	190	67	127	4,210	4,987	3,013	2,524	2,241	1,987
Puerto Rico	...	...	...	...	...	...	...	...	...
Qatar	...	684	822	1,045	1,193	...	950	1,143	...
Romania	...	...	...	22,335	8,706	5,460	2,766	1,991	3,474
Russian Federation	...	...	...	...	49,373	93,400	75,111	27,070	15,003
Solomon Islands	24	28	25	175	120	150	160	130	...
Somalia	...	...	...	...	...	...	...	...	...
South Africa	1,675	1,139	597	694	803	539	532	417	324
Spain	4,512	6,634	906	7,146	7,673	11,458	16,036	23,726	29,416
Sri Lanka	...	44	84	41	170	230	254	175	188
Sudan	578	242	...	76	43	329	73	...	...
Suriname	36	100	15	232	48	58	131	458	785
Swaziland	...	...	...	...	...	...	...	...	348
Sweden	2,122	2,247	2,030	1,684	2,175	1,877	2,037	2,229	2,844
Switzerland	1,676	247	345	117	172	187	172	167	200
Syrian Arab Republic	236	784	...	1,296	1,738	737	449	429	441
Tajikistan	...	...	...	...	...	...	...	...	...
Tanzania, United Republic of	10	-	230	10	25	5	13	19	14
Thailand	15	242	449	2,120	2,030	2,933	2,585	5,617	6,854
Timor Leste	...	...	...	...	...	...	...	...	...
Togo	946	779	1,327	794	980	1,348	992	1,075	892
Tokelau	...	...	...	...	...	...	...	...	...
Tonga	...	...	93	70	72	110	72	88	70
Trinidad and Tobago	10	92	12	14	4	11	11	132	16
Tunisia	...	1,419	1,757	3,988	3,662	4,768	3,946	1,681	1,582
Turkey	...	...	15,851	130	37	21	19	1	3
Turkmenistan	...	...	...	1,712	1,088	706	1,111	2,913	2,284
Tuvalu	...	5	3	5	7	7	7	7	4
Uganda	10	...	...	11	12	3	4	33	135
Ukraine	...	...	...	...	9,081	10,132	8,265	3,722	2,145
United Arab Emirates	1,176	13,942	7,379	10,500	8,100	18,000	24,000	24,000	21,900
United Kingdom	926	2,835	15,747	17,946	17,805	15,820	14,051	12,704	7,669
United States	121	569	2,677	3,212	4,202	4,408	6,432	10,828	15,087
Uruguay	20	90	4	1	4	2	3	2	1
Uzbekistan	...	...	...	5,625	2,211	310	291	184	753
Vanuatu	35	33	30	21	21	21	21	21	55
Venezuela, Bolivarian Republic of	8	427	31	45	125	56	30	32	84
Viet Nam	...	...	90	24,546	19,000	10,000	13,000	9,600	17,200
Yemen	396	1,420	6	32	4	334	51	51	150
Yugoslavia	...	...	...	100	27	131	304	304	2,199
Zambia	1	...	...	1	...	...	15	2	26
Zimbabwe	...	...	1	11	34	132	336	910	734
Czechoslovakia (Former)	7,000	7,000	1,000	...	...	...	...	...	...
USSR (Former)	41,596	58,133	77,733	76,570	...	...	...	...	...
Yugoslavia (Former Socialist Federal Republic)	115	2	1,510	...	...	...	...	...	...

Appendix 3: Cigarette exports, 1970-2000, selected years (*metric tons / million pieces*)

	1970	1980	1990	1995	1996	1997	1998	1999	2000
Afghanistan	...	...	...	...	...	...	...	...	...
Albania	...	...	...	...	20	...	58	20	5
Algeria	104	635	...	...	...	...	7	...	108
Andorra	...	...	...	...	...	39	86	76	65
Angola	155	...	...	...	...	...	...	...	...
Antigua and Barbuda	...	...	...	...	...	...	...	...	...
Argentina	...	11	724	2,452	1,788	2,708	2,077	3,102	2,555
Armenia	...	...	...	...	...	...	...	133	130
Australia	594	291	647	1,122	3,106	2,880	3,339	1,289	1,170
Austria	91	188	1,617	4,205	5,112	10,205	12,378	14,223	17,065
Azerbaijan	...	...	...	...	...	...	48	120	435
Bahamas	...	...	...	...	...	1	1	1	24
Bahrain	259	1,039	18	12	14	...	...	...	...
Bangladesh	...	...	2	-	15	40	47	50	15
Barbados	56	96	44	37	13	31	15	18	18
Belarus	...	...	...	...	...	...	299	699	1,030
Belgium	3,363	10,875	11,765	10,628	12,126	12,081	10,815	10,922	9,268
Belize	28	1	1	161	137	94	94	94	1
Benin	67	5	...	...	...	...	388	392	284
Bhutan	...	...	...	...	...	...	...	...	...
Bolivia	...	...	...	527	626	581	478	429	297
Bosnia and Herzegovina	...	...	...	...	...	10	...	2	...
Botswana	...	1	1	-	50	2	2	2	2
Brazil	609	1	12,435	63,417	80,262	87,313	87,169	8,058	842
Brunei Darussalam	...	...	...	...	...	...	...	...	...
Bulgaria	45,038	69,189	60,360	60,914	40,143	25,655	11,307	3,999	4,049
Burkina Faso	3	...	...	...	...	83	194	...	...
Burundi	...	40	...	...	...	...	-	11	14
Cambodia	...	...	...	...	...	...	...	...	15
Cameroon	...	14	89	171	203	102	143	143	14
Canada	264	659	1,804	4,449	1,968	1,462	2,842	1,621	1,559
Cape Verde	...	...	...	...	...	...	...	...	1
Central African Republic	14	...	17	29	4	...	...	...	...
Chad	...	...	...	...	...	...	...	...	...
Chile	...	...	45	137	169	244	232	...	...
China	-	1,010	8,361	64,803	58,835	24,877	22,876	7,548	8,499
China, Hong Kong SAR	3,121	4,090	75,712	74,327	79,572	45,874	35,229	18,536	34,464
China, Macao SAR	1	1	...	1,258	1,496	1,543	1,151	573	762
Colombia	...	106	564	117	114	241	438	1,155	2,469
Comoros	...	...	...	...	...	...	...	...	-
Congo	162	29	...	17	...	...	...	...	...
Congo, Democratic Republic of	...	...	...	...	...	...	...	...	...
Cook Islands	...	...	...	...	...	...	...	...	...
Costa Rica	...	1	...	...	...	41	680	700	324
Côte d'Ivoire	35	...	...	89	122	6	20	482	707
Croatia	...	...	...	1,627	1,035	2,462	2,603	3,511	6,117
Cuba	7,575	2,523	...	...	...	...	...	...	...
Cyprus	2	2,527	3,082	555	1,250	2,952	2,694	3,042	3,277
Czech Republic	...	...	...	8,025	11,671	18,509	18,521	10,641	8,718
Denmark	1,766	1,566	3,634	4,346	3,812	4,184	4,593	4,240	4,195
Djibouti	...	...	...	...	...	...	...	...	...
Dominica	...	...	...	8	7	13	...	5	6
Dominican Republic	...	...	...	...	16	4	...	...	...
Ecuador	28	26	443	60	37	59	79	10	177
Egypt	175	22	121	44	13	...	1	16	...
El Salvador	1	14	...	597	820	511	14	2	8
Equatorial Guinea	...	...	...	...	...	...	...	...	...
Eritrea	...	...	...	...	...	...	...	...	...
Estonia	...	...	...	59	193	577	404	250	65
Ethiopia	...	...	...	...	...	...	...	...	...
Fiji	66	6	10	1	2	1	-	-	8
Finland	315	3,119	1,307	1,377	3,313	3,765	2,086	553	460
France	3,795	5,627	5,410	8,514	11,172	14,851	14,721	15,795	14,390

	1970	1980	1990	1995	1996	1997	1998	1999	2000
Gabon	...	...	...	...	...	30	...	506	831
Gambia	...	...	...	85	...	26	...	35	...
Georgia	...	...	...	...	...	...	...	...	...
Germany	5,002	36,590	65,982	80,344	92,754	80,520	89,198	106,832	112,411
Ghana	...	...	...	...	235	73	90	160	766
Greece	34	15	3,352	13,399	22,411	20,277	14,320	15,885	18,621
Grenada	...	...	...	...	...	...	...	...	...
Guatemala	958	45	...	611	580	3,112	1,280	1,312	1,069
Guinea	...	...	...	7	8	...	42	54	23
Guinea-Bissau	...	...	...	...	...	...	...	...	...
Israel	-	86	8	15	25	45	50	90	104
Italy	114	311	417	244	235	211	314	238	283
Jamaica	...	73	32	14	14	26	32	36	27
Japan	58	159	5,336	13,977	12,517	14,642	11,957	13,536	13,775
Jordan	333	2,018	233	7	3	496	1,519	515	1,973
Kazakhstan	...	...	...	550	2,700	2,000	2,038	502	853
Kenya	45	49	389	5,046	1,963	2,453	2,335	2,124	2,826
Kiribati	...	...	...	...	...	...	...	...	...
Korea, Democratic People's Republic of	...	...	10	3	-	21	21	21	25
Korea, Republic of	9	468	405	1,513	2,951	2,721	3,283	3,663	8,899
Kuwait	748	1,238	44	8	92	48	39	58	...
Kyrgyzstan	...	...	...	...	...	...	3,418	4,032	...
Lao People's Democratic Republic	...	...	...	...	...	...	...	...	...
Latvia	...	...	...	2,128	875	193	247	648	1,386
Lebanon	1	...	...	...	...	21	14	2	...
Lesotho	...	...	...	...	...	...	...	...	...
Liberia	...	...	...	...	...	...	...	...	...
Libyan Arab Jamahiriya	...	...	2	...	...	...	...	...	...
Lithuania	...	...	...	146	30	48	2,236	3,810	3,816
Luxembourg	...	...	...	...	...	...	...	5,756	7,382
Macedonia, The former Yugoslav Republic of	...	...	...	1,483	6,167	6,176	3,620	4,688	5,675
Madagascar	235	9	2	1	-	5	...	1	2
Malawi	...	48	4	3	...	...	...	...	61
Malaysia	1,759	31	614	3,395	5,321	9,341	10,221	13,715	11,171
Maldives	...	...	...	...	...	...	...	...	...
Mali	1	...	4	...	...	...	...	...	...
Malta	67	458	72	130	263	129	116	158	377
Marshall Islands	...	...	...	...	...	...	...	...	...
Mauritania	...	...	...	...	...	...	...	...	...
Mauritius	...	...	40	3	5	-	1	-	...
Mexico	3	16	765	6,589	10,304	9,779	11,220	8,465	10,063
Micronesia, Federated States of	...	...	...	...	...	...	...	...	...
Moldova, Republic of	...	...	...	...	7,212	...	490	8,691	401
Monaco	...	...	...	...	...	...	...	...	...
Mongolia	...	...	...	...	28	...	...	...	...
Morocco	1	...	6	...	...	1	10	...	5
Mozambique	577	...	...	...	...	...	...	...	...
Myanmar	...	...	...	...	...	...	...	...	...
Namibia	...	...	...	...	...	...	...	...	1,239
Nauru	...	...	...	...	...	...	...	...	...
Nepal	...	...	...	1	1	1	1	1	...
Netherlands	4,973	30,117	69,333	82,180	116,035	118,003	103,722	105,113	101,550
New Zealand	52	156	83	96	108	146	164	181	184
Nicaragua	64	...	...	...	32	50	353	8	2
Niger	...	261	...	4	5	2	7	...	...
Nigeria	...	...	...	...	...	...	...	2	...
Niue	...	...	...	...	...	...	...	...	...
Norway	52	7	70	35	34	25	37	37	11
Oman	...	1,006	152	18,168	18,265	16,730	12,888	9,756	11,590
Pakistan	40	496	796	478	92	47	-	4	22
Palau	...	...	...	...	...	...	...	...	...
Panama	1	2	54	709	822	849	274	7	-
Papua New Guinea	...	...	7	...	...	...	...	...	...
Paraguay	...	...	...	...	...	39	...	2,875	3,740
Peru	...	...	...	...	...	...	156	1,130	1,498
Philippines	13	4	5,598	897	2,401	1,027	1,392	2,814	3,627
Poland	...	...	...	4,150	7,543	5,719	6,251	6,318	8,776
Portugal	141	295	229	266	316	242	571	2,739	6,697
Puerto Rico	...	...	...	...	...	...	...	...	...
Qatar	...	...	...	1	1	1	1	1	1
Romania	...	...	...	78	4	5	75	16	71
Russian Federation	...	...	...	...	4,409	1,238	298	167	545

	1970	1980	1990	1995	1996	1997	1998	1999	2000
Rwanda	...	...	...	...	...	...	36	3	...
Saint Kitts and Nevis	...	...	...	...	...	...	...	...	...
Saint Lucia	...	...	...	...	...	...	1	1	...
Saint Vincent and the Grenadines	...	...	...	...	...	...	...	...	...
Samoa	...	15	13	14	5	15	15	15	10
San Marino	...	...	...	...	...	...	...	...	...
Sao Tome and Principe	...	...	...	...	...	...	...	...	...
Saudi Arabia	...	1,193	620	25	12	1	7	7	-
Senegal	1,804	3	177	109	18	53	373	539	228
Seychelles	...	...	2	5	9	15	14	5	5
Sierra Leone	...	...	...	...	...	...	...	...	...
Singapore	1,550	1,405	28,445	49,044	56,153	60,844	53,280	30,684	27,562
Slovakia	...	...	...	4,144	2,823	3,507	3,021	3,030	3,638
Slovenia	...	...	...	13,676	1,227	2,328	4,138	4,632	4,831
Solomon Islands	...	...	...	...	...	...	...	...	...
Somalia	...	...	...	...	...	...	...	...	...
South Africa	80	150	238	7,200	12,242	14,915	19,331	10,619	20,881
Spain	402	916	837	4,025	3,614	5,308	4,195	5,598	5,210
Sri Lanka	...	40	376	726	972	1,035	673	459	368
Sudan	...	...	...	...	...	...	...	...	...
Suriname	...	...	...	...	1	6	6	...	...
Swaziland	...	...	...	...	...	...	...	...	257
Sweden	126	174	91	276	304	1,124	979	618	796
Switzerland	14,583	12,766	14,710	24,822	26,011	21,579	16,827	14,700	17,714
Syrian Arab Republic	...	1,112	343	...	...	...	...	...	...
Tajikistan	...	...	...	...	...	...	...	...	...
Tanzania, United Republic of	1	1,076	309	...	...	1,705	130	1,714	10
Thailand	...	1	...	100	237	339	696	847	622
Timor Leste	...	...	...	...	...	...	...	...	...
Togo	9	10	1	...	15	6	6	6	119
Tokelau	...	...	...	...	...	...	...	...	...
Tonga	...	...	1	...	...	...	-	-	-
Trinidad and Tobago	2	7	26	111	183	166	92	1,356	1,494
Tunisia	...	30	451	1,043	2,244	2,872	3,030	1,729	1,476
Turkey	13	-	2,827	8,102	21,057	12,270	8,778	9,581	12,269
Turkmenistan	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...
Uganda	29	...	...	74	16	94	...	33	165
Ukraine	...	...	...	...	10,247	4,577	4,655	8,519	10,248
United Arab Emirates	...	2,304	...	...	...	...	...	...	...
United Kingdom	20,568	41,014	40,759	83,216	87,566	94,835	82,310	73,469	80,642
United States	29,147	81,998	164,301	231,100	243,897	217,004	201,358	151,223	148,261
Uruguay	...	-	132	185	3,688	7,885	6,803	7,296	7,637
Uzbekistan	...	...	...	...	18	12	16	1,005	2,800
Vanuatu	...	...	...	...	...	...	...	...	...
Venezuela, Bolivarian Republic of	...	539	6,486	11,897	18,001	15,593	17,129	9,738	4,798
Viet Nam	...	...	...	124	96	188	300	120	120
Yemen	3	36	580	370	500	390	121	147	250
Yugoslavia	...	...	...	...	5,545	4,200	720	720	100
Zambia	...	...	...	...	...	...	645	18	120
Zimbabwe	1,700	1,800	379	818	1,754	1,761	1,107	1,201	1,395
Czechoslovakia (Former)	...	800	1	...	...	...	...	...	...
USSR (Former)	405	947	2,500	5,170	...	...	...	...	...
Yugoslavia (Former Socialist Federal Republic)	378	4,249	3,019	...	...	...	...	...	...

Appendix 4: Sources –cigarette production, imports, exports 1970-2000, selected years

		1970	1980	1990	1995	1996	1997	1998	1999	2000
Afghanistan	Exports	...	...	...	...	...	...	...	...	...
	Imports	COMTRADE	...	...	...	...	...	...	...	...
	Production	...	...	...	...	...	...	...	...	...
Albania	Exports	...	...	...	...	COMTRADE	...	COMTRADE	COMTRADE	COMTRADE
	Imports	...	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Algeria	Exports	COMTRADE	COMTRADE	...	COMTRADE	...	...	COMTRADE	...	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	...	...	COMTRADE
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Andorra	Exports	...	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	...	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	...	...	...	...	...	...	...	...
Angola	Exports	COMTRADE	...	...	...	...	...	...	...	...
	Imports	COMTRADE	...	...	...	...	...	...	...	...
	Production	UNSD	...	...	...	...	...	...	...	...
Antigua and Barbuda	Exports	...	...	...	...	...	...	...	COMTRADE	...
	Imports	...	...	...	...	...	...	...	COMTRADE	...
	Production	...	...	...	...	...	...	...	...	...
Argentina	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	USDA	USDA	ERC	ERC	ERC	ERC	ERC	ERC	ERC
Armenia	Exports	...	...	...	...	...	...	...	COMTRADE	COMTRADE
	Imports	...	...	...	FAO	FAO	COMTRADE	FAO	COMTRADE	COMTRADE
	Production	...	CIS	CIS	CIS	CIS	CIS	CIS	UNSD	UNSD
Australia	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	USDA	USDA	ERC	ERC	ERC	ERC	ERC	ERC	ERC
Austria	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	UNSD	UNSD	ERC	ERC	ERC	ERC	ERC
Azerbaijan	Exports	...	...	...	...	...	...	COMTRADE	COMTRADE	COMTRADE
	Imports	...	...	...	ERC	ERC	ERC	COMTRADE	COMTRADE	COMTRADE
	Production	...	CIS	CIS	CIS	CIS	CIS	CIS	ERC	ERC
Bahamas	Exports	...	...	...	...	...	FAO	FAO	FAO	FAO
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	...	...	...	...	...	...	...	...	...
Bahrain	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	...	...	...	...
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	...	...	...	COMTRADE
	Production	...	...	...	...	...	...	...	...	...
Bangladesh	Exports	...	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	...	FAO	FAO	FAO	FAO	FAO	FAO	...	...
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Barbados	Exports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	UNSD	...	...	...	...	...
Belarus	Exports	...	...	...	...	...	...	COMTRADE	COMTRADE	COMTRADE
	Imports	...	...	...	...	...	...	COMTRADE	COMTRADE	COMTRADE
	Production	...	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Belgium	Exports	...	...	...	...	...	...	...	COMTRADE	COMTRADE
	Imports	...	...	...	...	...	...	...	COMTRADE	COMTRADE
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	ERC
Belize	Exports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Benin	Exports	COMTRADE	COMTRADE	...	...	...	...	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	...	...	...	...	COMTRADE	COMTRADE	COMTRADE
	Production	...	...	...	...	...	...	...	...	...
Bhutan	Exports	...	...	...	...	...	...	...	...	...
	Imports	...	...	...	...	...	...	COMTRADE	COMTRADE	...
	Production	...	...	...	...	...	...	...	...	...
Bolivia	Exports	COMTRADE	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	...	UNSD	UNSD	...	...	...	...	...
Bosnia and Herzegovina	Exports	...	...	...	...	...	ERC	...	ERC	...
	Imports	...	...	...	...	...	ERC	ERC	ERC	ERC
	Production	...	...	ERC	ERC	ERC	ERC	ERC	ERC	ERC

		1970	1980	1990	1995	1996	1997	1998	1999	2000
Botswana	Exports	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	...	...	...	...	...	...	...	...	...
Brazil	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA
Brunei Darussalam	Exports	...	...	...	...	...	COMTRADE	...	...	...
	Imports	COMTRADE	COMTRADE	COMTRADE	...	...	COMTRADE	COMTRADE	...	...
	Production	...	...	...	...	...	...	...	...	...
Bulgaria	Exports	FAO	FAO	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	FAO	FAO	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	ERC	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Burkina Faso	Exports	COMTRADE	...	...	...	...	COMTRADE	COMTRADE	...	...
	Imports	COMTRADE	COMTRADE	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	...	...
	Production	...	UNSD	UNSD	ECOWAS	ECOWAS	ECOWAS	...	...	...
Burundi	Exports	...	FAO	...	...	...	...	FAO	FAO	FAO
	Imports	FAO	FAO	...	FAO	FAO	FAO	FAO	...	FAO
	Production	...	UNSD	UNSD	...	...	...	...	...	...
Cambodia	Exports	...	...	...	...	FAO	FAO	FAO	FAO	FAO
	Imports	...	...	...	...	...	...	...	...	...
	Production	UNSD	...	...	...	...	...	...	...	...
Cameroon	Exports	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	COMTRADE	COMTRADE	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	...	...	...	...	...	...	...
Canada	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	USDA	USDA	USDA	UNSD	UNSD	UNSD	ERC	UNSD	UNSD
Cape Verde	Exports	...	...	...	...	...	...	...	...	FAO
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	...	...	...	...	...	...	...	...	...
Central African Republic	Exports	COMTRADE	...	FAO	COMTRADE	COMTRADE	...	...	...	...
	Imports	COMTRADE	COMTRADE	FAO	COMTRADE	COMTRADE	...	...	...	...
	Production	...	UNSD	UNSD	UNSD	...	...	...	...	...
Chad	Exports	COMTRADE	...	...	...	...	...	...	...	...
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	UNSD	...	...	...	...	...
Chile	Exports	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
China	Exports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA
China, Hong Kong SAR	Exports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	USDA	USDA
China, Macao SAR	Exports	FAO	FAO	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	...	UNSD	UNSD	UNSD	...	...	...	...
Colombia	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	USDA	USDA	ERC	ERC	ERC	ERC	ERC	ERC	ERC
Comoros	Exports	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	...	...	...	...	...	...	...	...
Congo	Exports	COMTRADE	COMTRADE	...	COMTRADE	...	...	...	...	...
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	...	...	...	...	...	...
Congo, Democratic Republic of	Exports	...	...	...	...	...	...	...	...	...
	Imports	FAO	...	...	...	...	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	ERC	ERC	ERC	ERC	ERC	ERC	ERC
Cook Islands	Exports	...	...	...	...	...	...	...	...	...
	Imports	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	...	...	...	...	...	...	...	...	...
Costa Rica	Exports	...	COMTRADE	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	FAO	FAO	...	FAO	FAO	FAO	FAO	FAO	FAO
	Production	...	...	...	...	...	...	...	...	...
Côte d'Ivoire	Exports	COMTRADE	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	ERC	ERC	ERC	ERC	ERC	ERC	ERC
Croatia	Exports	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD

		1970	1980	1990	1995	1996	1997	1998	1999	2000
Djibouti	Exports	...	...	COMTRADE	...	...	...	...	...	...
	Imports	FAO	FAO	COMTRADE	...	...	...	...	...	...
	Production	...	...	...	...	...	...	...	...	...
Dominica	Exports	...	...	...	COMTRADE	COMTRADE	COMTRADE	...	COMTRADE	COMTRADE
	Imports	FAO	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	...	COMTRADE	COMTRADE
	Production	...	UNSD	...	...	...	...	...	...	...
Dominican Republic	Exports	...	COMTRADE	...	...	COMTRADE	COMTRADE	...	...	...
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	...
Ecuador	Exports	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	...	UNSD	UNSD	UNSD	UNSD	UNSD	...
Egypt	Exports	FAO	FAO	FAO	FAO	FAO	...	FAO	FAO	...
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
El Salvador	Exports	COMTRADE	COMTRADE	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	...	UNSD	UNSD	...	...	...	...
Equatorial Guinea	Exports	...	...	...	...	...	...	...	...	...
	Imports	...	...	...	...	...	...	...	...	...
	Production	...	...	...	...	...	...	...	...	...
Eritrea	Exports	...	...	...	...	...	...	...	...	...
	Imports	...	...	...	...	...	...	...	...	...
	Production	...	...	...	...	...	...	...	...	...
Estonia	Exports	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	...	UNSD	UNSD	UNSD	...	...	...	...
Ethiopia	Exports	...	...	...	...	...	...	...	...	...
	Imports	...	...	...	COMTRADE	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Fiji	Exports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Finland	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	ERC	ERC	ERC	ERC
France	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA
Gabon	Exports	...	...	...	...	...	COMTRADE	...	COMTRADE	COMTRADE
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	UNSD	...	...	...	...	...
Gambia	Exports	...	...	...	COMTRADE	...	COMTRADE	COMTRADE	COMTRADE	...
	Imports	COMTRADE	COMTRADE	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	...	...	...	...	...	...	...	...
Georgia	Exports	...	...	...	...	...	...	...	COMTRADE	COMTRADE
	Imports	...	...	...	ERC	ERC	ERC	ERC	ERC	...
	Production	...	CIS	CIS	CIS	CIS	CIS	CIS	UNSD	UNSD
Germany	Exports	FAO	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	FAO	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA
Ghana	Exports	...	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	FAO	FAO	...	...	FAO	FAO	FAO	...	FAO
	Production	UNSD	UNSD	UNSD	ECOWAS	ECOWAS	ECOWAS	...	...	...
Greece	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	USDA	USDA	ERC	ERC	ERC	ERC	ERC	UNSD	UNSD
Grenada	Exports	...	...	...	...	...	...	...	...	...
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	...	UNSD	UNSD	...	...	...	...	...	...
Guatemala	Exports	COMTRADE	COMTRADE	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	UNSD	...	...	...	...	...	...
	Imports	...	...	...	...	...	...	...	...	...
Haiti	Exports	...	...	...	...	...	...	...	...	...
	Imports	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	...	...	...	...	...	...
Honduras	Exports	COMTRADE	COMTRADE	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	ERC	ERC	ERC	ERC	ERC	ERC	ERC
Hungary	Exports	FAO	FAO	FAO	FAO	FAO	FAO	...	FAO	...
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Iceland	Exports	...	...	...	...	...	...	...	...	...
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	...	...	...	...	...	...	...	...

		1970	1980	1990	1995	1996	1997	1998	1999	2000
India	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
Indonesia	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
	Exports	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
Iran, Islamic Republic of	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA
	Exports	FAO	...	...	...	...	FAO	FAO	...	...
Iraq	Imports	FAO	FAO	FAO	FAO	FAO	FAO	...	...	FAO
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	...	...
	Exports	...	...	...	...	...	...	...	...	...
Ireland	Imports	...	...	...	...	...	...	...	...	...
	Production	...	...	...	...	...	...	...	...	...
	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
Israel	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	ERC	ERC	ERC	ERC	ERC	ERC	ERC
	Exports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
Italy	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	...	...	...	...
	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
Jamaica	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA
	Exports	...	COMTRADE	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
Japan	Imports	FAO	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
	Exports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
Jordan	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA
	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE
Kazakhstan	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	...	...	...	...
	Exports	...	...	...	FAO	FAO	FAO	FAO	FAO	FAO
Kenya	Imports	...	...	...	FAO	FAO	FAO	FAO	FAO	FAO
	Production	...	CIS	CIS	CIS	CIS	CIS	CIS	UNSD	UNSD
	Exports	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
Kiribati	Imports	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	...	...	...	...
	Exports	...	...	...	FAO	FAO	FAO	FAO	FAO	...
Korea, Democratic People's Republic of	Imports	...	...	...	FAO	FAO	FAO	FAO	FAO	...
	Production	...	...	...	FAO	FAO	FAO	FAO	FAO	...
	Exports	...	...	...	FAO	FAO	FAO	FAO	FAO	...
Korea, Republic of	Imports	...	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
Kuwait	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA
	Exports	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	...
Kyrgyzstan	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	...	...	...	...	...	...	...	...	...
	Exports	...	...	...	COMTRADE	COMTRADE	...	COMTRADE	COMTRADE	...
Lao People's Democratic Republic	Imports	...	...	...	COMTRADE	COMTRADE	...	COMTRADE	FAO	...
	Production	...	CIS	CIS	CIS	CIS	CIS	CIS	CIS	UNSD
	Exports	FAO	...	...	...	...	...	...	...	...
Latvia	Imports	FAO	...	...	...	...	...	...	...	FAO
	Production	UNSD	...	...	UNSD	...	...	...	...	...
	Exports	...	...	...	FAO	FAO	FAO	FAO	FAO	FAO
Lebanon	Imports	...	...	...	FAO	FAO	FAO	FAO	FAO	FAO
	Production	...	...	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	...
	Exports	COMTRADE	...	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE
Lesotho	Imports	COMTRADE	...	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	...	...	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
	Exports	...	...	...	...	...	...	...	...	...
Liberia	Imports	...	...	...	...	...	...	...	...	...
	Production	...	...	...	...	...	...	...	...	...
	Exports	COMTRADE	...	...	...	...	...	...	...	...
Libyan Arab Jamahiriya	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	...	UNSD	...	...	...	...	...	...	...
	Exports	...	...	COMTRADE	...	...	...	...	...	...
Lithuania	Imports	COMTRADE	COMTRADE	COMTRADE	FAO	FAO	COMTRADE	COMTRADE	...	...
	Production	UNSD	UNSD	...	...	...	...	...	...	...
	Exports	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
Lithuania	Imports	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	...	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
	Exports	...	...	...	...	...	...	...	...	...

		1970	1980	1990	1995	1996	1997	1998	1999	2000
Luxembourg	Exports	...	...	...	...	...	...	...	COMTRADE	COMTRADE
	Production	...	...	...	...	...	...	...	...	...
	Imports	...	...	...	...	...	...	...	COMTRADE	COMTRADE
Macedonia, The former Yugoslav Republic of	Exports	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	...	ERC	ERC	ERC	ERC	ERC	ERC	ERC
Madagascar	Exports	FAO	FAO	FAO	FAO	FAO	FAO	...	FAO	FAO
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	...	...
Malawi	Exports	...	COMTRADE	COMTRADE	COMTRADE	...	...	...	...	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	...	COMTRADE
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	...	...
Malaysia	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	ERC	ERC	ERC	ERC	ERC	ERC	ERC
Maldives	Exports	...	...	FAO	FAO	FAO	FAO	FAO	FAO	...
	Imports	...	...	...	COMTRADE	COMTRADE	COMTRADE	...	...	...
	Production	...	...	...	...	...	...	...	...	...
Mali	Exports	COMTRADE	...	COMTRADE	...	...	...	...	...	...
	Imports	COMTRADE	COMTRADE	COMTRADE	...	COMTRADE	COMTRADE	...	...	...
	Production	...	...	UNSD	UNSD	UNSD	...	...	...	...
Malta	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	FAO	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	...	...	...	...	...	...	...
Marshall Islands	Exports	...	...	...	...	...	...	...	...	...
	Imports	...	...	...	...	...	...	...	...	...
	Production	...	...	...	...	...	...	...	...	...
Mauritania	Exports	...	...	...	...	...	...	...	...	...
	Imports	FAO	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	...	...	...	...	...	...	...	...	...
Mauritius	Exports	...	...	FAO	FAO	FAO	FAO	FAO	FAO	...
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Mexico	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Micronesia, Federated States of	Exports	...	...	...	...	...	...	...	...	...
	Imports	...	...	...	...	...	...	...	...	...
	Production	...	...	...	...	...	...	...	...	...
Moldova, Republic of	Exports	...	...	...	COMTRADE	COMTRADE	...	COMTRADE	COMTRADE	COMTRADE
	Imports	...	...	...	COMTRADE	COMTRADE	...	COMTRADE	COMTRADE	COMTRADE
	Production	...	CIS	CIS	CIS	CIS	CIS	CIS	CIS	UNSD
Monaco	Exports	...	...	...	...	...	...	...	...	...
	Imports	...	...	...	...	...	...	...	...	...
	Production	...	...	...	...	...	...	...	...	...
Mongolia	Exports	...	...	...	...	COMTRADE	...	...	...	COMTRADE
	Imports	...	...	...	...	COMTRADE	...	...	...	COMTRADE
	Production	...	...	...	...	...	...	...	...	...
Morocco	Exports	COMTRADE	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	UNSD	ERC	ERC	ERC	ERC	ERC	ERC	ERC
Mozambique	Exports	FAO	...	...	...	...	...	...	...	...
	Imports	FAO	...	...	...	...	...	...	...	...
	Production	...	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Myanmar	Exports	COMTRADE	...	...	...	...	...	...	...	...
	Imports	COMTRADE	...	...	National statistics	National statistics	National statistics	National statistics	National statistics	...
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Namibia	Exports	...	...	...	...	...	...	...	...	FAO
	Imports	...	...	...	...	...	...	...	...	FAO
	Production	...	...	...	...	...	...	...	...	...
Nauru	Exports	...	...	...	...	...	...	...	...	...
	Imports	...	...	...	...	...	...	...	...	...
	Production	...	...	...	...	...	...	...	...	...
Nepal	Exports	...	...	...	FAO	FAO	FAO	FAO	FAO	...
	Imports	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	National statistics	National statistics	National statistics	National statistics	National statistics	National statistics	National statistics	National statistics	National statistics
Netherlands	Exports	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA
	Imports	USDA	USDA	USDA	USDA	USDA	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA
New Zealand	Exports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	ERC

		1970	1980	1990	1995	1996	1997	1998	1999	2000
Nicaragua	Exports	COMTRADE	COMTRADE	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	...	...	...	...	...	...	...	...
Niger	Exports	COMTRADE	COMTRADE	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	...	...
	Imports	COMTRADE	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	...	...
Nigeria	Production	...	...	...	...	...	...	...	...	...
	Exports	COMTRADE	...	...	...	...	...	...	COMTRADE	...
Niue	Imports	FAO	FAO	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	...	UNSD	ECOWAS	...	...	...	...	...
Norway	Exports	...	...	...	...	...	...	...	...	...
	Imports	...	...	...	...	...	...	...	...	...
Oman	Exports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
Pakistan	Production	...	USDA	ERC	ERC	ERC	ERC	ERC	ERC	ERC
	Exports	...	FAO	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
Palau	Imports	FAO	FAO	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	...	...	...	...	...	...	...	...
Panama	Exports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	COMTRADE	COMTRADE
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	COMTRADE	COMTRADE
Papua New Guinea	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
	Exports	...	...	...	...	...	...	...	...	...
Paraguay	Imports	...	...	...	...	...	...	...	...	...
	Production	...	...	...	...	...	...	...	...	...
Peru	Exports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
Philippines	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
	Exports	...	...	COMTRADE	...	...	...	COMTRADE	...	COMTRADE
Poland	Imports	COMTRADE	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	UNSD	...	...	...	...	...	...
Portugal	Exports	...	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	FAO	FAO	...	FAO	FAO	FAO	FAO	FAO	FAO
Puerto Rico	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
	Exports	...	...	...	...	...	...	...	...	...
Qatar	Imports	...	...	...	...	...	...	...	...	...
	Production	...	...	...	...	...	...	...	...	...
Romania	Exports	...	...	...	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	...	FAO	COMTRADE	COMTRADE	COMTRADE	...	COMTRADE	COMTRADE	...
Russian Federation	Production	...	...	...	...	...	...	...	...	...
	Exports	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
Rwanda	Imports	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	...	...	...	...	...	...	...	...
Saint Kitts and Nevis	Exports	...	CIS	CIS	CIS	CIS	CIS	CIS	UNSD	UNSD
	Imports	...	...	...	...	...	...	...	...	...
Saint Lucia	Production	...	...	...	...	...	...	...	...	...
	Exports	...	...	...	...	...	...	FAO	FAO	...
Saint Vincent and the Grenadines	Imports	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	...	...	...	...	...	...	...	...
Samoa	Exports	...	...	...	...	...	...	...	...	...
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
San Marino	Production	...	...	...	...	...	...	...	...	...
	Exports	...	...	...	...	...	...	...	...	...
	Imports	...	...	...	...	...	...	...	...	...
	Production	...	...	...	...	...	...	...	...	...

		1970	1980	1990	1995	1996	1997	1998	1999	2000
Sao Tome and Principe	Exports	FAO	FAO	FAO	FAO	FAO	FAO	...	...	...
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	...	...	...
	Production	...	...	...	...	...	...	...	...	...
Saudi Arabia	Exports	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	...	...	...	...	...	...	...	...
Senegal	Exports	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	...	ECOWAS	ECOWAS	ECOWAS	...	...	...
Seychelles	Exports	...	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	...
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Sierra Leone	Exports	...	...	...	...	...	...	...	...	...
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	...
	Production	UNSD	UNSD	...	ECOWAS	...	...	...	...	...
Singapore	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	...	...	...	...	...	...	...
Slovakia	Exports	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	...	UNSD	ERC	ERC	ERC	ERC	ERC	ERC
Slovenia	Exports	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	...	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Solomon Islands	Exports	...	...	...	...	...	...	...	...	...
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	...
	Production	...	...	...	...	...	...	...	...	...
Somalia	Exports	...	...	...	...	...	...	...	...	...
	Imports	...	...	...	...	...	...	...	...	...
	Production	...	...	...	...	...	...	...	...	...
South Africa	Exports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	FAO	FAO	FAO	National statistics	National statistics	National statistics	National statistics	National statistics	National statistics
	Production	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA
Spain	Exports	COMTRADE	COMTRADE	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	ERC
	Production	UNSD	...	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Sri Lanka	Exports	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Sudan	Exports	...	...	...	...	...	...	...	...	...
	Imports	COMTRADE	COMTRADE	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	...	...
	Production	UNSD	...	...	...	...	...	...	...	...
Suriname	Exports	...	...	...	...	COMTRADE	COMTRADE	COMTRADE	...	COMTRADE
	Imports	FAO	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	...	...	...	...
Swaziland	Exports	...	...	...	...	...	...	...	...	COMTRADE
	Imports	...	...	...	...	...	...	...	...	COMTRADE
	Production	...	...	...	...	...	...	...	...	...
Sweden	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Switzerland	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Syrian Arab Republic	Exports	...	COMTRADE	COMTRADE	...	...	...	...	...	...
	Imports	FAO	FAO	...	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Tajikistan	Exports	...	...	...	...	...	...	...	...	COMTRADE
	Imports	...	...	...	...	...	...	...	...	COMTRADE
	Production	...	CIS	CIS	CIS	CIS	CIS	CIS	CIS	UNSD
Tanzania, United Republic of	Exports	FAO	FAO	FAO	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	FAO	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	...	...	...
Thailand	Exports	...	COMTRADE	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Timor Leste	Exports	...	...	...	...	...	...	...	...	...
	Imports	...	...	...	...	...	...	...	...	...
	Production	...	...	...	...	...	...	...	...	...
Togo	Exports	COMTRADE	FAO	FAO	...	FAO	FAO	FAO	FAO	FAO
	Imports	COMTRADE	FAO	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	...	...	...	...	...	...	...	...

		1970	1980	1990	1995	1996	1997	1998	1999	2000
Tokelau	Exports	...	...	...	...	...	...	...	...	...
	Imports	...	...	...	...	...	...	...	...	...
	Production	...	...	...	...	...	...	...	...	...
Tonga	Exports	...	...	FAO	...	...	...	FAO	FAO	FAO
	Imports	...	COMTRADE	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	...	...	...	...	...	...	...	...	...
Trinidad and Tobago	Exports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Tunisia	Exports	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Turkey	Exports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	National statistics	National statistics	National statistics	National statistics	National statistics	National statistics	...	...
Turkmenistan	Exports	...	...	...	...	...	...	...	...	COMTRADE
	Imports	...	...	...	ERC	ERC	ERC	ERC	ERC	ERC
	Production	...	...	...	...	...	...	...	...	...
Tuvalu	Exports	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO	...
	Imports	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	...	...	...	...	...	...	...	...	...
Uganda	Exports	FAO	...	...	COMTRADE	COMTRADE	COMTRADE	...	COMTRADE	COMTRADE
	Imports	FAO	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	...
Ukraine	Exports	...	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	...	...	...	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	...	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
United Arab Emirates	Exports	...	FAO	...	...	...	...	...	...	...
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	...	...	...	...	...	...	...	...	...
United Kingdom	Exports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	USDA	USDA	USDA	National statistics	National statistics	National statistics	National statistics	National statistics	National statistics
United States	Exports	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA
	Imports	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA
	Production	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA	USDA
Uruguay	Exports	...	FAO	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	UNSD	...	ERC	ERC	ERC	ERC	UNSD	UNSD	UNSD
Uzbekistan	Exports	...	...	...	...	ERC	ERC	ERC	ERC	ERC
	Imports	...	...	...	ERC	ERC	ERC	ERC	ERC	ERC
	Production	...	CIS	CIS	CIS	CIS	ERC	ERC	ERC	ERC
Vanuatu	Exports	...	...	...	...	...	...	...	...	...
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	...	...	...	...	...	...	...	...	...
Venezuela, Bolivarian Republic of	Exports	...	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE	COMTRADE
	Production	USDA	USDA	USDA	USDA	USDA	USDA	USDA	...	...
Viet Nam	Exports	...	...	...	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	...	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	...	National statistics	National statistics	National statistics	National statistics	National statistics	National statistics	National statistics	...
Yemen	Exports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	...	...	UNSD	UNSD	UNSD	UNSD	...	...	...
Yugoslavia	Exports	...	...	...	...	FAO	FAO	FAO	FAO	FAO
	Imports	...	...	...	FAO	FAO	FAO	FAO	FAO	FAO
	Production	...	...	...	UNSD	UNSD	UNSD	UNSD	UNSD	UNSD
Zambia	Exports	COMTRADE	...	...	COMTRADE	...	...	COMTRADE	COMTRADE	COMTRADE
	Imports	COMTRADE	...	...	COMTRADE	...	...	COMTRADE	COMTRADE	COMTRADE
	Production	UNSD	UNSD	...	...	...	...	...	...	...
Zimbabwe	Exports	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Imports	...	...	FAO	FAO	FAO	FAO	FAO	FAO	FAO
	Production	USDA	USDA	ERC	ERC	ERC	ERC	ERC	ERC	ERC
Czechoslovakia (Former)	Exports	...	FAO	FAO	...	...	...	...	...	...
	Imports	FAO	FAO	FAO	...	...	...	...	...	...
	Production	UNSD	UNSD	UNSD	...	...	...	...	...	...
USSR (Former)	Exports	USDA	USDA	USDA	USDA	...	...	...	...	...
	Imports	USDA	USDA	USDA	USDA	...	...	...	...	...
	Production	UNSD	UNSD	UNSD	USDA	...	...	...	...	...
Yugoslavia (Former Socialist Federal Republic)	Exports	COMTRADE	COMTRADE	COMTRADE	...	...	...	...	...	...
	Imports	FAO	FAO	FAO	...	...	...	...	...	...
	Production	UNSD	UNSD	UNSD	...	...	...	...	...	...

Appendix 5: Total cigarette consumption estimates, 1970-2000, selected years (3 year-moving-average, million pieces)

	1970	1980	1990	1995	1996	1997	1998	1999	2000
Afghanistan	...	...	...	...	...	...	...	...	...
Albania	...	...	...	...	1,432	...	1,733	1,927	2,246
Algeria	6,362	15,234	17,403	17,450	17,032	16,797	17,269	17,719	17,637
Andorra	...	...	...	...	...	...	...	...	...
Angola	2,425	...	...	...	...	...	...	...	...
Antigua and Barbuda	...	...	...	...	...	...	...	...	...
Argentina	30,574	37,549	32,597	39,879	39,530	39,723	39,710	39,167	38,676
Armenia	...	...	...	...	...	...	...	3,979	3,979
Australia	27,743	35,020	35,206	30,349	29,050	27,803	27,572	26,277	25,796
Austria	13,406	15,740	14,369	14,299	13,353	12,723	11,587	11,321	11,100
Azerbaijan	...	...	...	3,273	3,400	3,215	4,104	3,862	4,363
Bahamas	...	...	...	...	...	...	...	...	...
Bahrain	...	...	...	...	...	...	...	...	...
Bangladesh	16,394	14,213	13,369	15,478	17,442	18,257	19,351	19,706	19,753
Barbados	154	146	114	106	...	...	...	...	...
Belarus	...	...	...	...	...	...	19,916	18,798	18,877
Belgium	18,376	19,704	20,052	18,082	16,633	15,101	15,463	15,775	15,486
Belize	95	141	117	...	...	...	...	...	...
Benin	...	...	...	...	...	...	...	...	...
Bhutan	...	...	...	...	...	...	...	...	...
Bolivia	...	...	...	...	...	...	...	...	...
Bosnia and Herzegovina	...	...	...	...	...	3,470	3,999	4,529	4,877
Botswana	...	...	...	...	...	...	...	...	...
Brazil	74,104	137,995	154,641	106,153	102,828	93,695	94,113	96,797	105,474
Brunei Darussalam	...	...	...	...	...	...	...	...	...
Bulgaria	11,533	17,066	17,526	15,503	16,371	19,037	20,518	22,182	22,307
Burkina Faso	228	1,077	1,115	995	1,055	1,094	...	...	...
Burundi	...	...	...	...	...	...	...	...	...
Cambodia	...	...	...	...	...	...	...	...	...
Cameroon	1,078	1,283	...	...	...	...	...	...	...
Canada	50,959	67,094	44,888	48,489	46,862	46,752	46,099	45,444	44,982
Cape Verde	...	...	...	...	...	...	...	...	...
Central African Republic	...	411	...	...	...	...	...	...	...
Chad	...	...	...	...	...	...	...	...	...
Chile	7,447	10,644	9,953	11,192	11,753	12,285	12,859	13,064	...
China	371,110	765,762	1,617,078	1,681,181	1,683,169	1,678,086	1,683,730	1,695,221	1,706,334
China, Hong Kong SAR	7,951	9,461	...	...	...	...	...	...	...
China, Macao SAR	...	...	...	...	...	...	...	...	...
Colombia	21,004	22,189	13,643	12,091	12,668	14,193	15,970	16,715	17,171
Comoros	...	...	...	...	...	...	...	...	...
Congo	950	713	655	...	...	...	...	...	...
Congo, Democratic Republic of	4,078	3,123	3,893	3,008	3,375	3,148	2,976	2,733	2,820
Cook Islands	...	...	...	...	...	...	...	...	...
Costa Rica	...	...	...	...	...	...	...	...	...
Côte d'Ivoire	2,418	3,765	2,096	2,370	2,583	2,745	2,775	2,693	2,604
Croatia	...	...	...	10,694	9,995	9,625	9,210	8,758	8,445
Cuba	...	...	...	...	...	...	...	...	...
Cyprus	...	...	...	...	...	...	...	...	...
Czech Republic	...	...	...	19,274	15,494	13,722	12,563	...	...
Denmark	7,461	8,115	7,933	8,294	8,488	8,507	8,357	8,126	8,027
Djibouti	...	...	...	...	...	...	...	...	...
Dominica	...	...	...	...	...	...	...	...	...
Dominican Republic	2,158	3,396	4,398	4,351	4,117	4,121	4,057	4,082	...
Ecuador	1,602	3,932	...	1,973	1,698	1,788	1,946	2,086	...
Egypt	14,152	33,945	41,072	42,524	46,152	49,343	51,008	52,000	51,995
El Salvador	2,061	2,472	...	1,699	1,699	...	...	...	...
Equatorial Guinea	...	...	...	...	...	...	...	...	...
Eritrea	...	...	...	...	...	...	...	...	...
Estonia	...	...	...	2,460	2,460	...	...	...	...
Ethiopia	...	...	...	...	...	...	...	...	...
Fiji	412	564	520	498	486	472	475	443	440
Finland	6,738	5,148	7,411	5,507	4,499	4,172	4,582	4,843	4,951
France	70,842	90,912	98,525	97,733	93,675	91,207	89,589	84,819	84,572

	1970	1980	1990	1995	1996	1997	1998	1999	2000
Gabon	...	475	393	333	...	...	...	...	...
Gambia	...	...	...	...	...	...	...	...	...
Georgia	...	...	...	...	...	...	...	...	...
Germany	145,058	155,117	144,687	137,731	133,388	121,666	124,828	124,620	125,679
Ghana	1,596	1,824	1,849	1,662	1,693	1,683	...	...	...
Greece	17,187	25,767	28,893	34,197	31,892	31,144	31,857	30,924	29,025
Grenada	...	...	...	...	...	...	...	...	...
Guatemala	2,141	2,425	...	1,981	2,123	...	3,490	3,557	3,500
Guinea	...	...	...	...	...	...	...	...	...
Guinea-Bissau	...	...	...	...	...	...	...	...	...
Guyana	499	581	274	...	...	...	...	...	...
Haiti	395	1,065	1,091	...	...	...	...	...	...
Honduras	1,588	2,337	2,670	2,390	2,393	...	...	3,534	3,534
Hungary	23,175	27,227	25,969	23,592	20,919	20,714	...	22,359	22,359
Iceland	331	397	496	479	488	466	457	431	431
India	63,792	79,023	58,206	69,839	73,249	75,631	77,733	74,920	74,537
Indonesia	33,983	81,761	127,975	165,633	178,297	190,038	195,586	201,469	203,779
Iran, Islamic Republic of	12,769	22,999	22,136	29,192	29,943	30,521	...	...	...
Iraq	...	...	...	...	...	...	...	...	...
Ireland	5,108	6,743	6,309	6,579	6,243	6,357	6,313	6,796	6,854
Israel	4,062	5,797	7,478	8,387	8,143	...	...	...	...
Italy	73,733	100,061	96,144	91,886	90,770	92,445	94,035	96,500	100,609
Jamaica	1,347	1,195	1,291	1,235	1,198	1,176	1,128	1,074	1,038
Japan	226,242	311,269	309,275	317,550	319,851	329,633	328,487	331,889	319,705
Jordan	1,303	2,412	3,019	4,280	4,306	...	...	...	...
Kazakhstan	...	...	...	16,676	19,487	22,013	22,051	21,085	20,873
Kenya	2,538	4,617	6,432	4,825	4,742	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...	...
Korea, Democratic People's Republic of	...	...	...	...	...	...	...	...	...
Korea, Republic of	43,385	68,515	95,438	100,520	101,799	103,549	102,615	101,456	98,664
Kuwait	2,011	2,957	2,034	3,030	2,812	2,735	2,740	2,421	2,088
Kyrgyzstan	...	...	...	...	...	...	...	...	...
Lao People's Democratic Republic	...	...	...	...	...	...	...	...	...
Latvia	...	...	...	...	...	...	...	...	...
Lebanon	...	...	...	...	...	...	...	...	...
Lesotho	...	...	...	...	...	...	...	...	...
Liberia	...	290	...	...	...	...	...	...	...
Libyan Arab Jamahiriya	1,925	5,262	...	...	...	...	...	...	...
Lithuania	...	...	...	6,869	7,572	8,012	7,750	6,256	5,456
Luxembourg	...	...	...	...	...	...	...	...	...
Macedonia, The former Yugoslav Republic of	...	...	...	...	3,679	3,786	3,619	3,795	3,693
Madagascar	1,043	2,049	1,941	2,447	2,726	3,047	3,085	...	...
Malawi	453	642	1,020	1,018	1,052	1,087	1,112	...	...
Malaysia	8,655	16,675	18,214	19,351	19,561	19,398	19,138	18,849	18,258
Maldives	...	...	...	...	...	...	...	...	...
Mali	...	...	1,043	...	...	...	...	...	...
Malta	492	750	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...
Mauritania	...	...	...	...	...	...	...	...	...
Mauritius	621	1,046	1,026	1,271	1,222	1,163	1,134	1,132	1,158
Mexico	40,797	53,983	50,574	49,720	49,321	48,975	49,488	49,174	49,130
Micronesia, Federated States of	...	...	...	...	...	...	...	...	...
Moldova, Republic of	...	...	...	...	...	...	...	...	...
Monaco	...	...	...	...	...	...	...	...	...
Mongolia	...	...	...	...	...	...	...	...	...
Morocco	...	13,129	14,039	14,564	14,352	14,496	14,251	14,052	13,817
Mozambique	...	...	...	...	...	...	...	...	...
Myanmar	...	...	...	...	...	...	...	...	...
Namibia	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...
Nepal	1,143	2,121	6,660	7,924	8,118	7,881	7,421	7,052	6,866
Netherlands	20,749	28,311	22,887	25,765	22,664	20,720	25,813	33,005	35,979
New Zealand	5,227	6,151	4,208	3,470	3,478	3,457	3,274	3,093	3,007
Nicaragua	...	...	...	...	...	...	...	...	...
Niger	...	...	...	...	...	...	...	...	...
Nigeria	...	...	9,790	9,784	...	...	...	...	...
Niue	...	...	...	...	...	...	...	...	...
Norway	...	2,493	3,051	2,654	2,714	2,672	2,669	2,607	2,645

	1970	1980	1990	1995	1996	1997	1998	1999	2000
Oman	...	...	...	...	...	...	...	...	...
Pakistan	23,406	33,800	30,920	37,718	41,291	46,613	48,676	48,938	52,280
Palau	...	...	...	...	...	...	...	...	...
Panama	...	...	...	...	...	...	...	...	...
Papua New Guinea	...	...	...	...	...	...	...	...	...
Paraguay	1,640	2,626	4,006	...	...	...	...	...	...
Peru	...	3,805	2,573	3,195	3,338	3,446	3,248	3,057	2,840
Philippines	40,917	58,889	66,955	70,674	69,122	75,051	71,910	72,967	73,958
Poland	73,188	92,151	91,984	93,699	92,460	89,953	90,112	84,821	77,117
Portugal	8,922	13,257	16,765	16,943	16,872	17,063	16,994	17,215	16,956
Puerto Rico	...	...	...	...	...	...	...	...	...
Qatar	...	...	...	...	...	...	...	...	...
Romania	...	...	...	29,999	31,213	28,318	...	...	...
Russian Federation	...	...	...	...	225,243	245,343	282,262	308,963	320,673
Rwanda	...	...	...	...	...	...	...	...	...
Saint Kitts and Nevis	...	...	...	...	...	...	...	...	...
Saint Lucia	...	...	...	...	...	...	...	...	...
Saint Vincent and the Grenadines	...	...	...	...	...	...	...	...	...
Samoa	...	...	...	...	...	...	...	...	...
San Marino	...	...	...	...	...	...	...	...	...
Sao Tome and Principe	...	...	...	...	...	...	...	...	...
Saudi Arabia	...	...	...	...	...	...	...	...	...
Senegal	...	3,006	...	1,603	1,732	1,565	...	...	...
Seychelles	...	88	77	75	87	90	73	58	51
Sierra Leone	...	...	...	...	...	...	...	...	...
Singapore	3,438	4,302	...	...	...	...	...	...	...
Slovakia	...	...	...	8,337	9,088	9,710	10,100	9,123	8,816
Slovenia	...	...	...	...	4,890	4,847	4,755	4,636	4,574
Solomon Islands	23	30	25	127	148	143	147	145	...
Somalia	...	...	...	...	...	...	...	...	...
South Africa	16,050	25,920	37,360	34,447	33,167	31,747	29,960	28,333	26,847
Spain	55,746	...	79,870	82,681	82,332	86,327	90,082	95,262	96,003
Sri Lanka	3,109	5,095	5,154	5,256	5,134	5,214	5,111	5,045	4,791
Sudan	...	...	...	...	...	...	...	...	...
Suriname	229	452	499	561	617	...	...	...	...
Swaziland	...	...	...	...	...	...	...	...	...
Sweden	10,493	12,520	11,713	9,163	8,238	7,621	7,137	7,476	7,839
Switzerland	16,001	15,214	17,161	17,192	16,878	17,053	17,217	17,396	17,196
Syrian Arab Republic	2,786	8,248	6,887	10,631	10,712	10,662	11,047	11,268	11,479
Tajikistan	...	...	...	...	...	...	...	...	...
Tanzania, United Republic of	2,769	3,285	3,546	3,633	3,492	3,384	...	...	...
Thailand	15,698	30,447	38,900	47,270	46,996	44,140	39,457	36,451	36,440
Timor Leste	...	...	...	...	...	...	...	...	...
Togo	...	...	...	...	...	...	...	...	...
Tokelau	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...	...
Trinidad and Tobago	824	986	760	784	992	1,251	1,184	964	647
Tunisia	...	6,004	8,351	9,212	9,525	9,646	10,459	11,361	11,678
Turkey	40,431	54,489	76,748	90,004	88,972	90,545	93,794	...	...
Turkmenistan	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...
Uganda	1,543	...	...	1,568	1,661	1,780	1,777	1,779	...
Ukraine	...	...	...	...	51,889	55,554	57,394	54,239	49,916
United Arab Emirates	...	...	...	...	...	...	...	...	...
United Kingdom	123,228	115,192	97,481	102,681	91,741	90,043	85,474	77,973	74,591
United States	549,472	637,450	535,597	515,201	514,564	503,461	486,094	470,935	463,745
Uruguay	3,141	...	...	2,869	2,862	2,865	3,368	3,504	3,563
Uzbekistan	...	...	...	6,980	8,184	8,053	8,889	7,857	7,798
Vanuatu	...	...	...	...	...	...	...	...	...
Venezuela, Bolivarian Republic of	...	...	16,010	16,759	...	...	...	...	...
Viet Nam	...	...	...	60,569	60,646	57,059	53,711	54,330	...
Yemen	...	...	5,902	5,900	6,397	6,494	...	...	...
Yugoslavia	...	...	...	...	7,289	9,586	11,270	14,480	14,630
Zambia	1,122	1,207	...	...	...	...	...	...	...
Zimbabwe	1,963	1,882	2,547	1,995	1,878	2,008	2,671	3,119	3,369
Czechoslovakia (Former)	27,831	29,725	28,099	...	...	...	...	...	...
USSR (Former)	375,256	424,624	389,116	361,875	...	...	...	...	...
Yugoslavia (Former Socialist Federal Republic)	32,476	53,845	52,972	...	...	...	...	...	...

Appendix 6: Per capita cigarette consumption estimates, 1970-2000, selected years (3 year-moving-average)

	1970	1980	1990	1995	1996	1997	1998	1999	2000
Afghanistan	...	...	...	...	...	...	...	...	...
Albania	...	...	...	...	659	...	796	882	1,027
Algeria	882	1,518	1,204	1,027	974	929	926	925	907
Andorra	...	...	...	...	...	...	...	...	...
Angola	753	...	...	...	...	...	...	...	...
Antigua and Barbuda	...	...	...	...	...	...	...	...	...
Argentina	1,790	1,924	1,445	1,614	1,573	1,555	1,530	1,486	1,456
Armenia	...	...	...	...	...	...	...	1,389	1,389
Australia	3,071	3,215	2,671	2,141	2,021	1,906	1,863	1,752	1,708
Austria	2,368	2,620	2,250	2,156	2,004	1,903	1,728	1,684	1,650
Azerbaijan	...	...	...	636	647	600	749	691	774
Bahamas	...	...	...	...	...	...	...	...	...
Bahrain	...	...	...	...	...	...	...	...	...
Bangladesh	448	298	210	211	232	236	243	241	234
Barbados	1,014	832	586	523	...	...	...	...	...
Belarus	...	...	...	...	...	...	2,422	2,281	2,285
Belgium	2,484	2,494	2,457	2,175	1,994	1,802	1,838	1,868	1,830
Belize	1,442	1,826	1,131	...	...	...	...	...	...
Benin	...	...	...	...	...	...	...	...	...
Bhutan	...	...	...	...	...	...	...	...	...
Bolivia	...	...	...	...	...	...	...	...	...
Bosnia and Herzegovina	...	...	...	...	...	1,207	1,350	1,465	1,546
Botswana	...	...	...	...	...	...	...	...	...
Brazil	1,319	1,834	1,601	976	925	824	808	813	869
Brunei Darussalam	...	...	...	...	...	...	...	...	...
Bulgaria	1,752	2,473	2,526	2,254	2,391	2,795	3,029	3,293	3,322
Burkina Faso	76	302	241	188	194	199	...	...	...
Burundi	...	...	...	...	...	...	...	...	...
Cambodia	...	...	...	...	...	...	...	...	...
Cameroon	278	263	...	...	...	...	...	...	...
Canada	3,313	3,544	2,045	2,075	1,980	1,951	1,900	1,850	1,820
Cape Verde	...	...	...	...	...	...	...	...	...
Central African Republic	...	304	...	...	...	...	...	...	...
Chad	...	...	...	...	...	...	...	...	...
Chile	1,273	1,436	1,087	1,116	1,152	1,185	1,221	1,230	...
China	733	1,186	1,937	1,875	1,853	1,824	1,806	1,794	1,780
China, Hong Kong SAR	3,146	2,530	...	...	...	...	...	...	...
China, Macao SAR	...	...	...	...	...	...	...	...	...
Colombia	1,689	1,316	612	478	489	535	589	604	614
Comoros	...	...	...	...	...	...	...	...	...
Congo	1,312	776	538	...	...	...	...	...	...
Congo, Democratic Republic of	354	215	204	127	139	128	119	107	109
Cook Islands	...	...	...	...	...	...	...	...	...
Costa Rica	...	...	...	...	...	...	...	...	...
Côte d'Ivoire	791	821	306	297	314	324	318	300	285
Croatia	...	...	...	2,861	2,659	2,549	2,429	2,303	2,218
Cuba	...	...	...	...	...	...	...	...	...
Cyprus	...	...	...	...	...	...	...	...	...
Czech Republic	...	...	...	2,294	1,835	1,616	1,476	...	...
Denmark	1,966	2,002	1,861	1,920	1,962	1,963	1,927	1,871	1,847
Djibouti	...	...	...	...	...	...	...	...	...
Dominica	...	...	...	...	...	...	...	...	...
Dominican Republic	912	1,033	1,000	890	820	800	767	762	...
Ecuador	474	849	...	272	226	232	245	259	...
Egypt	674	1,282	1,217	1,111	1,174	1,221	1,229	1,219	1,201
El Salvador	1,050	980	...	472	472	...	...	...	...
Equatorial Guinea	...	...	...	...	...	...	...	...	...
Eritrea	...	...	...	...	...	...	...	...	...
Estonia	...	...	...	2,092	2,092	...	...	...	...
Etiopia	...	...	...	...	...	...	...	...	...
Fiji	1,372	1,460	1,155	1,011	965	920	908	833	819
Finland	1,929	1,351	1,842	1,333	1,083	998	1,091	1,148	1,171
France	1,847	2,172	2,178	2,089	1,990	1,927	1,882	1,772	1,757

	1970	1980	1990	1995	1996	1997	1998	1999	2000
Gabon	...	1,043	666	506	...	...	...	...	...
Gambia	...	...	...	...	...	...	...	...	...
Georgia	...	...	...	...	...	...	...	...	...
Germany	2,410	2,431	2,170	2,015	1,945	1,768	1,810	1,803	1,814
Ghana	336	307	223	171	168	164	...	...	...
Greece	2,592	3,464	3,521	3,938	3,639	3,520	3,576	3,452	3,230
Grenada	...	...	...	...	...	...	...	...	...
Guatemala	742	651	...	361	382	...	571	572	553
Guinea	...	...	...	...	...	...	...	...	...
Guinea-Bissau	...	...	...	...	...	...	...	...	...
Guyana	1,330	1,296	591	...	...	...	...	...	...
Haiti	323	335	280	...	...	...	...	...	...
Honduras	1,167	1,244	985	757	745	...	...	960	960
Hungary	2,820	3,257	3,140	2,823	2,503	2,480	...	2,697	2,697
Iceland	2,374	2,402	2,596	2,368	2,385	2,253	2,182	2,035	2,013
India	191	187	108	116	119	121	121	114	112
Indonesia	483	911	1,096	1,255	1,321	1,379	1,388	1,400	1,388
Iran, Islamic Republic of	790	1,050	678	792	789	791	...	...	...
Iraq	...	...	...	...	...	...	...	...	...
Ireland	2,497	2,859	2,467	2,405	2,246	2,245	2,186	2,316	2,316
Israel	2,063	2,304	2,406	2,223	2,118	...	...	...	...
Italy	1,811	2,282	2,016	1,886	1,857	1,886	1,914	1,960	2,041
Jamaica	1,350	937	840	755	721	698	659	618	592
Japan	2,835	3,486	3,068	3,012	3,013	3,086	3,059	3,076	2,950
Jordan	1,449	2,129	1,734	1,725	1,686	...	...	...	...
Kazakhstan	...	...	...	1,428	1,667	1,880	1,879	1,791	1,771
Kenya	429	565	541	329	316	...	...	...	...
Kiribati	...	...	...	...	...	...	...	...	...
Korea, Democratic People's Republic of	...	...	...	...	...	...	...	...	...
Korea, Republic of	2,304	2,721	3,002	2,916	2,909	2,915	2,848	2,778	2,668
Kuwait	4,644	3,633	1,512	3,003	2,777	2,584	2,409	2,000	1,616
Kyrgyzstan	...	...	...	...	...	...	...	...	...
Lao People's Democratic Republic	...	...	...	...	...	...	...	...	...
Latvia	...	...	...	...	...	...	...	...	...
Lebanon	...	...	...	...	...	...	...	...	...
Lesotho	...	...	...	...	...	...	...	...	...
Liberia	...	273	...	...	...	...	...	...	...
Libyan Arab Jamahiriya	1,729	3,231	...	...	...	...	...	...	...
Lithuania	...	...	...	2,360	2,595	2,736	2,635	2,116	1,839
Luxembourg	...	...	...	...	...	...	...	...	...
Macedonia, The former Yugoslav Republic of	...	...	...	...	2,443	2,497	2,354	2,441	2,360
Madagascar	269	410	295	320	347	377	376	...	...
Malawi	185	198	205	190	193	194	196	...	...
Malaysia	1,415	1,999	1,608	1,509	1,487	1,433	1,378	1,322	1,262
Maldives	...	...	...	...	...	...	...	...	...
Mali	...	...	220	...	...	...	...	...	...
Malta	2,236	3,008	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...
Mauritania	...	...	...	...	...	...	...	...	...
Mauritius	1,316	1,682	1,381	1,575	1,491	1,400	1,346	1,326	1,349
Mexico	1,484	1,456	988	846	819	794	783	761	752
Micronesia, Federated States of	...	...	...	...	...	...	...	...	...
Moldova, Republic of	...	...	...	...	...	...	...	...	...
Monaco	...	...	...	...	...	...	...	...	...
Mongolia	...	...	...	...	...	...	...	...	...
Morocco	...	1,193	933	852	817	803	769	739	717
Mozambique	...	...	...	...	...	...	...	...	...
Myanmar	...	...	...	...	...	...	...	...	...
Namibia	...	...	...	...	...	...	...	...	...
Nauru	...	...	...	...	...	...	...	...	...
Nepal	159	245	622	659	660	626	575	533	512
Netherlands	2,172	2,581	1,872	2,044	1,789	1,623	2,011	2,559	2,775
New Zealand	2,687	2,695	1,633	1,252	1,241	1,221	1,146	1,073	1,038
Nicaragua	...	...	...	...	...	...	...	...	...
Niger	...	...	...	...	...	...	...	...	...
Nigeria	...	...	212	185	...	...	...	...	...
Niue	...	...	...	...	...	...	...	...	...
Norway	...	784	888	756	770	755	751	730	739

	1970	1980	1990	1995	1996	1997	1998	1999	2000
Oman	...	...	...	...	...	...	...	...	...
Pakistan	643	714	486	530	564	621	629	614	635
Palau	...	...	...	...	...	...	...	...	...
Panama	...	...	...	...	...	...	...	...	...
Poland	3,039	3,420	3,222	3,145	3,074	2,961	2,939	2,743	2,473
Portugal	1,440	1,835	2,116	2,078	2,059	2,071	2,053	2,071	2,036
Puerto Rico	...	...	...	...	...	...	...	...	...
Qatar	...	...	...	...	...	...	...	...	...
Romania	...	...	...	1,663	1,726	1,563	...	...	...
Russian Federation	...	...	...	...	1,916	2,081	2,385	2,598	2,691
Rwanda	...	...	...	...	...	...	...	...	...
Saint Kitts and Nevis	...	...	...	...	...	...	...	...	...
Saint Lucia	...	...	...	...	...	...	...	...	...
Saint Vincent and the Grenadines	...	...	...	...	...	...	...	...	...
Samoa	...	...	...	...	...	...	...	...	...
San Marino	...	...	...	...	...	...	...	...	...
Sao Tome and Principe	...	...	...	...	...	...	...	...	...
Saudi Arabia	...	...	...	...	...	...	...	...	...
Senegal	...	995	...	351	371	330	...	...	...
Seychelles	...	...	...	...	...	...	...	...	...
Sierra Leone	...	...	...	...	...	...	...	...	...
Singapore	2,658	2,440	...	...	...	...	...	...	...
Slovakia	...	...	...	2,006	2,166	2,293	2,363	2,119	2,039
Slovenia	...	...	...	...	2,979	2,944	2,872	2,786	2,742
Solomon Islands	257	253	147	611	694	643	638	620	...
Somalia	...	...	...	...	...	...	...	...	...
South Africa	1,220	1,528	1,664	1,345	1,264	1,182	1,091	1,011	941
Spain	2,278	...	2,520	2,496	2,469	2,572	2,669	2,810	2,826
Sri Lanka	415	536	446	414	397	395	380	369	344
Sudan	...	...	...	...	...	...	...	...	...
Suriname	1,186	2,155	1,943	2,088	2,285	...	...	...	...
Swaziland	...	...	...	...	...	...	...	...	...
Sweden	1,644	1,874	1,668	1,280	1,148	1,060	991	1,036	1,085
Switzerland	3,377	2,997	3,021	2,916	2,851	2,871	2,892	2,917	2,880
Syrian Arab Republic	854	1,834	1,062	1,357	1,313	1,255	1,249	1,224	1,223
Tajikistan	...	...	...	...	...	...	...	...	...
Tanzania, United Republic of	373	333	254	218	204	194	...	...	...
Thailand	774	1,087	1,043	1,128	1,099	1,014	889	805	798
Timor Leste	...	...	...	...	...	...	...	...	...
Togo	...	...	...	...	...	...	...	...	...
Tokelau	...	...	...	...	...	...	...	...	...
Tonga	...	...	...	...	...	...	...	...	...
Trinidad and Tobago	1,452	1,388	939	890	1,104	1,362	1,271	1,019	673
Tunisia	...	1,594	1,637	1,562	1,574	1,551	1,644	1,746	1,775
Turkey	1,914	2,006	2,101	2,164	2,084	2,068	2,118	...	...
Turkmenistan	...	...	...	...	...	...	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...
Uganda	304	...	...	152	156	163	159	157	...
Ukraine	...	...	...	...	1,268	1,358	1,405	1,329	1,225
United Arab Emirates	...	...	...	...	...	...	...	...	...
United Kingdom	2,920	2,586	2,094	2,174	1,935	1,893	1,790	1,627	1,553
United States	3,618	3,572	2,692	2,464	2,434	2,354	2,246	2,150	2,092
Uruguay	1,551	...	...	1,185	1,177	1,167	1,362	1,407	1,425
Uzbekistan	...	...	...	507	579	554	594	512	501
Vanuatu	...	...	...	...	...	...	...	...	...
Venezuela, Bolivarian Republic of	...	...	1,310	1,221	...	...	...	...	...
Viet Nam	...	...	...	1,317	1,290	1,183	1,085	1,084	...
Yemen	...	...	991	765	797	794	...	...	...
Yugoslavia	...	...	...	...	876	1,148	1,345	1,722	1,736
Zambia	489	392	...	...	...	...	...	...	...
Zimbabwe	723	514	459	323	297	309	402	460	493
Czechoslovakia (Former)	2,517	2,576	2,336	...	...	...	...	...	...
USSR (Former)	2,160	2,126	1,809	1,641
Yugoslavia (Former Socialist Federal Republic)	2,245	3,324	3,015

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The Economics of Tobacco Control sub-series is produced jointly with the Tobacco Free Initiative of the World Health Organization. The findings, interpretations and conclusions expressed in this paper are entirely those of the authors and should not be attributed in any manner to the World Health Organization or to the World Bank, their affiliated organizations or members of their Executive Boards or the countries they represent.

The editors for the Economics of Tobacco Control papers are: Joy de Beyer (jdebeyer@worldbank.org), Emmanuel Guindon (guindone@who.int) and Ayda Yurekli (ayurekli@worldbank.org).



THE WORLD BANK

1818 H Street, NW
Washington, DC USA 20433
Telephone: 202 477 1234
Facsimile: 202 477 6391
Internet: www.worldbank.org
E-mail: feedback@worldbank.org



WORLD HEALTH ORGANIZATION

Avenue Appia 20 1211
Geneva 27, Switzerland
Telephone: 41 22 791 2126
Facsimile: 41 22 791 4832
Internet: www.who.int
E-mail: tfi@who.int

ISBN 1-932126-66-X