

6.8

Fiscal Measures

Tobacco—public policy interface

In the initial decades of independent India, tobacco was considered as a source of revenue from taxes and exports rather than a harmful commodity. Even as knowledge of tobacco's ill-effects grew, it was believed, in most countries including India, that the taxes paid and other economic benefits flowing from tobacco-related activities in terms of output, employment, exports, reduced pension and social welfare benefits availed of by tobacco users, etc. easily offset the putative direct and indirect, pecuniary as well as non-pecuniary, costs arising from tobacco consumption.^{65,66}

However, public as well as policy-makers' perceptions of tobacco have changed in recent years. It is an accepted principle of public economics that public policies of control have to come into play for dealing with merit/demerit goods. Even in relation to economic analysis and financial policy, there is a reappraisal of tobacco. Enough evidence is available to show that tobacco has been recognized as a universal demerit good or simply 'bad'.^{67,68}

Though the Indian public policy towards tobacco has only lately explicitly accepted the need for tobacco control, it has not been entirely consistent as some of the early policy and programme initiatives for promoting the productivity and exports of tobacco and providing support to tobacco growers are still operational. Many structural features of the Indian economy were responsible for the slow and halting emergence of the tobacco control policy. The fiscal measures concerning tobacco carry the imprint of this mixed response to tobacco.

Despite increasing social disapproval, the tobacco trade has been sustained in India because of the domestic demand, international market and state promotion. The growth index of industrial production for beverages, tobacco and tobacco products is the highest compared with other industries, being 314.7 in 2003–2004, compared to the base year of 1980–1981.⁶⁹ The retained earnings of tobacco product manufacturing companies, as percentage of profit after tax, were 73% in 2001–2002.⁷⁰ The dependence of these companies on bank borrowings is low. The total sales value of major cigarette and chewing tobacco companies was Rs 99.38 billion and Rs 12 billion, respectively, in 2001–2002.⁷¹ The advertising costs of tobacco product companies was 5.1% (of their net sales) in 2001–2002, being the highest as compared to other industries. These figures reveal the sound financial base of tobacco product manufacturing companies. In recent years, new varieties of tobacco products have entered the Indian market. As the consumption of tobacco is largely supplier-induced, an increase in the consumption of *paan masala* and *gutka* can be attributed to advertising that lures people, particularly the young.

Over the years, the Indian Government followed a dual policy towards tobacco production and consumption. On the one hand, increased taxation has been justified on the grounds of public health protection while, on the other, different government departments promoted tobacco by providing subsidies/incentives for cultivation, marketing and exports. In addition, the role played by the tobacco industry also needs to be considered, as it induces both tobacco consumption and tobacco production, through private incentives/subsidies flowing to tobacco cultivation.

Historically, tobacco-related activities have been a source of major economic gains to various stakeholders who resist tobacco control. Apart from the well-organized and powerful cigarette companies (three of them control about 92% of the cigarette market), there are millions who are engaged in tobacco farming and tobacco product manufacturing in the unorganized as well as organized sector (Box 6.14).

Box 6.14 How many people are engaged in tobacco-related livelihoods?

The estimates of tobacco-related employment vary widely, based on who is reporting them. The tobacco industry reports that employment offered by tobacco extends to nearly 35 million persons: 6 million farmers, 20 million farm workers, 4.4 million *beedi* workers, 2.2 million *tendu* leaf pluckers and 2 million traders/retailers.⁷² The estimate given by the Ministry of Health and Family Welfare is, however, much lower. The number of people employed in tobacco industries was estimated to be 0.52 million in the annual survey of industries, while the 50th round of the National Sample Survey (NSS) (1993–1994) indicated that the number of people in tobacco-related employment is 3.5 million.⁶⁷ It must be recognized, in this context, that many of the persons engaged in the unorganized sector of tobacco processing and production are part-time workers. They are mostly women and children who work from home, rolling *beedis* for some part of the year. Similarly, the retailers too sell many products other than tobacco. The figures provided by the tobacco industry, of persons dependent on tobacco for their livelihood, appear inflated.

The conflict between tobacco stakeholders and public health advocates defines the political economy of tobacco control. Economists have convincingly shown the positive trade-off of restricting tobacco use and that there is no immediate danger to the existing economic interests as a result of measures to lower tobacco use.⁶⁷ The positive pay-off from tobacco control is substantial in terms of the multiplied effects of improvements in public health, reduced disease and death, and other externalities, which inevitably follow measures to ward off the tobacco epidemic. In addition to gains in terms of productivity and growth following from a healthier and more active workforce (better human capital), effective tobacco control contributes to cleaner streets and air quality, preservation of forests, reduced absenteeism, reduced fire hazards, healthier mothers and children; in brief, to a better quality of life. The overall impact of fiscal measures for tobacco control on economic, social and human development, including its contribution to the goal of health for all⁷³ in the twenty-first century, is likely to outweigh any short term dislocation which may follow. In fact, since

tobacco prevalence is found to be inversely related to the per capita income and literacy (the poor and illiterate are found to be more addicted to tobacco), the more effective the tobacco control, the lower the vulnerability of the poor to the adverse economic and social effects of tobacco use.⁶⁷

Given the inescapable complementarity and interdependence within and across nations, it is imperative that tobacco control policies be integral parts of national health and development policies, and that national and global tobacco control policies, such as those in the fiscal sphere, are well coordinated. In the absence of such linkages in the choice and design of specific policy instruments, such as taxation, trade, health, development, research, environment policies, tobacco control policies, etc. the outcomes of intervention may even turn out to be counterproductive. For instance, tobacco taxes in one region or country may lead to the migration of production and consumption to other regions and may also encourage smuggling. Similarly, blanket fiscal incentives for increasing investment in least-developed regions may not only attract tobacco companies to such regions but even lead to malpractices such as accounting practices showing fictitious production in the regions favoured by the policy (as was seen in India as a result of a tax holiday extension to the northeast region).

A historical review of the fiscal policy on the tobacco sector in India

Some of the historical fiscal landmarks related to tobacco are enumerated below:

1. Indian states were empowered to impose sales tax for the first time under the Government of India Act, 1935. Maharashtra was the first state to impose a tax on tobacco in selected urban and suburban areas in 1938.
2. Central excise duties on tobacco were introduced for the first time in 1943 under the Tobacco Excise Duty Act, 1943. The duty, initially levied on unmanufactured tobacco

- and cigars, was later extended to cigarettes in 1948. States levying local taxes on tobacco were compensated from the central excise duties. However, in 1953, the compensation to states was withdrawn and a Taxation Enquiry Committee set up to examine the incidence and suitability of central, state and local taxation. In 1956, it was agreed in a National Development Council (NDC) meeting that the sales tax levied by the states on mill-made textiles, tobacco and sugar may be replaced by additional excise duties (AED) levied by the Union Government. To this effect, the Additional Duties of Excise Act, 1957 was enacted. In 1973, smoking mixtures for pipes and cigarettes were added to the list of excisable items, followed by branded *beedis* and branded chewing, snuff and *hookah* tobacco. From 1973 to 1975, all tobacco-manufactured products were covered under the excise net. State Governments are generally opposed to the levy of AED, especially on (the highly revenue-productive) tobacco. This is because the revenue accrued from the AEDs is not shared by the Union with the States, while the basic duty is sharable with the States. For this reason, AEDs are not scaled up as regularly as the rates of the basic duty. However, the AED seems to be well established as a fiscal instrument.
3. In 1985, the Supreme Court barred the States from imposing a market fee on tobacco. However, in January 2002, the Supreme Court declared that the cultivation and sale of raw tobacco is a non-industrial activity and State Governments are free to impose agricultural market fee on their sales as in the case of any other agricultural produce.⁷⁴
 4. Duty structure (*ad valorem* and specific duties): Central excise duty on tobacco is self-assessed by the manufacturer except in the case of cigarettes, which is assessed by a Superintendent or an Inspector of Central Excise. *Ad valorem* duty, based on the assessable price of cigarettes, existed until 1984. This is a reverse method of arriving at the assessable value by deducting taxes and

duties from the wholesale price. In 1985–1986, *ad valorem* duty based on the maximum retail price (MRP) was imposed (MRP–abatements = assessable value [abatements covers duty, tax, packing, forwarding, etc. and is notified by the government in terms of percentages]). Experts apprehend that *ad valorem* tax is likely to result in quality degradation, under-invoicing, tax evasion, etc. and hence, it would be desirable to introduce the tax in such a way that there is no excess burden on the consumer in terms of quality reduction. Taxation of tobacco and tobacco products should also not lead to adverse revenue effects as far as the state exchequer is concerned. As a result, *ad valorem* rates were replaced, in 1987, by a specific duty structure. Duty was levied on the basis of the type and length of cigarettes as compared to the *ad valorem* duty imposed as a fixed percentage of the price of the product taxed. A specific or volumetric duty is a tax on a unit of the physical quantity of the product. The Tobacco Institute of India (TII) has estimated the total revenue collections from tobacco under two different types of tax structure. Revenue collections have increased four times during a period of 13 years under a specific duty structure as compared to a 13-year period under *ad valorem* duty (Table 6.7). Despite a reduction in the cigarette volume during the period from 1986–1987 to 1999–2000, there was an increase in the revenue.

Continuation of specific duties on cigarettes was recommended by the Tax Reforms

Table 6.7 Changes in revenue collection⁷⁵

Period	Duty structure	Revenue increase (Rs in million)	Change in the cigarette volume (%)
1973–1974 to 1986–1987	<i>Ad valorem</i> duty	10,690	25
1986–1987 to 1999–2000	Specific duty	47,100	21.5

Committee (1992), National Institute of Public Finance and Policy (NIPFP 1994) and Sarangi Committee (1999) in view of the substantial revenue gains and some convenience in levy.⁷⁶ There is also an argument that the levy of specific duty on tobacco products requires data on many aspects (such as the length and type of cigarettes, etc.), making the administration more complicated. Lakadawala and Nambiar stated that the specific duty structure is less price elastic, leading to revenue loss.⁷⁶ Thus, there are arguments both in favour of and against different rate regimes of tobacco taxation. Currently, the specific duty regime is being used for taxation of cigarettes and *beedis*. *Ad valorem* rates exist for other tobacco products.

5. *Ad valorem* duty was levied on branded *beedis*, chewing tobacco and other tobacco products based on the assessable price for 1993–1995, which was replaced by *ad valorem* duty based on the MRP in 1995–1996 and by specific duties based on the length and type of tobacco product in 1997–1998.
6. In 2001, the Central Government levied the National Calamity Contingent Duty (NCCD) at the rate of 15% on manufactured tobacco in view of the earthquake in Gujarat.
7. Price Stabilization Fund for tobacco: To provide financial relief to farmers of selected commodities (such as tea, coffee and rubber), including tobacco, from unfavourable price fluctuations, the Ministry of Commerce and Industry proposed the scheme of the Price Stabilization Fund on 24 July 2003. This Fund will be created with a corpus of Rs 5 billion comprising Rs 4.82 billion as a one-time contribution by the Central Government and a non-refundable initial contribution by growers of these commodities of Rs 500 each. In the initial stage, those having up to 4 hectares are proposed to be covered under the scheme.
8. A cess of 1% on cigarettes has been introduced by the Ministry of Commerce to mobilize resources for the Price Stabilization Fund.
9. Cigarettes and other tobacco products have been excluded from excise duty exemptions

applicable to industrial units in the north-eastern states with effect from 22 January 2001. This was in response to criticism from public health advocacy groups as well due to the recognition that tobacco companies were misusing these concessions for evasion of excise duty in other regions.

10. The Union Government proposes to empower State Governments to levy sales tax/value-added tax (VAT) on sugar, tobacco products and textiles, between 1% and 4%, in addition to continuation of the AED (imposed in lieu of sales tax with effect from 1957) on these items. This is being opposed by the tobacco lobby.

Tobacco-related public spending

In pursuance of the objective of higher growth, ‘public policy and spending-based support has been provided to tobacco cultivation and the industry’.⁶⁷ The public spending-based institutional and extension support to the tobacco subsector has been described as follows: ‘The Directorate of Tobacco Development, in collaboration with State Departments of Agriculture, primarily aims at planning, coordinating and supervising development and marketing programmes of tobacco at the national level. The Indian Tobacco Development Council, constituted in 1966, serves as an advisory body for this purpose. This Directorate is implementing programmes on production and distribution of pure seeds and seedlings of tobacco, and on training in improved methods of tobacco cultivation to the farmers. The Central Tobacco Research Institute (CTRI) is conducting research on improving the yield and quality of tobacco. A multicentre project by the Indian Council of Agricultural Research (ICAR) helps in agronomy, plant breeding, soil chemistry, entomology and plant pathology, as related to tobacco. The main functions of the Tobacco Board, constituted in 1976, are regulation of production of Virginia tobacco, ensuring fair and remunerative prices to the growers, maintenance and improvement of existing markets and development of new markets for Indian tobacco outside the country. While the Tobacco Board is concentrating on Virginia tobacco, the

interests of non-Virginia tobacco are being looked after, since 1983, by the National Cooperative Tobacco Growers Federation Limited.⁷⁷

The Tobacco Board runs a number of programmes. For tobacco farmers, it runs a programme of supply of inputs for quality and yield improvement, a programme for facilitating curing, storing, grading and for transferring advanced technology. Marketing of flue-cured Virginia (FCV) tobacco, by auction, is organized by the Board to replace the unorganized imperfect marketing marked by illegal practices in which the growers were at the mercy of the tobacco companies as price-givers. From 1984 onwards in Karnataka, and from 1985 in Andhra Pradesh, the auction system gave the growers better returns. Additional support is made available under the Price Stabilization Fund for tobacco. In addition to providing help to the farmers in production, the CTRI runs 10 research stations that helped evolve high-yielding variations of seeds. Marketing was also improved by fixing the crop size for each region separately in view of the national and international demands. In addition, a number of export promotion activities were also undertaken. To part-finance these activities, a Tobacco Board cess at 0.5% *ad valorem* and an agricultural producers' cess at 0.5% of the value of export are levied. The Tobacco Board, a statutory body, grants registration to various interests at stipulated fees. The tobacco interests also derive benefits under the Export Production Capital Goods Scheme, which enables the import of new and second-hand capital goods at 10% customs duty against the Open General Licence (OGL) rate of 25%. Many other schemes such as zero duty imports with export obligation, duty drawback scheme, market development schemes, etc. are also operated for the benefit of tobacco interests.

Clearly, India has operated a slew of positive support measures for the tobacco economy and its various stakeholders. These support measures of direct and indirect physical, technical, marketing and financial support extend right from cultivation to marketing to exports.

The thrust towards improving tobacco cultivation with public spending support, which was provided probably unmindful of the adverse effects on public health, seems to have yielded results. The 5-year moving average of the yield of tobacco doubled from about 722 kg per hectare in 1975–1976 to about 1440 kg per hectare for the 5 years ending in 1996–1997. While the area under tobacco cultivation grew at the compound rate of 0.32% per annum during this period, yield increased at the compound rate of growth of 1.5% with nearly stable acreage. Thus, it seems that the increases in tobacco output seem to have come mainly from improvement in productivity.⁷⁸ The coverage of tobacco acreage under irrigation recorded a sharp increase from under 10% around the mid-1950s to about 48% by 1995–1996. This increase can reasonably be attributed, to a large extent, to public investment. The improvement in tobacco yield can be related, *inter alia*, to the largely public-funded increase in irrigation facilities. It is clear that public spending has contributed to the growth of the tobacco subsector. Import of unmanufactured tobacco, during the period of import controls, also involved the allocation of scarce foreign exchange for supporting the tobacco industry and consumption. At the same time, tobacco products have attracted a fairly stiff tax regime. What is not clear is whether the tax on tobacco was imposed to reduce the demand for a substance, which is a serious health hazard or was merely a revenue-generating instrument.

By the early 1970s, it was becoming clear that public health considerations started entering the policy processes. The first major initiative, howsoever limited in actual results, was taken in 1975. It was largely limited to health warnings and proved insufficient.⁷⁹ The next move in this direction which gave major impetus to a multisectoral approach for tobacco control was the 22nd Report of the Parliament on subordinate legislation.⁶⁷ It highlighted the public health dimension. Later, India joined the World Health Organization initiative for tobacco control (Framework Convention on Tobacco Control [FCTC]).

Tobacco taxation

Tax policy has been advocated mainly for deterring and discouraging the use of both smoking and smokeless forms of tobacco. Its impact on the supply side has, both in theory and practice, received little attention. As for the use of the tax policy with respect to tobacco products, it is the revenue objective rather than the curtailment of tobacco addiction, which has generally and historically had an upper hand, especially in India. However, it has been shown that ‘these objectives overlap to some extent and diverge otherwise’. Within a certain range, as the tax rises, government increases its revenue and achieves its goal of containing consumption, hence the two objectives converge. It is, however, possible that the tax rate, which is optimal as a deterrent factor, does not necessarily generate maximum revenue for the state.⁸⁰ This question relates basically to the trade-off between the tobacco control objective and the direct, existing economic contribution made by tobacco activities to income, employment, revenue and trade balance, etc. which often tend to make governments give preference to short-term economic gain and growth (financial consideration) over the wider and long-term socioeconomic objectives, such as healthier, more productive, active and longer-living citizens, cleaner environment, etc.

In India, as in most other countries, it is only lately that heavy and regular taxation of cigarettes and other tobacco products, as the main part of a comprehensive package of tobacco control measures to minimize the damage to health from tobacco use, is acquiring prominence, on par with, if not in preference to, the revenue objective.⁸¹ A higher final product price of cigarettes and other similar products (by as much as one-half to three-fourths of the retail price), on account of the shifting of tobacco excise and other indirect imposts to the consumers, is expected to cause a reduction in the demand for these products, deter new recruits, especially young men and women, from getting hooked onto tobacco, and also act against resumption by quitters.

Tobacco revenue is unlikely to go down as a result of a tax-fed higher price, owing to its addictive property. The demand for tobacco, though inelastic, is certainly impacted by the price factor. An additional favourable factor is that, with the earmarking of tobacco revenue for compensating/rehabilitating poorer sections of society (such as the home-based, informal sector *beedi* workers or *tendu* leaf collectors or tobacco cultivators) or a similar health-promoting purpose, the objective of tobacco control can be attempted in a multi-pronged manner.

Specific tobacco taxes are generally preferred over *ad valorem* taxes as they allow greater flexibility and can outmanoeuvre the manipulation of tax liability by the manufacturers of tobacco products.

In India, a specific excise duty is generally imposed. The effectiveness of taxes depends on their rate. If the idea is to produce effective deterrence and not invite loss of revenue, careful crafting of the tax rate is needed. A World Bank report says that in lower-income countries, tobacco taxes ‘amount to no more than half the retail price of a pack of cigarettes’.⁸¹ It is clear that tax authorities have to base their decisions on the price elasticity of demand for tobacco products. No credible, systematic work has been done in India for estimating the price elasticity of the demand for different tobacco products. According to a study in India, the price elasticity of the demand for tobacco was estimated at -0.67 for the period 1980–1981 to 1992–1993.^{67,82} Based on the World Bank’s finding that ‘in the middle-income and low-income countries elasticity of demand is greater than in the high-income countries’, it can be inferred that middle- and low-income groups tend to have a higher elasticity of demand than higher-income groups.⁸¹ This inference can be of use in determining the tax rates for tobacco products which have different degrees of usage among different income groups, such as *beedis*, *khaini*, *kimam*, snuff, etc. and which are more popular among the lower-income groups than cigarettes, especially cigarettes with a higher price tag.

Another factor that may help fiscal authorities determine the tax rates could be the consideration to raise revenue from tobacco to defray the social costs, at least the pecuniary social costs engendered by a given level of tobacco consumption in a society. This resembles the 'polluter pays' principle. For example, it may be useful to juxtapose the tax collection and reduction in tobacco consumption *vis-à-vis* the number of lives saved, or medical and health care expenditure avoided. Presently, no such studies seem to be available in India.

In India, *beedis*, which are favoured by the poor, pose a dilemma to the tax authorities. The *beedi*-consuming masses have a rather high opportunity cost of *beedi* smoking and tobacco chewing, owing to their low and uncertain incomes, low level of nutrition and frequent exposure to livelihood stress. However, these very factors make them excessively vulnerable to tobacco-related diseases and death. Any policy

to discourage tobacco use would be welcome in so far as its effects would spare the users from disease and death in the medium- to long term, if the deterrence is reflected in lower consumption. However, a higher expenditure on *beedi* or chewing tobacco products could impose higher direct personal cost in terms of foregone consumption of necessities. A careful policy design, e.g. by combining taxes on *beedis* with countervailing, specific, sharply targeted welfare measures for the poor among smokers, based on earmarking of the revenue collected from *beedi* smokers, may probably help reconcile the conflict arising from *beedi* taxation.

Trends in excise rates

As can be seen from Table 6.8, excise duty rates have been gradually raised over time since Independence till date. Sometimes, additional levies have been devised to mobilize more revenues for the government.

Table 6.8 Trends in excise rates^{72,76,83,84}

Year	Rates/duties																																				
1948–1949 (IInd Union Budget of Independent India)	<ul style="list-style-type: none"> • 25% on the ex-factory price of cigarettes • Duty on unmanufactured tobacco increased from 9 annas to 12 annas (<i>beedi</i>/tobacco) and from 3 annas to 4 annas (FCV tobacco). The Finance Minister in his budget speech stated that <i>beedi</i>/tobacco taxation can be gradually rationalized so as to increase the revenue from tobacco products. 																																				
1949–1950	<ul style="list-style-type: none"> • For the first time, export duty at 15% <i>ad valorem</i> was levied on cigarettes, cigars and <i>cheroots</i> in 1949, with an estimated yield of Rs 6 million As per the recommendation of the National Development Council in 1957, sales tax on sugar, textiles and tobacco was replaced by AED. 																																				
1957–1958	<ul style="list-style-type: none"> • As per the recommendation of the National Development Council in 1957, sales tax on sugar, textiles and tobacco was replaced by AED. 																																				
1958–1959	<table border="1"> <thead> <tr> <th>Commodities</th> <th>BED</th> <th>AED</th> </tr> </thead> <tbody> <tr> <td colspan="3"><i>A. Unmanufactured (Rs per kg)</i></td> </tr> <tr> <td>1. FCV used for smoking mixtures</td> <td>16.50</td> <td>1.10</td> </tr> <tr> <td>2. FCV not specified</td> <td>2.20</td> <td>0.44</td> </tr> <tr> <td>3. Other than FCV</td> <td>1.03</td> <td>0.06</td> </tr> <tr> <td colspan="3"><i>B. Manufactured</i></td> </tr> <tr> <td>1. Cigars and <i>cheroots</i> whose value exceeds</td> <td></td> <td></td> </tr> <tr> <td> (a) Rs 25 per 100</td> <td>12.00</td> <td>3.00</td> </tr> <tr> <td> (b) If value is less than Rs 5 per 100</td> <td>0.50</td> <td>0.10</td> </tr> <tr> <td>2. Cigarettes</td> <td></td> <td></td> </tr> <tr> <td> (a) If value exceeds Rs 25 per 1000</td> <td>8.90–17.40</td> <td>3.80–8.60</td> </tr> <tr> <td> (b) If value is less than Rs 7.50 per 1000</td> <td>1.00</td> <td>0.40</td> </tr> </tbody> </table>	Commodities	BED	AED	<i>A. Unmanufactured (Rs per kg)</i>			1. FCV used for smoking mixtures	16.50	1.10	2. FCV not specified	2.20	0.44	3. Other than FCV	1.03	0.06	<i>B. Manufactured</i>			1. Cigars and <i>cheroots</i> whose value exceeds			(a) Rs 25 per 100	12.00	3.00	(b) If value is less than Rs 5 per 100	0.50	0.10	2. Cigarettes			(a) If value exceeds Rs 25 per 1000	8.90–17.40	3.80–8.60	(b) If value is less than Rs 7.50 per 1000	1.00	0.40
Commodities	BED	AED																																			
<i>A. Unmanufactured (Rs per kg)</i>																																					
1. FCV used for smoking mixtures	16.50	1.10																																			
2. FCV not specified	2.20	0.44																																			
3. Other than FCV	1.03	0.06																																			
<i>B. Manufactured</i>																																					
1. Cigars and <i>cheroots</i> whose value exceeds																																					
(a) Rs 25 per 100	12.00	3.00																																			
(b) If value is less than Rs 5 per 100	0.50	0.10																																			
2. Cigarettes																																					
(a) If value exceeds Rs 25 per 1000	8.90–17.40	3.80–8.60																																			
(b) If value is less than Rs 7.50 per 1000	1.00	0.40																																			
1963–1964	<ul style="list-style-type: none"> • A surcharge of 20% on basic duty was levied on unmanufactured tobacco and cigarettes in 1963. 																																				
1970–1971	<ul style="list-style-type: none"> • Cigarette taxes increased in the range of 3%–22% <i>ad valorem</i> depending on value slabs. Consumers of cheaper varieties (not exceeding Rs 9.50 per 1000) of cigarettes had to pay an additional amount of only 1–2 paise per packet of 10 cigarettes. 																																				

Table 6.8 (cont.) Trends in excise rates^{72,76,83,84}

Year	Rates/duties			
1970–1971	Commodities	BED	SED	AED
	<i>A. Unmanufactured (Rs per kg)</i>			
	1. FCV used for smoking mixtures	27.50	5.50	1.10
	2. FCV not specified	2.50	0.50	0.44
	3. Other than FCV	1.75	0.35	0.06
	<i>B. Manufactured</i>			
	1. Cigars and <i>cheroots</i> whose value exceeds			
	(a) Rs 25 per 100	21.00	7.00	3.75
	(b) If value is less than Rs 5 per 100	1.20	0.40	0.15
	2. Cigarettes			
	(a) If value exceeds Rs 25 per 1000	125%	25%	24%
	(b) If value is less than Rs 7.50 per 1000	42.5%	8.5%	5%
1972–1973	• In 1972, surcharge duty levied since 1963 was merged with additional excise and basic duties.			
1979–1980	• Excise duties on unmanufactured tobacco were abolished.			
1980–1981	• A special duty on cigarettes at one-tenth of the BED was introduced.			
1989–1990	• Duty on the non-filter 60 mm and below segment was introduced with a rate of Rs 103.25 per 1000 cigarettes.			
1990–1991	• There was a increase in the duty—15 paise for the cheaper cigarettes (up to 60 mm and 70 mm for non-filter and filter, respectively) and 75 paise for the costlier cigarettes (more than 75 mm filter cigarettes), per packet of ten. The Finance Minister stated that the increase was intended to curb consumption rather than getting revenue.			
1994–1995	• While the duty rates on the lowest-length segment of cigarettes were reduced from Rs 120 to Rs 60 per 1000 cigarettes, duty rates for other length segments increased by 12%.			
1995–1996	• Duty rates continued to be the same for the 60 mm and below segment with 7% increase for other length segments.			
2003–2004	Item	Specific rate of duty per 1000 units (in Rs)		
		BED NCCD*	SED	AED
	<i>Non-filter cigarettes</i>			
	1. FCV used for smoking mixtures	115	37	20
	2. Exceeding 60 mm but not exceeding 70 mm	390	125	60
	<i>Filter cigarettes</i>			
	3. Not exceeding 70 mm	580	185	90
	4. Exceeding 70 mm but not exceeding 75 mm	945	300	145
	5. Exceeding 75 mm but not exceeding 85 mm	1260	400	190
	<i>Beedis</i>			
	6. Other than paper-rolled, manufactured without aid of machines	6.0	1.40	1.00
	7. Unbranded	Nil	–	–
	Rates of duty (<i>ad valorem</i>)			
	<i>Unmanufactured tobacco; tobacco refuse</i>			
	8. Not bearing brand name	Nil	Nil	–
	9. Other	26%	10%	–
	Cigars and <i>cheroots</i>	16%	Nil	–
	<i>Branded chewing tobacco and paan masala-containing tobacco</i>			
		34%	18%	10%
	*2002–2003			

Source: Jain 2004; BED: basic excise duty; SED: special excise duty; AED: additional excise duty; FCV: flue-cured Virginia; NCCD: National Calamity Contingent Duty

Table 6.9 Central excise revenue from tobacco in India (Rs in billion)^{72,84,85}

Year	Cigarettes	Other tobacco products collections	Total	Revenue as % of total excise (%)
1951–1952	8	0.30	0.38	48
1961–1962	–	–	0.63	13
1971–1972	1.93	0.84	2.77	13
1981–1982	6.85	1.50	8.35	11
1991–1992	23.86	3.10	26.96	10
1997–1998	44.92	7.21	52.13	11
1998–1999	45.92	19.45	65.37	12
1999–2000	48.63	25.53	74.16	12
2000–2001	–	–	81.82	12

Source: Tobacco Board (2002); Sury MM (2004); TII, 2002; www.indiantobacco.com

Trends in excise revenue

The excise revenue from tobacco amounts to nearly 12% of the total excise collection. It has increased from Rs 0.38 billion in 1950–1951 to Rs 81.82 billion in 2001–2002, but its share in total excise collections has remained between 10% and 13%, since 1961 (Table 6.9). Excise duties are levied at different rates considering the nature of the product, the class of the consumer, revenue potential for the product in question, etc.

From 1984 onwards, India switched over from *ad valorem* duties (now confined to a few smokeless tobacco items) to specific duties, among others things, to prevent manipulation by tobacco majors. Another feature of the tax imposts in India is to differentiate between rates on the basis of the length of cigarettes. Unbranded *beedis* are taxed at lower rates. For

Table 6.10 Tobacco and tobacco products: Excise rate structure (basic additional)⁸⁶

Unmanufactured tobacco	Nil
Cigars and <i>cheroots</i>	Nil
Cigarettes (per thousand)	
Up to 60 mm	Rs 115
Between 60 mm and 70 mm	Rs 390
Filter up to 70 mm	Rs 580
Filter between 70 mm and 75 mm	Rs 945
Filter between 75 mm and 80 mm	Rs 1260
Others	Rs 1545
Cigarettes of tobacco substitutes	Rs 1000
Smoking mixtures for pipes and cigarettes	Rs 1000
Cut tobacco	Rs 50 per kg
<i>Beedis</i>	
Other than paper-rolled <i>beedis</i> non-machine work	Rs 6 per thousand
Others	Rs 15 per thousand
Chewing tobacco, <i>paan masala</i> , etc.	34%
Snuff	28%
Other branded (non-branded: nil)	28%

chewing tobacco, *gutka* and *paan masala*, tax rates are *ad valorem* (Table 6.10). The rate differential, along with differences in the levels of production, inevitably leads to divergent contributions by different tobacco products. Table 6.11 shows the the share of different tobacco products in the total output.

Table 6.12 shows the contribution of cigarettes to the Union revenue. It is clear that an overwhelmingly large part of the revenue is derived from cigarettes. In February 2001, the NCCD increased the tax by 15% but with diminished returns from it. The reduction in excise duty on non-filter cigarettes from Rs 120 to Rs 60 per thousand in 1993–1994 yielded a sharp increase in the revenue, but by sacrificing the tobacco control objective. Table 6.12 shows

Table 6.11 Revenue from Union excise duty (basic and additional) on tobacco products (1994–1995 to 2000–2001) (Rs in billion)⁸⁷

Year	Cigarettes, etc.	<i>Beedis</i>	Chewing tobacco, etc.	Others	Cess on <i>beedi</i>	Total
1994–1995	27.38	2.07	1.48	0.51	0.11	31.577
1995–1996	34.24	1.66	2.11	1.68	0.15	39.877
1996–1997	39.83	2.21	2.60	1.66	0.20	46.529
1997–1998	44.34	2.71	2.76	1.34	0.20	51.376
1998–1999	48.28	2.87	3.35	1.11	0.32	55.954
1999–2000	47.90	2.69	3.48	1.04	0.52	55.66
2000–2001	51.39	2.51	4.31	1.41	0.75	60.382

Table 6.12 Effective rates of excise duty on cigarettes from March 1987 to March 1995⁸⁸

Length including filter (in mm)	From 1 March 1987	From 1 July 1990	From 30 September 1991	From 15 June 1992	From 1 March 1993	From March 1994	From 1 March 1994
<i>Non-filter</i>							
Up to 60	*	100	110	120	60	60	60
61–70	150	175	200	250	250	270	300
<i>Filter</i>							
Up to 70	200	225	260	330	330	370	400
71–75	300	400	500	630	630	700	750
76–85	400	550	675	850	850	900	1000
85–1000	600	750	–	–	–	–	1300

*In 1987 and 1988 non-filter cigarettes were treated as a single category.

how the effective rates of excise duty on cigarettes with increases confined basically to filter and longer cigarettes.

The rates of taxes on tobacco products have seen frequent changes. During 1969–1970, cigarettes attracted 104.5% duty, while the impost was at 69.5% on unmanufactured tobacco. During 1960–1970, the rate of tax on unmanufactured tobacco was changed 5 times, while on manufactured tobacco it was changed 7 times. The total collection from tobacco excise was Rs 0.59 billion in 1960–1961 and increased to Rs 2.27 billion by 1970–1971. During 1960–1961, the share of tobacco revenue was 14.2% of the total excise collection, while in 1970–1971 it was 12.5%.⁷⁶

As for the effectiveness of tobacco taxation, the use of survey-based tobacco prevalence data may not be as good an indicator of the consumption level as the National Accounts Statistics data on private final consumption data. The latter shows that both in absolute terms and also as a proportion of private final consumption expenditure (PFCE) at unchanged 1993–1994 prices, one sees a sizeable increase in tobacco consumption, though the growth path is marked by ascents and descents.

Impact of taxation on tobacco production and consumption

Although tobacco taxation in India is motivated primarily by fiscal considerations, particularly

for cigarettes, it has resulted in reduced mass consumption of cigarettes. The share of cigarettes in total tobacco consumption reduced from 23% in 1971–1972 to 14% in 2001–2002. Total tobacco consumption declined from 552 million kg in 1996 to 471 million kg in 2001.⁸⁹

Cigarette manufacturers allege that tobacco tax rates in India are discriminatory against cigarettes. Taxes range from more than Rs 100 to Rs 2000 per 1000 for different types of cigarettes based on the length and quality. The tax rate on *beedis* is less than Rs 10 per 1000. Cigarette manufacturers demand lower tax rates on cigarettes on the grounds that it distorts production and consumption, and also on the grounds that, of tobacco products, cigarettes contribute nearly 80% of the tax revenue and 80% of the export revenue (including cigarette leaf tobacco) with their share being only 14% of the total tobacco consumption.

The higher prices of Indian cigarettes have also resulted in the flooding of the market with contraband cigarettes from Bangladesh and China. These account for about 8%–10% of domestic cigarette consumption, which indicates an excise revenue loss of more than Rs 6.55 billion.⁷²

A fall in the cigarette consumption, resulting from higher excise rates, coupled with a decline in tobacco exports, leads to lower prices for tobacco growers. The effects of the discriminatory tax policy on total tobacco consumption are presented in Table 6.13. The low prices of

Table 6.13 Tobacco consumption (million kg)⁷²

Year	Cigarettes	Other	Total
1981–1982	86	320	406
2001–2002	65	388	453
(estimates)	-24	+68	+47

other tobacco products, as compared to higher cigarette prices, may have led to an increase in the consumption of smokeless tobacco among the youth and the poor.

During 1997–2002, cigarette production decreased by 18% with a decrease in production for domestic consumption by 11% (Table 6.14).

Table 6.14 Cigarette production (million pieces)^{72,89}

Year	Quantity	Production for domestic consumption
1997–1998	106,970	105,765
1998–1999	101,001	99,569
1999–2000	97,629	95,778
2000–2001	96,642	94,626
2001–2002	87,295	–

Trends in export revenue

Tobacco exports account for about 4% of the total value of India's agricultural exports and result in substantial foreign exchange earnings (Table 6.15). India ranks fourth in the total export of tobacco and occupies the fifth place in the export of FCV tobacco, next to Brazil, Zimbabwe, China and the USA. India exports tobacco products to 100 countries worldwide. Of the 200 exporters registered with the Tobacco Board, 31 are major exporters. *Beedis* are imported by 56 countries (Tables 6.16 and 6.17).

Table 6.15 Revenue from tobacco exports^{69,89}

Year	Quantity (million kg)	Value (Rs in billion)
1960–1961	47.50	0.16
1965–1966	59.30	0.21
1970–1971	49.80	0.33
1975–1976	78.46	0.98
1980–1981	90.84	1.41
1985–1986	84.10	1.72
1990–1991	83.67	2.63
1995–1996	83.94	4.21
2000–2001	115.39	9.03
2001–2002	102.09	8.88
2002–2003	100.50	10.22

The United Kingdom, Russia, Bulgaria, Italy, Japan, France, Netherlands, Germany, Nepal and Egypt are India's traditional markets. India has made an entry into Spain, Tunisia, Romania, Brazil, Turkey and Canada in recent years.

Chewing tobacco/*zarda* and cigarettes are the main items of tobacco product exports (in value terms), contributing 44% and 30% of export revenue from tobacco products, which constitute 32% of total tobacco exports (2001–2002). Unmanufactured tobacco exports contribute nearly 70% to the revenue, the bulk share coming from FCV tobacco (about 55%).

Subsidies to the tobacco sector

Government support to tobacco is given largely to FCV tobacco, which has a high export value. The government, through the Tobacco Board, boosts exports by facilitating participation in international fairs and exhibitions, organizing

Table 6.16 Exports of tobacco products for the past three years

Variety	2000–2001		2001–2002		2002–2003#	
	Quantity	Value	Quantity	Value	Quantity	Value
Cigarettes	2016	565.15	2883	848.83	4199	1093.79
<i>Beedis</i>	962	329.58	961	333.75	959	325.15
Chewing tobacco	1953	943.33	2640	1249.40	1976	999.59
<i>Hookah</i> tobacco paste	9546	342.30	8910	348.28	9281	330.46
Cut tobacco	907	80.39	663	71.43	1277	107.80
Others	12	2.65	19	4.57	48	5.81
Total	15,393	2263.44	16076	2856.27	17,740	2862.61

Source: Tobacco Board #: April–February 2003
Quantity in tonnes; Value: Rupees in million

Table 6.17 Exports of different varieties of unmanufactured tobacco for past three years

Variety	2000–2001		2001–2002		2002–2003#	
	Quantity	Value	Quantity	Value	Quantity	Value
Flue-cured Virginia	64,638	5099.70	57,126	4827.90	59,650	4857.94
Burley	9810	651.05	11,036	558.47	13,543	746.58
Sun-cured <i>natu</i>	6670	292.47	5354	241.24	3055	127.96
Top leaf/ <i>jutty</i>	4923	206.25	1734	77.27	2020	74.13
Lal <i>chopadia</i>	6869	239.89	6026	166.52	5182	143.04
<i>Judi</i>	2656	64.97	2287	45.35	1403	32.82
Others	4971	216.02	2447	112.68	2061	108.62
Total	1,00,537	67,703.38	86,010	6028.86	86,914	6091.12

Source: Tobacco Board #: April–February 2003
Quantity in tonnes; Value: Rupees in million

Box 6.15 From Parliamentary Proceedings: Tobacco exports⁹⁰

Export of tobacco products

(Lok Sabha, Unstarred Question No. 5943, (H), May 2, 2003)

The Tobacco Board has projected exports for tobacco and tobacco products for 2003–04 at the same level as for 2003–03, viz. around 115,000 tons valued at Rs 9.8 billion. For the entire Tenth Plan period, the projected figures are 686,300 tons valued at Rs 57.69 billion.

Steps taken to enhance the exports of tobacco include, *inter alia*, reorientation of production of tobacco to meet changing international demands, enhancement of quality and productivity levels, monitoring control of pesticide residues, aligning grading to international standards, sponsoring of trade delegations to potential importing countries, participation in tobacco fairs, etc.

(Answered by the Minister of State in the Ministry of Commerce and Industry)

delegations of tobacco traders and exporters to various countries, and discussion at bilateral official meetings. The Board maintains a balance between the demand and supply of tobacco by regulating production, arranging auctioning of produce, and identifying demand from exporters and domestic industries.

Subsidies on tobacco cultivation

Tobacco cultivation seems to be guided mainly by economic advantages. A study carried out by Panchamukhi *et al.*, in a *beedi* tobacco-growing area of Karnataka, revealed that market

Box 6.16 From Parliamentary Proceedings: Tobacco Board

Tobacco production

(Lok Sabha, Unstarred Question No. 5848, May 2, 2003)

The Tobacco Board was constituted on 01.01.1976. The Tobacco Board regulates crop size in order to ensure remunerative prices to growers and operates auction platforms to enable its marketing. It also helps growers by facilitating the supply of seeds, fertilizers, pesticides and spraying equipment, analysis of soil and water, popularizing high yielding and disease resistant varieties, adopting measures to reduce the residue levels in tobacco, etc.

(Answered by the Minister of State in the Ministry of Commerce and Industry)

conditions of high price and assured demand are more powerful determinants of the farmers' decision to grow tobacco than the suitability of land in the region for growing tobacco.⁹¹

Subsidies may be direct or indirect cash incentives or benefits accruing to farmers due to government initiatives. Direct subsidies to tobacco farmers are in the nature of cash incentives and facilities extended specifically for promoting tobacco cultivation. Indirect subsidies include general subsidies given by the government for irrigation, fertilizers, credit and power. These general subsidies are also enjoyed by other farmers. However, credit subsidy may be enjoyed to a larger extent by tobacco farmers as they get easy credit on soft terms and on priority basis. Growers of FCV tobacco receive

direct subsidies and facilities under extension programmes from the Tobacco Board. Other tobacco growers benefit from the research and extension services of agricultural research centres, working under the University of Agricultural Sciences in Karnataka and Gujarat, with grants from the ICAR. For FCV tobacco growers, the Board provides subsidy for balanced fertilization, nursery fumigation, pests and disease control, supply of coal, tarpaulin for the insulation of barns, purchase of sprinkler sets, improving grading through community grading centres, etc. In addition, FCV farmers benefit from regulation of crop production, auctioning of produce, research on new varieties and the market, supply of quality seeds, demonstration programmes, etc. Tobacco industries also provide direct incentives for FCV tobacco through crop development, market intervention and prize awards. *Beedi* and other tobacco-growing farmers benefit from research on new varieties, the supply of quality seeds, technical guidance on pesticide use and application of manure, etc.

Table 6.18 presents farm subsidies provided by the Board in recent years, particularly for FCV tobacco. The subsidy per kg of tobacco is very low, being less than 2 paise. There has been a decline in the quantum of subsidy over the years. This reflects the changing policy of the government, which is gradually tending towards withdrawing subsidies to tobacco cultivation. It should be highlighted here that it is not the value or quantum of subsidy that determines or promotes FCV tobacco cultivation, but the support for marketing and higher prices that sustains tobacco cultivation. Details of indirect subsidies to tobacco growers are not available at the micro level. A recent study by

Panchamukhi *et al.* on the estimation of subsidies to tobacco cultivation reveals that indirect subsidies (credit, fertilizer, power, irrigation) to all types of tobacco amounted to Rs 571.10 per acre (2001–2002) in the tobacco-growing states of Andhra Pradesh, Karnataka and Gujarat. The direct asset and input subsidy, which is mainly for FCV tobacco, is Rs 16.60 per acre.⁹¹

Hidden subsidies to tobacco interests

Public spending-based support is provided to tobacco cultivation, marketing, exports and industry in various forms and through the agencies of various official bodies. It is not easy to arrive at the total public spending. Similarly, there are many difficulties in obtaining data on public spending at such a disaggregated level. However, given the high costs caused to the smokers as well as other users of smokeless tobacco and to the rest to society, such expenditure (though of value to the growers and other tobacco interests) is an addition to the social costs of tobacco and also a hidden subsidy to the tobacco interests. Despite the availability of a good deal of information on the tobacco-support activities of the government, these facts have neither been collated nor analysed. The policy implications of this factor also need to be worked out.

Private (tobacco industry) incentives to tobacco cultivation

The above discussion gives an account of the provision of subsidies and incentives to tobacco cultivation that flowed through government agencies. However, the discussion on subsidies would be incomplete if the benefits extended by

Table 6.18 Farm subsidies (direct) on flue-cured Virginia tobacco^{85,92}

Year	Subsidy (Rs in million)	Value of the crop (Rs in million)	Subsidy per hectare (Rs)	Subsidy per kg of production (Rs)
1998–1999	89 (0.1%)	7014	48.51	0.04
1999–2000	59 (0.1%)	6127	32.64	0.03
2000–2001	13 (0.6%)	220.9	31.06	0.03
2001–2002*	40.18 (3.4%)	120.0	29.93	0.03

*Provisional

the tobacco industry towards cultivation and marketing of tobacco are not included.

Incentives or hidden subsidies may not be in terms of grants or kind. They may be expenditure on services resulting in social benefits accruing to all those residing in the tobacco-growing region or elsewhere. Expenditure on such services indirectly benefits the funding agency, i.e. the tobacco industry itself. According to the Indian Tobacco Company (ITC), it spent Rs 6.5 million and Rs 3.4 million during 2000–2001 and 2001–2002, respectively, towards the construction of bus sheds, school buildings, primary hospitals and low-cost housing for the poor. The ITC has taken up online information services for traders and farmers, training in aqua farming in Andhra Pradesh, social forestry, watershed development and women's empowerment through the facilitation of micro-credit. These activities largely benefit farmers in Andhra Pradesh and Karnataka, from where the ITC gets FCV tobacco for cigarette manufacturing.

Tobacco growers get credit from tobacco traders and manufacturers for various purposes other than tobacco cultivation. Accurate information on these aspects is, however, not available from either the industries or farmers' households.

Subsidies/facilities to the tobacco industry

The tobacco industry does not receive any direct subsidy from the government or elsewhere. However, the supply of tobacco, particularly FCV, is assured as the Tobacco Board plays a major role in the production and auction of tobacco. The establishment of cigarette companies and tobacco products requires compulsory licensing and cigarettes are the target of heavy excise duties. For small-scale sector industries (SSI), the expenditure limit for excise purposes has been raised to Rs 5 million from the earlier limit of Rs 3 million. The clearance between Rs 5 million and 10 million shall be charged at a flat nominal rate of 5%. The tobacco industry, particularly the *bedi*

sector, benefits from concessions under the SSI promotion policy of the government. Central excise duty is self-assessed by manufacturers of *bedi* and other tobacco products, excluding cigarettes.

Subsidies/facilities for tobacco exports

Exports of tobacco are under the purview of the Open General Licence (OGL) policy. Some incentives provided by the Government of India for facilitating tobacco exports through the provision are given below.

1. Seventy per cent of tobacco export profits were exempted from tax during 2000–2001.
2. Under the Duty Entitlement Pass Book (DEPB), exporters are eligible to claim credit at the specified rates on the free on board (FOB) value of exports made in freely convertible currency, i.e. DEPB on post-export (Box 6.17). Exporters holding DEPB credits are entitled to the import of any item, barring those included in the negative list of imports, without payment of any customs duties against the credits registered in the DEPB. Exports made under the DEPB scheme are not entitled to duty drawback.
3. Tobacco exports are free from quota, minimum export price and quality restrictions. Export of these items is allowed freely under OGL, subject to the condition that such exporters are registered with the

Box 6.17 Duty Entitlement Pass Book (DEPB)

Category	Rate of credit (as % of FOB value)
1. Cigarettes packed in consumer packs	10%
2. Acetate cigarette filter rods (24.5 mm x 120 mm)	10%
3. Tobacco/sweet tobacco/tobacco paste packed in the relevant packing material	2%

FOB: free on board

- Board in accordance with the Tobacco Board Act.
4. Import content for export of tobacco: Packaging materials are imported with 80% of the requirement being met locally.
 5. There is exemption of export duty on unmanufactured tobacco.
 6. Unmanufactured tobacco is exempted from compulsory pre-shipment inspection by any government agency, if the exporter has an authorized letter from the overseas buyer stating that the buyer does not want pre-shipment inspection, and the said letter is filed by the exporter before the customs authorities.
 7. The Commerce Ministry of the Government of India under the Market Development Assistance (MDA) Fund provides financial assistance in the form of grants for activities such as on sales-cum-study tours, participation in export fairs/exhibitions abroad, advertising in foreign media and on publications for circulation abroad. The Ministry also implements research and production development programmes, opening of offices and setting-up of warehouses abroad.

Smuggling and effectiveness of tax policy

Tax-led reduction in the demand for tobacco products has to contend with some escape routes that tobacco interests may avail of. Smuggled cigarettes from such countries may have lower prices on account of either no tax or lower tax rates or other factors pertaining to supply-side factors, or as a result of deliberate policy by cigarette companies (e.g. for pre-testing a brand). This can reduce the effectiveness of tax-led tobacco control. While the prevalence of smuggling can be confirmed by many means, it is an uphill task to estimate its volume. The tobacco industry generally complains of widespread smuggling.⁹³

One possible method of estimating the quantum

of smuggling is to estimate the likely size of tobacco consumption based on the estimated prevalence rate of tobacco use and compare such an estimated consumption figure with the domestic legal availability of tobacco products (calculated as [domestic production + legal imports] – [legal exports of tobacco products]). The difference between the estimated consumption and domestic legal availability may be taken to suggest the volume of smuggled tobacco products consumed in a country. This figure, if negative, would indicate that more is smuggled out from the country than is smuggled in. One difficulty that may reduce the reliability of such an estimate is the presence of carry over stock with producers and traders. However, if there are no special reasons to believe that a departure from the normal stock maintenance behaviour has occurred over time, the estimate of the quantum of smuggling (worked out on the basis of the procedure described above) would not be wide off the mark. In any case, the authorities have to organize as much reliable information about the destination and sources of smuggled cigarettes as is possible. Evidently, it is possible that a country may be both a source as well as a destination of contraband cigarettes. Some idea about the volume of smuggling may be arrived at on the basis of the seizures of contraband by enforcement agencies. However, the detection of smuggling does not always provide a clear indication of its magnitude.

It is difficult to be categorical about how far anti-smuggling policies and the determination of domestic and cross-border tax imports are dependent on the estimates of smuggling volume. Smuggling does tend to lower the effectiveness of demand reduction through imposition of shiftable taxes on domestic and imported cigarettes. In addition to smuggling, unauthorized movement of cigarettes from the factory gates (evasion of excise) also reduces the effectiveness of tobacco control. In India, excise evasion has also been reported, especially owing to the presence of some tax-exempt regions. The tax holiday granted to the northeast region led to its abuse and facilitated large-scale tax evasion. Tobacco products manufactured

elsewhere in the country were falsely labelled as being manufactured in the tax haven of the northeastern region, resulting in evasion of excise tax.

It is on account of such factors that international cooperation and ‘symmetrical measures’ are considered useful for sharpening the thrust of tobacco control.⁷⁸

However, price differentials alone do not cause smuggling. The craze for some well-known, highly rated brands, as well as the demonstration effect of supposed high-class consumption tends to become grist to the smuggling mill. It has been reported that powerful organized criminal networks carry on cigarette smuggling on a large scale and ongoing basis. Huge profits entailed by such smuggling, added to an extent by cross-border travel and free baggage allowance, make smuggling a feasible and lucrative ‘business’.⁸¹ In so far as smuggling adds to the supply of cigarettes, it would tend to reduce prices and increase the variety-added consumption of cigarettes.

Tobacco interests, while at times accused of being hand in glove with the smuggling processes, generally complain of it being a threat. Indian companies complain of smuggling from Nepal, Myanmar, Bhutan and Bangladesh, etc. putting the value of Rs 5000 million as the estimated annual volume of smuggling (the source and method for arriving at the estimate remain unspecified). The chairman of India’s largest cigarette company, ITC, claimed that this contraband trade is growing at an annual rate of 20%.⁶⁷ It appears that cigarette smuggling is basically part of a phenomenon of smuggling but is spurred on by addiction to tobacco, preference for popular foreign brands and, of course, the price differential. This phenomenon certainly compromises the effectiveness of fiscal measures for reducing tobacco consumption and calls for strong countermeasures at both the national and global levels.

Rethinking policy initiatives

Fiscal measures in India never included a comprehensive policy to systematically curb the consumption of tobacco. The fiscal exercise has been a routine increase in excise duties, year after year, in almost every budget. The government never attempted to determine the extent of reduction in consumption nor consider further increase in taxes based on any price elasticity study.

A reduction in tobacco taxation is sometimes advocated to protect the tobacco industry. It is also argued that reduction in the tax burden of the tobacco sector would promote the demand for tobacco and tobacco products, thereby sustaining the tobacco industry and also encouraging the flow of revenue to the government. However, it is unethical to reduce taxes to promote smoking for the protection of the industry and to increase revenue collection, in view of the proven adverse health effects of tobacco consumption.

Chewing tobacco is one of the main causes of mouth cancer. *Beedis*, which are cheaper and consumed largely by the poor, have a higher tar content than cigarettes. In the light of these considerations, there should not be marked differences in tax policies for various types of tobacco products. Otherwise, there may be a shift from high- to low-priced tobacco. It is necessary to work out a strategic plan for covering the unorganized sector also under the tax regime. In addition, there is a necessity for working out a tax–price–demand analysis for tobacco products to frame an appropriate fiscal policy for the tobacco sector.

Under the World Trade Organization (WTO) regime, it is argued that world trade in tobacco might increase as market access stipulation specifies that member countries should import a minimum of 3%–5% of domestic consumption. India is one of the countries importing less than the stipulated quantity. India will have to import

Table 6.19 The 'Mini' experiment: Lowest length cigarette segment analysis (sales in billion sticks, revenue in Rupees in billion)⁹⁵

Year	Sales		Excise revenue	
	Mini	Total industry	Mini	Total industry
1989–1990	0.7	83.5	0.07	19.25
1990–1991	1.0	86.1	0.10	20.84
1991–1992	0.8	85.7	0.10	24.50
1992–1993	0.7	80.8	0.8	27.68
1993–1994	0.6	78.8	0.07	27.40
1994–1995	5.4	84.3	0.33	30.75
1995–1996	15.1	94.9	0.91	34.27
1996–1997	18.9	102.3	1.42	42.77

around 24 million kg of tobacco under the WTO agreement. The world market for tobacco is, however, not increasing and India's share in the world tobacco trade has decreased from 2% in the 1970s to 0.5% in 2001.⁹⁴

Article 17 of the FCTC, steered by the World Health Organization (WHO), states that efforts shall be made with the mutual cooperation of different agencies to promote economically viable alternatives for tobacco workers, growers and individual sellers. Article 22 also states that parties shall assist tobacco growers in shifting agricultural production to alternative crops in an economically viable manner. The Framework Convention Alliance (FCA), an alliance of over 160 NGOs from around the world, which supports the FCTC, has argued for ending all forms of subsidy to tobacco. These developments call for a rethinking on India's approach towards subsidies for tobacco and tobacco promotion. Subsidies may have to be diverted to promoting alternative livelihoods, in terms of income support and infrastructure development for the marketing of alternative crops.

It emerges from the analysis of the Union tobacco taxation policies that neither the choice of rates, nor the garnering of tax revenue seem to show that there was a conscious attempt to control tobacco consumption. Tax rates appear to have been changed for revenue considerations, which vary every year, and not with a systematic approach to use tax as an instrument for tobacco control. This is illustrated by the case of mini-cigarettes. The sale of mini-cigarettes increased from 0.6 billion to 1 billion

sticks between 1989–1990 and 1993–1994. However, when the tax rate was reduced by 50% in 1996–1997, the sale of mini-cigarettes jumped to nearly 18.9 billion sticks, without any decline in the production of or revenue collection from *beedis* or overall cigarette production or revenue (Table 6.19).

This kind of information does not indicate any conscious or systematic policy design for restraining tobacco production or consumption. Thus, compared to the pursuit of revenue for the public exchequer, the objective of tobacco control may well be considered largely incidental. From the point of view of the revenue objective, tobacco, with its inelastic demand and frivolous character, has generally been a hot favourite of revenue-hungry finance ministers. Certain features of tobacco taxation, such as not including cigars and *cheroots* or leaving a part of *beedi* production out of the tax net, show that demand reduction has not been a live concern with fiscal managers. Relatively low tax realization from *beedis*, the poor man's puff, is an example of an unkind kindness. This immediate outgo from the poorer citizens' pocket is considered more of a holy cow than the adverse health condition and long-term greater financial outgo. It can thus be said that reducing tobacco consumption by means of tax measures does not seem to have been a part of the policy architecture in India. True, in 2001, an additional impost in the form of the NCCD was clamped, which increased tobacco tax by 15%.⁹⁶ However, there is no evidence of it being realized that tobacco consumption itself is no less of a calamity. Clearly, it is necessary to relate

tobacco taxation to tobacco control in a far more explicit manner than has been the case so far.

In this connection, two additional points need consideration. Tobacco has received, as seen above, a good deal of explicitly articulated public support. A Government of India publication in 1997 asserted that, 'although it [tobacco] occupies less than 0.3% of the total cropped area in the country, it contributes the highest revenue to the national exchequer among all the agricultural commodities. Hence, it is considered as 'Kamdhenu' of the country besides, tobacco and tobacco industry are labour-intensive and provide employment, directly or indirectly, to millions of people in the country. It is, therefore, needless to emphasize the importance of tobacco to a developing country like India.'⁷⁷

It is now time to discard such attitudes and go in for policies directed at discouraging the supply of tobacco, by removing the incentives and imposing effective fiscal disincentives. The impact of higher taxes is presently felt only on a

small segment of the tobacco industry. Even this burden is passed on to the consumer. The tobacco industry currently faces hardly any disincentives to restrain further investment and slow down the rate of growth of tobacco products. This leaves the tobacco industry with enough incentives to continue committing ever more resources for enticing newer recruits to tobacco addiction and make investments for increasing the supply of a commodity designed to deliver nicotine. This unregulated play of market forces is certainly injurious to community health. Hence, a set of measures to restrain the growth in supply of tobacco products is likely to be more effective than relying solely on demand management steps. As a demerit good, a differential treatment given to the investment, production and profits from tobacco products would surely make a lot of sense.

A convincing case exists for doing away with all promotional public activities for tobacco and for using fiscal measures to progressively downscale this deadly trade with the objective of ultimately eliminating it.

* *Kamdhenu* is the divine cow, of Hindu mythology, whose yield is bountiful and limitless.

6.8 FISCAL MEASURES

KEY MESSAGES

- Tobacco taxation is discriminatory and covers only the organized sector and this too not uniformly. It is necessary to work out a strategic plan for covering the unorganized sector as well also under a tax regime.
- Increasing the tax base of tobacco by covering all types of tobacco products, irrespective of the turnover, is essential to stop people shifting from costlier to cheaper products. Those who profit from tobacco products should pay taxes while those who consume it have to be discouraged from using it. There should not be significant differences between the tax policies for various types of tobacco.
- The prevailing tax system is not in accordance with the consumption pattern. The tax contribution from non-cigarette products is very low (around 20% of total tobacco excise collections) as compared to their share in consumption (more than 80%). Moreover, there is no stability or consistency in the tax system being adopted for tobacco.
- A tax–price–demand analysis should be worked out for tobacco products to frame an appropriate fiscal policy for the tobacco sector.
- There are arguments against and in favour of both specific duty and *ad valorem* duty structures for cigarettes. In the specific duty structure, there is less scope for tax evasion and lesser chances of passing the burden to consumers.
- States are not in favour of additional excise duties for tobacco. Rates of additional excise duties are not raised as regularly as those of basic duties.
- The Indian Government has not yet come out with a policy that addresses both tobacco production and tobacco consumption from the perspective of tobacco control. While increased taxation is justified on the grounds of public health concern, the government is also promoting tobacco by providing incentives for cultivation, marketing and exports.
- An analysis of the fiscal policy of the government needs to consider not just the cash subsidies but also other kinds of support that flow from different government departments for the promotion of tobacco cultivation and production. In addition, the role played by the tobacco industry also needs to be considered as it induces both tobacco consumption and tobacco production.

References

6.1 Legislation and enforcement

1. Blanke Douglas D (ed). *Tools for advancing tobacco control in the XXIst century—Tobacco Control Legislation: An introductory guide*. Geneva: WHO; 2003.
2. Government of India. The Cigarettes (Regulation of Production, Supply and Distribution) Act, 1975, and rules framed there under.
3. World Health Organization. Resolutions of World Health Assembly, 1986 and 1990.
4. Government of India. Cabinet Secretariat O.M 27/1/3/90-Cab dated 7 May, 1990, regarding prohibition of tobacco smoking in public places.
5. Government of India. Prevention of Food Adulteration Act, 1954, and rules framed there under.
6. Government of India. Drugs and Cosmetics Act, 1940, and rules framed there under.
7. Government of India. Cinematograph Act, 1952.
8. Government of India. Cable Television Networks (Regulation) Act, 1995, and rules framed there under.
9. Government of India. Ministry of Railway's circular No. 97/TG.III/600 dated 12 April, 1999.
10. Government of India. Ministry of Railway's circulars No. 99/TG.III/600/6 dated 4 July, 2001.
11. Parliament of India. Twenty-second report of the Committee on Subordinate Legislation (1995).
12. Government of India. Report of the Expert Committee on the Economics of Tobacco Use (2001).
13. Government of India. The Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Bill (2001) (as introduced in the Rajya Sabha).
14. Parliament of India. Report of the Department-related Parliamentary Standing Committee on Human Resource Development on Tobacco Control Bill (2001).
15. National Human Rights Commission of India's report on Regional Consultation on 'Public Health and Human Rights', New Delhi (2001).
16. Supreme Court of India order dated 2 November, 2001 in Writ Petition (Civil) No. 316 of 1999.
17. Government of India. The Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003, and rules framed there under.

6.4 Civil society's initiatives

18. WHO. *WHO's interaction with civil society and non-governmental organizations. Review report*. Geneva: WHO; 2002. Available from URL: http://www.who.int/whr/2002/chapter4/en/index10.html#fig_4_9 (accessed on 23 March 2004).
19. WHO. *Strategic alliances: The role of civil society in health. CSI discussion paper no. 1*. Geneva: WHO; 2001. Available from URL: http://www.who.int/civilsociety/documents/en/alliances_en.pdf (accessed on 23 March 2004).

20. WHO. *WHO and civil society: Linking for better health*. Geneva: WHO; 2002. Available from URL: <http://www.who.int/civilsociety/documents/en/CSICaseStudyE.pdf> (accessed on 23 March 2004).
21. Chatterjee P. *Civil Society in India: A necessary corrective in a representative democracy*. D+C Development and Cooperation No. 6. Deutsche Stiftung für Internationale Entwicklung Frankfurt, Germany: 2001:23–24. Available from URL: <http://www.dse.de/zeitschr/de601-9.htm> (accessed on 2 April 2004).
22. Government of India. *National Health Policy 2002, India*. Available from URL: <http://mohfw.nic.in/> <http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN009630.pdf> (accessed on 2 April 2004).
23. Dayal MS. *Report on the National Conference on Tobacco or Health*. New Delhi, 27–28 July 1991.
24. Gupta PC, Hamner JE III, Murti PR (eds). Consensus summary and recommendations. In: *Control of tobacco-related cancers and other diseases*. Mumbai: Oxford University Press; 1992:353–5.
25. HRIDAY-SHAN. Signature campaigns against second-hand smoke on the occasion of World No Tobacco Day, May 2001. Available from URL: <http://www.hriday-shan.org/html/mainmaster.htm> (accessed on 24 April 2004).
26. Framework Convention Alliance. Mumbai Declaration by Indian NGOs on the FCTC Indian Coalition for Tobacco Control. Available from URL: http://fctc.org/archives/Declaration_Mumbai.shtml (accessed on 2 April 2004).

6.5 Tactics of the tobacco industry

27. World Health Organization. *Country profiles on tobacco or health*. New Delhi: WHO; 2002.
28. *The non-smoker's movement of Australia. Fact sheet—Tobacco advertising*. Available from URL: <http://www.nsama.org.au/adverts.htm> (accessed on 4 August 2004).
29. *Tobacco free kids. India*. Available from URL: <http://tobaccofreekids.org/campaign/global/casestudies/india.pdf> (accessed on 24 July 2004).
30. Vaidya GS, Naik UD, Vaidya SJ. Effects of sports sponsorship by tobacco companies on children's experimentation with tobacco. *British Medical Journal* 1996;**313**:400.
31. Bhan I. An act of bravery. *The Financial Express*. Available from URL: http://www.financialexpress.com/print.php?content_id=56225 (accessed on 18 July 2004).
32. Simpson D. India: PM's bravery awards 'nothing to do with our products' (news analysis). *Tobacco Control* 2003;**12**:120.
33. International Agency on Tobacco and Health. *India: Red and White bravery award row* 2004;**149**:2–3.
34. International Agency on Tobacco and Health. *India: gutka banned, ads survive*. 2004;**149**:3.

35. International Union Against Cancer, UICC GLOBALink. *India: Marketing and posting strategy to promote gutkha (chewed tobacco)*. Available from URL: <http://www.globalink.org/tobacco/docs/ap-docs/010531kapadia.shtml> (accessed on 5 February 2004).
36. *One is not enough*. Available from URL: <http://www.indiaonline.com/fmcg/s> (accessed on 9 August 2004).
37. World Health Organization. *Bollywood victim or ally: A study on the portrayal of tobacco in Indian cinema, for the tobacco free initiative*. 2003.
38. India: movie shoots at women (news analysis). *Tobacco Control* 2000;**9**:9.
39. Tobacco free kids. *Tobacco: A global killer*. Available from URL: www.tobaccofreekids.org/campaign/global (accessed on 26 July 2004).
40. International Agency on Tobacco and Health. *India: Cigarette promotion in villages*. 2003;**139**:3.
41. India: Where there's a Wills there's a way (round ad bans) (news analysis). *Tobacco Control* 2001;**10**:304.
42. Vivek TR. *Tobacco ban forces ITC to stub Wills*. Available from URL: <http://in.rediff.com/money/2004/jul/21itc.htm> (accessed on 5 August 2004).
43. Indian Tobacco Company Limited. Available from: URL: http://www.itcportal.com/agri_exports/e-choupal_new.htm (accessed on June 7 2004).
44. Godfrey Philips Corporate. *Brief history*. Available from URL: <http://www.godfreyphilps.com/aboutgp/history.asp> (accessed on 7 May 2004).
45. International Agency on Tobacco and Health. *India: Wills brands central to new structure*. 2004;**146**:2.
46. Comments on rules notified. *The Tobacco News*. New Delhi: Tobacco Institute of India. 2004;7.
47. The Liberty Institute. *The Mission of Liberty Institute*. Available from: URL: <http://www.libertyindia.org/about.htm> (accessed on 3 August 2004)
48. Foggo D. *Writer fired over tobacco links*. Available at URL: <http://www.telegraph.co.uk/news/main.jhtml?xml=%2Fnews%2F2002%2F01%2F27%> (accessed on 9 August 2004).
49. Rao R. Smoking bans: lounge raises hackles. *Indian Express* 8 July 2004.
50. International Agency on Tobacco and Health. *India: BAT (British American Tobacco) firm sells life insurance*. 2003;**141**:5.
51. Basu A. Hooked on to the *hookah*, puff by puff. *Times of India* 7 June 2004.
- school-based intervention in New Delhi. *American Journal of Health Behaviour* 2002;**26**:173–81.
55. Mehta FS, Gupta MB, Pindborg JJ, Bhonsle RB, Jalnawalla PN, Sinor PN. An intervention study of oral cancer and precancer in rural Indian populations: A preliminary report. *Bulletin of the World Health Organization* 1982;**60**:441–6.
56. Gupta PC, Pindborg JJ, Bhonsle RB, Murti PR. Intervention study for primary prevention of oral cancer among 36,000 Indian tobacco users. *Lancet* 1986;**1**:1235–39.
57. Gupta PC, Mehta FS, Pindborg JJ, Daftary DK, Aghi MB, Bhonsle RB, *et al*. A primary prevention study of oral cancers among Indian villagers. Eight year follow up results. In: Hakama M, Beral V, Cullen JW, Parkin DM (eds). *Evaluating the effectiveness of primary prevention of cancer*. Lyon: International Agency on Cancer; 1990.
58. Aghi MB, Gupta PC, Bhonsle RB, Murti PR. Communication strategies for intervening in the tobacco habits of rural populations in India. In: Gupta PC, Hamner JE, Murti PR (eds). *Control of tobacco-related cancers and other diseases*. Proceedings of an International Symposium, 15–19 January, 1990. Mumbai: Oxford University Press; 1992.
59. Anantha N, Nandakumar A, Vishwanath N, Venkatesh T, Pallad YG, Manjunath P, *et al*. Efficacy of an anti-tobacco community education programme in India. *Cancer Causes and Control* 1995;**6**:119–29.
60. Luthra UK, Sreenivas GR, Menon GR, Prabhakar AK, Chaudhry K. Tobacco control in India: Problems and solutions. In: Gupta PC, Hamner JE III, Murti PR (eds). *Control of tobacco-related cancers and other diseases*. Proceedings of an International Symposium, 15–19 January, 1990. Mumbai: Oxford University Press; 1992:241–8.
61. UICC GLOBALink. India: Vivek Oberoi to get World-No Tobacco Day award. 7 June 2004.
62. Vertiainen E, Paavola M, McAlister A, *et al*. Fifteen-year follow-up of smoking prevention effects in the North Karelia Youth Project. *American Journal of Public Health* 1998;**88**:81–5.
63. Goldman LK, Glantz SA. Evaluation of antismoking advertising campaigns. *Journal of American Medical Association* 1998;**279**:772–7.
64. Cigarette smoking before and after an excise tax increase and an antismoking campaign, Massachusetts, 1990–1996. *Morbidity and Mortality Weekly Report* 1996;**45**:966–70.

6.6 Health education and mass media efforts

52. US Department of Health and Human Services (USDHHS). *Preventing tobacco use among young people: A report of the Surgeon General*. Atlanta, Georgia: USDHHS, Public Health Service, Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking And Health; 1994.
53. CDC. *Best practices for comprehensive tobacco control programs*. Atlanta, GA: USDHHS; 1999.
54. Reddy KS, Arora M, Perry CL, Nair B, Kohli A, Lytle LA, *et al*. Tobacco and alcohol use outcomes of a

6.8 Fiscal measures

65. Kenneth W. The economics of tobacco and health: An overview. In: Abedian I, vander Merwe R, Wilkins N, Jha P (eds). *The economics of tobacco control: Towards an optimal policy mix*. Cape Town, South Africa: Applied Fiscal Research Centre, University of Cape Town; 1998:57–75.
66. Collins D, Lapsley H. Estimating and disaggregating the social costs of tobacco. In: Abedian I, Vander

- Merwe R, Wilkins N, Jha P (eds). *The economics of tobacco control: Towards an optimal policy mix*. Cape Town, South Africa: Applied Fiscal Research Centre, University of Cape Town; 1998:155–78.
67. Government of India (GOI). Report of the Expert Committee on the Economics of Tobacco. New Delhi: Ministry of Health and Family Planning (MOHFW), GOI; 2001.
 68. Kabra K. Some neglected aspects of the economics of tobacco. In: Abedian I, Vander Merwe R, Wilkins N, Jha P (eds). *The economics of tobacco control: Towards an optimal policy mix*. Cape Town, South Africa: Applied Fiscal Research Centre, University of Cape Town; 1998:5–14, 350–2.
 69. Government of India (GOI), Ministry of Finance. *Economic survey*. New Delhi: Taxmann Publications Pvt Ltd; 2004.
 70. Center for Monitoring Indian Economy Pvt Ltd (CMIE). *Corporate sector*. Mumbai: CMIE; 2004.
 71. CMIE. *Industry market size and shares*. Mumbai: CMIE; 2004.
 72. Tobacco Institute of India (TII). *The golden leaf in Parliament*. New Delhi: TII; 2002:18.
 73. Yach D. The importance of tobacco control to health for all in the 21st century. In: Abedian I, Vander Merwe R, Wilkins N, Jha P (eds). *The economics of tobacco control: Towards an optimal policy mix*. Cape Town, South Africa: Applied Fiscal Research Centre, University of Cape Town; 1998:15–23.
 74. Singhal V. *Indian agriculture*. New Delhi: Indian Economic Research Centre; 2003.
 75. Tobacco Institute of India. *Tobacco news*. New Delhi: TII; 2000:7.
 76. Lakdawala DT, Nambiar KV. *Commodity taxation in India*. Ahmedabad: Sardar Patel Institute of Economic and Social Research; 1972.
 77. Government of India (GOI). *Status paper on tobacco*. Chennai: Directorate of Tobacco Development, Ministry of Agriculture; 1997:101.
 78. Sanghvi LD. Challenges in tobacco control in India: A historical perspective. In: Gupta PC, Hamner JE, Murti PR (eds). *Control of tobacco-related cancers and other diseases*. Mumbai: Oxford University Press; 1992.
 79. Shimkhada R, Peabody JW. Tobacco control in India. *WHO Bulletin* 2003;**81**:48–52.
 80. Jha P and Abedian I. *The economics of tobacco control*. In: Abedian I, Vander Merwe R, Wilkins N, Jha P (eds). *The economics of tobacco control: Towards an optimal policy mix*. Cape Town, South Africa: Applied Fiscal Research Centre, University of Cape Town; 1998:1–4.
 81. World Bank. Development in Practice. *Curbing the epidemic: Governments and economics of tobacco control*. Washington, DC: The World Bank Publication; 1999.
 82. National Council of Applied Economic Research. *Export potential of the tobacco sector* (mimeographed). New Delhi: National Council of Applied Economic Research; 1994.
 83. Jain RK. *Central excise tariff of India*. New Delhi: CENTAX Publications Pvt. Ltd; 2004:726–7.
 84. Sury MM (ed). *India: Central Government budgets 1947 to 2003–2004*. New Delhi: Indian Tax Foundation; 2004:518–27.
 85. Central Board of Customs and Excise, Ministry of Finance, Government of India. Various annual issues of the Central Board of Excise and Custom. *Statistics of customs and excise revenue collections of the Indian Union*, Calcutta; 2001–2002.
 86. Jain RK. *Central excise tariff of India, 2003–04*. 42nd ed. New Delhi: Centax Publications; 2003.
 87. Thimmaiah G. *Memorandum submitted to the Expert Committee on the Economics of Tobacco Use*. New Delhi: Government of India; 1995:1.
 88. Indian Society of Tobacco Science (ISTS). *Tobacco science reporter*. Rajahmundry: ISTS; 2003.
 89. Tobacco Board. *A compendium on the activities and functions of the Tobacco Board*. Guntur: Tobacco Board; 2002.
 90. Tobacco Institute of India. *The golden leaf in Parliament. A summary of questions and answers in Parliament*. New Delhi: TII; 2003.
 91. Panchamukhi PR, Debi S, Annigeri VB, Nayanatara SN. *Economics of shifting from tobacco cultivation*. Dharwad: Centre for Multi Disciplinary Development Research; 2000 (In press).
 92. Panchamukhi PR, Debi S, Annigeri VB, Nayanatara SN, Kulkarni AR. *Subsidy for tobacco growers in India: An empirical study*. Dharwad: Centre for Multi Disciplinary Development Research; 2004.
 93. Joossens L. *Tobacco smuggling: An optimal policy approach*. In: Abedian I, Vander Merwe R, Wilkins N, Jha P (eds). *The economics of tobacco control: Towards an optimal policy mix*. Cape Town, South Africa: Applied Fiscal Research Centre, University of Cape Town; 1998:146–54.
 94. Jha B. India's tobacco exports: Recent trends, determinants and implications. *Indian Journal of Agricultural Economics* 2002;**57**:52–64.
 95. Tobacco Institute of India. *Opportunities and challenges in tobacco*. New Delhi: TII; 1999:7.
 96. Tobacco Institute of India. *Tobacco news*. New Delhi: TII; 2002.