Introduction
The past decade has seen a significant paradigm shift in tobacco-related policies that has led to a significant curtailment of the use of tobacco in many countries. However, nearly all of these advances have occurred in industrialized countries. Unfortunately developing countries’ policies have lagged far behind (1), and tobacco consumption in these countries continues to rise (2, 3). The Indian Parliament recently introduced a multifaceted tobacco control bill (the Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Bill of 2001). This paper summarizes tobacco use and its consequences in India, examines the major legislative control measures that preceded this comprehensive legislation, and discusses additional measures required to successfully curb tobacco use in India.

History of tobacco use in India
The Portuguese introduced tobacco to India 400 years ago and established the tradition of tobacco trade in their colony of Goa. Two hundred years later the British introduced commercially produced cigarettes to India and established tobacco production in the country (4). Today, of the 1.1 billion people who smoke worldwide, 182 million (16.6%) live in India.

Tobacco consumption continues to grow in India at 2–3% per annum, and by 2020 it is predicted that it will account for 13% of all deaths in India (5, 6).

In India an estimated 65% of all men and 33% of all women use some form of tobacco (6). While the prevalence of smoking among men and women differs substantially — 35% of men and 3% of women — both use smokeless tobacco products to approximately the same extent (6).
Health consequences of tobacco consumption in India

In 1990 approximately 1.5% of total deaths in India were tobacco-related, and the nation amassed over 1.7 million disability-adjusted life years (DALYs) due to disease and injury attributable to tobacco use (8). Tobacco-related cancers account for approximately half of all cancers among men and one-fourth among women (6), and it is estimated that 8.3 million cases of coronary artery disease and chronic obstructive airway diseases are also attributable to tobacco each year (9). Treating these three tobacco-related diseases cost approximately US$ 6.5 billion in 1999 (6).

Smokeless tobacco is an important etiological factor in cancers of the mouth, lip, tongue, and pharynx. It is not surprising, therefore, that India has one of the highest rates of oral cancer in the world. These rates are steadily increasing and oral cancers are occurring more frequently among younger individuals (10). Annual oral cancer incidences in the Indian subcontinent have been estimated to be as high as 10 per 100,000 among males (11).

India’s tobacco industry and market

India is the world’s third largest tobacco-growing country. In 1992 it produced 7% of the world’s total unmanufactured tobacco and 14% of the world’s total manufactured tobacco in the form of cigarettes and bidis (6).

The overall contribution of the tobacco industry to India’s large agricultural sector — it employs two-thirds of the country’s labour force — is small. Approximately 3.5 million people are employed in tobacco cultivation in India, representing less than 0.5% of the agricultural labour force and 0.31% of the total labour force (12). In contrast, cigarette manufacturing is a mechanized production process and generates fewer jobs (13). However, manufacturing of tobacco products other than cigarettes (bidis and various forms of chewing and smokeless tobacco) largely takes place within the unorganized sector, providing employment for what is estimated to be millions of women and children who work at home (14).

Bidi manufacturing is the largest tobacco industry in India. In 1998, a total of 858 billion bidis were sold in India and sales are projected to reach 1031 billion by 2007 (14).

Guthka and pan masala have become increasingly popular with young people. These mixes, containing areca nut, tobacco and flavoured additives, are sold in colourful small sachets for as low as half a rupee (ca US$ 0.01) (14). This rapidly growing cottage industry uses aggressive marketing and advertisements and has successfully secured a large market (15).

The cigarette market was worth an estimated 60 billion rupees (US$ 1.7 billion) in the late 1990s (15). While four Indian companies, Indian Tobacco Company (ITC), Godfrey Phillips Limited, Golden Tobacco, and National Tobacco, control the cigarette market, foreign multinationals hold stakes in three of them (14). Interestingly, these cigarette companies face significant competition from the unorganized bidi manufacturers which are largely protected from high taxes because of their status as small-scale industry (13).

Advertising by tobacco companies amounted to US$ 48.8 million in 1998 (15). Marketing of tobacco products has grown substantially in recent years with greater concentration on advertising strategies such as event sponsorships, point of sale (promotional display material where cigarettes are sold), and brand-stretching (tobacco brand names on non-tobacco merchandise or services) (15).

Tobacco legislation in India

Effective tobacco control in other parts of the world has been achieved via multipronged strategies focusing on reducing the demand for tobacco products (16–18). These strategies include the following: raising taxes; publishing and disseminating information about the adverse health effects of tobacco, including adding prominent health warning labels to products; imposing comprehensive bans on advertising and promotion; restricting smoking in workplaces and public places; and extending access to nicotine replacement alternatives and other cessation therapies (17, 18).

These demand reduction strategies are typically accomplished through national legislation. In India, health legislation has been historically (and perhaps more practically) enacted at the state level. National legislation has been reserved for major issues requiring country-wide uniformity (16).

India has a short history of tobacco-related legislation. The first national level bills were introduced not to curtail but to build a foundation for the tobacco industry and enable it to be competitive on the international market. Early attempts to enact tobacco control legislation were insufficient and only recently has there been significant impetus to come up with a multifaceted national control measure (19).

Pro-tobacco legislation dates back to 1975 with the Tobacco Board Act, introduced to develop the tobacco industry (20). It facilitated the regulation of production and curing of tobacco, fixed minimum prices, and provided subsidies to tobacco growers; the objective was to develop the Indian tobacco market and make the industry export competitive (21). Similarly, the Tobacco Cess Act of 1975 was enacted to collect duty on tobacco for the development of the tobacco industry (21). Anti-tobacco advocates have criticized these Acts because they nurtured the tobacco industry through subsidies and loose export policies (21, 22).

India’s first national level anti-tobacco legislation was the single-faceted Cigarettes Act of 1975, which mandated health warnings on cigarette packets and on cigarette advertisements (23). This Act prescribed all packages to carry the warning “Cigarette smoking is injurious to health” in the same language used in the branding on the package. The text was to be a minimum of 3 mm in height, irrespective of the dimensions of the surface on which it appeared or of the dimensions of the brand name (21). While this Act was a major step in tobacco control, it did not apply to non-cigarette tobacco products.

In the years following the Cigarettes Act of 1975, there were a number of other single-faceted national attempts at controlling tobacco use. For instance, in statutes dealing with the preservation of the environment, the Prevention and Control of Pollution Act of 1981 included smoking in the definition of air pollution (23). The Motor Vehicles Act of 1988 made it illegal to smoke or spit in a public vehicle (23). Finally, the Cable Television Networks Amendment Act of 2000 prohibited the transmission of tobacco, liquor, and baby food commercials on cable television across the country (24).

Many state-level governments in India have imposed different types of tobacco control legislation. The Delhi government was the first to impose a ban on smoking in public
places, with the Delhi Prohibition of Smoking and Non-smokers Health Protection Act of 1996 (25). In addition to prohibiting the sale of cigarettes to minors and prohibiting sale 100 m from a school building, this law allowed for enforcement in public places and public transport by the police and medical professionals. A first time offender is fined 100 rupees (US$ 2.40) and briefed by the police or medical officer about the law and the negative health consequences of tobacco use. As expected, it has been difficult to enforce this ambitious programme, and it has probably had little real impact — the key problem being lack of manpower to enforce the law (26, 27).

Other states too have enacted bans on public smoking. For example, in 1999 the Kerala High Court came out with a judgement prohibiting smoking in public places, including parks and highways (27, 28). Similarly, the state of Goa introduced anti-tobacco legislation in 1999. Following intense lobby from pro-tobacco groups the final legislation was a diluted version of the original bill, but did maintain an important provision that banned smoking in public places (29). Spitting of residues from chewing tobacco in public places was also prohibited by the legislation. In the past 12 months, the states of Tamil Nadu and Andhra Pradesh have banned the marketing and sales of gutka.

In February 2001, Indian Prime Minister Vajpayee’s Union Cabinet introduced the Cigarettes and other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Bill, a multifaceted anti-tobacco legislation to replace the Cigarettes Act of 1975 (30). Smoking in public places would be outlawed, the sale of tobacco to persons below 18 years of age would be prohibited, and tobacco packages would be required to have warnings the same size as that of the largest text in English or the local language. The proposed national Bill would prohibit tobacco companies from advertising and sponsoring sports and cultural events. Significantly, this Bill covers most tobacco products including not only cigarettes, but also cigars, bidis, cheroots, tobacco pipe, hookah tobacco, chewing tobacco, pan masala, and gutka.

The consequences of violating the laws under the Bill are far more stringent than with the original 1975 Act. Defying the ban by smoking in public places such as streets, parks or government complexes will be fined up to 200 rupees (US$ 4). The same fine applies to vendors who sell tobacco to minors (under-18-year-olds). A second-time offence will result in a fine of 100 000 rupees (US$ 2000) and imprisonment for up to 3 years (30).

**Additional steps to curb demand**

While this multifaceted bill is a big step for India in controlling tobacco use, its effectiveness depends on additional major measures. Essential measures to comprehensive tobacco control through demand reduction are the following: increased tax on all tobacco products; control of smuggling; closure of all advertising avenues; and creation of an infrastructure for enforcement of laws.

**Taxation and smuggling**

The tobacco industry in India is subject to a range of taxes imposed by the Federal and State Governments. According to an industry report, taxation on cigarettes accounts for around 55% of the average price of a packet of 20 cigarettes (13). The same report estimated that total excise duty generated by tobacco products was around US$ 1424 million in 1998; nearly 82% of that amount came from the sale of cigarettes (13). These data highlight the minimal contribution of the unorganized sector to excise revenue. Bidis, in particular, have a far lower excise tax than cigarettes (13, 25). Furthermore, the Indian Government has limited ability to collect excise from the unorganized sector as it consists of scores of small producers.

Regardless of the difficulty in collecting taxes from the unorganized sector, even greater strides in tobacco control would be achieved by increasing taxes on all types of tobacco, as all tobacco products are substitute goods and all have negative health effects that warrant a tax to reduce demand (31). Increasing taxes on tobacco products effectively lowers consumption in developing countries (3, 32). In India, higher taxes would induce quitting and prevent starting tobacco consumption; The World Bank estimates that a 10% price increase reduces demand by 8% in low- or middle-income countries (18). Since most of India’s tobacco is consumed by the poor, with an increasing trend towards use by youth, price increases are likely to be effective with these groups who are the most price sensitive (18). While demand for more expensive cigarettes is likely to fall with increased prices, this decrease in cigarette consumption could be offset by the use of bidis. Consumers may not quit smoking as a result of the higher prices but merely switch to bidis, the cheaper alternative.

It is also possible that with higher taxes on tobacco products in India, smuggling of these products from neighbouring countries with lower tax rates will become a problem. Although there is little experience and research on the effectiveness of various anti-smuggling measures, successful ones may include placement of prominent tax stamps and local-language warnings on packages and the aggressive enforcement of penalties to deter smugglers (33).

**Closing all advertising avenues**

The proposed legislation may prove less effective at controlling tobacco advertisement since it has ignored some avenues of advertising and promotion. Two developing countries, Brazil and Thailand, have recently passed legislation that may be effective in this area.

Although Brazil has a big economic stake in tobacco (34), producing nearly as much unmanufactured tobacco as India and being the world’s lead exporter of tobacco leaf, Brazil enacted measures in 2000 that outlaw all television, newspaper and magazine advertising of tobacco products, and event sponsorship by cigarette companies (35). The measures also require placement of graphic health warnings on cigarette packages. While the effects of Brazil’s stringent advertising laws remain to be seen, the government has demonstrated the political will to control tobacco use despite the industry’s important role in the national economy.

Similarly, Thailand introduced comprehensive tobacco control legislation in 1992 that included strict advertising laws (36). The Thai experience provides insight into challenges that lie ahead for India due to loopholes in their proposal to curb tobacco advertisement. Thai law explicitly prohibits the following: sale of cigarettes through vending machines; use of free samples, give-aways, or exchanges; offer of free access to events; advertising products with tobacco brand names or logos; production, importation, sale or advertising of products that imitate tobacco products and packages (i.e. brand-stretching); and point-of-sale advertising (36, 37).
The Indian tobacco industry, anticipating loopholes and gaps, is already employing unique strategies to circumvent future laws. For instance, in 1998 the ITC aggressively promoted their Benson & Hedges cigarette brand by hiring young people to roam Mumbai’s bars, colleges, and parks distributing free packets of cigarettes to increase the market share (38). Similarly, it is reported that ITC has legally registered Wills Sport and Gold Flake–Golden Getaways as two distinct brand names exclusively to promote sports and cultural events (14). The proposed Bill does not include clear specific bans on all types of advertisement and it will be difficult to counter such strategies. As demonstrated by Brazilian and Thai laws, further measures will be needed to block all avenues of advertising via stringent and thorough policies.

Enforcement
The Thai experience also demonstrates that legislation is not enough. Although Thai laws are comprehensive, a major problem has been their enforcement. A 1996 Thai survey showed that 97% of 15-year-olds were able to purchase cigarettes even though the law states that tobacco products are restricted to those over 18 years of age (36, 37). It is also apparent that point-of-sale advertising and brand-stretching are also escaping Thai law due to the lack of enforcement (36, 37). Building an enforcement infrastructure in India appears to be essential to the success of tobacco control and is a much needed government priority.

Politics and economics of tobacco control
The tobacco lobby has argued that tobacco control measures can negatively impact the economy by creating massive employment loss. Simulation of the net impact of tobacco control on the Indian economy has not been adequately investigated, making it difficult to assess accurately the effect of control measures. However, studies from other countries demonstrate that employment losses occur in the sectors that are immediately associated with cigarette production; however, these losses can be outweighed by increases in employment in all other industries, particularly in labour-intensive service industries (12). Jobs lost in retailing tobacco are likely to be replaced by jobs in retailing other products people can purchase with the money formerly spent on tobacco (12).

Future national comprehensive tobacco control legislation in India will require better understanding of the political economy. As the third largest agricultural producer of tobacco, slowing this industry down will not only require concerted political will and sustained commitment, but will also require careful investigation of the involved stakeholders.

Conclusion
Tobacco use in India is projected to have devastating consequences. Only recently has the Indian government begun to act on the seriousness of the situation and initiate a legislative process to combat this social ill. However, if legislation is to be successful it will need to encompass more comprehensive measures beyond the ones in the proposed Bill, such as increasing taxes on all tobacco products and closing loopholes in advertising laws. Strong political but from the government and intense education of the population will be required if the tobacco epidemic in India is brought under control.

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Résumé
Lutte antitabac en Inde
La législation relative à la lutte contre le tabagisme dans les pays en développement reste en retard par rapport à l’augmentation considérable de la consommation de tabac. L’Inde, troisième producteur mondial de tabac, a totalisé 1,7 million d’années de vie ajustées sur l’incapacité (DALY) en 1990 du fait des maladies et traumatismes attribuables à l’usage du tabac dans une population où 65 % des hommes et 38 % des femmes sont des consommateurs de tabac. En Inde, la législation antitabac, adoptée au niveau national en 1975, était essentiellement limitée à des mises en garde sanitaires et s’est révélée insuffisante. Ces dix dernières années, la législation nationale a été de plus en plus appliquée, mais a encore manqué de l’uniformité et des stratégies multidirectionnelles nécessaires pour réduire la demande. Un nouvel élément, proposé en 2001, vient renforcer cette législation, avec de nouvelles mesures destinées à réduire la demande : interdiction formelle de fumer dans les lieux publics, interdiction de la vente de tabac aux mineurs, obligation d’apposer des mises en garde plus visibles sur les étiquettes, interdiction de la publicité pour le tabac lors d’événements sportifs ou culturels. Malgré ces mesures, la nouvelle législation ne suffira pas à réduire la demande de produits du tabac en Inde. Le Gouvernement indien devra également adopter des politiques visant à augmenter les taxes, lutter contre la contrebande, combler les lacunes de la législation sur la publicité et prévoir des moyens suffisants pour faire appliquer la législation antitabac.

Resumen
La lucha contra el tabaco en la India
En los países en desarrollo la legislación antitabáquica ha ido a la zaga del espectacular incremento experimentado por el consumo de tabaco. La India, el tercer cultivador de tabaco del mundo, acumuló 1,7 millones de años de vida ajustados en función de la discapacidad (AVAD) en 1990 como consecuencia de enfermedades y traumatismos atribuibles al consumo de tabaco en una población donde el 65% de los hombres y el 38% de las mujeres tienen ese hábito. La legislación antitabáquica de la India, promulgada por vez primera a nivel nacional en 1975, limitaba su alcance fundamentalmente a las publicaciones sanitarias y resultó insuficiente. En el último decenio se han aplicado cada vez más leyes estatales, que han carecido de uniformidad y del respaldo de
una estrategia plurifrontal de control de la demanda. Una nueva iniciativa legislativa de ámbito nacional propuesta en 2001 representa un avance en este sentido. Incluye las siguientes medidas clave de reducción de la demanda: prohibición del consumo de tabaco en lugares públicos; prohibición de la venta de tabaco a los menores; exigencia de etiquetas de advertencia sanitaria más destacadas; y prohibición de la publicidad en los acontecimientos deportivos y culturales. Pese a estas medidas, la nueva legislación no será suficiente para reducir la demanda de productos de tabaco en la India. El Gobierno debe también adoptar políticas de aumento de los impuestos, combatir el contrabando, eliminar las brechas que pueda aprovechar la publicidad, y adoptar las disposiciones adecuadas para imponer el cumplimiento de las leyes de control del tabaco.

References