

GUEST EDITORIAL

THE ECONOMICS OF TOBACCO IN INDIA

Sonaliya K N

Tobacco consumption is the single most important avoidable factor in the growth of non-communicable diseases in developing countries,¹ particularly in India. Tremendous economic growth has spurred a visible rise in disposable incomes and in the affordability of tobacco products in the country. As international and domestic tobacco companies apply ever more effective tobacco marketing strategies in this large and rapidly developing economy, the risk of an increase in tobacco consumption remains significant.

Tobacco use patterns in India are unique and reflect longstanding cultural practices. Two features stand out — bidis are more common than cigarettes; and chewing tobacco use is widely prevalent. The diversity in forms of tobacco consumption complicates any assessment of tobacco taxation in India. Tobacco is also fairly important as an economic activity in India — its production and sale directly or indirectly involve some 7 million workers, and tobacco contributes roughly 2% of central tax revenue. India also has a mosaic of taxation approaches, mirroring a diverse tobacco manufacturing and legislative environment.

Roughly 10% of the world's tobacco smokers live in India, representing the second largest group of smokers in the world after China.² India is also the third largest producer of tobacco leaf in the world. In contrast to most other countries, India's tobacco consumption pattern reflects heavy use of noncigarette tobacco, primarily in the form of bidis, chewing tobacco and paan preparations. Bidis account for as much as 85% of total smoked tobacco. With a rise in disposable incomes, per capita consumption of cigarettes is expected to increase. Further, quitting is still uncommon, and less than 2% of adults identify themselves as ex-smokers.³

Prevalence estimates of the number of smokers in India have varied, in part due to difficulties in comparing questions posed in successive sample surveys. The most direct estimation uses the National Family Health Survey-3 (NFHS-3) of 2005-06.⁴ NFHS-3, however, does not represent all adults; it collected data for men aged 15-54 and women aged 15-49. Analysis of a combination of sources suggests that an estimated 120 million Indians smoke some form of tobacco, a figure that includes 115 million male smokers and 5-6 million female smokers.

There is a body of evidence in India and worldwide on the adverse health effects of tobacco consumption. Globally, 5.4 million deaths annually are caused by tobacco use, and it is expected that by the year 2030 about 80% of these deaths will be in developing countries.² The leading causes of death from smoking

are cardiovascular diseases, chronic obstructive pulmonary disease, and lung cancer. About one-half of deaths due to tobacco consumption occur in people aged 35 to 69,⁵ the period of life when individuals are most economically productive.

Health care costs from tobacco use impose burdens on annual health budgets, especially in poor countries like India. By one estimate, India spent approximately Rs 300 billion (US\$ 6.2 billion) in 2002-03 in public and private spending on the treatment of tobacco-related illnesses.⁶ If accurate, this would amount to roughly one-fourth of all health spending in the country — as a point of comparison, tobacco-related health spending tends to amount to 6-15% of health spending in other developing countries.⁷ Another study using nationally representative health care expenditure data found that the direct cost of treating four major tobacco related diseases (respiratory, tuberculosis, cardiovascular, and neoplasms) in India amounted to Rs 54 billion (US\$ 1.2 billion) in 2004, or 4.7% of India's national health care expenditure that year.⁸

Tobacco is a labour-intensive crop in India. Growing, harvesting and processing tobacco represent the means of livelihood of a large number of agricultural labourers.⁹ National employment surveys by the National Sample Survey Organization (NSSO) place the direct and indirect tobacco workforce in India at approximately 7 million during 2004-05, representing approximately 1.5% of overall employment in the formal sector. This includes workers engaged in tobacco farming, manufacturing and the wholesale/retail trade, either full or part time.

The vast majority of these jobs, perhaps more than 4million, are in bidimanufacture,¹⁰ with women making up half of the tobacco-related workforce. The number of workers directly or indirectly engaged in the tobacco sector has more than doubled over the past 20 years, from 2.88 million in 1983 to roughly 7.0 million in 2004-05, against an increase of approximately 50% in employment in general over the same period. Many of these workers, however, are employed part-time, so that the figures tend to overstate the importance of tobacco as a source of full-time employment in the country.

India is the world's third largest tobacco producing country after China and Brazil and produced more than 10% of the world's raw tobacco during 2003-04, but ranked only ninth globally as an exporter of tobacco and tobacco products. Tobacco production in India is geared towards consumption within the country. A large proportion of raw tobacco is used to manufacture chewing tobacco, bidis and other products. Cigarette

tobacco accounted for less than a third of the total tobacco production in 2004.⁶

Four multinational companies — the ITC Group, Godfrey Philips India Ltd, VST Industries Ltd and GTC Industries Ltd. — account for almost all of India's cigarette manufacturing sector and together account for Rs 150 billion (US\$ 3.4 billion) in annual revenue. Of these four, the ITC Group dominates cigarette production and controls about 70% of market volume.

In contrast, none of the more than 300 brands of bidis commands even a 5% market share within India.¹⁰ The bidi industry is composed of a large number of small-scale manufacturers,¹¹ with more than 98% of bidis being handmade. The number of small-scale manufacturers has fallen by more than half since producers increasingly outsource to households to circumvent tax rules. Despite this, there were still some 3000 bidi producers as of 2004. Interestingly, while these are nominally small-scale industries, many are owned by, or under the control of larger manufacturers. Accurately determining the actual scale of co-ownership has been difficult,¹² but will be central to enforcing legislation.

Against this complex economic background, increases in tobacco consumption and in the prevalence of tobacco-related illnesses and mortality only underscore the urgency of using policy interventions, including tobacco taxation, to improve public health in India.

REFERENCES

1. Jha P, Chaloupka FJ. Curbing the Epidemic Governments and the Economics of Tobacco Control. World Bank; 1999.
2. World Health Organization. WHO Report on the Global Tobacco Epidemic, 2008: The MPOWER Package. Geneva: World Health Organization; 2008.
3. Jha P, Jacob B, Gajalakshmi V, Gupta PC, Dhingra N, Kumar R, et al. A nationally representative case-control study of smoking and death in India. *New England Journal of Medicine*. 2008;358:1137-1147.
4. International Institute of Population Sciences (IIPS), Macro International. National Family Health Survey (NFHS-3), 2005-06: India: Volume I & II. Mumbai: IIPS; 2007.
5. World Health Organization. The Tobacco Atlas. Geneva: World Health Organization; 2002.
6. Reddy SK, Gupta PC. Report on Tobacco Control in India. Ministry of Health and Family Welfare. New Delhi: Government of India; 2004.
7. Lightwood J, Collins D, Lapsley H, Novotny TE. Estimating the Costs of Tobacco Use. In: Jha P and Chaloupka FJ, eds. Tobacco Control in Developing Countries. Oxford, U.K.: Oxford University Press; 2000:63-103.
8. John RM, Sung HY, Max W. Economic cost of tobacco use in India, 2004. *Tobacco Control*, 2009;18:138-143.
9. Kaur S. Tobacco cultivation in India: time to search for alternatives. In: Efroymsen D, FitzGerald S, eds. Tobacco and Poverty: Observations from India and Bangladesh. PATH Canada; 2002:15-20.
10. Sunley EM. India: The Tax Treatment of Bidis. Paris: International Union Against Tuberculosis and Lung Disease; 2009.
11. Euromonitor International. Tobacco India, Euromonitor International — Country Market Insight; 2007.
12. Gupta PC, Asma S. Bidi Smoking and Public Health. Ministry of Health and Family Welfare, New Delhi, India; 2008.

The author is affiliated to Gujarat Cancer Research Institute Medical College, Ahmedabad as a Professor & Head in Department of Community Medicine.