

THE ECONOMICS OF TOBACCO AND TOBACCO TAXATION IN BANGLADESH

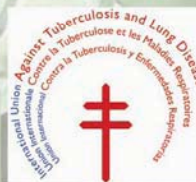
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EXECUTIVE SUMMARY

01. Increase price of cigarette and *Bidi* by 33% (include this in the upcoming FY 2008-09 National Budget). This will decrease use rate by 14% and 9% in short and long-run respectively; raise government revenue earning by 53% and 44% in short-run and long-run respectively; increase supplementary duty to 98% (currently 49%); avert 800,000 premature deaths in the next 40 years.
02. Strengthen tax administration to minimize tax evasions which are more applicable for *Bidi* and low brand cigarettes. Two prong measures are suggested to address tax evasion: (i) Additional manpower and material; (ii) Modernization of the relevant information systems.
03. There is dearth and paucity of various types of important data pertaining to tobacco such as smoking prevalence over time; time-series price data of tobacco products, data on quantity of various brands of cigarettes produced and consumed, employment in tobacco cultivation and processing and so on. The government should take necessary steps to carry out regular survey on tobacco consumption and prevalence and other issues pertaining to tobacco. The private sectors, especially the Cigarette and *Bidi* manufacturing companies should contribute towards developing these data bases and undertaking relevant studies. All these data bases and studies should be made public without delay.
04. During last three decades both the acreage under cultivation and production of tobacco has reduced, but production of cigarette has increased. Between 1974/75 and 2003/04, the total production of cigarettes has increased by 2.2 times while per capita availability of cigarettes has increased by 25 percent. The share of GDP value of tobacco manufacturing in all manufacturing has increased from 5.44 % in 1996-97 to 6.22 % in 2004-05. Trends of last two decades show that share of gross value added of tobacco manufacturing in all manufacturing has increased from 12.4 % in 1980-81 to 16.3 % in 1999-2000.
05. Employment in tobacco agriculture has reduced over time, although manufacturing employment tends to show increase. Official statistics suggests that share of tobacco manufacturing constitute less than 1 percent of all manufacturing employment. However, data from knowledgeable sources contradicts the official data. According to knowledgeable sources, only in bidi manufacturing annual employment amounts to 621,000 labour with 155,000 direct labour and 466,000 indirect labour. Bangladesh is a net importer of tobacco products, although import constitutes no more than 5 % of domestic demand.
06. Tobacco is considered an important cash crop to the farmers. Since last few decades, the big tobacco companies have been motivating farmers to cultivate tobacco through contract farming. Farmers often cultivate tobacco because the companies provide them with seeds, fertilizers, pesticides, loans, etc. The government should encourage cultivation of alternative crops and provide easy credit facilities and other necessary input supports to the farmers. To raise awareness among grassroots level farmers about the negative health and environmental impacts of tobacco cultivation and processing, the government can send messages through the Sub-Assistant agriculture officers.

07. Manufacturing of cigarette accounts for 76 % of gross output and 87% of fixed assets in all tobacco products. However, 80% of employment comes from *bidi* manufacturing. The number of *bidi* producing units accounts 70 % of all tobacco manufacturing establishments. About 50% of the market share of cigarettes is borne by the British American Tobacco Bangladesh Company Limited (BATB) and 20-40% is borne by Dhaka Tobacco Company. Other smaller units produce 20-40 %. Therefore, cigarettes manufacturing is almost a monopoly of the BATB. The social corporate responsibility of BATB has to be enhanced which should include, among others, their enhanced roles in the anti-tobacco campaigns and compliance with the Bangladesh Tobacco Control Act 2005 and FCTC 2003.
08. In 2004, the total amount of cigarette and *bidi* consumption was 100,831 million sticks. Between 1996 and 2004, both cigarette and *bidi* consumption increased by 65% with consumption of cigarette increased by 20% and consumption of *bidi* increased by 84%. During the same period, while the per capita cigarette consumption per day (15+) decreased from 0.71 to 0.64, the per capita *bidi* consumption per day increased from 1.65 to 2.30. Both cigarette and *bidi* consumption per capita per day increased from 2.36 to 2.94. In 2004, overall prevalence of smoking tobacco among 15+ years aged population was 21% with 41% for male and 2% for female. Although prevalence of smoking tobacco was less at 2% among females, prevalence of smokeless tobacco was high at 24%. Prevalence of either smoking or smokeless tobacco was 37% among 15+ years population with 49% for male population and 25% for female population. The prevalence of both smoking and smokeless tobacco is higher among the lower economic class of people for both men and women. Average expenditure on tobacco and tobacco products constitute around 2.5% of monthly household expenditure. Therefore, all out efforts are needed to reduce the prevalence of tobacco usage – both smoking and smokeless.
09. There are two types of costs of tobacco consumption: direct costs and indirect costs. Direct costs refer to the out-of-pocket expenditures borne by households and costs borne by the health system in the public sector. Indirect costs refer to the costs due to premature deaths and disabilities of smokers. The benefits of tobacco consumption are derived from two sources: tax revenue collected on domestic tobacco consumption and net wages earned in the tobacco sector. Considering 25% inpatient department (IPD), the total annual direct cost of medical care due to tobacco related illness is 67.6 billion Tk. of which health system costs 21.6 billion Tk. and out-of-pocket costs 45.8 billion Tk. The total indirect costs of tobacco related illness is 80.3 billion Tk. of which loss of net wage due to death accounts 40.6 billion Tk. and current year loss of net wages due to disability accounts 39.8 billion Tk. Therefore, the total costs imposed on society, due to prevalence of tobacco related illness, at 25% IPD, is 147.7 billion Tk. (67.6 billion Tk. plus 80.3 billion Tk.), of which total cost imposed on society directly due to tobacco usage is 60.6 billion Tk. (41% of cost attributed to tobacco usage). Total benefit due to tobacco usage is 33.3 billion Tk. of which benefits due to total revenue collected amounts 27.3 billion Tk. and benefit due to net wage earned is 6.0 billion Tk. The net costs on society due to tobacco usage is 27.3 billion Tk. per year (US \$ 0.40 billion) which is equivalent to 1% of the current GDP of Bangladesh. Moreso, about 10.5 million people currently malnourished could have an adequate diet if money spent on tobacco were spent on food instead. Therefore, vigorous efforts in reduction of tobacco usage will have high positive impact on poverty reduction, public health, and on the overall economy of Bangladesh.

10. The long run price and income elasticities of demand for cigarettes in Bangladesh are estimated to be -0.57 and 1.47 respectively and the short run ones are estimated -0.41 and 1.14 respectively. The estimated elasticity parameters are consistent with expectations and show larger absolute value of long run elasticity than that of the short run. These price elasticity estimates are indicative enough to show adequate potentials of positive impact of increase in the tobacco price on the reduction of consumption.
11. Value-added tax, customs duty, and supplementary taxes and duties on domestically produced tobacco products as well as on imported tobacco are the sources of tobacco tax revenue. Over 95% of tobacco products are manufactured domestically and import constitute less than 5%. Tobacco tax revenue consists of mainly taxes on domestic production. Value added tax is not only invariant among various price levels of cigarettes, it is invariant over all other products and their imports. It is the supplementary duty (SD) that varies among different price levels of cigarette as well as other tobacco products. Various tobacco taxation options imply various options of supplementary duty. Because of the multiplicative method of calculating VAT and supplementary duty, the rate of increase of overall tax becomes lower than the rate of increase of supplementary duty. For a given change in the supplementary duty, the immediate impact will take place in the overall tax and duty rate, which in turn gets reflected in the price change. Given the baseline supplementary duty, which is 49 %, the various rates of price increases of 10%, 33%, 50%, and 70% corresponds to increase of the supplementary duty of 64%, 98%, 124%, and 153 % respectively. The price consumption relationship of cigarette shows that at 10%, 33%, 50%, and 70% price increase, the corresponding decrease in the consumption will be 4 %, 14%, 21% and 29% respectively in the short run and 6%, 19%, 29%, and 40% respectively in the long run. At the same rate of price increase the short run increase in the government revenues will be 18%, 53%, 72%, and 88% respectively and the long run increase 16%, 44%, 55%, and 58% respectively. However, eventually there will be a situation when the increase of price will have no impact on increasing the level of government revenue. This will occur at a situation where the supplementary duty rates are 319% in the short run and 219 % in the long run. The corresponding level of decrease of employment at 10%, 33%, 50%, and 70% of price increase will be respectively 4%, 14%, 29%, and 40% in the short run and 6%, 19%, 29%, and 40% in the long run. Although the rates of decline in the employment appear to be high, however, this should not cast a shadow on the prospect of tax rate increases. This is because the non tobacco industry constitute more than 99% of all industrial employment. Moreover, the enhanced revenue earned from the higher taxes can be used in supporting other productive activities to compensate the loss in employment in tobacco manufacturing. Furthermore, there is high social benefit particularly among the poor, such as the quitters can spend the saved money for consumption of food like rice, which would provide more calories to those. Overall, the lower consumption associated with tax-cum-price intervention will reduce the net cost of tobacco usage. The poorer section of the population who are the worst victims of tobacco-related deaths and disabilities, would be the prime beneficiary of increased taxes. It has been shown that higher price interventions will reduce cumulative death due to tobacco overtime. With 33 %, 50 %, and 70 % price increase the reduction in cumulative deaths during the next 40 years will be 0.8, 1.39, and 1.95 million respectively. Thus, price increase reduces death more than proportionately.

12. Although smuggling constitutes trifle tax evasion on domestic production particularly in lower brand cigarettes and bidis is high resulting in considerable amount of loss of government revenue. Increase in taxation may prompt some manufacturers to evade some portion of the additional tax burden. Two-prong measures are suggested in this regard: additional manpower and material, and modernization of the information system.
13. Bangladesh has signed the Framework Convention on Tobacco Control (FCTC) in 2003 and passed the Bangladesh Tobacco Control Act in 2005. However, the Act does not comply with the FCTC in a number of respects. For example, the Act does not mention measures to promote cessation of tobacco use and adequate treatment for tobacco dependence; it does not indicate tax measures to reduce tobacco consumption, and leaves off the importance of building awareness and participation of public and private agencies, and gender specific rule for tobacco control. These issues should be addressed by making necessary amendments and changes in the BTCA 2005. Also, there is a need to change the definition of tobacco products in the BTCA 2005. "Tobacco products" in the Act should also incorporate smokeless tobacco. This is particularly important because 24% of women (30 + years of age) in Bangladesh consume smokeless tobacco.
14. Most of the stipulations made in the BTCA 2005 are not enforced. Although the Act has prohibited smoking in public places and public transport and designated smoking places, people still freely smoke in public places and transports. There is considerable lack from the side of the government to take necessary steps to those violating the rules of the Act. It is necessary to form an implementation and monitoring cell by involving anti-tobacco organizations and civil society members so that the periodical review of progress of implementation of the BTCA 2005 can be made.
15. Although the BTCA 2005 has made stipulation towards the health related warnings in the body of packets which relates to the written warnings. The Act should make stipulation about pictorial warnings showing the health hazards of tobacco use.
16. The taskforce committees set up at the district and upazila levels for the implementation of the BTCA 2005 are not active in most cases. There are many districts and upazilas where these committees have not been set up yet. The Government should take all out measures to activate these committees.
17. Although tobacco advertisements in the media have been banned, indirect promotion of tobacco companies and their products both in the media and in the form of free distribution of samples targeting mostly the younger generation is continuing. Mass media should play pivotal roles in creating and crystallizing public awareness against the use of tobacco.
18. The games and sports and even social activities arranged by the tobacco promoting companies should be prohibited.
19. The government should ban the production and distribution of candies, toys and other products with tobacco product images, which may be appealing to the minors.
20. School textbooks should contain articles on ill effects of tobacco and smoking.
21. The local level social organizations, NGOs, professional bodies, student fronts, political parties, and civil society (including *Imams* of about 500,000 mosques) at large should raise their informed voice against production and consumption of tobacco.