Promoting Evidence-Based Strategies to Fight the Global Tobacco Epidemic
Results from the ITC Bangladesh Survey Project

Bangladesh National Report

Suggested Report Citation

I am happy to learn that the ITC Bangladesh Project is going to launch its research findings on the use of tobacco and its pervasive effects on the people's health and the society.

Bangladesh was the first to sign the WHO Framework Convention on Tobacco Control and among the first 40 countries to become parties to the Convention.

The findings of the research project manifest the enduring threat of tobacco use to the health and well-being of our people, and to the economic and social development of our country.

I hope that this report will provide valuable details of the challenges of tobacco control in Bangladesh from a multidisciplinary perspective.

I congratulate the multinational team of researchers, including the investigators from the Department of Economics at the University of Dhaka and their colleagues from the University of Waterloo in Canada, who have worked together on this very timely research initiative.

Joi Bangla, Joi Bangabandhu
May Bangladesh Live Forever.

Sheikh Hasina
As the World Health Organization has concluded, tobacco use is the most significant preventable cause of death and disease in the world and that this is particularly true in developing countries. The Bangladesh government has recognized the importance of strong tobacco control measures. Bangladesh was the first country in the world to sign the WHO Framework Convention on Tobacco Control (FCTC) the world's first health treaty – and our country was among the first 40 countries to ratify the FCTC. Since that time, the government has taken steps to implement the policies contained within the FCTC through the Tobacco Control Act (TCA) of 2005.

In 2010, it is time to assess where our country stands in tobacco use and how well the policies of the TCA have worked. In 2009, the International Tobacco Control (ITC) Project began its extensive research to tell us about tobacco use and the impact of our policies, as they have done in 19 other countries throughout the world including, China, India, Mexico, Brazil, Canada, United States, France, and Germany.

The findings of the ITC Bangladesh Survey reveal that much still needs to be done to reduce tobacco use and to prevent the future health, social, and economic consequences of tobacco use in our country. The Survey reveals that tobacco use continues to be an enormous problem in our country. For example, 54% of males and 32% of females use some form of tobacco. Among males in Bangladesh, 42% smoke some form of tobacco – 18% smoke cigarettes and 6% smoke bidi. An additional 18% smoke both forms of tobacco and 28% use smokeless tobacco. Among women, 1.3% smoke some form of tobacco and 32% use smokeless tobacco. If these numbers do not decrease, the public health costs, along with the economic health care costs, would present a serious threat to our country’s goals of continued positive economic development. At the same time, the ITC Bangladesh Survey also highlights that the Bangladeshi people are favorable to stronger tobacco control measures, particularly in comparison with the other 19 countries in the ITC Project. The findings from the ITC Bangladesh Survey will inspire us to do more to reduce tobacco use in our country.

We are grateful to the ITC Project for this landmark document and especially to the researchers at the Department of Economics at Dhaka University for their leadership in this rigorous scientific project that has told us so much about our need to reduce tobacco use in our country.

Long live Bangladesh.

Dr. A. F. M. Ruhal Haque
I am very pleased that the findings of the International Tobacco Control (ITC) Bangladesh Survey 2009 are now available in this comprehensive National Report.

The Ministry of Health and Family Welfare is committed to implementing strong tobacco control policies to meet our obligations to the WHO Framework Convention on Tobacco Control (FCTC) and ultimately to protecting the health of the Bangladeshi people. The ITC Bangladesh Survey results provide important evidence of how tobacco use prevalence has changed in Bangladesh since the 2004-05 WHO tobacco use prevalence study. They point to the need for continued efforts to curb tobacco use at the National level, particularly among men and women living in slum and tribal populations. The unique ability of the ITC Bangladesh Survey to measure the effectiveness of policies enacted under the Tobacco Control Act (TCA) of 2005, provides us with evidence for implementing strong tobacco control initiatives.

We are thankful for the collaboration of researchers at the Department of Economics at Dhaka University and University of Waterloo in Canada for undertaking this much needed landmark study.

Long live Bangladesh.

Prof. (Dr.) Syed Modasser Ali
Vice President FCTC, COP
“The findings of the ITC Bangladesh Survey reveal that much still needs to be done to reduce tobacco use and to prevent the future health, social, and economic consequences of tobacco use in our country.”

Prof. A. F. M. Ruhal Haque M.P.  
Honorable Minister  
Ministry of Health & Family Welfare
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“The findings of the [ITC Bangladesh] research project manifest the enduring threat of tobacco use to the health and well-being of our people, and to the economic and social development of our country.”

Sheikh Hasina
Hon’ble Prime Minister
Government of the People’s Republic of Bangladesh
The ITC (International Tobacco Control) Policy Evaluation Project is a multi-country prospective cohort study designed to measure the psychosocial and behavioural impact of key policies of the World Health Organization Framework Convention on Tobacco Control (FCTC). This report presents results of Wave 1 of the ITC Bangladesh Survey – a face-to-face survey of a nationally representative sample of tobacco users and of non-users of tobacco conducted between February and May 2009.

ITC Bangladesh Survey Team

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Funding for ITC Bangladesh Project

International Development Research Center (IDRC) — Research for International Tobacco Control (RITC)
Canadian Institutes of Health Research (CIHR)
Ontario Institute for Cancer Research (OICR)
BACKGROUND

The ITC Project Surveys

The International Tobacco Control Policy Evaluation Project (the ITC Project) is the first-ever international cohort study of tobacco use. Its overall objective is to measure the psychosocial and behavioural impact of key national level policies of the WHO Framework Convention on Tobacco Control (FCTC). The ITC Project is a collaborative effort with international health organizations and policymakers in 20 countries (see back cover) so far, inhabited by more than 50% of world’s population, 60% of the world’s smokers, and 70% of the world’s tobacco users. In each country, the ITC Project is conducting annual (approximately) longitudinal surveys to assess the impact and identify the determinants of effective tobacco control policies in the key domains of the FCTC, including the following:

- Health warning labels and package descriptors
- Pricing and taxation of tobacco products
- Tobacco advertising and promotion
- Smoke-free legislation
- Education and support for cessation

All ITC Surveys are developed using the same conceptual framework and methods, and the survey questions are designed to be identical or functionally equivalent in order to allow strong comparisons across countries. The ITC Project aims to provide an evidence base to guide policies enacted under the FCTC, and to systematically evaluate the effectiveness of these legislative efforts.

ITC Bangladesh Survey

In 2008, researchers from the Bureau of Economic Research (BER) and the Department of Economics at the University of Dhaka partnered with the International Tobacco Control Policy Evaluation Project (the ITC Project) at the University of Waterloo in Canada to create the ITC Bangladesh Survey. This project is funded for three survey waves by the International Development Research Centre (IDRC), Canada with additional funding from Canadian Institutes of Health Research (CIHR), and Ontario Institute for Cancer Research. Wave 1 of the survey was conducted in February to May 2009, and Wave 2 started in March 2010.

The objective of the ITC Bangladesh Survey is to create a system for (1) comprehensive surveillance of tobacco use behaviour and factors related to tobacco use, and (2) evaluation of tobacco control policies as they are implemented in accordance with Bangladesh’s obligations as a Party to the FCTC. These policies implemented to date include a restriction on smoking in public places, a ban on cigarette advertising in magazines and newspapers, and text warning labels covering 30% of the cigarette packages. Evaluation of future policies—including possible graphic warnings and increases in tobacco taxes—will be conducted through the ITC Bangladesh Survey.

The ITC Bangladesh Wave 1 Survey is designed as a follow-up study to the 2004-05 WHO Study, “Impact of Tobacco-related Illnesses in Bangladesh”, which was conducted soon after Bangladesh’s ratification of the FCTC but before any action had taken place. The WHO Study was a multi-component analysis of the health and economic consequences of tobacco use in Bangladesh. A major component of the WHO Study was a national survey of tobacco use. Because the WHO Survey was conducted prior to the enactment of the Tobacco Control Act (TCA) on 15 March 2005, the statistics on tobacco use from the survey constitute a pre-TCA snapshot for any follow-up survey assessing the impact of tobacco control policies on tobacco consumption behavior in Bangladesh.

The ITC Bangladesh Survey is thus a timely initiative that can contribute to the ongoing surveillance efforts among adults and youth. These efforts include the recent findings from the Global Adult Tobacco Survey (GATS) which was conducted in Bangladesh in 2009 with the goals of systematically monitoring adult tobacco use and tracking key tobacco control indicators. Together, these studies will provide valuable information to the Bangladesh Government toward the goal of strong FCTC implementation. This ITC Bangladesh National Report presents the findings from the Wave 1 of the ITC Bangladesh Survey. The intent is to provide a detailed picture of the current tobacco control policy landscape in Bangladesh, including cigarette and bidi smokers, and non-smokers' beliefs, attitudes, and behaviours, following the passage of the TCA. Under this Act, three main areas—a ban on smoking in public places, a ban on advertising of tobacco products, and warning labels on packages have been in place since 2006. This Report represents an evaluation of policies implemented under the TCA and therefore is a follow up to the 2004-05 WHO Study which evaluated areas of tobacco control before the implementation of the TCA. The methods and design of the WHO Study were incorporated into the ITC Survey whenever possible to facilitate the pre- and post-TCA comparison.

2. The results of GATS Bangladesh can be found at http://www.cdc.gov/tobacco/global/gats/countries/sea/reports/bangladesh/.
KEY FINDINGS

1. Tobacco use in Bangladesh has increased considerably compared to five years ago. 8.7 million more people are using tobacco, including 2.5 million more smokers. There are now 41.1 million people in Bangladesh who use tobacco, including 20.9 million who smoke either cigarettes or bidis or both.

2. High rates of tobacco use are particularly troubling in the tribal and the slum areas of Bangladesh, which adds a much greater burden to the health and well-being of the people living in those areas.

3. The price of tobacco products has not kept up with the rapid increase in cost of living. The low price is a major factor underlying the increase in tobacco use despite the Tobacco Control act of 2005.

4. The Bangladeshi people—even smokers—are nearly unanimous in their negative attitudes toward tobacco use AND in their support for the Government taking stronger measures against tobacco.

5. Despite their negative opinions about tobacco, few Bangladeshi smokers have plans to quit.

6. Cigarette packs are a major source of information about the harms of smoking—smokers want more health information on cigarette packs.

7. Smoke-free laws have not been effective, but public support for complete smoking bans in public places is high.

IMPLICATIONS FOR TOBACCO CONTROL IN BANGLADESH

1. Increase tobacco-specific taxes and harmonize tax rates across different forms of tobacco, so that tobacco users do not simply substitute their higher cost cigarettes for lower cost bidis.

2. Create and implement warning labels with graphic images on tobacco packaging (cigarette packs and bidi packaging).

3. Reaffirm and strengthen enforcement of the smoke-free law of the TCA.

4. Design and implement public education campaigns to highlight the harms of tobacco use and motivate quitting.
METHODS

OVERVIEW

The International Tobacco Control (ITC) Policy Evaluation Project is an international research collaboration across 20 countries – Canada, United States, United Kingdom, Australia, Thailand, Malaysia, South Korea, China, Mexico, Uruguay, New Zealand, France, Germany, the Netherlands, Bhutan, France, Brazil, India, Bangladesh, and Mauritius. The primary objective of the ITC Project is to conduct rigorous evaluation of the psychosocial and behavioural effects of national-level tobacco control policies of the Framework Convention on Tobacco Control (FCTC). The ITC Project is conducting large-scale annual prospective cohort surveys of tobacco use to evaluate FCTC policies in countries inhabited by half of the world’s smokers. Each ITC Survey includes key measures for each FCTC policy domain that are identical or functionally similar across the 20 countries to facilitate cross-country comparisons. The evaluation studies conducted from the ITC Surveys take advantage of natural experiments created when an ITC country implements a policy: changes in policy-relevant variables in that country from pre- to post-policy survey waves are compared to other ITC countries where that policy has not changed. This research design provides high levels of internal validity, allowing more confident judgments regarding the possible causal impact of the policy. For description of the conceptual model and objectives of the ITC Project, see Fong et al. (2006); for description of the survey methods, see Thompson et al. (2006).

The International Tobacco Control Policy Evaluation Project in Bangladesh (the ITC Bangladesh Project) was created in 2008 to rigorously evaluate the psychosocial and behavioural effects of tobacco control legislation in Bangladesh, using methods that the ITC Project has employed in many other countries throughout the world. The project objective is to provide an evidence base to guide policies enacted under the Framework Convention on Tobacco Control (FCTC) and to systematically evaluate the effectiveness of these legislative efforts.

The ITC Bangladesh Survey was a face-to-face survey conducted by trained interviewers from the Bureau of Economic Research (BER) at the University of Dhaka, Bangladesh. The Wave 1 survey consisted of a nationally representative sample of 2,510 adult smokers and 2,116 adult non-smokers aged 15 years and older, who were surveyed from 13 February to 11 May, 2009. These respondents form a cohort who will be re-contacted to answer follow-up surveys in 2010 and 2011. An additional sample of 597 adult smokers and 540 adult non-smokers was selected from six urban slums in and around Dhaka city. The next Wave of the ITC Bangladesh Survey is scheduled to take place from March to June, 2010.

Figure 1 presents an overview of the ITC Bangladesh Survey timeline in relation to other important tobacco control policy initiatives in Bangladesh.


Sampling Design

The ITC Bangladesh Wave 1 Survey is a nationally representative probability sample of tobacco users and non-users selected through a multi-stage clustered sampling design (sampling with probability proportional to population size at the levels of district, upazila/thana, village/ward). A total of 94,485 adults age 15 and older from 31,689 households were enumerated to establish an accurate sampling frame from which survey participants would be drawn. For the National sample, 23 districts out of the 64 districts covering Bangladesh were selected, 20 of them using probability proportional to population size. A total of 40 upazilas from the 23 districts, and 2 villages from each upazila were selected, again with probability proportional to size. Thus, a total of 80 villages/wards were selected for the National sample. In addition, six urban slum areas within the city of Dhaka and its surrounding areas were selected to conduct the survey among the slum population.

A breakdown of the composition of the sample by area and type of tobacco use is shown in Table 1. Further information on the sampling design and construction of sampling weights is provided in the ITC Bangladesh Wave 1 Technical Report. This report is available at http://www.itcproject.org/projects/bangladesh.
The ITC Bangladesh Wave 1 Survey included several specific and unique sampling features. First, a large-scale collection of enumeration data was conducted to obtain nationally representative estimates of the prevalence of smoked and smokeless tobacco use by gender, age, rural-urban area, and SES (allowing for construction of sampling weights). Second, the survey was designed to include a number of special populations — in addition to purposive sampling of the slum population — two districts were selected to include the tribal populations (Garo and Chakma) to better understand the impact of policies on these two outliers of the mainstream population. Moreover, one district was purposively selected to cover one land port that is used for the cross-border trade of tobacco products, which is potentially a significant outlet of the illegal trade of tobacco products between Bangladesh and India.

Finally, a census was conducted from December 2008 to February 2009 in the sample villages prior to the actual survey. This census was used to estimate key indicators of tobacco use (e.g., prevalence of cigarette and bidi smoking). The stratification of households by socio-economic status based on the census data is an added feature of the study that will allow for poverty and welfare analysis of tobacco usage in Bangladesh.

Table 1. Composition of the Wave 1 ITC Bangladesh sample by area and type of tobacco use.

<table>
<thead>
<tr>
<th>Type of sample</th>
<th>Sample areas</th>
<th>Cigarette Smokers</th>
<th>Dual Users (Cigarette &amp; Bidi)</th>
<th>Bidi smokers</th>
<th>Non-smokers</th>
<th>Smokeless Tobacco Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Sample</td>
<td>74</td>
<td>1789</td>
<td>229</td>
<td>347</td>
<td>2006</td>
<td>955</td>
</tr>
<tr>
<td>Tribal Areas</td>
<td>4</td>
<td>51</td>
<td>30</td>
<td>27</td>
<td>86</td>
<td>29</td>
</tr>
<tr>
<td>Dhaka Slum Areas</td>
<td>6</td>
<td>529</td>
<td>38</td>
<td>30</td>
<td>540</td>
<td>291</td>
</tr>
<tr>
<td>Border Areas</td>
<td>2</td>
<td>21</td>
<td>5</td>
<td>11</td>
<td>24</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>86</td>
<td>2390</td>
<td>302</td>
<td>415</td>
<td>2656</td>
<td>1284</td>
</tr>
</tbody>
</table>
### Characteristics of the Sample

Table 2 summarizes the demographic characteristics of the adult National sample (aged 15 years and older) included in Wave 1 of the ITC Bangladesh Survey. Smokers were defined as currently smoking cigarettes only, bidis only, or both cigarettes and bidis at least once a week.

#### Table 2. Demographic characteristics of the Wave 1 ITC Bangladesh Survey National Sample.

<table>
<thead>
<tr>
<th></th>
<th>Smokers n = 2,270</th>
<th>Non-smokers n = 2,030</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2179</td>
<td>96.0</td>
</tr>
<tr>
<td>Female</td>
<td>91</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-17</td>
<td>67</td>
<td>3.0</td>
</tr>
<tr>
<td>18-24</td>
<td>372</td>
<td>16.4</td>
</tr>
<tr>
<td>25-39</td>
<td>806</td>
<td>35.5</td>
</tr>
<tr>
<td>40-54</td>
<td>567</td>
<td>25.0</td>
</tr>
<tr>
<td>55+</td>
<td>458</td>
<td>20.2</td>
</tr>
<tr>
<td><strong>Monthly Household Income (Tk - Bangladesh Taka)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 5,000 Taka</td>
<td>284</td>
<td>22.5</td>
</tr>
<tr>
<td>5,000-10,000 Taka</td>
<td>602</td>
<td>47.8</td>
</tr>
<tr>
<td>10,000-15,000 Taka</td>
<td>203</td>
<td>16.1</td>
</tr>
<tr>
<td>15,000-20,000 Taka</td>
<td>77</td>
<td>6.1</td>
</tr>
<tr>
<td>20,000+ Taka</td>
<td>91</td>
<td>7.2</td>
</tr>
<tr>
<td>Not stated</td>
<td>3</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>495</td>
<td>21.9</td>
</tr>
<tr>
<td>Primary (1-5 years)</td>
<td>767</td>
<td>33.9</td>
</tr>
<tr>
<td>Secondary (6-8 years)</td>
<td>453</td>
<td>20.0</td>
</tr>
<tr>
<td>SSC (9-10 years)</td>
<td>241</td>
<td>10.6</td>
</tr>
<tr>
<td>HSC (11-12 years)</td>
<td>136</td>
<td>6.0</td>
</tr>
<tr>
<td>Bachelor’s degree (14-16 years)</td>
<td>132</td>
<td>5.8</td>
</tr>
<tr>
<td>Master’s degree (15-17 years)</td>
<td>39</td>
<td>1.7</td>
</tr>
<tr>
<td>Above Master’s degree</td>
<td>2</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muslim</td>
<td>1940</td>
<td>85.5</td>
</tr>
<tr>
<td>Hindu</td>
<td>321</td>
<td>14.2</td>
</tr>
<tr>
<td>Christian</td>
<td>4</td>
<td>0.2</td>
</tr>
<tr>
<td>Buddhist</td>
<td>1</td>
<td>0.0</td>
</tr>
<tr>
<td>Other (specify)</td>
<td>1</td>
<td>0.0</td>
</tr>
<tr>
<td>Don’t know</td>
<td>1</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Content of the ITC Bangladesh Survey

The ITC Bangladesh Survey was developed by an international, transdisciplinary team of tobacco control experts. Most of the survey methods and virtually all of the survey items have been taken from the standardized protocols used in ITC Surveys conducted in 19 other countries.

Tobacco Users responded to questions on:

1. **Smoking Behaviour and Cessation.** Smoking history and frequency, as well as current smoking behaviour and dependence, and quitting behaviours;

2. **Knowledge and Basic Beliefs About Smoking.** Knowledge of the health effects of smoking and important beliefs relevant to smoking and quitting, perceived risk and perceived severity of tobacco-related diseases;

3. **Tobacco Control Policies.** Awareness of, impact of, and beliefs relevant for each of the FCTC demand reduction policy domains (warning labels, taxation/price, advertising/promotion, smoke-free bans, light/mild);

4. **Other important psychosocial predictors** of smoking behaviour and potential moderator variables (e.g., attitudes, normative beliefs, self-efficacy, intentions to quit);

5. **Individual difference variables relevant to smoking** (e.g., depression, stress, time perspective);

6. **NGO and Microfinance Organizations.** Whether respondents have memberships, whether they have received support, and whether the organizations have promoted tobacco control (e.g., restricting smoking in meetings);

7. **Demographics** (e.g., age, gender, marital status, education, occupation).

Non-Tobacco Users responded to similar questions, with the exception of the smoking- and cessation-relevant questions.

Head of each household also responded to questions on: (1) Tobacco Cultivation (e.g., involvement in tobacco farming, governmental support), (2) Wealth Index, (3) Income and Expenditures.

*The average length of the Wave 1 Survey was 75 minutes for smokers and 30 minutes for non-smokers. Copies of all versions of the ITC Bangladesh Survey are available on the ITC Project website at www.itcproject.org*
WHAT THIS REPORT CONTAINS

This report provides an overview of key findings from the ITC Bangladesh Wave 1 Survey. The results are discussed in the context of the current tobacco control landscape in Bangladesh. The focus of this report is to inform tobacco control policy development across the key domains of the WHO Framework Convention for Tobacco Control. Cross-country comparisons are provided for illustrative purposes based on ITC Survey Wave 1 results in other countries. With the exception of Bangladesh, estimates from other countries are based on respondents age 18 and older while estimates for Bangladesh are based on respondents age 15 and older. Estimates for Bangladesh were very similar when 15 to 17 year old respondents were excluded. Therefore, all estimates include 15-17 year olds for comparability to the 2004-05 WHO study.

All figures present weighted point estimates with corresponding 95% confidence intervals. Point estimates presented in this report exclude item-specific non-responses; the only exceptions to this rule are for income, knowledge-based questions (where “Don’t know” is considered a valid response), or where otherwise explicitly indicated. More detailed information on non-response and weighted point estimates and 95% confidence intervals for ITC Bangladesh Survey data cited in this report will be forthcoming in an “Appendix: Frequency Tables for ITC Bangladesh National Report”. This document will be available for download at: http://www.itcproject.org/keyfindi.
THE TOBACCO LANDSCAPE

This section provides an overview of tobacco use and tobacco control policies in Bangladesh at the time of the Wave 1 ITC Bangladesh Survey (February to May 2009). Bangladesh has long recognized the importance of addressing the tobacco problem. It was the first country to sign the WHO Framework Convention on Tobacco Control (FCTC), the world’s first-ever health treaty, and was among the first 40 countries to become a Party to the FCTC. Bangladesh made a further commitment to tobacco control in 2005 with the passage of the Tobacco Control Act (TCA), whose provisions, including enhanced warning labels, smoke-free legislation, and advertising and promotion restrictions, were implemented in 2006. The ITC Bangladesh Project represents both an assessment of the impact of the TCA on reducing tobacco use and a systematic effort to identify areas where action needs to be taken to move forward in reducing tobacco use in Bangladesh in the future.

Prevalence of Tobacco Use

In 2004-05, the World Health Organization (WHO) conducted an extensive national study of the overall impact of tobacco use in Bangladesh. As part of this study, the WHO conducted a national survey of tobacco use. The WHO estimates of prevalence were, until 2009, the most recent indication of tobacco use in the country. In 2009, both the Global Adult Tobacco Survey (GATS) and the ITC Bangladesh Survey were conducted, which provide current estimates of the prevalence of tobacco use in the country.

The ITC Bangladesh Survey shows that overall smoking prevalence (cigarettes, bidis, and hookah) has actually increased in the past five years (since the WHO study of 2004-05), from 20.9% to 22.0%. Our findings show that 42.0% of males and 1.3% of females smoke some form of tobacco. The increase in smoking prevalence over the past five years is primarily due to an increase in the ‘multi use’ smokers, that is, those who smoke more than one form of tobacco. In the National sample, the percentage of Bangladeshi smokers who smoked both cigarettes and bidis increased from 0.7% to 9.4%. The growth in smokeless tobacco use since 2004-05 is also striking – from 19.7% to 29.8%. Smokeless tobacco use increased among males from 14.8% to 27.6% and among females from 24.4% to 32.0%.

Compared to 2004-05, in 2009:

• Tobacco use of any form (smoked, smokeless, or both) has increased from 36.8% to 43.2%
• There are 8.7 million more tobacco users (4.8 million more men; 3.9 million more women)
• There are 2.5 million more smokers (of cigarettes and/or bidis)

In 2009, there are 41.1 million people in Bangladesh who use tobacco, including 20.9 million who smoke either cigarettes or bidis or both.

6. The results of GATS Bangladesh can be found at http://www.cdc.gov/tobacco/global/gats/countries/sear/reports/bangladesh/.
The rate of tobacco use is particularly troubling in the slum and tribal areas of Bangladesh, which adds a much greater burden to the health and well-being of the people living in those areas.

The prevalence of tobacco use of all forms, and of smoking, is higher in the Dhaka slum sample than in the Bangladesh National sample. More than half of men and women (54.8%) surveyed in the Dhaka slums use either smoked or smokeless tobacco. The prevalence of smoking among men in the Dhaka slum sample is particularly troubling — 78.8% of males smoke some form of tobacco. This is substantially higher than the male prevalence rates in the National and tribal populations (42.0% and 49.0% respectively). The majority of male smokers in the slum population smoke cigarettes — 68.1% — compared to 18.3% of males in the National sample and 10.9% of males in the tribal sample.

Among the Garo and Chakma populations in Netrokona and Rangamati districts, respectively, 49.0% males and 16.8% females are smokers. Women in the tribal populations have the highest prevalence of smoking some form of tobacco in Bangladesh. Smokers in the tribal sample have the highest prevalence of smoking more than one form of tobacco — 33.5% of men and 10.5% of women smoke cigarettes and bidis and/or hookah. Tribal populations have the highest prevalence of hookah smoking in Bangladesh; in contrast, not a single person surveyed in the slum areas smoked hookah.

Based on epidemiological studies of smoking-related death rates, it is estimated that between 14% and 21% of all men alive today in Bangladesh will die prematurely because of smoking.

The average loss of life expectancy of those who die is estimated to be about 6 to 10 years.

Based on epidemiological studies of smoking-related death rates, it is estimated that between 14% and 21% of all men alive today in Bangladesh will die prematurely because of smoking.
Tobacco Control Policies

The Bangladesh Government has recognized the toll of tobacco and has taken action to reduce tobacco use. Bangladesh was the first country to sign the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) on 16 June 2003 and it was among the first countries to ratify the treaty on 10 May 2004. In 2005, the government passed the Tobacco Control Act (TCA) and on May 30, 2006, the regulations for the TCA were implemented.

The Tobacco Control Act (TCA) included the following policies:

- Ban on smoking in public places and on public transportation
- Ban on advertising of tobacco products
- Ban on sponsorships, charity, etc. by tobacco companies
- Ban on automatic vending machines
- Text warning labels on at least 30% of the front and back of tobacco packages

In addition, the National Strategic Plan of Action for Tobacco Control (2007-2010) was developed by the Bangladesh Government to: (1) strengthen existing regulations, (2) provide national guidelines and a detailed plan of action in support of the TCA, and (3) build capacity for sustained action in tobacco control throughout the country.

The substantial increase in smoking prevalence represents a significant challenge to tobacco control efforts in Bangladesh. It suggests that the Tobacco Control Act has yet to make a significant impact in curbing tobacco usage in Bangladesh.
Tobacco pricing and taxation

Increasing tobacco taxes is universally recognized as the single most effective policy instrument to reduce tobacco consumption (MPOWER 2008), particularly among youth, less educated, and lower income people—in those groups where tobacco use tends to be higher.7,8

Article 6 of the FCTC obligates countries that have ratified the treaty to adopt pricing and taxation measures to reduce tobacco consumption, such as sales restrictions and limitations on international travelers importing tax and duty free tobacco products.

Taxation is an important component of a comprehensive tobacco control program. In fact, higher taxes and tax equalization across different forms of tobacco products (e.g., equalizing tax on factory-made cigarettes and bidis and loose tobacco used for roll-your-own bidis) is widely accepted as the most powerful tobacco control policy intervention.

Bangladesh’s current taxation on domestically manufactured tobacco products consists of a supplementary duty that varies from 32% to 57% increasing with higher price ranges for cigarettes and a value-added tax (VAT) at 15% for all price ranges of cigarettes. For a pack of 25 sticks of bidis, the supplementary duty is 20%. These tax rates apply to the ex-factory price of cigarette and bidis. For imports, 25% customs duty and 15% VAT are imposed on all forms of tobacco products. The supplementary duty on imports, however, varies from 20% on raw tobacco to 100% on hand-made cigarettes, bidis, cigars, cheroots, etc., and 350% on factory-made cigarettes. In the last budget 2009-2010, the retail nominal price tiers for the progressive tax rates of supplementary duty were updated. The total nominal tax rate increased by 1.2% over 2006-07 to 2009-10 when the rate of inflation was in the range of 5-10%. Thus the cigarette tax rate was more than cancelled out by the inflation rate.

There is very clear evidence to indicate that the price of cigarettes is falling far behind the rate of inflation (SEE SIDEBAR). As a result, affordability of cigarettes and bidis is increasing dramatically, leading to greater consumption and prevalence of smoking—which is a leading cause of death and disability in Bangladesh.

According to the WHO study conducted in 2004-05 in Bangladesh, every year about 1.2 million people suffered from illnesses, namely, lung cancer, cancers of the mouth and larynx, stroke and ischemic heart diseases, chronic obstructive pulmonary disease, pulmonary tuberculosis, and Buerger’s disease, that were directly attributable to tobacco consumption. The WHO study further estimated that annually 102,117 deaths in the population (16% of all deaths of people aged 30 years and over) were caused by these illnesses that were attributable in part to tobacco use. Of these, 57,583 cases were directly attributed to tobacco usage. The death and disability from illnesses caused by tobacco cost Bangladesh 1% of its annual Gross Domestic Product.

Now with 8.7 million more tobacco users in 2009, the incidence of illnesses and death from tobacco use, along with the consequent economic and social losses are expected to increase markedly. The evidence points clearly to the urgent need to increase tobacco taxes in order to reduce the affordability of cigarettes and bidis.

The affordability of cigarettes

According to the Statistical Yearbook of Bangladesh, Bangladesh Bureau of Statistics (BBS, annual issues), during 1995-2006, the nominal price of a pack of the most popular cigarette brand—Star—increased at an annual average rate of 2.9% while the annual average rate of inflation was 5.4%. Consequently, the real price of Star cigarettes fell at an annual rate of 2.5%, thus increasing the demand for cigarettes. At the same time, real per capita GDP increased by 3.5% per annum, raising the affordability and consumption of cigarettes further. We estimate that in 1990, 16.8% of per capita GDP was needed to purchase 100 packs of Star cigarettes. But by 2006, only 6.6% of per capita GDP was needed to purchase the same quantity. In other words, the affordability of cigarettes increased by a factor of 16.8/6.6 = 2.55. As a consequence, the aggregate consumption of cigarettes in Bangladesh doubled from 614 to 1250 million packs of 20 sticks of cigarettes (BBS, annual issues).


Smoke-free policies

Article 8 of the FCTC requires the adoption of effective measures to provide protection from exposure to tobacco smoke. In Bangladesh, smoking is not allowed in public places and public transportation, except at designated smoking areas.

The TCA declared health-care and educational facilities 100% smoke-free; however, there is currently only a partial ban on smoking in universities, government facilities, indoor offices, restaurants, pubs, and bars. These bans are not effective. In the WHO MPOWER (2008) report, Bangladesh received a score of 0 out of 10 in the implementation of smoke-free policies.10

Warning labels

Article 11 of the FCTC stipulates that Parties shall adopt and implement effective packaging and labelling measures.

As of September 1, 2006, The TCA required text health warnings on smoked tobacco products clearly stating that smoking causes death, stroke, heart disease, lung cancer, breathing or other health problems. These health warnings cover 30% of the front and back surfaces, and six different warnings are to be used in six-month rotation. Smokeless tobacco products are not covered by the law.

New FCTC Article 11 Guidelines adopted in 2008 recommend pictorial warnings on at least 50% of the package and call for key requirements for the content, position, and size of warnings. Health warning labels must also include rotating messages. Thus far, Bangladesh has not yet created regulations for warnings that would be consistent with the strong Article 11 Guidelines.

Light/mild product descriptions

Article 11 of the FCTC also restricts deceptive tobacco product labelling that “directly or indirectly creates the false impression that a particular product is less harmful than other tobacco products.” These may include terms such as 'low tar', 'light', ‘ultra-light’, 'smooth', 'white', or 'mild'. The current version of the TCA in Bangladesh does not require the removal of these descriptors from the labels of tobacco products and their packages.

Education, communication, training, and public awareness

Under Article 12, Parties must promote and strengthen public awareness of tobacco control issues through education and public awareness programs on the health risks of tobacco consumption and the benefits of cessation, and provide public access to information on the tobacco industry. The TCA currently does not include any provision for training or awareness programs for dissemination of such information as a government initiative. The non-governmental organizations, on the other hand, have historically played an active role in preventing tobacco use around the country through a wide range of awareness programs.
**Tobacco advertising, promotion, and sponsorship**

Article 13 of the FCTC requires Parties to implement effective measures against tobacco advertising, promotion, and sponsorship. Guidelines for Article 13 recommend a comprehensive ban on tobacco advertising, promotion, and sponsorship (or apply restrictions that are as comprehensive as possible). Included among the recommended measures are bans on: cross-border advertising, promotion, and sponsorship; display of tobacco products at points of sale; tobacco product vending machines; internet sales; and attractive packaging and product features.

Consistent with Article 13, the TCA prohibits tobacco advertising, promotion and sponsorship in national TV and radio, local magazines/newspapers, billboards/outdoor advertising, free distribution, non-tobacco products with tobacco brand names, or sponsored events. The advertising of tobacco products on electronic media, email, internet, or any other written or printed or spoken form, is also banned.

Furthermore, one important objective of the TCA was to explicitly prohibit the sponsorship of events, activities, or initiatives by the tobacco industry. As a result, consumption of tobacco products cannot be encouraged through charity, prizes, scholarships or sponsorships of sporting activities. On this yardstick, Bangladesh received a score of 5 out of 10 in the MPOWER (2008) report of WHO due to weak implementation of the ban.10

**Cessation and treatment**

Article 14 of the FCTC promotes the implementation of programs for smoking cessation, including programs for diagnosing, counselling, preventing, and treating tobacco dependence, as well as facilitating accessible and affordable treatments.

Bangladesh has community cessation services in some communities and there are a few private tobacco cessation centres. Nicotine Replacement Therapy (NRT) and other pharmaco-therapeutic medications are not available in the country; however, some health settings have counselling facilities.

**Illicit trade**

Although there are no published data on the percentage of tobacco consumption and consequent loss of tax revenue that can be attributed to smuggling, counterfeiting, or individual tax avoidance, one trade report11 suggests that smuggling is not as prevalent in Bangladesh as in the neighbouring countries. Part of the reason is that tobacco product prices (including taxes) have not increased in real terms over the past 20 years. Nonetheless, the government introduced a banderol system on cigarette packs in 2001 to deter smuggling activity.


11. ERC Statistics Intl plc (2005) "World Cigarettes".
TOBACCO USE AND QUITTING BEHAVIOUR

Smoking in Bangladesh is a study in contrasts. Although Bangladesh has the highest percentage of daily smokers among all ITC countries surveyed, Bangladeshi smokers also have the second-lowest average cigarettes per day consumption. Although the vast majority of Bangladeshi smokers have a very negative opinion of smoking overall and the great majority of them regret ever having started smoking, the ITC Bangladesh Wave 1 Survey findings suggest that these negative opinions about smoking, for the most part, have not translated into quitting. Only one-third of smokers in Bangladesh have tried to quit in the past, and only 10% have plans to quit in the next 6 months. These findings emphasize the need for strong public education campaigns and for strong warning labels to continue to highlight the great harms in smoking and to encourage smokers to quit. The findings also point to the need for the creation of broad, low-cost interventions to increase thoughts and motivation among smokers to quit.

Smoked tobacco consumption

Bangladesh has the highest percentage of daily cigarette smokers among 18 ITC countries surveyed — 98% are daily cigarette smokers. While having the highest percentage of daily smokers, Bangladeshi smokers smoke the second-lowest average number of cigarettes per day among ITC countries — 9.7 cigarettes per day.

Smokers who smoke bidis exclusively and dual smokers (smoke bidis and cigarettes) smoke on average 12.9 bidis per day.

Only 1% of Bangladeshi smokers reported that they currently smoke hookah.
Bangladeshi smokers’ opinions of smoking

Bangladeshi smokers have a very negative opinion about smoking. 95% of cigarette and bidi smokers have a ‘bad’ or ‘very bad’ opinion of smoking — the highest of 19 ITC countries. 92% of smokers ‘agree’ or ‘strongly agree’ that society disapproves of smoking.

Smokers almost unanimously (96%) ‘agree’ or ‘strongly agree’ that smoking is addictive. The majority of smokers also regret smoking — 88% of cigarette smokers and dual smokers ‘agree’ or ‘strongly agree’ that if they had to do it over again they would not have started smoking.

Bangladeshi smokers strongly support the government taking further action on tobacco control. 98% of smokers ‘agree’ that the government should do more to tackle the harm caused by smoking.

Perception of harm

67% of cigarette only smokers and 63% of dual smokers think that smoking bidis is more harmful to health than smoking cigarettes. This percentage is much lower among bidi-only smokers — 37% think that smoking bidis is more harmful to health than smoking cigarettes.

23% of cigarette, bidi, and dual smokers have used smokeless tobacco in the last 6 months. Of those who have used smokeless tobacco in the last 6 months, 89% use it daily. 91% of smokeless tobacco users think that smokeless tobacco is neither ‘good nor bad’. 96% of smokers think that smokeless tobacco is addictive. Almost one-third (30%) of smokers think that smokeless tobacco is less harmful than smoking cigarettes; one half (53%) think there is no difference in harm; and 17% think that cigarettes are less harmful than smokeless tobacco.

Quit intentions

Bangladeshi smokers have strong negative opinions about smoking. However, this has not translated into thoughts or actions to quitting. 70% of smokers ‘agree’ or ‘strongly agree’ that they enjoy smoking too much to give it up.

One third (36%) of smokers have ‘ever’ tried to quit smoking. Only 10% of cigarette smokers plan to quit within the next 6 months. This is even lower for bidi smokers — only 5% plan to quit within the next month or 6 months.

For those who are planning to quit within the next 6 months, the most common reasons selected for wanting to quit are personal health (96%), perceptions that Bangladesh society disapproves of smoking (89%), concern about effect of smoke on non-smokers (84%), and disapproval of smoking among close friends and family (75%). The least important reasons were free, or lower cost medication (5%) and smoking restrictions at work (23%). Price was mentioned by about half (55%) of smokers. This is low relative to other ITC countries.

Use of cessation assistance

12% of smokers had visited a doctor in the past 6 months. Of these smokers, 85% were given advice to quit, and of those given advice, 84% reported that the advice made them think about quitting.
Strong public disapproval of smoking in Bangladesh and negative opinions towards smoking among smokers themselves demonstrates that the foundation for higher rates of quitting exists; what is needed to translate this potential into action is the presence of interventions that will encourage and support smokers to quit. These would include effective public education campaigns about the benefits of quitting, graphic warning labels, found in many other ITC countries to be effective in educating smokers about the harms of smoking and increasing motivation to quit, and possibly the development of programs within health clinics to assist Bangladeshi smokers in quitting.
PROTECTION FROM EXPOSURE TO TOBACCO SMOKE

Article 8 of the WHO Framework Convention on Tobacco Control requires Parties to implement effective measures to protect the public from exposure to tobacco smoke. In 2005, under the Tobacco Control Act, Bangladesh implemented a ban on smoking on public transportation, hospitals, and schools. Designated smoking areas are permitted in restaurants, pubs, and bars; indoor offices; universities; and government facilities. The ITC Bangladesh Wave 1 Survey measures smokers’ and non-smokers’ awareness of current rules about smoking in various public venues, as well as smoking in the home and levels of support for policies to ban or restrict smoking. The ITC Survey asks smokers and non-smokers whether they observed smoking during their last visit to each key public venue, which is a primary measure of the effectiveness of the smoke-free law. (Because the ITC Survey respondents are a representative sample of smokers and non-smokers in Bangladesh, their reports of whether there was smoking in their last visit to a restaurant constitutes a representative sample of restaurants throughout the country.)

The ITC Bangladesh Wave 1 Survey finds that the Tobacco Control Act has been ineffective in protecting the Bangladeshi people from exposure to tobacco smoke, as required by the FCTC. There is strong support for existing complete smoking bans on public transportation and in hospitals, and schools. However, the majority of smokers and non-smokers are supportive of even stronger and more comprehensive smoking restrictions in public places, including strong support for 100% smoke-free restaurants and workplaces.

Smoking on public transportation

The ITC Bangladesh Wave 1 Survey shows that the majority of smokers and non-smokers are aware of the current smoking ban on any mode of public transportation — 90% of smokers and 87% of non-smokers indicated that smoking is not allowed at all on buses, ferries, launches, or trains.

Despite high awareness of the ban, however, almost half of smokers (49%) and non-smokers (46%) who rode public transportation in the last 6 months observed people smoking during their last trip.

An overwhelming majority of smokers and non-smokers support the complete ban on smoking on public transportation. 99% of smokers and non-smokers agree that there should be a complete ban on smoking on public transportation.
Smoking in workplaces

Complete smoking bans in indoor workplaces exist in Bangladesh, but they are not universal. Bangladesh is among the lowest third of ITC countries surveyed that have complete workplace smoking bans. Among those who work outside the home, 36% of smokers and 62% of non-smokers indicated that smoking is not allowed in any indoor areas at their workplace. 56% of smokers and 39% of non-smokers indicated that there are no rules or restrictions on smoking in their workplace.

More than half of Bangladesh’s workforce who work indoors continue to be exposed to secondhand smoke - 62% of smokers and 51% of non-smokers observed smoking indoors in their workplace in the last month.

Public support for a full ban on smoking in the workplace is high. 78% of smokers and 90% of non-smokers think that smoking should be completely banned in indoor workplaces.

Smoking in restaurants

Bangladesh stands poorly in terms of having strong policies on smoking in restaurants. 69% of smokers and 51% of non-smokers said that there are no rules or restrictions on smoking in restaurants. Only 13% of smokers and 29% of smokers indicated that there is a complete ban on smoking inside restaurants.

Among those who visited a restaurant in the last 6 months, 93% of smokers and 78% of non-smokers noticed people smoking during their last visit. In contrast, the prevalence of noticing smoking is very low in other ITC countries where smoking is banned in restaurants, such as Ireland (3%), France (2-3%), and Mexico City (9%).

Despite this very high prevalence of smoking, the Bangladeshi people strongly support completely smoke-free restaurants. 68% of smokers and 86% of non-smokers support a complete ban on smoking in restaurants.

Smoking in the home

Complete smoking bans in the home are surprisingly common in Bangladesh. 41% of smokers and 59% of non-smokers have completely banned smoking in their own homes. An additional 42% of smokers and 31% of non-smokers have no rules or restrictions on smoking in their homes. 17% of smokers and 10% of non-smokers only allow smoking inside some rooms.

Support for smoking bans in other public venues

Smokers and non-smokers almost unanimously supported complete smoking bans in hospitals (98% of smokers and non-smokers) and schools, colleges, and universities (95% of smokers and 95% of non-smokers).
Bangladesh lags far behind other countries in efforts to reduce exposure to tobacco smoke. The ITC Bangladesh Wave 1 Survey indicates that most Bangladeshi smokers and non-smokers support completely smoke-free workplaces and restaurants. Strong guidelines adopted for Article 8 require all indoor workplaces and public places to be completely smoke-free. Policymakers must move forward to address the shortcomings of the Tobacco Control Act and adopt a comprehensive smoking ban in workplaces and public places such as restaurants.
PRODUCT LABELING

Since 2006, the TCA has mandated text-based warnings on 30% of the front and back of all tobacco packs in Bangladesh. There are six different health warnings that are rotated over six months, and the warnings state that smoking causes death, stroke, heart disease, lung cancer, breathing or other health problems. The size and text-only warnings represent the minimal standard of Article 11 (Tobacco Warning Labels) of the FCTC. Stronger Article 11 Guidelines were adopted in November 2008 by the Parties; these recommend the use of graphic health warnings covering at least 50% of the front and the back of the pack. To date, the Bangladesh warnings have not been upgraded to meet the Article 11 Guidelines. The findings from the ITC Bangladesh Wave 1 Survey demonstrate that there is a need to enhance the warning labels in Bangladesh.

Awareness of health warnings

Bangladeshi smokers are aware of the text-based health warnings on their tobacco packs. More than half of cigarette and dual-use smokers (58%) noticed the health warnings ‘often’ in the past month. This places Bangladesh 4th out of 18 ITC countries.

Impact of health warnings

Although Bangladeshi smokers reported a relatively high level of awareness of the text-only health warnings, less than one-quarter (22%) stated that the labels made them think about the health risks of smoking ‘a lot’.

A minority of Bangladeshi smokers (17%) stated that the text-based warnings made them want to quit smoking ‘a lot’. In comparison, smokers in the slum areas and in the tribal areas reported that the effectiveness of the warnings for making them think of quitting ‘a lot’ was slightly higher, at 21% and 30%, respectively.

These findings demonstrate that the effectiveness of the text-only health warnings in Bangladesh is less than optimal, although the effectiveness is higher in tribal areas.
Support for enhanced health warnings

The majority of Bangladeshi smokers (62%) want more information about the health risks of tobacco use on cigarette packages – the second highest level of support among all the ITC countries. Smokers from the slum areas, in which the prevalence of smoking is higher compared to both the national and the tribal populations, were overwhelmingly supportive of adding more information on the health risks of smoking to cigarette packages, where 77% of smokers indicated this. More than three-quarters (77%) of smokers ‘agree’ or ‘strongly agree’ that tobacco companies should be required to sell cigarettes and bidis in plain packaging.

The findings from the ITC Bangladesh Wave 1 Survey demonstrate the strong need to enhance warning labels. Bangladesh is well-positioned to benefit from the introduction of pictorial warning labels on cigarette packs. Pictorial warnings may be very effective in Bangladesh because smokers already demonstrate a relatively high level of awareness of the text-only labels, and so the pictorial labels should be very noticeable. In addition, pictorial warnings are effective in populations that have a higher proportion of people with low literacy or illiteracy. ITC evaluation studies of pictorial health warnings in Canada, Thailand, Mexico, Australia, New Zealand, and Brazil have shown that the introduction of larger warning labels with graphic images is an effective means to educate smokers about the harms of smoking, which leads to thoughts and action toward quitting.

Examples of pictorial health warnings are available from the Tobacco Labelling Resource Centre at:

http://www.tobaccolabels.ca/labelima


Bangladesh Needs Pictorial Warnings

Warning labels on cigarette packs have great potential as a health risk communication intervention: a smoker who smokes 10 cigarettes per day (the average for Bangladeshi smokers) will potentially be exposed to 3500 viewings of the warnings in a year. Well-designed pictorial warnings communicate the harms of tobacco use in a vivid and memorable way that is more powerful than text-only warnings. Over 30 countries have either introduced, or are in the process of introducing, pictorial warnings. ITC evaluation studies demonstrate that pictorial warnings are more salient, get smokers to think about the health risks of smoking, and motivate smokers to quit. If Bangladesh were to implement larger pictorial health warnings, the impact on smokers could be profound.

ITC Project evidence on the effectiveness of pictorial labels is available in this report at http://www.itcproject.org
Tobacco Price and Taxation

The ITC Bangladesh Survey collected extensive information on purchasing and price of tobacco products. The survey asked smokers questions to determine the extent to which the price of cigarettes and bidis influences brand selection and influences thoughts about quitting. The survey also asked smokers about their perceptions of the costs of smoking.

Price as a reason to quit

Although there has not been a major change in taxation policies in Bangladesh, the ITC Bangladesh Wave 1 Survey points to the importance of price in tobacco use. More than half (55%) of smokers (cigarette smokers and ‘dual users’ – those who smoke both cigarettes and bidis) agreed that the price of cigarettes is a reason to think about quitting, only the 7th most common reason out of 12 reasons for quitting. In addition, the 55% figure for Bangladesh ranks 15th out of 19 ITC countries, indicating weak connections between price and quitting in Bangladesh. This suggests that the price needs to be increased through taxation to provide greater motivation and urgency for quitting among smokers.

Concerns about money spent on cigarettes and bidis

The majority of smokers are concerned about the money spent on cigarettes and bidis. 92% of cigarette only smokers and 87% of dual smokers ‘agree’ or ‘strongly agree’ that they spend too much on cigarettes. 93% of bidi only smokers ‘agree’ or ‘strongly agree’ that they spend too much money on bidis.

Affordability of cigarettes

The considerably lower tax rate on bidis impedes government efforts to reduce smoking rates as cigarette smokers can simply substitute the more expensive forms of smoked tobacco with cheaper forms.

The ITC Bangladesh Wave 1 Survey found that only 5% of smokers agreed that in the last 6 months there was a time when the money they spent on cigarettes resulted in not having enough money for household essentials like food. This finding suggests that cigarettes continue to be affordable and that there is ample room to increase tobacco taxes.

Since 1990, cigarettes in Bangladesh have become 2.5 times more affordable. Increasing tobacco taxes is universally recognized as the most effective policy instrument to reduce tobacco consumption (MPOWER 2008).13, 14


14. A complete review of the theories and empirical evidence in support of this claim is in progress in "Tax, Price and Tobacco Use Among Young People" and "Tax, Price and Tobacco Use Among the Poor," Chapters VI-VII, In Effectiveness of Tax and Price Policies for Tobacco Control, IARC Handbooks of Tobacco Control, Volume 14, International Agency for Research on Cancer, Lyon, France (forthcoming).]
Brand choice among cigarette smokers

More than half of the cigarette smokers (59%) chose their brand of cigarettes based on price, placing Bangladesh in the highest third of ITC countries who select brand based on price. 13% of cigarette smokers purchase cigarettes in the lowest price tier, a majority (72%) purchase cigarettes in the second lowest tier, 11% in the third lowest tier, and 4% in the highest tier. The majority of smokers (92%) did not make any effort in last 6 months to buy cigarettes that are less expensive than they could get from local stores.

Evidence of the urgent need to raise tobacco taxes

The World Bank recommends that tobacco taxes be set at a minimum of two-thirds (66%) of the sale price to effectively reduce tobacco use prevalence and consumption. Analysis of the ITC Bangladesh Wave 1 Survey data on purchasing and price paid for cigarettes and bidis has found that tobacco taxes are far below this minimum level. For cigarettes, it is estimated that total tax accounts for only 42% of the sale price. For bidis, it is even lower at 28% of the sale price. To achieve the World Bank recommended tax rate, the supplementary duty (SD) needs to be raised by up to 200% over 2009 rates for cigarettes and by 650% for bidis. This means increasing the sale price of cigarettes by 67% (to an average price of 30.22 Taka per pack) and bidis by 108% (to 12.50 Taka per pack).

It is estimated that even a 50% increase in supplementary duty on cigarettes and on pack of 25 sticks of bidis — a 16.6% increase in sale price of cigarettes and a 8.3% increase in sale price of bidis — would lead to:

- 856,000 fewer cigarette smokers
- 456,000 fewer bidi smokers
- 466 million fewer packs of 10 cigarettes smoked
- 127 million fewer packs of 25 bidis smoked

To further reduce the high prevalence of smoking-related diseases and mortality resulting from increasing levels of tobacco demand and consumption, Bangladesh must raise the tax on all forms of tobacco. This can be done gradually over an extended period of time. In addition, the large tax differential that exists between cigarettes and bidis in Bangladesh is stimulating the dual usage of cigarettes and bidis and switching between these two products by smokers, a habit that undercuts the likelihood of quitting or lowering smoking intensity. Harmonization of taxes across different tobacco products (that is, to eliminate differences in price between cigarettes and bidis) can address this unintended effect to some extent.
The myths of revenue loss and unfair tax burden on the poor

Opponents of tobacco tax increases argue that such increases will result in a significant loss of government revenue and impose an unfairly high tax burden on the poor. Economic analyses of the ITC Bangladesh Wave 1 Survey results show that the government does not need to fear the loss of revenue until the tax rate is increased by a significant amount and tobacco consumption falls to a sufficiently low level. The ITC Bangladesh findings confirm a universal finding in economic studies of tobacco use that the poor are more price responsive than the rich. A tax increase is more likely to reduce their tobacco consumption, resulting in larger health gains and therefore lower health and economic disparity in society. In this manner, the limited resources of the poor will be diverted from addictive to productive uses, improving the socio-economic welfare of the poor.

In other words: significant increases in tobacco-specific taxes will BOTH increase government revenue and reduce the consumption of tobacco as well as the number of people who use tobacco.

A Tobacco Taxation Strategy for Bangladesh

Based on an economic analysis of the ITC Bangladesh Survey data\textsuperscript{16}, the following tobacco taxation strategy is recommended:

1. In order to maximize revenue from tobacco taxation, the government should increase supplementary duty on cigarettes by 350% and on bidis by 500% in the long run. These increases would more than double the cigarette price and nearly double the bidi price. While this increase seems drastic, it would barely offset the more than twofold increase in the affordability of cigarettes and bidis over the past two decades.

2. This increase in tax rates should be implemented in phases to allow reasonable time for concerned consumers and producers to adjust for the increase in price. One reasonable strategy for implementation would be to index tobacco tax to the inflation and economic growth so that the real price increases by at least 10% every year above the inflation rate. This would keep pace with both the growth in income and the purchasing power of people. We estimate that this incremental strategy would take about 10 years for the sales price to come up to the target price levels.

3. During the same period of time, the government should make the transition from ad valorem to specific excise taxation of tobacco. The specific tax should ultimately be the 2020 price equivalent of today’s price of 20 Taka on a pack of 10 cigarette sticks and about 6 Taka on a pack of 25 bidi sticks. To implement these taxes over a 10-year period would require an increase in tax of 2 Taka per pack of cigarettes and 0.60 Taka per pack of bidis every year.

4. By implementing this multifaceted long-term strategy of (a) increasing the tobacco-specific taxes to reduce affordability, (b) moving from ad valorem to specific taxation, and (c) reducing (and ideally eliminating) the differential tax rates between cigarettes and bidis, the resulting tobacco taxation system will become more efficient at generating higher levels of revenue at the same time as it will reduce overall tobacco consumption and prevalence.

TOBACCO ADVERTISING, PROMOTION, AND SPONSORSHIP

Article 13 of the FCTC requires Parties to implement effective measures against tobacco advertising, promotion, and sponsorship. The Bangladesh Tobacco Control Act (TCA) 2005 prohibits tobacco advertising on national and private television channels and radio, local magazines/newspapers, and billboards/outdoor advertising. Free distribution of tobacco products and non-tobacco products with tobacco brand names is banned, as well as tobacco industry sponsored events.

Tobacco Advertising

The ITC Bangladesh Wave 1 Survey findings indicate that restrictions on advertising in the TCA have been effective in limiting advertising in some venues. Less than 10% of smokers reported noticing cigarettes or bidis being advertised on televisions (9%), billboards (8%), on or around street vendors (6%), in cinema halls (4%), on radio (3%), or in newspapers and magazines (3%). However, half of smokers (51%) noticed advertising on posters and almost half of smokers (48%) noticed advertising on shop windows or inside shops where cigarettes or bidis are purchased. More than one-third of smokers noticed advertising in restaurants or tea stalls (35%).

Tobacco Promotion and Sponsorship

Smokers noticed the following forms of tobacco promotion relatively infrequently: sponsorship of a sport or sporting event (1%), sponsorship of music, theatre, art, or fashion events (1%), competitions (2%), special price offers (3%), free samples (10%), brands or logos clothing or other items (10%), and free gifts or special discount offers (13%). Tobacco company sponsorship of election campaigns was the most commonly identified type of tobacco promotion – 44% of smokers noticed this type of promotion.

One-quarter of smokers (24%) have ‘often’ seen people smoking cigarettes or bidis in the entertainment media in the last 6 months.

The ITC Bangladesh Wave 1 Survey findings suggest that restrictions on advertising, promotion, and sponsorship have been effective in restricting the public’s exposure to tobacco on television, radio, billboards, and in newspapers and magazines. However, the TCA needs to be strengthened to curb the high prevalence of advertising on posters, at point of sale, and in other public places including restaurants and tea stalls. Tobacco company sponsorship of election campaigns also needs to be controlled through tighter regulations.
Knowledge of the harms of smoking

The ITC Survey measures tobacco users’ awareness of a range of health effects associated with smoking cigarettes and smoking bidis. In general, smokers demonstrated high levels of awareness of smoking-related health effects. Smokers correctly believed that smoking causes health effects such as tuberculosis (98%), lung cancer in smokers (93%), stroke (92%), asthma in children (89%), lung cancer in non-smokers (84%), and impotence (79%). There were no consistent differences between cigarette smokers and smokers who smoke both bidis and cigarettes in terms of their knowledge of the health effects associated with smoking cigarettes.

A comparison between cigarette smokers’ and bidi smokers’ knowledge shows that a higher percentage of cigarette smokers were aware that the product they smoke (i.e. cigarettes for cigarette smokers and bidis for bidi smokers) causes lung cancer (94% vs. 89%), mouth cancer (92% vs. 85%), asthma (90% vs. 81%), stroke (93% vs. 73%), premature aging (82% vs. 72%), coronary heart disease (86% vs. 72%), bronchitis (86% vs. 68%) and impotence (80% vs. 67%). Previous research suggests that these differences in knowledge may be associated with differences in socio-economic status (SES), as bidi smokers may have lower levels of education compared to cigarette smokers.

Beliefs about light/mild cigarettes

The majority of smokers (cigarettes only and dual users) in Bangladesh are misinformed about the use of terms ‘light’ and ‘mild’ on cigarette packs. More than half (58%) of smokers think that some cigarettes are less harmful (when in fact there is no evidence that some cigarettes—such as ‘light’ cigarettes—are indeed less harmful). Almost three-quarters (74%) of smokers ‘agree’ or ‘strongly agree’ that ‘light’ cigarettes are less harmful than ‘regular strength’ cigarettes. 82% believe that light cigarettes are smoother on your throat and chest than regular strength cigarettes. 86% of smokers believe that the term ‘smooth’ on cigarette packs means that the cigarettes are light, mild, or low in harmful chemicals. 79% believe that the term ‘ultra’ means that cigarettes are light, mild, or low in harmful chemicals. All of these beliefs are untrue. The high level of misperceptions indicates a strong need for effective educational campaigns (e.g., mass media) to eliminate them.
Exposure to anti-smoking messages

The ITC Bangladesh Wave 1 Survey results indicate that the most common sources of information on the dangers of smoking cigarettes or encouraging quitting were: television (78%), cigarette packs (69%), and posters (63%). The workplace was the least common source of information. Radio and newspapers or magazines were only identified as sources of information for approximately one-third of smokers (37% and 33% respectively). For one-third (32%) of smokers this advertising has not made smoking cigarettes less socially acceptable; however, 68% of smokers said that it made smoking ‘a little’ or ‘a lot’ less socially acceptable. Two-thirds (66%) of smokers reported that this advertising did not make them any more (or less) likely to quit.

Perceptions of the tobacco industry

An overwhelming majority of smokers are in favour of stronger regulation of the tobacco industry. 97% of smokers ‘agree’ or ‘strongly agree’ that the tobacco industry should be more tightly regulated.

More than three-quarters (77%) of smokers ‘agree’ or ‘strongly agree’ that tobacco companies should be required to sell cigarettes and bidis in plain packaging.

These findings suggest that smokers are aware of anti-smoking information or messages; however, the effectiveness of this information is weak. Given the low percentage of Bangladeshi smokers who have plans to quit smoking, it is important for public education programs to expand their objectives of increasing knowledge of the harms of smoking to also motivate smokers to quit and provide links to cessation programs and support to help smokers to take action to quit.

The widespread inaccurate perception among smokers that ‘light’ and ‘mild’ cigarettes are safer suggests the need for stronger warning label policies to ban the use of these terms. Strong support among Bangladeshi smokers for plain packaging and the importance of cigarette packs as a major source of information suggests that there is an urgent need to adopt the strong FCTC Guidelines for warning labels and implement large pictorial warnings as soon as possible.
“From the analysis of Wave 1 of the ITC Bangladesh Survey, we conclude that increasing tobacco taxes can significantly reduce consumption of cigarettes and bidis through reduced smoking prevalence as well as lower smoking intensity of continued smokers. We also show that raising tax rate can increase tobacco tax revenue to a large extent.”

Nigar Nargis
Ummul Hasanath Ruthbah
Geoffrey T. Fong
IMPLICATIONS FOR TOBACCO CONTROL

The ITC Bangladesh Wave 1 Survey provides powerful evidence of the high and increasing level of tobacco use. But it also provides equally powerful evidence of the readiness of the Bangladeshi tobacco users themselves for stronger action on tobacco control.

1. Increase tobacco-specific taxes and harmonize tax rates across different forms of tobacco so that tobacco users do not simply substitute their higher cost cigarettes for lower cost bidis.

In order to maximize revenue from tobacco taxation, the government should increase supplementary duty on cigarettes by 350% and on bidis by 500% in the long run. These increases would more than double the cigarette price and nearly double the bidi price. While this increase seems drastic, it would barely offset the more than twofold increase in the affordability of cigarettes and bidis over the past two decades.

The long-term target must be set while also moving from ad valorem to specific taxation and while also collapsing the differential tax rate between cigarettes and bidis. Moving to specific taxation would also reduce the price differential between cigarettes of different price tiers.

2. Create and implement larger health warnings with graphic images.

It is time for Bangladesh to meet the obligations of the recent strong FCTC Article 11 Guidelines on warning labels by introducing rotating, larger warnings (at least 50% of the top of the package on both front and back) including graphic images of the harms of tobacco use. This will help to motivate quitting and increase the effectiveness of the warnings among low-literate and non-literate Bangladeshi people.

3. Reaffirm and strengthen enforcement of the smoke-free law of the TCA.

ITC evaluation of smoke-free policies throughout the world have demonstrated that strong implementation and enforcement of smoke-free laws can be highly effective in reducing the public’s exposure to secondhand smoke. There is an urgent need to create comprehensive (100%) smoke-free public places, including workplaces and restaurants, with no exemptions and no provisions for ventilation which has been demonstrated to be ultimately ineffective.

4. Design and implement public education campaigns to highlight the harms of tobacco use and motivate quitting.

Strong public disapproval of smoking in Bangladesh and negative opinions towards smoking among smokers provide a strong foundation for higher rates of quitting. Effective public education campaigns to encourage and support smokers to quit can translate this potential into action.
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Further References

**ITC Bangladesh Survey**


**ITC Project Brochure and Warning Labels Report**


**Bangladesh Tobacco Data**


FCTC and Bangladesh Tobacco Control

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The International Tobacco Control Policy Evaluation Project

The ITC Project
Evaluating the Impact of FCTC Policies in...

20 countries • 50% of the world’s population
60% of the world’s smokers • 70% of the world’s tobacco users

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