

Bangladesh

Overview of

TOBACCO USE, TOBACCO CONTROL LEGISLATION, AND TAXATION

World Bank Group
Global Tobacco Control Program
Country Brief

Table of contents

Executive summary	3
Acknowledgments.....	5
Introduction	6
Tobacco control legislation in Bangladesh	6
Smoke-free places	6
Tobacco advertising, promotion, and sponsorship.....	6
Tobacco packaging and labeling.....	6
Cigarette contents and disclosures	6
Tobacco use.....	8
Tobacco use among adults.....	8
Tobacco use among adolescents and young people.....	12
Tobacco growing	13
Cigarette and bidi manufacturing	14
Cigarette production	14
Bidi production.....	14
Tobacco Products Consumption	15
Tobacco-related burden.....	16
Tobacco taxation.....	17
Cigarette taxation.....	17
Bidi taxation	18
Smokeless tobacco taxation.....	19
Electronic cigarettes.....	19
Additional tobacco taxes.....	19
Tobacco revenue	20
Tobacco prices.....	21
Comparison of cigarette prices and taxes in Bangladesh and neighboring countries	22
Comparison of prices of various tobacco products.....	23
Tobacco affordability	23
Cigarette smuggling.....	24
Discussion.....	24
Conclusions and recommendations.....	26
References.....	27

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Overview of Tobacco Use, Tobacco Control Legislation, and Taxation A Country Brief

Executive summary

Bangladesh was one of the first countries both to sign and to ratify the WHO Framework Convention on Tobacco Control. Prime Minister Sheikh Hasina in 2016 pledged the commitment of her government to work towards full compliance with the WHO FCTC and stated that overhauling tobacco taxation was high on the agenda as the most powerful measure for reducing tobacco use. Bangladesh aims to be tobacco-free by 2040.

Currently, Bangladesh is one of the largest tobacco-consuming countries in the world, where an estimated 46 million adults were users of a variety of smoked and/or smokeless tobacco products.

It was estimated that in 2010, about 25% of all deaths among men aged 25 to 69 years were attributable to smoking which results in an **average loss of 7 years of life per smoker.**

In 2010-2018, tobacco tax rates were annually increased. In 2011-2017, tobacco tax revenue grew by 104% in nominal terms or by 38% in real (inflation-adjusted) terms. Overall, tobacco consumption apparently declined over those years, but the rate of decline was small as with growing population incomes, cigarette affordability was not eventually reduced.

Some other factors also undermine the effectiveness of tax increases in reducing tobacco consumption in Bangladesh. **The structure of tobacco consumption gradually shifted from bidi and smokeless tobacco use to cigarette smoking.** However, the multi-tiered cigarette excise tax structure incentivized lower-price cigarette consumption. The share of low-priced cigarettes also increased as the tobacco industry's market expansion and pricing strategy keep low-price cigarettes affordable.

Despite the tobacco tax increases, **cigarette prices and excise tax rates are still much lower** in Bangladesh than in most neighboring countries and should be further increased.

Cigarette smuggling into Bangladesh is rather low, and smuggled cigarettes are typically more expensive in comparison to domestic low-priced cigarettes.

The following changes in tobacco tax rates and structure could both decrease tobacco consumption and increase tobacco tax revenue in the country:

- Cigarette ad valorem excise rates should be unified for all kinds of cigarettes at the level currently used for the premium cigarettes.
- Additional unified specific excise tax should be introduced for all kinds of cigarettes.
- Excise taxes for bidi and smokeless tobacco products should be increased high enough to minimize downward shifting to less expensive products.
- After the above changes are introduced, the unified specific rates for all kinds of tobacco products should be annually increased to make tobacco products less affordable over time in order to reduce tobacco consumption and the prevalence of tobacco use in line with FCTC provisions.

Tobacco control monitoring, including the collection of economic information on tobacco products sales, prices, and other indices, should be much improved in the country to support more accurate forecasts of the outcomes of the current and future tobacco control activities.

Acknowledgments

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Introduction

The Objective of the Country Brief

This country brief presents an overview of current tobacco control legislation, use, and taxation policy in Bangladesh. Data and information were collected from different sources. The brief is intended to serve as the context for complementary assessments on different aspects of tobacco taxation in the country to be shared with government teams and other national and international stakeholders.

Tobacco control legislation in Bangladesh

Bangladesh signed the FCTC on June 16, 2003, and ratified it less than one year later, on June 14, 2004, one of the first countries both to sign and to ratify the treaty. Thus, Bangladesh became a Party to the WHO Framework Convention on Tobacco Control on February 27, 2005.

Smoke-free places

Smoking is prohibited in the majority of indoor public places and workplaces, with a minor exception for restaurants with fewer than four walls. Certain public places may have outdoor designated smoking zones, but healthcare and educational facilities, among other public places, shall not have such zones. Smoking is prohibited in one-room means of public transport, but public transport with two or more rooms may have designated smoking zones. With respect to outdoor places, children's parks, fairs, and queues of passengers riding public vehicles are smoke-free. Sub-national jurisdictions may enact smoke-free laws that are more stringent than the national law [1].

Tobacco advertising, promotion, and sponsorship

Tobacco advertising is prohibited in all print and electronic media, including at the point-of-sale. Free and discounted tobacco products are also prohibited, but internet tobacco sales and tobacco products bearing non-tobacco brand names are allowed. Although sponsorship by the tobacco industry is not completely prohibited, publicity of the sponsorship is prohibited.

Tobacco packaging and labeling

The law requires pictorial health warnings to cover at least 50 percent of the main display areas of all tobacco products. One of nine warnings (seven warnings for smoked products and two warnings for smokeless products) must be rotated every three months. Misleading terms such as "light" and "low tar" are prohibited on tobacco packaging, but other misleading packaging (e.g., colors, numbers, and symbols) is not banned.

Cigarette contents and disclosures

The law does not grant the authority to regulate the contents of cigarettes and does not require that manufacturers and importers disclose to government authorities information on the emissions of their products. Moreover, it is uncertain whether manufacturers and importers must disclose the contents of their products.

The Smoking and Tobacco Usage Act (2005) restricted smoking in a variety of places; mandated health warning labels on tobacco product packaging with six rotating text warnings that take up 30% of the front and back of cigarette and bidi pack; most tobacco product advertising was banned, including on television and radio, in local print, and billboards, as well as tobacco company sponsorship of tournaments. Other regulatory documents included the National Strategic Plan of Action for Tobacco Control, 2007–2010, and the Smoking and Tobacco Product Usage Act which went into effect in May 2009 [2].

The National Assembly of Bangladesh passed the Tobacco Control Law Amendment Bill on 29 April 2013, closing many loopholes in the country's previous tobacco control law¹.

The most important measures in the amendment were as follows:

- Smokeless tobacco has been brought under the definition of "Tobacco".
- Restaurants and indoor workplaces have been included among the public places that should be completely smoke-free. Fines for non-compliance with smoke-free regulations were increased from 50 BDT (approximately USD 0.6) to 300 BDT (USD 3.9), in addition to the penalties for violations of other measures covered by the law.
- Advertisement at points-of-sale was banned and "corporate social responsibility" activities were restricted. Anti-tobacco messages were required to be shown if tobacco use is included in a movie.
- Sales of tobacco to and by minors was banned.
- Graphic health warnings are to be printed on tobacco packs that cover at least 50% of each principal surface area. Misleading descriptors such as "light", "mild" and "low tar" can no longer be used.
- The Ministry of Health was mandated by law to establish and operate the "National Tobacco Control Cell" (earlier, the Cell functioned under an administrative order).
- The Government was mandated to elaborate policies to discourage tobacco cultivation.

According to the Smoking and Tobacco Products Usage Act 2013 and Rules 2015, printing of graphic health warnings on all tobacco packets was made mandatory from March 19, 2016. According to Section 10 of the law, the graphic health warnings were supposed to be printed covering 50 percent upper part of the tobacco packets' surface but due the interference of the tobacco companies, the Ministry of Law, Justice and Parliamentary Affairs issued a temporary permission to print the graphic health warnings covering 50 percent lower part of tobacco packets, and the National Tobacco Control Cell issued a public circular about the issue on March 16, 2016. When the anti-tobacco activists lodged a writ petition with the High Court, the court declared the circular illegal after hearings. Subsequently, the National Tobacco Control Cell issued another public circular on July 04, 2017, prescribing to print graphic health warnings on 50 percent upper part of tobacco products packages mandatorily from September 19, 2017².

National Tobacco Control Cell was established in 2007³. It is the functional arm of the Ministry of Health and Family Welfare for tobacco control activities in Bangladesh. It has become the hub of national coordination, referral and support center for all tobacco control stakeholders, including NGOs. It is headed by the Additional Secretary (Public Health and WHO) of the Ministry of Health and Family Welfare and its day-to-day supervision is conducted by the Coordinator of National Tobacco Control Cell.

In 2015 [3], tobacco control policies in Bangladesh were assessed at 27 out of 37 points.

Prime Minister Sheikh Hasina, speaking in Dhaka in January 2016 at the South Asian Speakers' Summit on Achieving SDGs, told about her hopes to make Bangladesh a tobacco-free country within the next 25 years in order to achieve Sustainable Development Goals (SDGs) and to build a healthy nation⁴. The

¹ http://www.who.int/fctc/implementation/news/news_ban/en/

² <http://print.thefinancialexpress-bd.com/2017/07/31/179310>

³ <http://ntcc.gov.bd/front/information/1>

⁴ <http://bdnews24.com/bangladesh/2016/01/31/pm-hasina-hopes-to-make-bangladesh-tobacco-free-within-2040>

prime minister announced that ‘all sorts of steps’ would be taken to implement the tobacco control laws. She said the laws would be amended to make them consistent with the WHO Framework Convention on Tobacco Control (FCTC). The third SDG – to ensure healthy lives and promote well-being for all at all ages – will not be achieved without FCTC, she said. “*Tobacco is a hindrance to reach the other SDGs,*” Hasina said. Prime Minister Hasina pledged the commitment of her government to work towards full compliance with the WHO FCTC and stated that overhauling tobacco taxation was high on the agenda as the most powerful measure for reducing tobacco use. Bangladesh aims to be tobacco-free by 2040⁵.

Prime Minister Sheikh Hasina instructed the authorities to adopt a national tobacco control program with health development surcharge⁶. Following the instruction, the ministry of health framed the draft surcharge policy and sought the opinion of nine relevant ministries. With the recommendations, the Ministry of Health published the draft policy on its website on December 2016 for public opinion.

Tobacco use

Bangladesh is one of the largest tobacco-consuming countries in the world, where an estimated 46.3 million adults are users of a variety of smoked (e.g., cigarettes, bidis) and/or smokeless (e.g., betel quid with tobacco, gul, sada pata, khaini) tobacco products [4].

Tobacco use among adults

Smoking prevalence in Bangladesh has been assessed infrequently since the mid-1990s; while survey methods and samples varied across surveys and over time, these surveys suggest that smoking prevalence has been relatively flat (40-45%) among men for a long time, while declining somewhat among women (from 4% to 1.5%) [4].

Three annual urban and rural cross-sectional surveys, which were carried out between 2001 and 2003, found that the overall prevalence of smoking, chewing tobacco and gul usage constituted 20.5%, 20.6%, and 1.8%, respectively. Current smoking and gul usage were significantly higher in males (42.2% and 2.2%, respectively) than females (2.3% and 1.5%, respectively) while chewing tobacco was slightly more common in females (21.6%) than males (19.4%). No significant urban-rural difference was observed in smoking rate after adjusting for sociodemographic variables while chewing tobacco was 1.5 times more likely to occur in rural residents and gul usage was 3.6 times more likely to occur in urban residents. On average a smoker consumed 9.3 sticks a day with males and rural residents smoking more [5].

The national survey conducted in 2004 revealed that 41% of men and 1.8% of women (aged 15+) smoked tobacco products, while 14.8% of men and 24.4% of women used smokeless tobacco; 36.8% of adults (aged 15 years and older) used some form of tobacco⁷.

In 2006, Urban Health Survey [6] attracted attention to the socioeconomic disparities in tobacco use: with the overall smoking prevalence among men being 53.6%, the study found the significantly higher prevalence of smoking among men in slums (59.8%) than non-slums (46.4%). Respondents living in

⁵ <https://www.theunion.org/news-centre/news/prime-minister-of-bangladesh-highlights-progress-in-tobacco-control-at-south-asian-summit-on-sustainable-development-goals>

⁶ <http://print.thefinancialexpress-bd.com/2017/08/26/181651>

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http://apps.who.int/fctc/implementation/database/sites/implementation/files/documents/reports/Bangladesh_a_nnex2_prevalence.pdf

slums significantly more likely confirmed that they smoked cigarettes (53.3%) as compared to those living in non-slums (44.6%). A similar pattern was found for bidis (slums = 11.4% and non-slums = 3.2%).

Several waves of Demographics and Health Survey were conducted in Bangladesh but data on tobacco use was collected only in 2007 [7]. The report documents a high prevalence of tobacco use among Bangladeshi men: 60% were smokers of cigarettes and 20% consumed other forms of tobacco. Use of tobacco was more common among older men, those living in rural areas, men with no education, and men in the lowest wealth quintile. Regional variations were notable as well. Although rural men were more likely to smoke cigarettes than urban men, urban smokers tended to smoke more cigarettes per day than their rural counterparts. In this survey, women were not asked about tobacco use [8].

In 2009, the Global Adult Tobacco Survey Bangladesh (GATS Bangladesh) [9-14] found that 43.3% of adults (aged 15 years and older) used some form of tobacco, with a higher prevalence of tobacco use among males (58.0%) than females (28.7%). Estimates from GATS Bangladesh showed that 23.0% of adults used smoked tobacco and that 27.2% of adults used smokeless tobacco. Findings also showed that while the prevalence of smoked tobacco use was much higher among males (44.7%) than females (1.5%), the prevalence of smokeless tobacco use was similar among males (26.4%) and females (27.9%). Overall, the prevalence of both smoked and smokeless tobacco use was higher in rural areas than in urban areas.

The analysis of GATS data found some evidence of educational and wealth gradients regarding smokeless tobacco use [15].

Bangladesh was found to differ from other countries of the region with regard to the pattern of smokeless tobacco use which is more prevalent among women than among men [16]. In 2011, a survey specifically aimed to consider smokeless tobacco use among women [17] found that among adult rural women with a history of at least one pregnancy, the prevalence of 'current consumption', 'ever consumption but not current', and 'never consumption' was 25%, 44%, and 31%, respectively. Current consumption was associated with being over 25 years of age, a lower level of education, being an income earner, being Muslim, and being divorced, separated or widowed.

Nation-wide STEPS surveys covering people aged 25 years and older among both rural and urban population in Bangladesh, was conducted in 2002 [18], 2010 [19, 20], and 2013 [21]. Subnational surveys with STEPS methodology were also conducted, e.g. in 2005 [22].

Numerous MICS surveys were conducted in Bangladesh; however, questions on tobacco use were not included in them.

As regards age distribution of tobacco use [20], its prevalence was the lowest in the youngest age groups and increased with age. Among women, this was true regarding both smoking (which increased from 0.4% among those aged 25-34 to 6.2% among women aged 65+) and smokeless tobacco use (which increased from 16.4% among the youngest group to 62.9% among the oldest). Among men, smokeless tobacco use also steadily increased with age from 18.3% to 40.9%. However, the prevalence of smoking among men was above 50% in all age groups between 25 and 64 years old. Only those aged above 65 years had a prevalence of smoking below 40%. This pattern probably means that the population of Bangladesh is experiencing three tobacco use epidemics -- two traditional (bidi smoking and smokeless tobacco use which are more widespread among older population groups) and one new epidemic of manufactured cigarettes smoking which predominantly overwhelms young and middle-aged men.

Table 1. Tobacco use in Bangladesh among adults

Year	2002	2004	2009	2010	2013	2017
Survey (age groups)	STEPS (25-64)	Health cost study (15 +)	GATS (15+)	STEPS (25-64)	STEPS (25-64)	GATS [23, 24]
Current smoking prevalence	21,8	20,9	23,0	26,2	20,3	18.0
men		41	44,7	54,8	39,9	36.2
women		1,8	1,5	1,3	3,5	0.8
Smokeless tobacco use		19,7	27,2	31,7	28,7	20.6
men		14,8	26,4	29,4	28,5	16.2
women		24,4	27,9	33,6	29,5	24.8
Use of any tobacco products		36,8	43,3	51,0	45,8	35.3
men		48,6	58,0	70,0	58	46.0
women		25,4	28,7	34,4	32,0	25.2

MM Zaman from the WHO Bangladesh conducted an analysis of tobacco use trends bringing together all the national level studies conducted in 2004-2013⁸. Although the studies varied in age groups, his analysis was based on the subjects aged 25 years or older. He concluded that the prevalence of tobacco use slightly increased in 2004-2009, and then it declined in 2009-2013. This decline was primarily caused by the declining trend in smoking. However, the smokeless tobacco use was on the rise. Similar conclusion was made regarding Bangladeshi men [25].

However, a different pattern was described using the International Tobacco Control data. Over 90,000 individuals from over 30,000 households participated in two waves of the International Tobacco Control (ITC) Bangladesh Project conducted in 2009 and 2012. The estimates were obtained for the prevalence of use of all tobacco products by socioeconomic groups [26]. Between 2009 and 2012, overall tobacco use went down from 42.4% to 36.3%. The decline was more pronounced with respect to smokeless tobacco use than smoking. The prevalence of exclusive cigarette smoking went up from 7.2% to 10.6%; while smoking both cigarette and bidi went down from 4.6% to 1.8%.

In terms of the number of tobacco users, it appears that the market for exclusive cigarette use expanded significantly with 4.15 million additional smokers in three years' time. At the average consumption of 9.3 cigarettes used by a smoker per day (ITC Wave 3 Survey), this increase in the number of cigarette smokers means additional consumption of 4.7 billion cigarettes a year. On the other hand, the number of dual smokers and mixed tobacco users went down. The average daily consumption of cigarettes by dual smokers (who also smoke bidis) is lower than that for the exclusive cigarettes smokers (5.7 cigarettes per day), while the average daily consumption of cigarettes among mixed tobacco users (who also use smokeless tobacco) is the same (9.3 cigarettes per day). Thus, the decline in cigarette consumption from the reduction of 2.7 million dual smokers and 3 million mixed tobacco users is expected to be 5.34 billion pieces, which more than offsets the increase in cigarette consumption from the growth in exclusive cigarette use. In other words, the net cigarette consumption decreased over 2009–2012 [26].

⁸ <http://www.dhakacourier.com.bd/is-tobacco-use-declining-in-bangladesh/>

Exclusive bidi smoking remained stable at around 2%. However, the total prevalence of bidi smoking (including mixed use) decreased from 6.6% to 3.7%.

Exclusive smokeless tobacco use went down from 20.2% to 16.9%, and both smokeless tobacco use and smoking went down from 8.4% to 5.1%. This might mean that the trend has changed compared to the results of earlier conducted surveys which showed the upward change in smokeless tobacco use.

Recent release of GATS 2017 results showed a decline in most indicators of tobacco use among the adult population in Bangladesh [23, 24] (see Table 1).

In general, the prevalence of tobacco use is higher among men, older age groups, poorer people, slum dwellers, the tribal population, and the border area population, suggesting the greater burden of tobacco use among the disadvantaged groups.

The overall decline in the prevalence of tobacco use can, therefore, be viewed as a structural shift in the tobacco market in Bangladesh from cheap products such as bidi and smokeless tobacco to more expensive cigarettes, which is expectable with the growth in income and purchasing power of the general population.

Tobacco use among adolescents and young people

Global Youth Tobacco Survey (GYTS) was conducted in Bangladesh in 2004 [27] in Dhaka; in 2007 [13] and in 2013 [28], surveys were conducted at the national level. While the use of manufactured cigarettes was rather low among adolescents and especially girls, many more of them reported using other tobacco products, and this rate among boys increased significantly between 2004 and 2007 (Table 2).

Table 2. Tobacco use among adolescents

		2004 [27]	2007 [29]	2013 [28]
Current smokers of cigarettes (%)	Total	1.8 (1.2 - 2.8)	3.0 (1.6 - 5.4)	2.1 (0.9–4.9)
	Boys	2.3 (1.4 - 3.9)	4.6 (2.8 - 7.5)	3.4 (1.5–7.1)
	Girls	0.0	1.1 (0.4 - 2.9)	0.0
Current users of other tobacco products (%)	Total	4.0 (3.1 - 5.2)	6.5 (4.9 - 8.6)	
	Boys	3.6 (2.5 - 5.0)	7.3 (5.2 - 10.1)*	
	Girls	4.7 (3.4 - 6.4)	4.7 (2.8 - 7.8)	

Several waves of Global Health Professions Students Survey (GHPSS) as another part of GTSS (see Table 3) were conducted in Bangladesh [29]. While groups surveyed in separate years were not the same, the results allow concluding that smoking of manufactured cigarettes is much higher among male students and constitutes 35-50%. Among female students, the prevalence of smoking is much lower than among men and differs dramatically between various groups from less than 1% among nursing female students in 2008 to about 10% among dental and pharmacy female students in 2009. While dental female students showed a significant increase in current cigarette smoking between 2005 and 2009 from 3% to 8%, other specialties were either surveyed just once or did not reveal significant changes in the prevalence of smoking.

With regard to other tobacco products, GHPSS gives quite a mosaic picture which probably reflects different levels of tobacco use in various socio-demographic groups of Bangladesh society. For some specialties, the tobacco use does not differ between men and women, for others (e.g. nursing students), many more male students use 'other tobacco' than female students. For some groups (dental students),

the prevalence increased dramatically over time while it did not change in other groups (medical students).

Table 3. Prevalence of cigarette smoking and other tobacco use among health professions students in Bangladesh

	Indicator	Specialty	2005	2006	2008	2009
Males	Currently Smoked Cigarettes	Dental	46.7 (39.0 - 54.7)			41.0 (37.7 - 44.4)
		Medical		46.5 (37.6 - 55.6)		37.3 (21.6 - 56.3)
		Nursing			49.5 (45.6 - 53.5)	
		Pharmacy				36.2 (28.1 - 45.2)
	Currently Used Other Tobacco Products	Dental	7.8 (4.6 - 13.1)			17.9 (15.6 - 20.5)
		Medical		13.3 (3.7 - 38.2)		13.1 (8.5 - 19.6)
		Nursing			26.4 (23.1 - 29.9)	
		Pharmacy				21.1 (11.9 - 34.8)
Females	Currently Smoked Cigarettes	Dental	3.3 (1.6 - 6.7)			8.2 (6.9 - 9.8)*
		Medical		4.4 (1.2 - 14.1)		1.5 (0.5 - 5.0)
		Nursing			0.3 (0.2 - 0.5)	
		Pharmacy				9.8 (5.4 - 17.2)
	Currently Used Other Tobacco Products	Dental	0.9 (0.2 - 3.8)			17.8 (15.9 - 19.9)
		Medical		9.9 (4.6 - 20.0)		7.0 (3.2 - 14.8)
		Nursing			6.5 (6.0 - 7.1)	
		Pharmacy				13.9 (7.3 - 24.9)

Tobacco growing

The acreage devoted to tobacco growing in Bangladesh has been falling steadily for most of the past three decades, before rising sharply in 2010. According to the Statistical Yearbooks⁹, in 2000-2009, tobacco acreage area was rather stable (about 75,000 hectares) before rising in 2010. In 2011-2014, the area was around 120,000 hectares, but then decreased to 105,000 hectares in 2017-2018. Tobacco leaf production increased from about 40,000 tons in 2000-2009 to about 80-90 thousand tons in 2011-2018.

While widely grown, tobacco is a relatively minor crop in overall agriculture in Bangladesh. In 2010, the acreage devoted to tobacco growing accounted for only 0.25% of acreage for all crop production and, in

⁹ <http://www.bbs.gov.bd/site/page/29855dc1-f2b4-4dc0-9073-f692361112da/Statistical-Yearbook>

2009, the monetary value of the tobacco grown was only 0.22% of the value of all agricultural production.

Over recent years, however, tobacco leaf exports have grown much more rapidly, the result of a 10% incentive on exports provided by the government as part of an export diversification program begun in 2003. Much of the recent rise in the quantity of tobacco grown in Bangladesh is accounted for by these increased exports, with the share of exported tobacco rising from about 2.5% in 2000 to nearly 34% in 2009. In 2008, the export incentive was eliminated. In the 2010/11 budget, the government imposed a 10% duty on tobacco leaf exports in an effort to discourage tobacco growing. In 2017, the government imposed 25% export duty on tobacco aiming to discourage their production and consumption as the items are injurious to health¹⁰; however, in 2018 this export duty was reduced to 0%¹¹.

The Bangladesh Bureau of Statistics estimated that in 2005/06, 5,893 persons were employed in cigarette manufacturing and 115,500 persons were employed in tobacco growing, about 0.3% of the agricultural labor force. While the recent rise in tobacco growing in Bangladesh was likely to have increased the number of tobacco farmers in the country, the overall share of agricultural employment in tobacco growing is likely to be less than 0.5%.

Cigarette and bidi manufacturing

Cigarette manufacturing is highly concentrated in Bangladesh, while bidi manufacturing is much more fragmented.

Cigarette production

Cigarette markets are dominated by two companies—British American Tobacco Bangladesh (BATB) and the domestic Dhaka Tobacco Industries (DTI), a part of the Akij Group. BATB brands share in retail cigarette volume increased from 44% in 2013 to 62% in 2017 [30]. DTI's share of the cigarette market was around 21-24% over recent years. There are several other smaller domestic cigarette companies operating in Bangladesh. Together, in 2017, they accounted for 17% of the Bangladeshi cigarette market. Imports account for less than 1% of cigarette consumption in Bangladesh. Similarly, cigarette exports are minimal, accounting for less than 1% of production in most years.

Derby (BATB) was the most popular cigarette brand in 2017 with market share 28% [30]. It is followed by Pilot (BATB), Navy (DTI), Hollywood (BATB), Star (BATB) and Sheikh (DTI). Together, the top six brands accounted for over 68% of cigarette consumption in 2017. Premium brand cigarettes are typically sold in packs of 20, while discount brands are often sold in 10-cigarette packs so as to keep pack prices more affordable.

Bidi production

Bidi production is much more fragmented than cigarette manufacturing. The top four firms account for a little less than 50% of the market, and, according to the 2001/03 Economic Census, there were a total of 9,624 bidi manufacturers, with over 96% of these being household-based.

The 2001/03 Economic Census estimated that 45,272 people were employed in bidi manufacturing. About two-thirds of employment in bidi manufacturing was in the formal sector and one-third was related to household-based establishments. Women are more likely to be employed in producing bidis in the formal sector, and about 65% of those employed in household-based bidi manufacturing are

¹⁰ <http://www.dhakatribune.com/business/economy/2017/06/01/govt-impose-surchage-tobacco/>

¹¹ http://nbr.gov.bd/uploads/budget/Speech_EN_18_19.pdf

women. Wages for bidi workers are very low, most bidi workers live in poverty, and many children are also involved as unpaid assistants in household bidi production [31].

A recent study conducted by the Tobacco Industry Watch BD team and widely covered by the media^{12 13} found mismatches in numbers of bidi factories and workers in Bangladesh. According to the study, there were 117 bidi factories in Bangladesh, employing around 65,000 workers who produced 48.65 billion sticks annually. Some 60 to 65 percent of the bidi workers are children aged between four and 14 years, although child labor is banned in the country by law. Most of the children were malnourished (their actual age could not be known) and low paid, and could not attend school regularly. Working in the bidi factories stands fourth among the government-listed 38 hazardous jobs prohibited for children.

Tobacco Products Consumption

Although the government has not banned cigarette imports, it imposes high taxes on imported cigarettes [32]. Tobacco imports in all forms are heavily taxed, but the tax rates are particularly high for imported cigarettes, ranging from 220 percent to 476 percent. Such high import taxes effectively function as an import ban on foreign cigarettes. So cigarette consumption is almost equal to cigarette production.

Barkat et al [4] reported in 2012 that in 1997-2010, cigarette consumption rose by over 40%, from 50.9 billion cigarettes to almost 71.4 billion cigarettes. Bidi consumption was estimated to be rising more rapidly over time, from 43 billion bidis in 1990 to over 81 billion in 2010.

The country FCTC reports informed that 80 billion cigarettes and 50 billion bidis were produced in 2012¹⁴, whereas in 2014, the production decreased to 71 billion cigarettes and 43 billion bidis¹⁵.

Data on cigarette and bidi production in Bangladesh in 2007-2017 are presented in Table 4 [32]. The data demonstrate that in 2007-2012, cigarette production increased more than 3-fold: from 23.5 billion to 82.1 billion cigarettes, slightly declined in 2012-2013 FY, but then average annual production exceeded 80 billion cigarettes. Bidi production also substantially increased in 2007-2012: from 35.3 billion to 72.8 billion, but then decreased to about 45 billion sticks a year.

Table 4. Cigarette and bidi production, billion sticks

Financial Year	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Premium cigarettes	2,9	3,3	4,1	4,4	5,2	4,2	3,8	4,1	4,0	4,4
High cigarettes	7,5	6,8	9,2	7,0	8,1	8,1	8,8	8,0	4,6	4,5
Medium cigarettes	11,7	18,8	19,2	19,9	19,4	14,6	16,8	12,5	9,4	8,8
Low cigarettes	1,4	13,7	33,6	41,5	49,4	39,7	50,3	58,1	65,9	66,8
Total Cigarette	23,5	42,6	66,1	72,8	82,1	66,6	79,7	82,7	83,9	84,5
Bidi	35,3	46,3	63,4	67,2	72,8	44,4	46,8	44,5	43,2	43,5

¹² <http://print.thefinancialexpress-bd.com/2017/06/15/175424>

¹³ <http://www.observerbd.com/details.php?id=80092>

¹⁴ http://apps.who.int/fctc/implementation/database/sites/implementation/files/documents/reports/bangladesh_2012_report.pdf

¹⁵ http://apps.who.int/fctc/implementation/database/sites/implementation/files/documents/reports/bangladesh_2014_report.pdf

Total cigarettes and Bidi	58,8	89,0	129,4	140,0	154,9	111,0	126,5	127,2	127,0	128,0
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Source: National Board of Revenue

Euromonitor International reports that cigarette sales in Bangladesh increased from 72.9 billion sticks in 2011 to 88.9 billion sticks in 2017 [30]. Over the same period of time, smokeless tobacco sales decreased from 46.5 tons to 42.6 tons.

However, according to UN database¹⁶, in 2008-2010, annual cigarette production in Bangladesh was rather stable – about 24 billion cigarettes each year. Statistical Yearbook¹⁷ also reported that in 2004-2011, annual availability for consumption was about 24 billion cigarettes a year, and then this quantity increased to 32 billion cigarettes in 2011-2012 FY. Unfortunately, data are not available for later years.

According to the BAT Directors reports,¹⁸ the cigarette industry had marginal volume growth in 2015 (January-December) and 2016 (but not in 2014) as the consumers were shifting from bidi to cigarettes while total tobacco industry was in decline. The growth dynamics of the industry varied across the price slabs of cigarettes. The low segment experienced growth (its share increased from 67% in 2014 to 80% in 2016), while high and medium segments declined. The situation changed in 2017-2018, the cigarette production in the country declined by 4.4% in 2017 and 9% in 2018 (January-December) mainly due to the decline in low segment cigarettes by 9% and 26% respectively. Low segment cigarette share decreased to 60% in 2018, as sales of the 3 top cigarette segments increased. BAT reported that the decline of low segment production in 2018 was mainly caused by their price increase by 30%.

Tobacco-related burden

An epidemiological study conducted in 2004 [33] showed that smoking was responsible for approximately 57 000 deaths and 1.2 million tobacco-related illnesses per year in Bangladesh; 16% of all deaths among those of age 30 years and older were attributable to tobacco use. A more recent study [34] conducted with 2010 data concluded that about 25% of all deaths among men aged 25 to 69 years are attributable to smoking which results in average loss of 7 years of life per smoker. These studies suggest an increase in the proportion of tobacco-attributable deaths.

Estimates for 2004 indicate that the annual healthcare costs attributable to tobacco-related illnesses in Bangladesh were 50.9 billion Bangladeshi Taka (BDT) (USD 856 million), including 5.8 billion BDT (USD 98 million) to treat the diseases caused by the exposure to secondhand tobacco smoke. These amounts most certainly underestimate the tobacco-related costs given that the study focused on the costs of eight selected tobacco-related diseases rather than all diseases caused by tobacco use and conservatively estimated that 25% of those experiencing a disease caused by tobacco would seek inpatient care.

In addition to sizable health care costs, the premature deaths, and disability, tobacco use results in significant productivity losses. Conservative estimates for Bangladesh similarly find that the lost productivity costs due to tobacco use are somewhat higher than the health care costs. In 2004, cost of lost productivity due to tobacco-attributable premature deaths caused by the eight selected diseases

¹⁶ <http://data.un.org/Data.aspx?q=cigarettes&d=ICS&f=cmID%3a25010-1>

¹⁷

http://bbs.portal.gov.bd/sites/default/files/files/bbs.portal.gov.bd/page/b2db8758_8497_412c_a9ec_6bb299f8b3ab/SYB-2018.pdf

¹⁸ http://www.batbangladesh.com/group/sites/BAT_9T5FQ2.nsf/vwPagesWebLive/DOA5GDLS?opendocument

was estimated to be 59 billion BDT (USD 993 million). Taken together, a very conservative estimate of the economic costs of tobacco use in Bangladesh in 2004 was 110 billion BDT (USD 1.85 billion), over 3% of GDP in 2004 [33].

Tobacco taxation

Bangladesh imposes a variety of taxes on tobacco products, including supplementary duties on cigarettes, bidis, chewing tobacco and pipe tobacco, duties on imported tobacco products and on both imported and exported tobacco leaf, and a value-added tax on all tobacco products.

Cigarette taxation

In Bangladesh, the prices of each brand of cigarettes were determined by the National Board of Revenue, and these prices were used as the tax base for calculating the tax liability of cigarette manufacturers. Based on these administered prices by brands, cigarettes are categorized into four brand tiers, which are called “slabs” in Bangladesh. The ad valorem excise tax rate (known as Supplementary Duty -- SD), which is based on the administered retail price, varies by these price categories (see Table 5) with the current rate varying (from July 2017) between 52%-65%. In addition, there is value added tax (VAT) at 15% of retail price levied at the point of sale. The tax rate for the low-priced category is significantly lower than that for the top tiers. This was designed to protect domestic low-priced brands and low-income smokers consuming these brands.

Table 5. Ad valorem excise rates for cigarettes of different price categories (prices are for 10 sticks per pack)

Tiers	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Low	6-6,99	6,5-7,5	7,25-8,75	8,4-9,15	11-11,3	12,1-12,3	13,69-13,91	15-16,5	18	23	27 L 35 I	32
<i>tax rate, %</i>	32	32	32	33	36	39	39	43	48	50	52 L 55 I	55
Medium	12,5-13,49	13,25-14,25	16,25-17,25	18,4-19	22,5-23	24,75-25,25	28-30	32,5-35	42-44	45-69	45-69	48-74
<i>tax rate, %</i>	52	52	52	53	55	56	56	60	61	62	63	65
High	19-26,9	21-28	23,25-29,25	27-32	32-36	35,2-39,5	42-45	50-54	70-100	70-100	70-100	75-100
<i>tax rate, %</i>	55	55	55	56	58	59	59	61	63	64	65	65
Premium	35+	41+	46,25	52+	60+	66+	80+	90+	101+	101+	101+	101+
<i>tax rate, %</i>	57	57	57	58	60	61	61	61	63	64	65	65

L - Local; I - international

The price slabs that define the tiered tax structure were not continuous. No brands are supposed to be priced below the minimum price in the slab for lowest price cigarettes. Brands sold at prices between the slabs were taxed at the maximum rate. Most cigarette smokers in Bangladesh surveyed in the ITC-Bangladesh surveys of 2009 and 2010 reported paying prices between the price slabs, in effect paying lower taxes [4].

The significant price gaps between brands of cigarettes in different price categories created greater incentives for smokers to switch to cheaper brands in response to price and tax increases. These gaps also created greater incentives for manufacturers to engage in tax avoidance and evasion (e.g., by positioning brands in the gaps between price slabs) [35].

In November 2013, the National Board of Revenue (NBR) issued a demand notice to British American Tobacco Bangladesh (BATB) for paying 19 billion BDT as value-added tax and supplementary duty which the company evaded by selling medium-slab cigarettes declaring them as low-slab ones. According to the NBR, the BATB evaded the taxes from August 19, 2009, to January 31, 2013, by selling its Pilot and Bristol brand cigarettes at lower prices declaring the two brands in lower slab though they belong to the medium slab. BATB filed petitions before the high court challenging retrospective tax demanded by the revenue board.¹⁹ However, BATB has won an appeal in the Supreme Court against a High Court order. With the apex court order delivered on July 25, 2018 the BATB need not pay the amount to NBR²⁰.

From July 2015, continuous tier structure was introduced and every brand can be set to a defined tier. Since July 2017, the lower slab has been divided into two new slabs titled 'local brands' and 'international brands'.

In 2007-2009, ad valorem rates did not change, but from July 2010, the rates for all tiers were changed almost annually. The rates for lowest tier were increased much faster: from 32% to 52% or by 62%, while the high-priced cigarettes rate was increased from 57% to 65% or by 14%.

The minimum price of the lowest tier cigarettes increased from 6 BDT per pack of 10 cigarettes in 2007 to 27 BDT in 2017. Prices of other tiers also increased, while the increase of tier prices could move some brands to a tier with a lower rate and vice versa.

In 2018-2019 FY, actually only two ad valorem excise rates were used: 55% for the low segment (with price Tk. 32-47 per 10 cigarettes) and 65% for medium and high segments cigarettes with price Tk. 48-101 per 10 cigarettes)²¹. In general, the tier structure was gradually moving towards unified rates: in 2018, the difference between lowest and highest rates was 10 percentage points, while in 2010 it was 25 percentage points.

Bidi taxation

The prices of bidis are determined by the bidi manufacturers themselves, and their tax liability was calculated based on a pre-determined tariff value per pack of bidis. The VAT was imposed on the tariff value plus the excise tax. The excise tax rate differentiates between non-filter and filter bidis.

Table 6. Bidi excise taxes and prices

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Bidi non-filter (price, BDT per pack of 20 sticks)	4,36	5,354	6,14	7,06	10,61	12.5	12.5
Tariff value (in BDT)	3,1579	3,88	4,27	4,91	7,1		
tax rate, %	20	20	25	25	30	30	30
Actual specific tax (BDT per pack)	0,63	0,78	0,85	0,98	1,42	3,75	3,75
Bidi filter (price, BDT per pack of 20 sticks)	4,93	6,052	6,92	7,98	12,03	12.5	15
Tariff value (in BDT)	3,43	4,22	4,64	5,34	7,75		
tax rate, %	25	25	30	30	35	35	35
Actual specific tax (BDT per pack)	0,69	0,84	0,93	1,07	1,55	4,375	5,25

¹⁹ <http://archive.newagebd.net/105701/nbr-claims-tk-1924cr-in-tax-from-batb/>

²⁰ <http://www.theindependentbd.com/post/162913>

²¹ http://nbr.gov.bd/uploads/budget/Speech_EN_18_19.pdf

For example, in 2011, bidi were sold at an average retail price of BDT6.00 per pack of 25, while the retail price was not the tax base. Supplementary Duty (SD) and VAT were rather applied to a tariff value of BDT 3.1579 and BDT 3.43 per pack of 25 non-filter and filter bidi respectively. Therefore, this tariff value-driven tax base reduced the effective rate of SD and VAT to 10.5% and 9% respectively [36].

According to the law, the excise for bidi is calculated as established tariff value multiplied by the SD (ad valorem) rate, which actually makes this excise a specific one. The calculated specific rates are presented in Table 6. In 2012-2016, such specific excise increased by 125% in four years.

In June 2017, the Minister of Finance Abul Maal Abdul Muhith proposed to abolish the existing bidi tariff system and to fix the tax inclusive prices of both a pack of 25 sticks of non-filter bidi and a pack of 20 sticks of filter bidi at the level of BDT 15²². However, the parliament reduced these prices to BDT 12.5²³. Anyway, this measure is expected to increase the actual excise tax for bidi by 170%.

In the 2018-19 FY, fixed price of filter bidi was increased to BDT 15²⁴

Smokeless tobacco taxation

The excise tax rate on the most widely used smokeless tobacco products (Zarda and Gul) is set as a percentage of the ex-factory price. The excise rate of smokeless tobacco products was 10% in 2009, 20% (from July 2011); 30% (from July 2012), 60% (from July 2014) and 100% (from July 2016). For tax collection purposes, administrative prices (which are used as a base for ad valorem rate) of Zarda and Gul were fixed at Taka 25 per 10 grams from July 2018.

So, over the last six years, the smokeless tobacco excise rate was increased 10-fold.

An analysis of fiscal policies results concluded that taxation had significantly reduced smokeless tobacco use among adults in both India and Bangladesh [37].

Electronic cigarettes

In early 2017, a 10% duty was applied to e-cigarettes and to their refill packs. In June 2017, the Minister of Finance proposed to introduce two separate Harmonized System Codes for these two items and to impose 25 percent customs duty on both items. At the same time, he also proposed to impose 100 percent Supplementary Duty on these products²⁵.

Additional tobacco taxes

The tobacco companies pay **corporate tax** calculated as 45% of the profit²⁶.

In 2017, the government has proposed to impose a **surcharge** of 2.5% **on incomes** from tobacco products including cigarettes, bidi, zarda, and gul²⁷.

Supplementary duty at the rate of 20% is levied on the domestic production of the **cigarette and bidi paper**²⁸.

²² <http://bdnews24.com/economy/2017/06/01/finance-minister-muhith-goes-tough-on-bidi>

²³ <http://print.thefinancialexpress-bd.com/2017/07/02/176701>

²⁴ http://nbr.gov.bd/uploads/budget/Speech_EN_18_19.pdf

²⁵ [https://www.mof.gov.bd/en/budget1/17_18/speech/BS_English_2017-05-31%20\(Wednesday\)_Final.pdf](https://www.mof.gov.bd/en/budget1/17_18/speech/BS_English_2017-05-31%20(Wednesday)_Final.pdf)

²⁶ <https://www.fmcibd.com/blog/129-corporate-tax-in-bangladesh>

²⁷ <http://www.dhakatribune.com/business/economy/2017/06/01/govt-impose-surcharge-tobacco/>

²⁸ <http://print.thefinancialexpress-bd.com/2015/06/05/95425>

In 2015, **customs duty on Artificial Filament Tow** used to produce filter tips for cigarettes, was increased from 5% to 25%²⁹.

The government imposed the '**health development surcharge**' as 1% tax from tobacco companies in the budget for the fiscal year 2014-15. The VAT authority collects the surcharge on the basis of the same value on which they claim VAT. The surcharge is levied for supply of locally produced tobacco products at the production stage. The National Board of Revenue (NBR) collected the revenue during the last three financial years, 2014-15, 2015-16, and 2016-17; however, the health development surcharge worth BDT 9.0 billion remained unutilized during the last three fiscal years due to the lack of a specific guideline to spend the amount³⁰. The draft of the policy got approval in an inter-ministerial meeting on February 15, 2017. The policy was scheduled to be placed before the cabinet in August 2017. The National Tobacco Control Cell under the Ministry of Health could use the surcharge revenue to execute a national tobacco control program which assumes conducting research and awareness campaigns, rehabilitating tobacco users, creating alternative jobs for tobacco farmers and ensuring overall health development.

Over recent years, there were several proposals to raise tobacco taxes in Bangladesh on behalf of: (1) the World Bank³¹; (2) the World Health Organization³²; (3) Dr Mahfuz Kabir, Research Director of Bangladesh Institute of International and Strategic Studies³³. These proposals have some common elements. All of them suggest to:

- 1) Reduce the number of slabs;
- 2) Increase ad valorem rates and minimum price floor for remaining slabs;
- 3) Introduce specific excise tax in addition to the ad valorem excise.

Tobacco revenue

According to the WHO reports on the global tobacco epidemic³⁴, tobacco revenue in Bangladesh increased in 2012-2016 by 72%. In 2016-2017 FY, tobacco tax revenue increased to 193 billion BDT, growing by 16 percent per year (9 percent in real terms) in 2014-2017 [32].

Table 7. Tobacco tax revenue, billion BDT

	2011-2012	2013-2014	2014-2015	2015-2016	2016-2017
Excise	74,5	97		130	
VAT	20	26		33	
Total Revenue	94,5	123	145	163	193

According to the British American Tobacco annual reports,³⁵ this company's total payments (Value added tax (VAT), Supplementary Duty (SD), Health Development Surcharge (HDSC), Income Tax & Customs duty) increased from 46 billion BDT in 2010 to 191 billion BDT in 2018. The annual reports also provide data on BAT contribution and percentage to the total VAT, SDC and HDSC from cigarette

²⁹ <http://print.thefinancialexpress-bd.com/2015/06/05/95353>

³⁰ <http://print.thefinancialexpress-bd.com/2017/08/26/181651>

³¹ <http://documents.worldbank.org/curated/en/614301535710804378/pdf/Preliminary-Recommendations-for-Effective-Tobacco-Tax-Design-in-Bangladesh.pdf>

³² <http://www.searo.who.int/bangladesh/epubip00175542ecmanuscript.pdf>

³³ <https://www.thedailystar.net/opinion/economics/news/rethinking-tobacco-tax-and-price-measures-1724095>

³⁴ http://www.who.int/tobacco/surveillance/policy/country_profile/bgd.pdf

³⁵ http://www.batbangladesh.com/group/sites/BAT_9T5FQ2.nsf/vwPagesWebLive/DOA5GDSL?opendocument

industry. Calculations based on this data revealed that this revenue from 140 billion BDT in 2014 to 243 billion BDT in 2018 or by 73% in nominal terms or by 38% in real (inflation-adjusted) terms.

The main part of tobacco revenue comes from cigarette taxes. Bidi consumption was estimated to be 35-40% of the total tobacco consumption, but its tax earning as a fraction of the total tobacco revenue was less than 2% in 2016³⁶ and 3% in 2017 [32].

In 2013-14, the government revenue from smokeless tobacco (Zarda and Gul) was only 15 million BDT. In 2014-15, total expenditure on consumption of smokeless tobacco products was BDT 16.50 billion. But the government earned only BDT 143.6 million tax from the sector, which is less than 1.0 percent of the total expenditure, according to NBR data³⁷.

Tobacco prices

According to the WHO reports³⁸, prices of the most sold brand and the cheapest brand increased 3-fold over six years (2010-2016) and the price of the premium brand increased 2-fold (Table 8).

Table 8. Cigarette prices (BDT per pack of 20 cigarettes)

	2008	2010	2012	2014	2016
WHO reports					
Most sold brand	25,9	33	50	70	100
Premium brand		104		190	220
Cheapest brand		14,6	28	30	50
ITC reports [35, 38]					
	2009	2010	2011-12	2014-15	
Nominal average price	31,2	39,4	55,4		
<i>Real (inflation-adjusted) average price</i>	<i>40,6</i>	<i>47,0</i>	<i>57,8</i>		
Low-priced cigarette brand	20	20	24	31	
Medium-priced cigarette brand	40	43	53	53	
High-priced cigarette brand	89	90	100	119	
Premium cigarette brand	153	156	185	205	

The ITC survey results also demonstrated the increases in average cigarette prices, both in nominal and real terms. ITC also presents self-reported prices (Table 8) on cigarettes of different price tiers, while the pace of increase is slower than the average price increase.

According to the data published in the Annual Statistical Yearbooks³⁹, cigarettes and bidi had different price trends (Figure 1). In 2007-2013 cigarette price increase was above the inflation, while bidi price – below inflation. However, from 2014 bidi price increase much exceeded the inflation. Cigarette price declined in 2014-2015, but then highly increased.

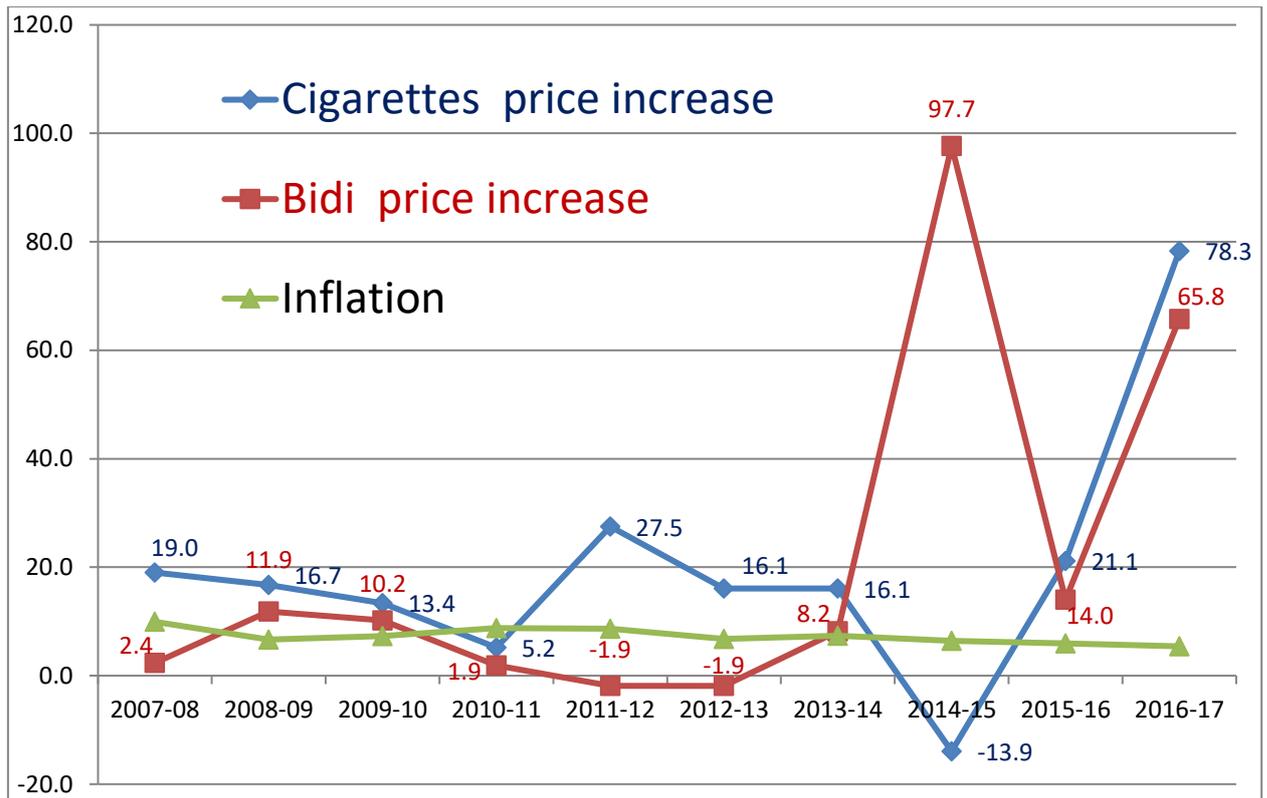
³⁶ <http://print.thefinancialexpress-bd.com/2017/05/10/172156>

³⁷ <http://print.thefinancialexpress-bd.com/2015/08/14/103951>

³⁸ <http://www.who.int/tobacco/economics/bangladesh.pdf>

³⁹ <http://www.bbs.gov.bd/site/page/29855dc1-f2b4-4dc0-9073-f692361112da/Statistical-Yearbook>

Figure 1. Changes in prices of tobacco products, comparison with inflation



Data source: Statistical Yearbooks⁴⁰

Comparison of cigarette prices and taxes in Bangladesh and neighboring countries

The WHO Global Tobacco Report, 2017 shows information on cigarette prices and taxes in Bangladesh and other countries of the WHO South-East Asia Region (SEARO) in 2016 [39] (Table 9).

Table 9. Cigarette prices and taxes in Bangladesh and other SEARO countries

Country	Price of a 20-cigarette pack of the most sold brand			Taxes as a % of price of the most sold brand						Net-of-tax part of the price, USD
	In reported currency	Reported currency	In USD	Specific excise	Ad valorem excise	Total Excise	VAT/ Sales tax	Other taxes and duties	TOTAL TAX	
Bangladesh	100	BDT	1,28	0,00%	62,00%	62,00 %	15,00 %	0,00%	77,00 %	0,29
India	158	INR	2,36	26,46%	0,00%	26,46 %	16,67 %	0,00%	43,12%	1,34
Indonesia	21 667	IDR	1,65	44,31%	4,43%	48,74 %	8,70%	0,00%	57,44%	0,70
Maldives	47	MVR	3,05	0,00%	0,00%	0,00%	0,00%	53,19%	53,19%	1,43
Myanmar	850	MMK	0,72	35,29%	0,00%	35,29 %	0,00%	0,00%	35,29%	0,47
Nepal	180	NPR	1,68	14,84%	0,00%	14,84 %	11,50 %	0,00%	26,35%	1,24
Sri Lanka	1 000	LKR	6,86	47,50%	3,93%	51,43 %	10,71 %	0,00%	62,15%	2,60
Thailand	86	THB	2,47	2,16%	64,77%	66,93 %	6,54%	0,00%	73,48%	0,66
Timor-Leste	1,50	USD	1,50	25,33%	0,00%	25,33 %	2,44%	0,23%	28,01%	1,08

⁴⁰ <http://www.bbs.gov.bd/site/page/29855dc1-f2b4-4dc0-9073-f692361112da/Statistical-Yearbook>

We calculated the net-of-tax price of the most popular cigarette brand as follows: Price in USD * (1 – Total tax share). Cigarettes in Bangladesh had the second lowest price in the Region (after Myanmar), but, paradoxically, the highest tax share percentage: Bangladesh is the only country in the Region, where tax share exceeds 75%. It was caused by the lowest net-of-tax cigarette price in Bangladesh, and this proves that the tax share indicator can be misleading in comparing countries tobacco taxation policies.

Comparison of prices of various tobacco products

In 2011-2012, the price of one stick of bidi was less than one-fourth of one stick of the cheapest cigarette brand [40]. There were two distinct varieties of zarda available in the market—the cheaper variety that sells for less than 0.60 BDT per gram and the higher-priced variety that sells for 0.60 to 1.00 BDT per gram. The average price of the cheaper variety of zarda is comparable to the bidi price per stick, while the price of higher-priced variety zarda is higher than bidi price. On average, the price of zarda per gram is less than half of the price per stick of the cheapest brand of cigarette. The price of gul was around 0.10 BDT per gram and it was comparable to the cheaper price variety of zarda.

In early 2016, excise taxes on the most sold brands of cigarettes were approximately 61% of their retail price. 'Bidi' taxes account for approximately 11% of retail prices, and taxes on smokeless tobacco products are approximately 19% of retail prices⁴¹.

Tobacco affordability

Bangladesh economist Prof. Abul Barkat said that faulty taxation has actually been reducing tobacco prices in Bangladesh “steadily” since 2001, encouraging new users⁴². From 1997 to 2002, cigarettes were gradually getting less affordable as real incomes were going down. This led to a decline in per capita cigarette consumption during this period. But cigarettes became more affordable after 2002 when incomes rose rapidly. So, there was a rise in per capita consumption from 2003 to 2010.

Nargis et al (2016) [38] used nationally representative individual-level cohort data from the International Tobacco Control (ITC) Bangladesh Survey, conducted in four waves in 2009, 2010, 2011-12, and 2014-15, to measure the affordability of tobacco products in terms of Relative Income Price (RIP), which is defined as the percentage of per capita income needed to purchase 100 packs of cigarettes. The results of the analysis show that both cigarettes and bidis became more affordable in Bangladesh over the period from 2009 to 2015, and the affordability of smokeless tobacco products remained unchanged between 2011-12 and 2014-15. While the price of cigarettes increased in real terms, and the price of bidis decreased over this period, income growth more than offset the negative effect of the cigarette price increase on cigarette demand, resulting in a shift in preference from bidis to cigarette smoking. Similar conclusions on increasing affordability were made in another analysis of ITC data [41].

According to the Household Income and Expenditure surveys (HIES) conducted by the Bangladesh Bureau of Statistics, the average monthly household income increased from 1485 BDT in 2005 to 2553 BDT in 2010, or by 72%, and then further to 3936 in 2016⁴³, or by 54%. In 2005-2010, cigarette prices increased by 105% and bidi prices by 29%, and it means that cigarettes became less affordable and bidi – more affordable. In 2010-2016, according to CPI data from the Annual Statistical Yearbooks 2010,

⁴¹ <http://www.thefinancialexpress-bd.com/2016/03/14/21041>

⁴² <http://www.theindependentbd.com/home/printnews/46308>

⁴³

http://bbs.portal.gov.bd/sites/default/files/files/bbs.portal.gov.bd/page/b2db8758_8497_412c_a9ec_6bb299f8b3ab/SYB-2018.pdf

cigarette prices increased by 79% and bidi prices by 135%, so, in those years cigarette affordability moderately declined, while affordability of bidi was substantially reduced, and their sales substantially decreased (see Table 4).

Cigarette smuggling

The government introduced some policies against cigarette smuggling in the early 2000s, and illicit cigarette trade reduced from 20% in 2000 to 1.2% in 2009⁴⁴.

The tobacco industry makes yearly estimates based on field intelligence data gathered through surveys of retail market outlets. The total number of illicit cigarettes was estimated to be 1.5 billion sticks in FY2016/17, which is about 1.8% of the total cigarette market for that year [32].

Currently, high-priced brands are usually smuggled to Bangladesh. The BAT reports⁴⁵ that in 2014-2016, only the premium segment was facing competition due to the availability of the smuggled cigarettes in the market. Euromonitor admits that smuggled cigarettes are typically more expensive in comparison to domestic economy cigarettes [30]. The median price of illicit cigarettes in Bangladesh in 2013 was estimated [42] to be 2.83 USD, while the median price of licit cigarettes was only 0.51 USD.

Bidis smuggling are believed to be negligible. Despite Bangladesh's large border with India, industry experts judge that bidi smuggling from India is not a major issue for two reasons. First, bidi production in Bangladesh is very cheap. Secondly, the bidi leaf used in India, known as tendu leaf, is generally not preferred by Bangladeshi consumers [32].

Some recommendations on the reform agenda to control illicit tobacco trade in Bangladesh are presented in Ahmed, 2019 [32].

Discussion

Over recent years, Bangladesh has been implementing a rather aggressive tobacco taxation policy:

- 1) Ad valorem rates were increased for all kinds of cigarettes, while the increase was much larger for low-priced cigarettes and the difference in tax rates between cigarette tiers decreased.
- 2) Tax rates for bidi were also increased and the tariff value system was abolished, which also increased actual bidi tax.
- 3) The tax rate for smokeless tobacco products was increased 10-fold in 2010-2016.
- 4) Some additional taxes were introduced, including taxes for e-cigarettes and "health development surcharge".

The tobacco taxation policy was implemented against the efforts of the tobacco industry to keep tobacco tax rates as low as possible. The pressure of the tobacco industry is evident from the fact that during the period from the fiscal year 2004-05 to the fiscal year 2009-10, SD (supplementary duty - ad valorem tax) rates in different price slabs of cigarettes remained the same [36]. During the fiscal year 2011-12 budget cycle, more than 120 MPs made written statements to the National Board of Revenue not to increase bidi prices. They demanded to rather completely withdraw the tax from bidis. In 2017, bidi factory owners urged the government to withdraw tax hike in bidi proposed in the budget for the

⁴⁴ http://www.who.int/tobacco/economics/meetings/uicc_tc_taxation_bangladesh.pdf

⁴⁵

[http://www.batbangladesh.com/group/sites/BAT_9T5FQ2.nsf/vwPagesWebLive/DOALJFGV/\\$FILE/Directors'_Report_2016.pdf?openelement](http://www.batbangladesh.com/group/sites/BAT_9T5FQ2.nsf/vwPagesWebLive/DOALJFGV/$FILE/Directors'_Report_2016.pdf?openelement)

fiscal year 2017-18⁴⁶. In some cases, the Parliament approved lower tax rates than those proposed by the Ministry of Finance.

In 2010, a Tobacco Tax Cell within the National Board of Revenue was established⁴⁷. The purpose of this cell is to support the tobacco tax policy with data and evidence. Tobacco Tax Cell (TTC) drafted a “Tobacco Tax Policy and 5-Year Roadmap” based on the international best practices – the first of its kind in Bangladesh⁴⁸. With the WHO support, the TTC also had drafted a situation report on tobacco taxation.

In May 2015, the TTC submitted to policy-makers a draft of the national tobacco tax policy⁴⁹. The draft tax policy focused on the withdrawal of tier system and the gradual reduction of tobacco consumption. It also featured several strategies including those aimed to counteract illicit trade of tobacco products, to use health development surcharge and to ban sales of bidi or loose cigarettes.

In early 2016, the Minister of Finance A M A Muhith instructed the National Board of Revenue to revise the existing tobacco taxation system. “Existing tobacco tax system has to be completely overhauled next year. The slab-based tax will not exist,” Mr. Muhith wrote in a note to NBR⁵⁰. However, slab-based tax system actually still exists, while the rate differences between slabs were reduced.

The total price elasticity of demand for cigarettes in Bangladesh was estimated to be -0.49 [43]. The elasticity of smoking prevalence accounted for 59% of the total price elasticity. The total price elasticity of cigarette consumption is higher for people belonging to lower socioeconomic status: -0.75 for the low SES group, -0.40 for the medium SES group and -0.36 for the high SES group. Increases in taxes would result in a significant reduction in cigarette consumption while increasing tax revenue.

Simulated tax increases and different tax structures with 3 scenarios—uniform ad valorem excise; uniformed ad valorem excise with specific excise floor; uniform specific tax—were modeled by Nargis et al [43]. They concluded that raising cigarette taxes and prices can increase government revenue; however, the uniform specific excise would provide lower revenue increase than other two scenarios. The greater price sensitivity of cigarette consumption among poorer people means that the poor would benefit more from a given cigarette price increase. This would result in a reduction in the inequities of the burden of tobacco consumption that currently exists in Bangladesh.

Barkat et al (2012) [4] also simulated the effects of cigarette tax increases on several outcomes related to cigarette and bidi smoking in Bangladesh, including overall consumption, government tax revenues, the number of current and future smokers, and deaths caused by smoking. In all scenarios considered, rather than preserve the existing ad valorem system and price slabs, they considered the effects of using a uniform specific excise tax. Their model demonstrated that eliminating the tiered tax structure and adopting a uniform specific excise tax on cigarettes would raise average prices and reduce cigarette consumption. In addition, this increase in taxes and prices will cause millions of current Bangladeshi cigarette smokers to quit smoking while preventing millions Bangladeshi youth from taking up cigarette smoking. Together, these reductions in smoking are expected to prevent almost 6 million premature deaths caused by tobacco use in the current population cohort. At the same time, because of the inelasticity of cigarette demand, the tax increase would generate additional cigarette tax revenues.

⁴⁶ <http://print.thefinancialexpress-bd.com/2017/06/07/174632>

⁴⁷ http://apps.who.int/iris/bitstream/10665/112847/1/9789241507301_eng.pdf

⁴⁸ <http://www.searo.who.int/bangladesh/enbantobaccosuccess/en/>

⁴⁹ <http://print.thefinancialexpress-bd.com/2015/05/23/93776>

⁵⁰ <http://www.thefinancialexpress-bd.com/2016/03/14/21041>

Similarly, sharp increases in bidi taxes would also generate significant new tax revenues while reducing bidi smoking and its public health consequences.

Analysis of ITC survey data revealed significant movement of smokers across price tiers from one wave to another. Higher income raises the probability to up-trade and decreases the probability to down-trade. Thus, price-tiered market provides smokers more opportunities to accommodate their smoking behavior when faced with price and income change. Therefore, tiered structure of the tax system should be replaced with uniform taxes. Moreover, all cigarette taxes need to be raised to an extent so that it off-sets any positive effects of income growth [44].

Banqladesh has achieved a high share of tax in the price of cigarettes, but has not achieved the expected health benefits from reduction in cigarette consumption. In addition to a growing affordability of cigarettes, three factors appear to have undermined the effectiveness of tax and price increases in reducing cigarette consumption in Banqladesh. First, the multi-tiered excise tax structure widened the price differential between brands and incentivized downward substitution by smokers from higher-price to lower-price cigarettes. Second, income growth and shifting preferences of smokers for better quality products encouraged upward substitution from hand-rolled local cigarettes (bidi) to machine-made low-price cigarettes. Third, the tobacco industry's market expansion and differential pricing strategy changed the relative price to keep low-price cigarettes inexpensive [45].

Conclusions and recommendations

In 2010-2018, tobacco taxes were annually increased. In 2011-2017, tobacco tax revenue grew by 104% in nominal terms or by 38% in real (inflation-adjusted) terms. Overall, tobacco consumption apparently declined over those years, but the rate of decline was small. The structure of tobacco consumption gradually shifted from bidi and smokeless tobacco use to cigarette smoking, while the share of low-priced cigarettes increased on cigarette market.

Despite the tobacco tax increases, cigarette prices and excise tax rates are still much lower in Banqladesh than in most neighboring countries and should be further increased.

The following changes in tobacco tax rates and structure could both decrease tobacco consumption and increase tobacco tax revenue in the country:

- Cigarette ad valorem excise rates should be unified for all kinds of cigarettes at the level currently used for premium cigarettes. This will minimize incentives to shift to cheaper products.
- Additional unified specific excise tax should be introduced for all kinds of cigarettes.
- Excise taxes for bidi and smokeless tobacco products should be changed from ad valorem to specific ones with specific rates equal (in monetary form) to the rates calculated for high price categories of these products with the current ad valorem rates. The excise rate for bidi should be high enough to minimize downward shifting to less expensive products.
- After the above changes are introduced, the unified specific rates for all kinds of tobacco products should be annually increased to make tobacco products less affordable over time in order to reduce tobacco consumption and the prevalence of tobacco use in line with FCTC provisions.

Tobacco control monitoring, including the collection of economic information on tobacco products sales, prices, and other indices, should be much improved in the country to support more accurate forecasts of the outcomes of the current and future tobacco control activities.

References

1. Tobacco Control Laws. *Country Details for Bangladesh*. 2017; Available from: <https://www.tobaccocontrolaws.org/legislation/country/bangladesh/summary>.
2. Bleich, S.N., et al., *Noncommunicable chronic disease in Bangladesh: overview of existing programs and priorities going forward*. Health Policy, 2011. **100**(2): p. 282-289.
3. Heydari, G., et al., *Comparison of Tobacco Control Programs Worldwide: A Quantitative Analysis of the 2015 World Health Organization MPOWER Report*. Int J Prev Med, 2016. **7**: p. 127.
4. Barkat, A., et al. *The economics of tobacco and tobacco taxation in Bangladesh*. 2012; Available from: http://global.tobaccofreekids.org/files/pdfs/en/Bangladesh_tobacco_taxes_report.pdf.
5. Flora, M.S., C.G. Mascie-Taylor, and M. Rahman, *Gender and locality differences in tobacco prevalence among adult Bangladeshis*. Tob Control, 2009. **18**(6): p. 445-50.
6. Khan, M.M., et al., *Prevalence and correlates of smoking among urban adult men in Bangladesh: slum versus non-slum comparison*. BMC Public Health, 2009. **9**: p. 149.
7. *Bangladesh Demographic and Health Survey 2007*. 2009, NIPORT, Mitra and Associates, and Macro International: Dhaka, Bangladesh.
8. Sreeramareddy, C.T., et al., *Smoking and smokeless tobacco use in nine South and Southeast Asian countries: prevalence estimates and social determinants from Demographic and Health Surveys*. Popul Health Metr, 2014. **12**: p. 22.
9. World Health Organization. *Bangladesh 2009 Global Adult Tobacco Survey report*. 2009; Available from: www.who.int/entity/tobacco/surveillance/global_adult_tobacco_survey_bangladesh_report_2009.pdf.
10. Palipudi, K.M., et al., *Social Determinants of Health and Tobacco Use in Thirteen Low and Middle Income Countries: Evidence from Global Adult Tobacco Survey*. Plos One, 2012. **7**(3).
11. Palipudi, K., et al., *Predictors of tobacco smoking and smokeless tobacco use among adults in Bangladesh*. Indian journal of cancer, 2012. **49**(4): p. 387.
12. Palipudi, K., et al., *Prevalence and sociodemographic determinants of tobacco use in four countries of the World Health Organization: South-East Asia region: findings from the Global Adult Tobacco Survey*. Indian J Cancer, 2014. **51 Suppl 1**: p. S24-32.
13. Sinha, D.N., et al., *Tobacco use among youth and adults in member countries of South-East Asia region: review of findings from surveys under the Global Tobacco Surveillance System*. Indian J Public Health, 2011. **55**(3): p. 169-76.
14. Giovino, G.A., et al., *Tobacco use in 3 billion individuals from 16 countries: an analysis of nationally representative cross-sectional household surveys*. The Lancet, 2012. **380**(9842): p. 668-679.
15. Bandyopadhyay, A. and M. Irfan, *Educational and Wealth Inequalities in Smokeless Tobacco Use: An Analysis of Rural-Urban Areas of Bangladesh and India*. Subst Abuse, 2019. **13**: p. 1178221818825074.
16. Sinha, D.N., et al., *Prevalence of smokeless tobacco use among adults in WHO South-East Asia*. Indian J Cancer, 2012. **49**(4): p. 342-6.
17. Hossain, M.S., et al., *Prevalence and correlates of smokeless tobacco consumption among married women in rural Bangladesh*. PLoS One, 2014. **9**(1): p. e84470.
18. *Behavioural Risk Factors of Non-Communicable Diseases in Bangladesh*. 2002; Available from: <http://www.who.int/chp/steps/BangladeshSTEPSReport.pdf>.
19. *Non-Communicable Disease Risk Factor Survey Bangladesh 2010*. 2010; Available from: http://www.who.int/chp/steps/2010_STEPS_Report_Bangladesh.pdf.
20. Zaman, M.M., et al., *Prevalence of risk factors for non-communicable diseases in Bangladesh: Results from STEPS survey 2010*. Indian J Public Health, 2016. **60**(1): p. 17-25.
21. Zaman, M.M., et al., *Clustering of non-communicable diseases risk factors in Bangladeshi adults: An analysis of STEPS survey 2013*. BMC Public Health, 2015. **15**: p. 659.

22. Razzaque, A., et al., *Sociodemographic differentials of selected noncommunicable diseases risk factors among adults in Matlab, Bangladesh: findings from a WHO STEPS survey*. Asia Pac J Public Health, 2011. **23**(2): p. 183-91.
23. *Bangladesh GATS 2009 and 2017 Comparison Factsheet*. 2018; Available from: <https://nccd.cdc.gov/GTSSDataSurveyResources/Ancillary/DownloadAttachment.aspx?ID=3421>.
24. *Bangladesh GATS 2017 Factsheet*. 2018; Available from: http://bbs.portal.gov.bd/sites/default/files/files/bbs.portal.gov.bd/page/57def76a_aa3c_46e3_9f80_53732eb94a83/GATS_BAN_2017_Fact%20Sheet.pdf.
25. Sinha, D.N., et al., *Trends of Smokeless Tobacco use among Adults (Aged 15-49 Years) in Bangladesh, India and Nepal*. Asian Pac J Cancer Prev, 2015. **16**(15): p. 6561-8.
26. Nargis, N., et al., *Prevalence and Patterns of Tobacco Use in Bangladesh from 2009 to 2012: Evidence from International Tobacco Control (ITC) Study*. PLoS One, 2015. **10**(11): p. e0141135.
27. *Bangladesh - Dhaka (Ages 13-15) Global Youth Tobacco Survey (GYTS) FACT SHEET*. 2004; Available from: <https://nccd.cdc.gov/GTSSDataSurveyResources/Ancillary/DownloadAttachment.aspx?ID=96>.
28. D'Angelo, D., et al., *Current Cigarette Smoking, Access, and Purchases from Retail Outlets Among Students Aged 13-15 Years - Global Youth Tobacco Survey, 45 Countries, 2013 and 2014*. MMWR Morb Mortal Wkly Rep, 2016. **65**(34): p. 898-901.
29. *Global Tobacco Surveillance System Data (GTSSData)*. 2009.
30. Euromonitor International. *Tobacco in Bangladesh*. 2018; Available from: <https://www.euromonitor.com>.
31. Roy, A., et al., *Gainfully employed? An inquiry into bidi-dependent livelihoods in Bangladesh*. Tob Control, 2012. **21**(3): p. 313-7.
32. Ahmed, S., Z. Sattar, and K. Alam. *Confronting illicit tobacco trade: a global review of country experiences. Bangladesh: illicit tobacco trade*. . 2019; Available from: <http://pubdocs.worldbank.org/en/455291548434730684/WBG-Tobacco-IlicitTrade-Bangladesh.pdf>.
33. World Health Organization. *Impact of tobacco-related illnesses in Bangladesh*. 2005; Available from: http://apps.who.int/iris/bitstream/10665/70728/1/TOB_NCD_001_eng.pdf.
34. Alam, D.S., et al., *Smoking-attributable mortality in Bangladesh: proportional mortality study*. Bull World Health Organ, 2013. **91**(10): p. 757-64.
35. ITC Project. *Tobacco Price and Taxation Policies in Bangladesh: Evidence of Effectiveness and Implications for Action*. 2014; Available from: http://itcproject.org/files/ITC_Final_Bangladesh_Price_and_Tax_-_May_2014.pdf.
36. Ahmed, N. *Tobacco Taxation in Bangladesh: Administrative and Political Constraints*. 2012; Available from: http://www.who.int/tobacco/economics/meetings/wctoh_2012_tob_tax_bangladesh.pdf.
37. John, R.M., A. Yadav, and D.N. Sinha, *Smokeless tobacco taxation: Lessons from Southeast Asia*. Indian J Med Res, 2018. **148**(1): p. 46-55.
38. Nargis, N., et al. *The trend in affordability of tobacco products in Bangladesh 2009-2015: Evidence from ITC Bangladesh Surveys*. 2016.
39. World Health Organization. *WHO report on the global tobacco epidemic 2017. Monitoring tobacco use and prevention policies*. 2017; Available from: http://www.who.int/tobacco/global_report/en/.
40. Nargis, N., A.K. Hussain, and G.T. Fong, *Smokeless tobacco product prices and taxation in Bangladesh: findings from the International Tobacco Control Survey*. Indian J Cancer, 2014. **51 Suppl 1**: p. S33-8.
41. Nargis, N., et al., *Trend in the affordability of tobacco products in Bangladesh: findings from the ITC Bangladesh Surveys*. Tob Control, 2019. **28**(Suppl 1): p. s20-s30.
42. Brown, J., et al., *An analysis of purchase price of legal and illicit cigarettes in urban retail environments in 14 low- and middle-income countries*. Addiction, 2017: p. n/a-n/a.

43. Nargis, N., et al., *The price sensitivity of cigarette consumption in Bangladesh: evidence from the International Tobacco Control (ITC) Bangladesh Wave 1 (2009) and Wave 2 (2010) Surveys*. *Tob Control*, 2014. **23 Suppl 1**: p. i39-47.
44. Huq, I., et al., *The Impact of Income and Taxation in a Price-Tiered Cigarette Market: findings from the ITC Bangladesh Surveys*. *Tob Control*, 2019. **28**(Suppl 1): p. s37-s44.
45. Nargis, N., et al., *A decade of cigarette taxation in Bangladesh: lessons learnt for tobacco control*. *Bull World Health Organ*, 2019. **97**(3): p. 221-229.