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SRI LANKA

COUNTRY REPORT

PREPARED BY
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1. Overview of tobacco market and information on stakeholders

Tobacco cultivation has a long history in Sri Lanka. It was first introduced by the Portuguese in the 16th Century, along with the habit of smoking (Uragoda, 1987). Several types of tobacco products are consumed in both smoked and smokeless forms in Sri Lanka at present. The most widespread smoked form of tobacco is combustible cigarettes. However, the use of bidi[1], traditional betel quid, commercial and non-commercial preparations of different types of smokeless tobacco is also prevalent (Alcohol and Drug Information Centre, 2020). In the following section, we illustrate the overall situation of the market of tobacco products, the role and extent of the presence of stakeholders in the economy, and the state of the policy related to tobacco use and production in Sri Lanka.

1.1. Economic share of tobacco market (sales volume, employment)

Cigarette production in 2018 was 3.15 billion sticks. Between 2003-2005 and 2014-2015 production has slightly increased, but it became stable at 3.15 billion sticks in 2017-2018 (National Dangerous Drugs Control Board, 2020). However, bidi production has increased from 1.89 billion sticks in 2008 to 4.85 billion sticks in 2018 (Ceylon Tobacco Company, 2019). Levels of manufactured tobacco products contracted in 2019 for the second consecutive year (Central Bank of Sri Lanka, 2020).

The value of imports of tobacco and tobacco products, which amounted to US$ 88 million in 2019, did not have a significant impact on country's trade balance, since Sri Lanka exported US$113 million worth tobacco and tobacco products during the same period (Central Bank of Sri Lanka, 2020). Tax revenue from cigarettes and tobacco was Rs. 92 billion in 2018, which makes a significant contribution (4.1%) to government revenue. Tax revenue from tobacco increased by approximately 300 percent from Rs. 31 million in 2007 to Rs. 92 million in 2018. Although government revenue from tobacco has been increasing over time, the share of government revenue has fallen from 9.1% in 2000 to 4.1% in 2018 (Central Bank of Sri Lanka, 2020).

The Centre for Combating Tobacco (CCT) enjoys a monopoly role in the Sri Lankan tobacco market. CTC has relationships with over 20,000 farmers and 60,000 retailers, supporting more than 176,000 livelihoods (Ceylon Tobacco Company, 2020). However, there are only approximately 3,000 tobacco farmers who are currently registered with the Ministry of Agriculture (MOA) in Sri Lanka (Thibbotuwawa & Dissanayake, 2019). CTC employees 270 people permanently. The number of employees in the other tobacco companies (Cigar) operating in Sri Lanka is estimated to be around 4,000 (Tobacco Unmasked, 2020). There is no official estimate of number of bidi manufacturers in the country.

1.2. Stakeholders

There is wide variation in the size of tobacco firms in Sri Lanka., Small-scale raw tobacco producers like dry tobacco leaf seller operate alongside multinational company like British American Tobacco (BAT). British American Tobacco (BAT) first established its branch in Sri Lanka in 1960 and the Ceylon Tobacco Company (CTC) was incorporated in 1932 (Tobacco Unmasked, 2020). Similarly, consumers widely vary in terms of age, income and socio-economic status.

CCT is the Sri Lankan tobacco observatory established at the Faculty of Medicine University of Colombo which work together with Alcohol and Drug Information Centre (ADIC) Sri Lanka and National Authority on Tobacco and Alcohol (NATA) in implementation of activities (Tobacco Unmasked, 2020). Other than that, stakeholders include social intelligentsia, CBOs, national NGOs and international organizations like the WHO campaign against tobacco consumption and tobacco industry, due to the fact that the death toll of tobacco in Sri Lanka was estimated to be 12,351 people per year in 2018 (10% of overall deaths) (World Health Organization, 2018). According to the UNDP, tobacco use costs Sri Lanka Rs. 214 billion in economic losses (equivalent to 1.6% of its GDP) in 2016 and causes substantial human development losses (UNDP, 2019).

1.2.1. Tobacco manufacturer and market structure

Sri Lanka mainly produces three types of smoking tobacco products, namely cigarettes, bidi, and cigars. The tobacco market is primarily dominated by cigarette manufacturers. 100% of the tobacco used for cigarette manufacturing in Sri Lanka is cultivated in the country, which accounted for approximately 3,000 tons of tobacco in 2018. British American Tobacco (BAT) owns 84.13% of the shares of the Ceylon Tobacco Company PLC Ltd (CTC), which is responsible for the entire manufacturing process from tobacco cultivation to cigarette production in Sri Lanka (Ceylon Tobacco Company, 2020). CTC owns a monopoly share (99%) of the domestic cigarette market with the remaining 1% comprising of imported cigarettes (World Bank Group, 2017). According to a report by John Keells Stock Brokers (Pvt) Ltd, CTC owns 96% of the cigarette market with the remaining 4% consisting of illicit cigarettes (Rajasekaran, 2008).

CTC also exports its manufacturing cigarettes which approximately contributes 1% to its overall annual revenue. According to the Export Development Board (EDB) there are three other tobacco manufacturing companies in Sri Lanka other than CTC, namely, United Tobacco Processing Pvt Ltd; Thansher and Company; and Agio Tobacco Processing Company Pvt Ltd, which produces cigar, tobacco cuts and semi-manufactured tobacco, mainly for the export market (Tobacco Unmasked, 2020).

1.2.2. Prevalence of tobacco use

According to the 2015 STEPs survey by WHO, current tobacco smoking prevalence for those aged between 18 and 69 years was 15.0% for both sexes, with a significant difference in prevalence rates for men (29.4%) and women (0.1%) (Ministry of Health, Nutrition and Indigenous Medicine, 2015). The Trend Survey 2018 on tobacco smoking trends over the age of 15 years, reports a steady decrease of smoking prevalence from the beginning of the 2009 to 2018, but recent data shows that smoking prevalence has increased between 2017 (23.8%) and 2018 (28.4%) (Alcohol and Drug Information Centre, 2020).

Cigarettes constitute the most common type of smoking tobacco (88.3%) and alternatives such as bidi and cigars constitute only 10.1% and 1.3% respectively. On average, a current smoker spends about Rs. 3,900 for a month on smoking. However, a daily smoker spends Rs. 5,850 per month on smoking (Alcohol and Drug Information Centre, 2020). ADIC spot survey data revealed that the highest rate of tobacco smoking has been reported from the 25-39 age group, while the lowest has been reported from the 15-24 age group in 2019, with a significant decrease in tobacco smoking across all age groups compared to 2018. In terms of occupational groups, the highest proportion of current users were “skilled agricultural and fishery workers” followed by “forces and elementary occupations” while the lowest rate of current smokers was from the “technicians and associate professional” occupation group (Alcohol and Drug Information Centre, 2020).

By geographical coverage, the highest rate of current smokers has been observed in the Jaffna District (30%) while the second highest was seen in the Trincomalee District (29%). Matara, Anuradhapura and Nuwaraeliya Districts also showed above average rates (24.32%) while the remaining six districts had below average rates. The lowest rate was reported from Kegalle District (19%) (Alcohol and Drug Information Centre, 2020). According to the Demographic and Health Survey (DHS) 2016, there is no significant difference among smoking prevalence across sectors in the country. However, the rural sector has a higher share of households (34.5 percent) compared to the estate and urban sectors (31.6 per cent each). In terms of income categories, 39.7% of the households in the lowest wealth quintile have at least one member who smokes tobacco compared to 24% in the highest quintile (Department of Census and Statistic, 2016).

1.2.3. Anti-tobacco movement

The anti-tobacco movement in Sri Lanka goes back to late 1980s. The Alcohol & Drug Information Center (ADIC)-Sri Lanka was inaugurated in April 1987, with the objective of preventing drug use through social changes and effective education. ADIC has also been responsible for mapping trends of alcohol and tobacco use across the country since 1998, and conducts trend surveys annually to track tobacco, alcohol and other drug consumption across the country. These surveys greatly help policymakers design stronger and targeted tobacco control policies for prevention (Alcohol and Drug Information Centre, 2020).

CCT is the Sri Lankan agency established under Article 5.3 to monitor tobacco industry activities and to protect public health policies from the commercial and other vested interests of the tobacco industry. The influence of the tobacco industry at political, economic, social and individual levels, as well as industry activities directly or indirectly related to tobacco control and public health, are monitored, analyzed and disseminated to raise awareness by CCT. Implementation partners of CCT include ADIC, NATA Sri Lanka and the Expert Committee on Tobacco, Alcohol and Illicit Drugs of the Sri Lanka Medical Association (SLMA). Community mobilization against tobacco use had been taken forward by some non-governmental organizations (NGOs), prominent Buddhist monks, academics and medical doctors (Samarasinghe, 2017).

1.2.4. Tobacco farmers

Tobacco cultivation has expanded since it was first introduced by the Portuguese in the 16th century (Uragoda, 1987). In early 1980s, it started to decline. Data indicate that both tobacco production and the total cultivated area have decreased significantly over the last few decades, dropping by more than three-quarters since 1980 (Food and Agriculture Organization, n.d.). Approximately 0.68 per cent of agricultural land (equivalent to 15,594 hectares) was under tobacco cultivation in 1982. In 2018, total cultivated area was reduced to 1,338 hectares, a mere 0.06 per cent of agricultural land. This highlights a drastic decline in the importance of tobacco in the cultivated crop mix. Tobacco production has also declined dramatically, from 16,670 MT in 1982 to 3,273 MT in 2017 (Thibbotuwawa & Dissanayake, 2019).

CTC claims that approximately 20,000 persons are currently engaged in tobacco farming (Ceylon Tobacco Company, 2020). However, the MOA estimates that only about 3,000 farmers currently cultivate tobacco in Sri Lanka (Thibbotuwawa & Dissanayake, 2019). Even though there are no official figures, the number of farmers is also believed to be in a declining trend. Many tobacco farming households grow more than one crop at a time and do not rely on tobacco as a main income source. Instead, tobacco farming provides supplementary income for farmers. However, farmers continue to grow tobacco due to several factors such as forward contracts and having a readymade market for their crops, with some additional benefits such as free

extensions and subsidized inputs (Thibbotuwawa & Dissanayake, 2019). Apart from its negative health impacts, growing tobacco in the mid- and up-country areas of Sri Lanka has caused severe soil erosion, leading to the downstream sedimentation, depletion of water resources, and a decline in land productivity (Ministry of Environment and Renewable Energy, 2014). Moreover, growing tobacco will hardly contribute to household food security, which is a growing concern during pandemics such as COVID-19 (Dissanayaka, 2020).

1.2.5. Government's stake and involvement

Sri Lanka became a signatory to the WHO FCTC on 23rd September 2003 and ratified it on 11th November 2003, as the first Asian country and 4th in the world to do so. In the roadmap to tobacco control legislation in Sri Lanka, the NATA Act was passed in 2006 as the law governing tobacco control in Sri Lanka. This law covered various aspects related to restrictions on smoking in public places; packaging and labeling requirements; tobacco advertising, promotion and sponsorship; and offenses and penalties. Moreover, the Act authorized the Minister of Health to issue regulations under the law and established the NATA to enact legal aspects for alcohol and tobacco prevention in Sri Lanka (Tobacco Control Laws, 2020).

However, in Sri Lanka, the government has a strong financial interest in the tobacco industry. It is highly reliant on this industry for revenue generation, because increasing taxes on cigarettes and tobacco has been the most appealing option for the government to fill the budget deficit, and government's stake on tobacco industry and tobacco policy is insurmountable. Nonetheless, the size of health warnings was increased to 80 percent of the front and back of tobacco product packages in 2015, while regulations prohibiting the manufacture, importation, and sale of smokeless tobacco products, e-cigarettes containing tobacco, and cigarettes that are flavored, colored, or sweetened were introduced. Other than that, smoking was prohibited in many indoor public places and workplaces and on public transport, and advertising of tobacco through most forms of mass media was prohibited (Tobacco Control Laws, 2020).[2]

1.2.6. Illicit trade

Illicit cigarette trade through smuggling takes place in both large and small scales in Sri Lanka. Large scale smuggling is carried out through container shipments despite detections by Customs. Large scale smuggling also takes place by concealing illicit cigarettes inside other items, giving rise to the presence of 'low volume-high frequency' illicit cigarette smuggling. Small-scale smuggling is carried out by individuals smuggling cigarettes into the country in their luggage, either individually or in a coordinated manner (Colombage, Morais, & Wickramasinghe, 2018). The increase in foreign migrant workers into the country is observed as a significant factor in contributing to small scale smuggling in recent times (Colombage, Morais, & Wickramasinghe, 2018). However, there is evidence that tobacco companies sometimes exaggerate the extent of illicit tobacco by commissioning studies whose methodology and validity are unclear (Weerasekera, 2019).

For instance, a study done in 2017 using a disposed cigarette butt/pack collection technique found that 15.56% of butts and 10.8% of packs have come from the illicit market. However, interestingly, only 3% of cigarettes sold in the open market were illicit based on test purchases. Their estimates of quantities of illicit cigarettes for 2017 were in the range of 383 million sticks to 583 million sticks with a tax loss in the range of Rs. 11.5 billion to Rs. 17.5 billion (Colombage, Morais, & Wcikramasinghe, 2018). However, these estimates are questionable because the study relied on tobacco company expertise to distinguish formal butts from illicit butts, and its data was collected from high tourist density districts (Weerasekera, 2019). By comparing 2016 cigarette consumption data against 2019 sales data, another report estimated the illicit cigarette share was

21% of the total market (Research Intelligence Unit , 2019). CTC claims that due to the Government increasing taxes on legal cigarettes in Sri Lanka, cigarette smuggling grew by 45% to 740 million illicit sticks in 2019, accounting for 8% of the total tobacco market (Ceylon Tobacco Company, 2020).

1.3. Discussion and conclusion

Sri Lanka was the first Asian country to ratify the WHO FCTC and the fourth globally. The National NATA Act was enacted in 2006 to protect public health from tobacco- and alcohol-related harm (Fonseka, 2009). Tobacco smoking has become a large-scale public health epidemic in Sri Lanka. Due to gradual increases in price, tax increases, sales censorship and anti-tobacco awareness campaigns, cigarettes production decreased from 4.7 billion sticks to 3.15 billion sticks between 2002 and 2018 (World Health Organization, 2018). Volumes of cigarette production in Sri Lanka were fairly steady at the level of 5.2 billion sticks in the late 1990s (World Bank Group, 2017), and then production decreased from 4.7 billion sticks to 3.15 billion sticks between 2002 and 2018 (National Dangerous Drugs Control Board, 2020). Illicit cigarette trade through large and small scale smuggling is prevalent in Sri Lanka. A 2019 estimate suggests that the illicit cigarette share is 21% of the total market (Research Intelligence Unit, 2019).

As of 2015, tobacco smoking prevalence for those aged between 18 and 69 years was 15.0% overall, with a significant difference between prevalence rates for men (29.4%) and women (0.1%) (Ministry of Health, Nutrition and Indigenous Medicine, 2015). As of 2019, tobacco prevalence was highest in the 25-39 age group and lowest in the 15-24 age group. Prevalence declined from the beginning of the 2009 to 2017, but since 2017 there has been an increase in prevalence from 23.8% in 2017 to 28.4% in 2018 (Alcohol and Drug Information Centre, 2020). Cigarettes constitute the most common type of smoking tobacco (88.3%) and alternatives such as bidi and cigar constitute only 10.1% and 1.3% respectively. On average, a current smoker spends about Rs. 3,900 for a month on smoking. However, a daily smoker spends Rs. 5,850 per month on smoking (Alcohol and Drug Information Centre, 2020). The economic cost associated with tobacco related deaths and disabilities has been estimated to be more than the revenue received by Sri Lankan government from tobacco products (WHO, 2018).

Tobacco farming in Sri Lanka has decreased sharply. The latest statistics indicate a tobacco cultivated area of 1,338 hectares, a mere 0.06 per cent of agricultural land in 2018. Production has also declined dramatically, from 16,670 MT in 1982 to 3,273 MT in 2017. MOA estimates that only about 3,000 farmers currently cultivate tobacco in Sri Lanka (Thibbotuwawa & Dissanayake, 2019).

The anti-tobacco movement in Sri Lanka is a strong collaborative activity led throughout the country by few key institutes and the government. ADIC-Sri Lanka, which was inaugurated in April 1987, is responsible for preventing drug use through social changes and effective education. ADIC is also responsible for mapping trends of alcohol and tobacco use across the country through surveys since 1998. Implementation partners of CCT include ADIC, NATA and SLMA. Community mobilization against tobacco use had been taken forward by some non-governmental organizations (NGOs), prominent Buddhist monks, academics and medical doctors (Samarasinghe, 2017).

Sri Lanka has a strong tobacco control policy regime. In the roadmap to tobacco control legislation in Sri Lanka, the NATA Act was passed in 2006 as the law governing tobacco control. This law covers various aspects related to restrictions on smoking in public places; packaging and labeling requirements; tobacco advertising, promotion and sponsorship; and offenses and penalties.

2. Demand for tobacco

Over the last two decades, a lot of research has been conducted on Sri Lanka to understand different aspects of tobacco consumer behavior. These includes studies ranging from the determinants of tobacco prevalence to understanding smoking behavior, as well as studies relating to estimating health costs associated with smoking. Leading international organizations such as WHO, International Tobacco Control (ITC) and American Cancer Society have also conducted multiple surveys. WHO conducted several surveys, the most well-known of which are the Global Youth Tobacco Survey (GYTS) 2007, GYTS 2011 (Ages 13-15), GYTS 2015, STEPS 2003 (Western province), STEPS 2006 and STEPS 2015. Each of these studies was designed to address and understand different aspects of tobacco consumer behavior. While GYTS study was done to cover individuals from 13 to 15 years of age, STEPS is a survey on non-communicable diseases, where it is understood that one of the main contributors to such diseases is the use of tobacco. Respondents of this study ranged from ages 25 to 64. Even though the surveys were done in different years, they have been conducted at regular intervals whereby a holistic picture of the consumers' story can be covered over the last two decades. While Sri Lanka has not done a Global Adult Tobacco Survey (GATS) yet, it has conducted the Global Health Professions Student Survey and Global School Personnel Survey at various points of time.

Among others, ADIC conducts Spot and Trend surveys annually since 2010 to study the prevalence of the tobacco usage in Sri Lanka (Alcohol & Drug Information Centre, 2020). Both direct and indirect costs of the use of alcohol and tobacco were estimated in 2015 by a study conducted by the NATA and the WHO, in collaboration with the Ministry of Health and Nutrition of Sri Lanka (MOH) and the SLMA (World Health Organization, 2017). Other than that, DHS 2016 of the Department of Census and Statistics (DCS) and Annual Health Bulletins (AHB) of the MOH are popular data sources related to the tobacco demand.

This chapter draws from the results of all these surveys mentioned above, in order to bring about a comprehensive understanding of what is known about the demand side of tobacco consumption and identifying what remains to be learned.

2.1. Overview of different types of tobacco products and their prices in Sri Lanka

In Sri Lanka, there are two broad types of tobacco products consumed by users - smoked and smokeless (chewing). Chewing tobacco is used mainly as a complement to betel. Smoking is mainly done in the form of cigarettes, bidis, and cigars. Tobacco is also smoked in pipes, but in very small quantities. According to the ADIC survey 2019, the main smoked tobacco product was manufactured cigarettes with a proportion of 88.3%. The second highest smoked product was bidi (a home industry based hand-rolled smoking product) accounting for 10.1%, while the third was cigars (1.3%). Other products were smoked at a significantly lower rate (Alcohol and Drug Information Centre, 2020).

CTC categorizes cigarettes into different brand segments based on their prices as low-end, value for money segment, aspirational premium and premium segments, and offers a strong portfolio of brands to cater to diverse consumer preferences. Capstan caters to the low end segment and is the only non-filtered cigarette in the market, while Bristol and Navy-Cut are value for money brands. John Player Gold Leaf (JPGL), which caters to the aspirational premium segment of the market, has been CTC's leading brand with roughly an 80% market share. Dunhill is the premium offering of CTC (Ceylon Tobacco Company, 2020).

In Sri Lanka, cigarettes of different price categories have different excise rates. Average cigarette prices have increased over the last decade (Table 2.1.1). In 2008-2016, the excise rate for JPGL cigarettes increased more than three-fold, with a similar tax share in 2008 and 2016 (76%) because net-of-tax part of the price also increased more than three-fold. A similar situation is observed for Capstan cigarettes: both retail price and the net-of-tax price increased five-fold, but the total tax share is still about 73% (World Bank Group, 2017). Bristol prices also increased almost three-fold. However, chewing tobacco prices have increased by only 26% over the last decade (Table 2.1.1).

Table 1 (2.1.1) Price components of different cigarette brands, LKR

Year	Gold Leaf (JPGL)- length 72-84 mm					Capstan - Length below 60 mm					Cigarettes-Bristol	Chewing tobacco Jaffna
	Price	Excise	VAT	NBT	Tax Share (%)	Price	Excise	VAT	NBT	Tax Share (%)		
2008	16	9.68	2.09	0.3	75.4	4	2.3	0.52	0.08	72.2	12.7	52.7
2009	18	10.72	1.93	0.4	72.5	4	2.3	0.43	0.08	70.0	14.0	55.2
2010	20	11.26	2.14	0.4	69.0	6	2.6	0.64	0.12	56.5	14.9	55.5
2011	22	12.11	2.36	0.4	67.6	6	3.5	0.64	0.12	70.4	16.7	56.1
2012	25	13.8	2.68	0.5	67.9	8	4.1	0.86	0.16	64.0	18.8	58.4
2013	28	14.96	3	0.6	66.3	10	5.3	1.07	0.2	65.7	20.4	62.1
2014	30	16.61	3.21	0.6	68.1	10	5.6	1.07	0.2	68.7	-	63.9
2015	33	21.61	0	0	65.5	10	6.0	0	0	60.0	20.0	62.0
Jan-16	35	23.75	0	0	67.9	11	7.0	0	0	63.4	24.7	66.4
Oct-16	42	30.5	0	0	72.6	20	11.7	0	0	58.4	-	-
Nov-16	50	30.5	6.52	1	76.0	20	11.7	2.61	0.4	73.4	-	-
2017											35.0	75.5

Source: World Bank group report (2017); Economic and Social Statistics in Sri Lanka report (2019) by Central Bank of Sri Lanka
https://www.cbsl.gov.lk/sites/default/files/cbslweb_documents/statistics/otherpub/ess_2019_e.pdf

2.2. Prevalence of tobacco use by consumer characteristics

Prevalence rates of tobacco use have been declining in Sri Lanka over the years. This downward trend in prevalence is observed for both males and females as well as among urban and rural inhabitants. These prevalence rates vary across studies due to differences in methodologies in sampling and estimation methods. In this section, prevalence rates are reported by different consumer characteristics.

2.2.1 Prevalence of tobacco use by age

Prevalence rates of tobacco increase with age in Sri Lanka. The highest rate of tobacco smoking was in the 25-39 age group (27.4%), while the lowest was in the 15-24 age group (19.9%) in 2019 (Table 2.2.1.1). However, historical data reveals that the highest prevalence rate has been changing alternatively between the two highest age groups, 25-39 and 40 and above, over the years. There is a significant decrease in tobacco smoking across all age groups over the last ten years. The 40 and above age group has recorded the largest reduction of smoking prevalence between 2018 and 2019, with a 22% reduction from 31.9% prevalence in 2018 to 24.8% in 2019.

Table 2 (2.2.1.1) Prevalence of tobacco use by age (%)

	Age group		
	15-24 years	**25-39 Years**	**>=40**
2009	32.06	42.00	38.30
2010	26.40	42.50	40.70
2011	29.00	37.00	32.00
2012	26.60	36.90	38.90
2013	26.90	35.90	36.70
2014	26.60	38.20	35.90
2015	25.10	34.80	35.50
2016	29.00	38.40	32.60
2017	18.36	23.90	26.70
2018	21.50	28.60	31.90
2019	19.90	27.40	24.80

Source : Alcohol and Drug Information Centre (2019). Annual Trend Survey on Tobacco and Smoking in Sri Lanka.
http://adicsrilanka.org/wp-content/uploads/2020/05/Tobacco-Trend-Survey-2019.pdf

2.2.2 Prevalence of tobacco use by gender

Gender disaggregated data on smoking prevalence indicate a significant difference between males and females (Table 2.2.2.1). Currently, 29.4 percent of adult males have smoked tobacco compared to only 0.1 percent of the females. In terms of smokeless tobacco, prevalence for adult males was 26 percent as compared to only 5.3 percent of the females. There are considerable differences between the two sexes in their daily use of tobacco and smokeless tobacco. Similar pattern of differences between smoking prevalence in males and females was found in other surveys, including the National Oral Health Survey (2015-2016) and Sri Lanka Country Profile (2015) of the Tobacco Atlas.

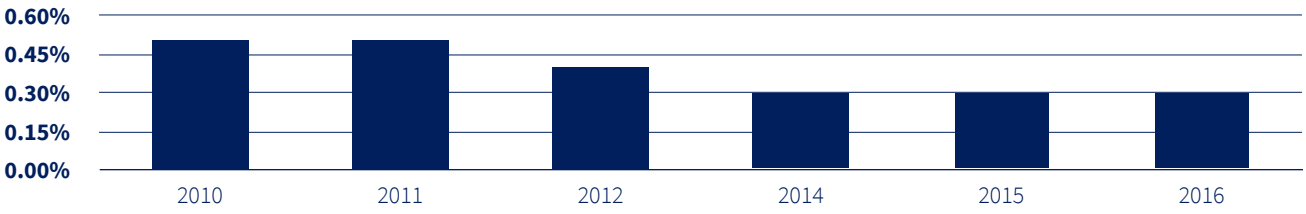
Table 3 (2.2.2.1) Prevalence of tobacco use by gender (%)

Adults	STEP Survey 2015		National Oral Health Survey (2015-2016)				Tobacco Atlas (2015)			
	18-69 yrs		30-44 yrs		60-69 yrs		>15 yrs		10-14 yrs	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Smoke tobacco (%)	29.4	0.1					22.4	0.3	0.45	0.32
Smoke tobacco daily (%)	19.9	0.1	22.6	0.0	22.0	0.0				
Smokeless tobacco (%)	26.0	5.3								
Smokeless tobacco daily (%)	19.0	4.1	21.3	2.4	34.6	10.7				

Source: WHO STEP Survey 2015; National Oral Health Survey (2015-2016)

The prevalence of smoking among females in Sri Lanka shows a declining trend (Figure 2.2.2.1). In 2010, the proportion of adult females who smoked in Sri Lanka was around 0.5 percent, and subsequently declined to 0.3 percent in 2016.

Figure 1 (2.2.2.1) Trend in the prevalence of smoking by females



Source: Statistica (n.d) Prevalence of smoking for females in Sri Lanka from 2010 to 2016, https://www.statista.com/statistics/732798/sri-lanka-female-smoking-rate/

2.2.3 Prevalence of smoking by education level

Smoking prevalence has a gradient with levels of education. The frequency of tobacco smoking is negatively associated with the improvement of educational levels (Fernando, et al., 2019). With a higher level of educational attainment, prevalence rates generally decline among both the daily smokers and non-daily smokers (Table 2.2.3.1). Another study in 2005 has also observed higher prevalence rates among less educated people (Perera B, 2005).

Table 4 (2.2.3.1) Prevalence of smoking by education level (%)

Category	Smoking Frequency (%)	
	Daily smokers	Not Daily
Up to Ordinary level	62.3	47.3
Up to Advanced level	25.9	31.8
Diploma/Degree	11.8	20.9

Source : BMC Public Health (2019). Socioeconomic factors associated with tobacco smoking among adult males in Sri Lanka. https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-019-7147-9

2.2.4 Prevalence of smoking by occupation

ADIC 2018 report reveals that “Skilled agricultural and fishery workers” (42.9%) and “Craft and related workers” (41.6%) have more current smokers as compared with other occupational groups (Table 2.2.4.1). “Technicians and associate professionals” and “Service workers and shop and market sales workers” were the two occupational categories with the lowest share of current smokers. In 2019, “Skilled agricultural and fishery workers” (36.9%) and “Elementary workers” (33.2%) have reported highest rate of current smokers while “Technicians and associate professionals” had the lowest share (29.4%). There was a reduction of smoking in all occupational categories between 2018 and 2019.

Table 5 (2.2.4.1) Prevalence of smoking by occupation (%)

Occupation	2018			2019		
	Current smokers	Last 30 days abstainers	Never uses	Current users	Last 30 days abstainers	Never uses
Technicians & Associate Professionals	27.50	26.70	47.5	29.40	16.70	53.90
Service workers & shop & market sales worker	25.80	25.9	48.3	-	--	--
Skilled Agricultural & Fishery Workers	42.90	25.70	31.40	36.90	23.40	39.60
Craft & related workers	41.6	23.80	34.70	31.20	25.30	43.60
Plant & Machine Operators & Assemblers	35.70	28.10	36.20	31.20	25.30	43.60
Elementary Occupations	36.20	21.20	42.60	33.20	19.90	46.90
Police & Armed forces	--	--	--	32.6	30.20	37.20

Source: ADIC Survey 2018 and 2019 http://adicsrilanka.org/wp-content/uploads/2019/10/TS-Tobacco-Smoking-Report-2018.pdf , http://adicsrilanka.org/wp-content/uploads/2020/05/Tobacco-Trend-Survey-2019.pdf

2.2.5 Prevalence of smoking by income

The prevalence of tobacco smoking declines by household wealth. According to the DHS 2016, the prevalence of smoking is highest among the poorest households (40 percent compared to 24 percent among the richest ones).

Table 6 (2.2.5.1) Prevalence of smoking by income (%)

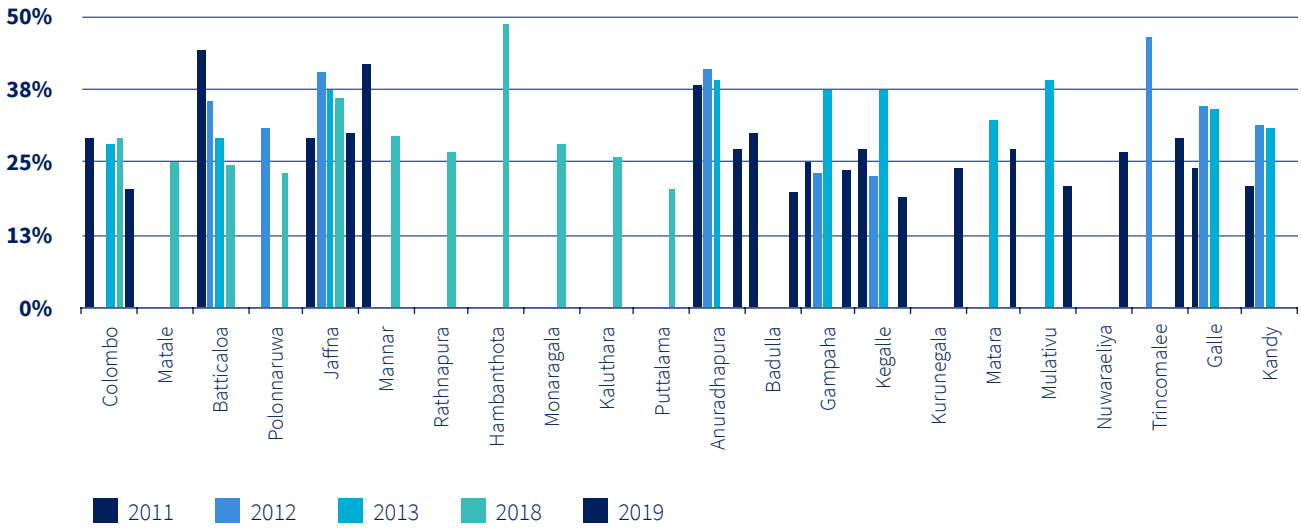
Wealth Quintile	Smoke Tobacco	Smokeless Tobacco
Lowest	39.7	39.9
Second	37.7	36.3
Middle	35.6	30.3
Fourth	31.6	22.9
Highest	23.6	12.2

Source: DHS 2016

2.2.6 Prevalence of tobacco usage by district & sectors

The ADIC tobacco spot surveys have been carried out covering different districts, to measure the district-wise prevalence of smoking. In 2018 the highest smoking prevalence rate was in Hambantota district (48.5%), followed by Jaffna district (35.9 %) (Figure 2.2.6.1). The lowest rate in 2018 was reported from Puttalam District (20%). In 2019 the highest smoking prevalence rate was observed in Jaffna district (30%), followed by Trincomalee district (29%). While it is very difficult to make an inference on trends because of the coverage of different districts, figures in Colombo and Jaffna districts show a declining trend. The lowest rate in 2019 was reported from Kegalle District (18%). Matara, Anuradhapura and Nuwaraeliya recorded higher smoking prevalence rates than the overall rate, which was 24.32%. While it is difficult to make comparisons based on all the districts due to different district coverage in different surveys, in general, it shows a declining trend in most districts.

Figure 2 (2.2.6.1) Current tobacco usage by district (%)



Source: ADIC Reports 2011-2019

In terms of sectors, the rural sector shows a higher prevalence of smoking than the urban sector, for both smoked tobacco and smokeless tobacco, based on DHS 2016 figures. Importantly, the estate sector has the highest usage of smokeless tobacco (Table 2.2.6.1).

Table 7 (2.2.6.1) Current tobacco usage by sectors (%)

	Smoke Tobacco	Smokeless Tobacco
Urban	31.6	14.4
Rural	34.5	30.5
Estate	31.6	53.0

Source: DHS 2016

2.3. Prevalence of tobacco use (over time) by type of tobacco products

As mentioned earlier, there are two main forms of tobacco products – smoked and smokeless. Cigarettes and bidi are the two main types of smoked tobacco. According to the 2019 ADIC survey, the main smoked tobacco product was manufactured cigarettes with a prevalence of 88.3%. The second highest smoked product was

bidi (a home industry based hand-rolled smoking product) with a prevalence rate of 10.1%, while the third was cigars (1.3%). Other products were smoked at a significantly lower rate. Bidi was relatively used more by current smokers “above 40” age group (20.5%) and the people in “Jaffna” (50.7%) district. CTC claims that 40-45% of tobacco smoking market is comprised of bidi smokers during the years from 2009 to 2015. It also claims that Sri Lanka’s bidi market has continued to expand at a steady pace due to price increases for legally manufactured cigarettes led by steep excise taxes.

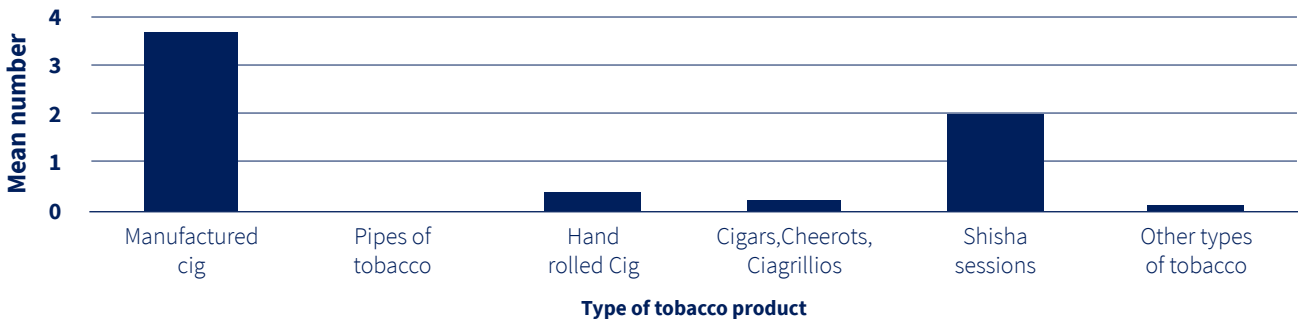
Table 8 (2.3.1) Prevalence of different types of tobacco users (%)

Type	2015	2016	2017	2018	2019
Cigarette	91	93	93.80	89.50	88.30
Bidi	8	4.50	5.20	15.90	10.10
Cigar	0.80	1	0.90	3.50	1.30
Other	0.10	0.50	0.30	2.30	2.30

Source: ADIC Reports 2015-2019

According to the Non Communicable Disease Risk Factor survey (2015), the mean number of manufactured cigarettes used among male daily smokers was 3.7, while the mean number of hand rolled cigarettes used was 0.4 (95%). Although the majority (85.2%) of current male smokers were using manufactured cigarettes, more than one fourth (28%) were using Shisha. In addition, 6.9% were using hand rolled cigarettes and 2% were using pipe tobacco (World Health Organization; Ministry of Health, Nutrition and Indigenous Medicine, 2015).

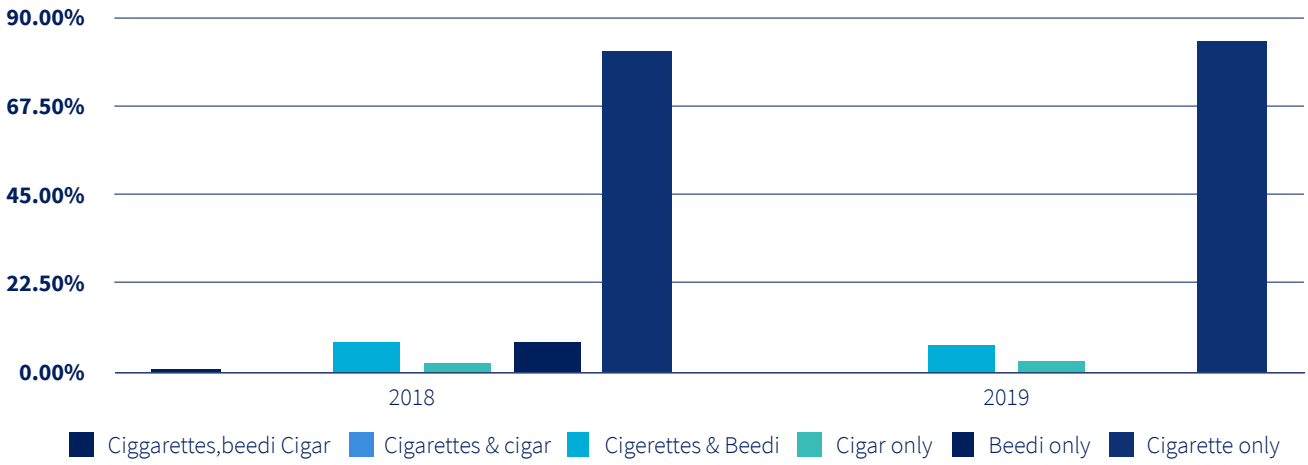
Figure 3 (2.3.1) Mean amount of tobacco products used by daily male smokers 2015



Source: Non Communicable Disease Risk Factor survey (2015)

Figure 2.3.2 shows that a clear majority of current smokers were exclusively using cigarettes (81.4% in 2018 and 84% in 2019), while next highest categories were bidi only at 7.8% in 2018 and cigarette and bidi at 7.1% in 2019, which are over ten times lower than figures for cigarette use. There has been a reduction in bidi-only consumption and an increase in cigarette-only consumption from 2018 to 2019.

Figure 4 (2.3.2) Exclusive/mix use of tobacco smokers 2018 and 2019



Source: ADIC Tobacco Trend Survey-2019

A majority of smokers used cigarettes, in contrast to other products, across all districts in 2019 (Table 2.3.2). All current smokers from the Kegalle District were cigarette smokers. The second highest product smoked across all districts was bidi, but compared to cigarettes the rates of bidi smoking were relatively low. The highest percentage of bidi smokers was observed from the Districts of Jaffna and Mullaitivu, while the lowest was reported from Trincomalee District. Smoking rates of cigars was very low compared to cigarettes and bidi. The highest recorded cigar consumption was observed from the Mullaitivu District, while cigar smoking was not observed in the Districts of Kegalle and Kurunegala.

Results were more or less similar in 2018. Cigarettes were still the most common form of smoking product used by current smokers in all districts, except for Jaffna in 2018. Bidi was the highest consumed product in Jaffna, while Matale also reported a high consumption of bidi (Table 2.3.2).

Table 9 (2.3.2) Different smoking products used by current smokers at district level (%), 2018-2019

	2018			2019			
	Cigar	**Bidi**	**Cigarettes**	**Cigar**	**Bidi**	**Cigarette**	**Other**
Colombo	10.00	10.20	99.20	2.00	9.80	98.00	0.00
Matale	0.00	22.30	96.70				
Batticaloa	3.50	16.60	84.10				
Plonnaruwa	3.80	14.60	92.00				
Jaffna	15.50	50.70	46.70	2.70	23.30	90.40	0.00
Rathnapura	0.00	4.40	100.00				
Hambanthota	0.60	9.10	98.70				
Monaragala	2.00	2.00	100				
Kaluthara	0.00	0.00	96.60				
Puttalama	1.20	8.30	98.50				
Anuradhapura				1.40	8.50	98.60	0.00
Badulla				0.00	5.80	100	0.00

Gampaha				0.00	5.10	100	0.00
Kegalle				0.00	0.00	100	0.00
Kurunegala				0.00	10.80	100	0.00
Matara				1.40	10	98.60	0.00
Mulativue				7.00	23.30	90.70	4.70
Nuwaraeliya				0.00	19.40	90.30	0.00
Trincomalee				1.60	4.70	95.30	0.00

Source: Tobacco smoking report 2018; Tobacco trend survey-2019.

Smoking "cigarettes only" was the highest across all occupations in 2019 (Table 2.3.3). The occupational groups of "Legislators," "Senior Officials and Managers," "Professionals," "Technicians and Associate Professionals" and "Forces" exclusively smoked "cigarettes only." The second highest combination across all occupations was smoking "cigarettes and bidi." The highest percentage of cigarette and bidi users was recorded from the occupational group of "craft and related workers." The combination of "cigarettes and cigar" was smoked in a small percentage in two occupation groups, "skilled agricultural fishery workers" and "elementary occupations." Consumption of "bidi only" was seen only in two occupational groups, "plant and machine operators" and "assemblers and elementary occupations."

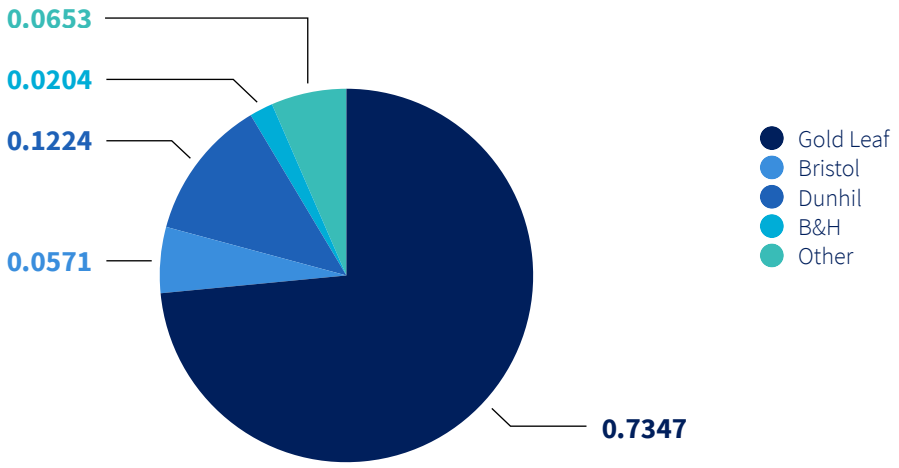
Table 10 (2.3.3) Exclusive/mixed use of tobacco products by occupation (%)

	LSOM	PRF	TAP	CLKR	SWS MW	SAFW	CRW	PMOA	EO	FOR	RET	UNE MP	STUD
All	0	0	0	0	0	2.4	0	0	0	0	0	0	0
Cigarette, bidi & cigar	0	0	0	0	0.6	0	2.9	0	1.4	0	0	0	0
Bidi and other	0	0	0	0	0	2.4	0	0	0	0	0	0	0
Cigarette and cigar	0	0	0	0	0	2.4	0	0	1.4	0	0	0	0
Cigarette and bidi	0	0	0	12.5	5	12.2	20	3.4	16.4	0	11.1	11.8	12.7
Bidi only	0	0	0	0	0	0	0	90	2.7	0	0	0	0
Cigar only	0	0	0	0	1.7	9.8	2.9	1.7	8.2	0	0	0	0
Cigarette only	100	100	100	87.5	92.8	70.4	74.3	94	69.9	100	88.9	88.2	87.3

Source: Tobacco trend Survey 2019. Notes: LSOM - Legislators, Senior Officials and Managers, PROF – Professionals, TAP – Technicians and Associate Professionals, CLRK – Clerk, SWSMW – Service Workers and Shop Market Sales Workers, SAFW – Skilled Agricultural and Fishery Workers, CRW – Craft and Related Workers, PMOA – Plant and Machine Operators and Assemblers, EO – Elementary Occupations, FOR – Forces (Police and Armed Forces), RET – Retired, UNEMP – Unemployed, STUD – Students

A study done in 2018 has found JPGL (73.47%) as the most preferred cigarette brand of smokers, followed by Dunhill (12.2%) and Bristol (5.7%). Remarkably, none of the respondents preferred the local brands Capstan and Navy Cut (Figure 2.3.3). Around 6.5% of respondents preferred unlisted brands, which could be considered as mostly illicit. Around 2.0% respondents preferred Benson and Hedges, which has both local and illicit versions (Colombage, Morais, & Wcikramasinghe, 2018).

Figure 5 (2.3.3) Preferences for cigarette brand



Source: Colombage, Morais, & Wcikramasinghe, 2018

2.4. Distribution of tobacco use by age of initiation, frequency of use, switching & quitting

2.4.1. Age of initiation

According to ADIC studies, the majority of Sri Lankan people generally start consuming smoked tobacco products in the age group of 16-20 years. More than one-fourth of tobacco smokers had initiated tobacco smoking below the age of 18. More than one-fifth of tobacco smoking initiation occurred under the age of 15 in 2015, which was reduced to just 6% in 2019. More than 93% of current tobacco smokers initiated under the age of 30 across the years surveyed. A small percentage of smokers (1-7%) initiated smoking over the age of 30 years before 2019. It is clear from the data that the share of smokers who initiated in the age group of 16-20 years has increased over the years, while it has contracted in other age group categories.

Table 11 (2.4.1.1) Distribution of tobacco use by age of initiation from 2015-2019 (%)

Age group	2015	2016	2017	2018	2019
<=10	6.20	1.70	3.60	1.2	1.0
11-15	14.90	16.60	13.30	6.6	5.0
16-20	54.30	53.00	59.30	60.10	67.60
21-25	20.00	19.50	18.00	15.20	15.50
26-30	6.20	5.40	4.60	9.90	10.80
31-35	1.30	2.60	0.70	7.0	
36-40	0.50	0.60	0.30		
<40	1.00	0.60	0.10		

Source: ADIC Survey Reports 2015-2019

According to the ADIC surveys across the years of 2016-2019, the most common occasion of initiation of

smoking was “with friends” followed by “at a party.” In 2019, 59.2% smokers had initiated smoking “with friends” compared to 52.7% in 2016, while 17.9% smokers had initiated “at a party” in 2019 compared to 20% in 2016. There is a considerable proportion of smokers who have initiated “on a trip” and “alone at home.” Interestingly, 5.9% of smokers have initiated smoking “at work place” in 2019, which is a drastic increase from the previous years (1.2%-2.4%).

Table 12 (2.4.1.2) Distribution of tobacco use by occasion of smoking (%)

Occasion	2016	2017	2018	2019
At a funeral	0.20	0.10	n.a.	0.5
Irrelevant answer	n.a.	0.1	n.a.	n.a.
At a school	n.a.	0.3	n.a.	2.3
Cannot remember	1.40	0.70	n.a.	1.4
At work place	2.10	1.20	2.40	5.90
Tuition class	2.10	1.30	0.60	0.30
Big match	2.30	2.50	1.00	0.30
After exam	7.1	3.60	3.00	0.40
Alone at home	4.40	5.60	4.00	3.70
On a trip	7.60	7.40	7.10	1.70
At a party	20	22.70	19.40	17.90
Gathering with friends	52.70	54.40	62.30	59.20
In abroad	0.20	n.a.	n.a.	n.a.
Musical show	n.a.	n.a.	n.a.	0.2

Source: ADIC Report 2016, 2017, 2018, 2019

2.4.2. Frequency of use

In ADIC surveys from 2016-2019, the distribution of population by frequency of use is broadly categorized by “current smokers” and “non-smokers,” where non-smokers are subcategorized as “former smoker” and “never smoker.” The percentage of current smokers is in a declining trend, whereas the percentage of non-smokers is increasing (Table 2.4.2.1). The former has reduced from 32% in 2016 to 24% in 2019, while the latter has increased from 68% in 2016 to 76% in 2019.

Table 13 (2.4.2.1) Frequency of use (%), 2015-2019

Frequency		STEP survey			ADIC Survey			
		2015			2016	2017	2018	2019
		Men	Women	Total				
Current smokers	Daily	19.9	0	10.2	32	24	28.4	24.2
	Occasional	9.5	0	4.8				
Non smokers	Former smoker	16.7	0.1	8.5	68	25	24.3	19.4
	Never smoker	53.9	99.8	76.5		51	47.4	56.4

Source: https://www.who.int/ncds/surveillance/steps/STEPS-report-2015-Sri-Lanka.pdf ADIC Reports 2016-2019

In STEPS 2015, the distribution of population by frequency of use was broadly categorized by "current smoker" and "non-smokers." Current tobacco smokers were then subcategorized by "daily smokers" and "occasional smokers." Non-smokers were subcategorized as "former smoker" and "never smoker" (World Health Organization; Ministry of Health, Nutrition and Indigenous Medicine, 2015). In 2015, among current smokers of smoked tobacco, the percentage distribution of daily smokers and occasional smokers was 10.2% and 4.8% respectively (Table 2.4.2.1). Men (19.9%) had a higher daily smoking prevalence than females (0%), while 85.0% adults among the overall population were non-smokers. Among these non-smokers, the majority (76.5%) were never smokers and former smokers accounted for only 8.5%. The percentage of never smokers was significantly higher among females (99.8%) as compared to males (53.9%). The percentage of former smokers was significantly higher for males (16.7%) than females (0.1%) (World Health Organization; Ministry of Health, Nutrition and Indigenous Medicine, 2015).

Over the past few years, the majority of smokers were daily smokers across all age groups (Figure 2.4.2.1). A consistent increase in the rate of daily smokers with age is visible. The highest number of daily smokers were visible in the age group "40 and above" while the lowest was in the "15-24" age group. Interestingly, there is a clear positive association between daily smoking frequency and age. Smoking frequency rates of "few times a month" and "only in special occasions" tend to decrease with age. The highest number of "few times per month" smokers was in the "15-24" age group. Over the years, frequencies of "daily smoking" and "only in special occasions" have been in a declining trend while the smoking frequency of "few times a month" is increasing.

Figure 6 (2.4.2.1) Frequency of smoking among age groups, 2011-2019

Source: ADIC (2019). Annual Trend Survey on Tobacco and Smoking in Sri Lanka.
http://adicsrilanka.org/wp-content/uploads/2020/05/Tobacco-Trend-Survey-2019.pdf

Table 14 (2.4.2.2) Use smoking products by frequency, 2018-2019

Frequency	2018			2019		
	Cigarette	Bidi	Cigar	Cigarette	Bidi	Cigar
Occasional/ Only at a function	91.80%	12.90%	-	95.80%	4.20%	-
Few times a month	88.90%	9.30%	4.00%	95.10%	3.30%	1.60%
Weekly	-	-	-	91.30%	8.10%	0.70%
Daily	89.10%	18.00%	3.80%	90.40%	8.40%	0.90%

Source: http://adicsrilanka.org/wp-content/uploads/2019/10/TS-Tobacco-Smoking-Report-2018.pdf; http://adicsrilanka.org/wp-content/uploads/2020/05/Tobacco-Trend-Survey-2019.pdf

According to ADIC survey results from 2018 and 2019, cigarettes were the most smoked product across different frequencies of smoking. Bidi was the second highest smoked product across all frequencies while cigars were the third. There were no cigar users who used "occasionally." The highest rate of bidi consumption

was observed in the "daily smoking" group while the lowest was in the group which smoked a "few times a month." The highest rate of cigarette consumption was observed in the "occasional" group; however there were no significant differences across other groups. The highest rate of cigar consumption was observed in the "few times a month" group.

2.4.3. Switching behaviour

In Sri Lanka, the prices of the cigarette brands vary significantly due to two reasons. First, as a basic practice in product portfolio management, most companies use varieties of products that suit their customers both financially and non-financially. For example, the CTC product portfolio consists of premium, average and low priced cigarettes. The "average category" of cigarettes, which consists of the most sold JPGL brand, holds the highest volume of sticks issued. Capstan is the highest selling brand in the "Low priced cigarettes" category while Benson & Hedges holds the upper hand in "premium category." Second, cigarettes of different price categories have different tax rates. From the year 2016, the gross price of a JPGL stick was Rs. 12 whereas the gross price of a Capstan stick was Rs. 5.30. The net price of a JPGL stick was Rs. 50 whereas the net price of a Capstan stick was Rs. 20 (Figure 2.4.3.1).

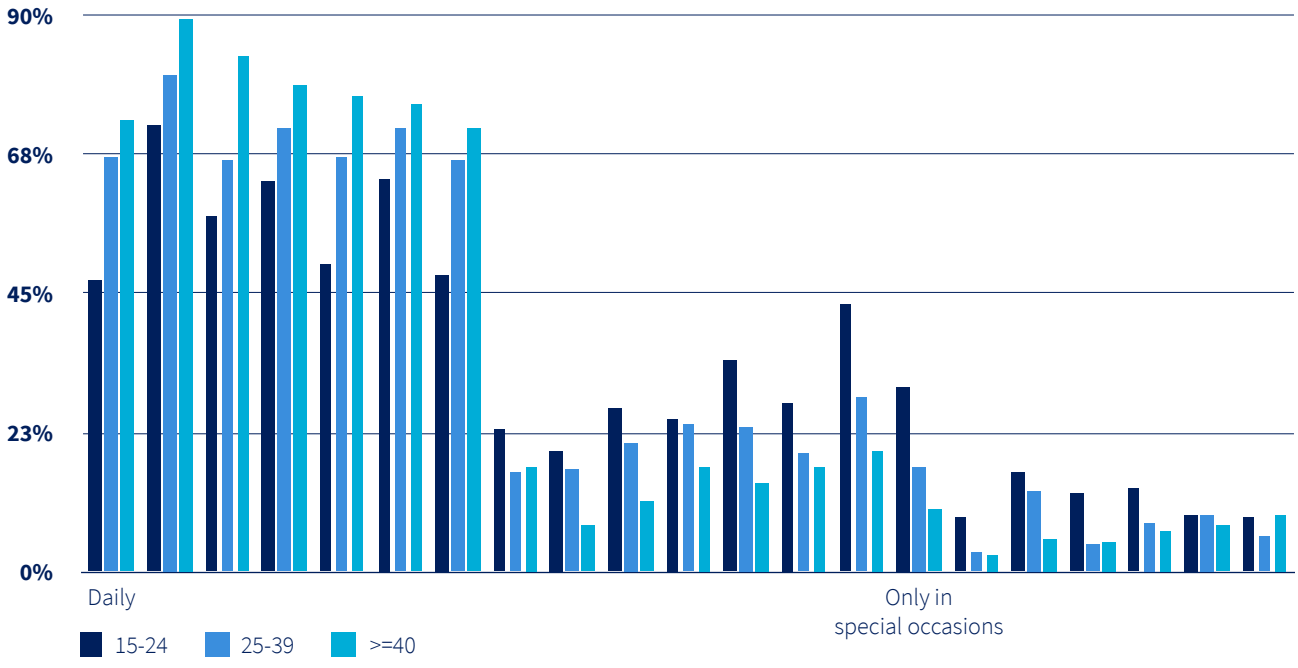
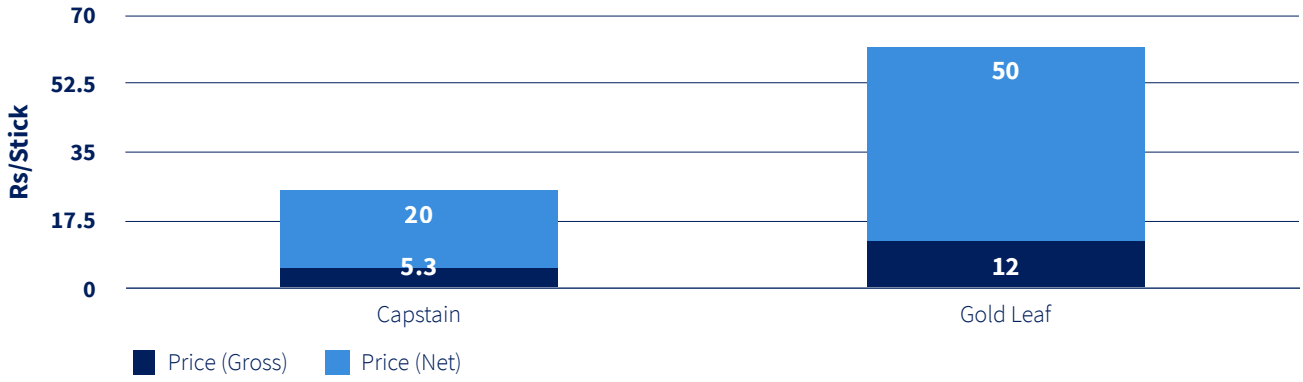


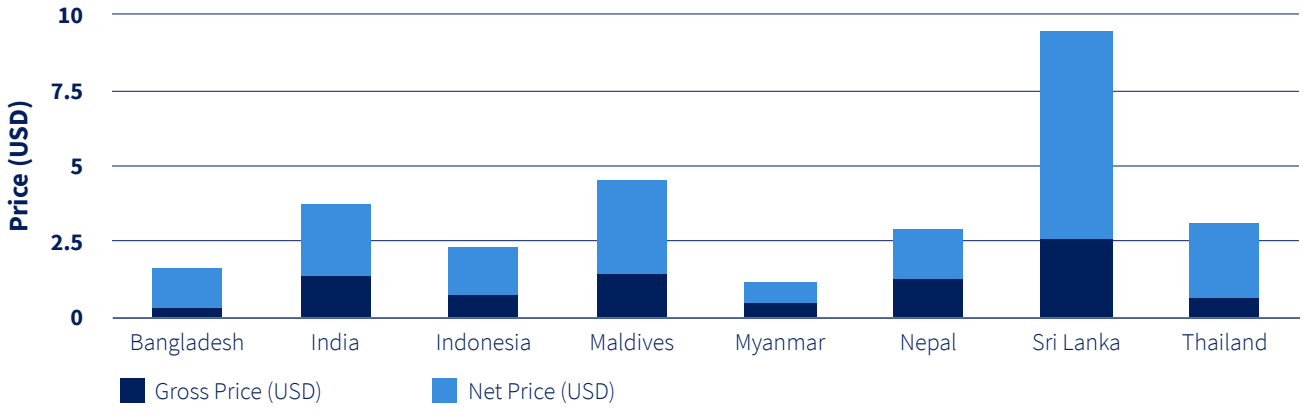
Figure 7 (2.4.3.1) Price differentiation of average and low-priced cigarettes, 2016



Source: World Bank Group, 2017

Also, the price is relatively higher compared to the cigarette prices of any neighboring countries (Figure 2.4.3.2). The reason for such premium price in Sri Lanka is mainly due to the imposition of higher excise tax (58.4% on JPGL) on tobacco products.

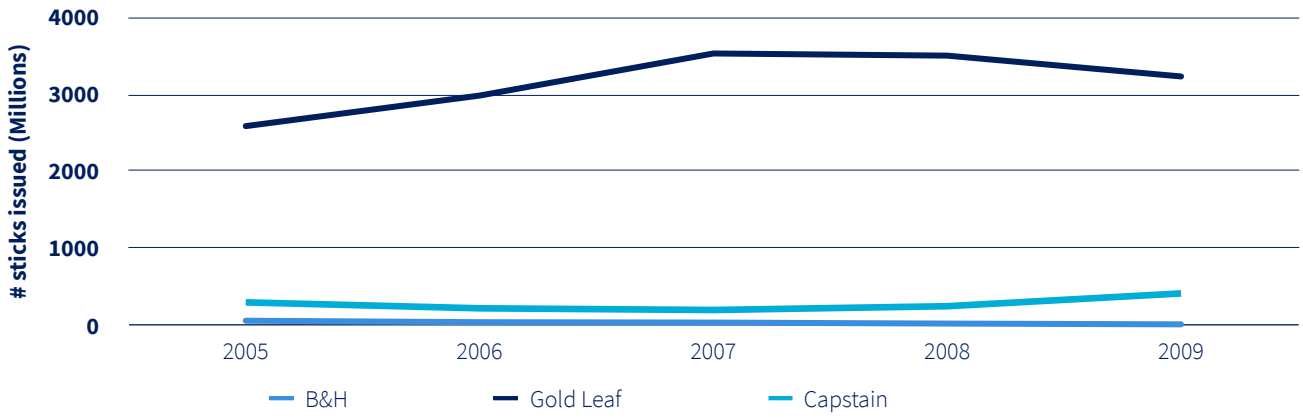
Figure 8 (2.4.3.2) Price of 20 cigarette pack of the most sold brand in neighbouring countries, 2016



Source: (World Bank Group, 2017)

As a result of price increases, switching has occurred from premium and average price legal cigarettes to low-priced legal cigarettes and bidi as well as illegal cigarettes. As shown in Figure 2.4.3.3, most of the reduction in production of cigarette sticks since 2007 has happened in the “average level product category” followed by the “premium” category, while the production of “low priced cigarettes” has shown an increasing trend.

Figure 9 (2.4.3.3) Number of sticks issued by different brands



According to CTC, the market for illegal cigarettes and bidi has increased by 11% and 28% respectively from 2017-2018, while total legal industry volume has remained the same. Hence, it can be inferred that cigarette consumers in Sri Lanka tends to switch over to cheaper brands, bidi and illicit cigarettes. In 2017, only 2.5% of current smokers were found to be substituting cigarettes with bidi, following cigarette price increases; in contrast, 87% reduced cigarette usage and 3% switched to cheaper cigarettes (Weerasekera, 2019).

2.4.4. Quitting behaviour

The quitting behaviour of tobacco consumers in Sri Lanka has been reported in the following major categories: (a) current smokers who have attempted to quit smoking in the past 12 months; (b) smokers who have been advised to quit smoking by a healthcare provider in the past 12 months and (c) the quit ratio for daily smoking among ever daily smokers (World Health Organization, 2018). Further, the quitting behaviour of smoking in Sri Lanka has been surveyed in ADIC Spot and Trend Surveys under the two categories - “attempted to quit” and “quit.”

WHO reports that 52 percent of the current smokers in Sri Lanka have made quit attempts and 35 percent of current smokers have been advised to quit tobacco smoking by a health care provider. Moreover, the report indicates that 34.4% of daily smokers and 16% of daily smokeless users had quit smoking (World Health Organization; Ministry of Health, Nutrition and Indigenous Medicine, 2015). According to ADIC, 67% and 58% of smokers have made an attempt to quit smoking in 2012 and 2014 respectively (Table 2.4.4.1).

Table 15 (2.4.4.1) Distribution of current smokers who tried to quit smoking (%)

Attempt to quit smoking	ADIC Survey		WHO STEP
	2012	2014	2015
Yes	67	58	52
No	33	42	48

Source: ADIC Tobacco Reports 2012, 2014 & Ministry of Health, Nutrition and Indigenous Medicine, 2015

The percentages of attempted quitting are quite high (>43.9%) across all age categories (Table 2.4.4.2). However, ADIC 2014 and WHO STEPS 2015 surveys show a considerably greater percentage (>60%) of attempted quitting in the age group of “over 40” and “18-29” respectively. While attempted quit rates are high, the actual quit rates are relatively low. Only 21% of ever male smokers (whom have ever smoked during their

lifetime) have quit smoking at the time of their survey (Table 2.4.4.3) (Alcohol and Drug Information Centre, 2019). However, in 2018, a considerable proportion of ever male smokers have quit smoking at the time of the survey. These proportions were over 36% in 2012, 2016 and 2017.

Table 16 (2.4.4.2) Attempts to quit smoking by age group (in %), 2014-2015

Age category	ADIC 2014	WHO STEP 2015
15-18	52.70	
18-24		60.8
25-29	49.10	
30-39		53.6
40-44	60.10	
45-59		43.9
60-69		46

Source: ADIC Tobacco Report 2014 & Ministry of Health, Nutrition and Indigenous Medicine, 2015

Table 17 (2.4.4.3) Distribution of smokers who quit smoking (%)

Quit smoking	2012	2016	2017	2018	2019
Yes	36	39	39	41	21
No	64	61	59	59	79
Not answered	not included	not included	2	not included	

Source: ADIC Tobacco Reports 2012, 2016, 2017 and ADIC Trend Surveys 2018, 2019

In 2017, more than a quarter of the respondents (25.5%) who had quit smoking have done it considering it to be a "useless" practice, followed by health concerns (23.5%) (Table 2.4.4.4). Family & other's influence (13.1%) and financial problems (12.7%) also played a significant role in smokers' quitting behaviour. The major reasons for quitting were quite similar across the years.

Table 18 (2.4.4.4) Reasons to quit smoking 2011-2017 (%)

Reason	2011	2012	2013	2014	2016	2017
Health concern	16.30	24.50	29.70	25.00	26.50	23.50
Pointless/Stupid thing	16.80	29.60	12.20	18.00	18.50	25.50
Financial Problem	11.70	14.80		19.10	18.50	12.70
No special reason	8.50	4.70	19.80	4.20	8.50	6.40
Family & other's influence	7.50	18.10	11.70	12.60	12	13.10
Not Addicted/Just for test		2.90	2.30	2.00	3.90	
Unpleasant			4.40	3.60	5	0.90
Experience from society		3.80	2.30		1.40	
Awareness	10.50	5.3				
Moralistic/Religious policy	5.10	2.90	1.60		2.10	

Dislike it		5.3				
Just thought and stop		4.70				
Irrelevant answer				9.30	2.60	3.20
Not answered						8.00
Other	14.40	14.30	21.90	3.10		5.00

Source: ADIC Tobacco Reports 2011-2017

According to ADIC 2018, in terms of quitting behaviour of different age groups, respondents who have quit smoking during youth (ages 15-24 years) have done it due to "dislike" or considering it as a "useless" act (46%) followed by "health reasons" (27%) (Table 2.4.4.5). However, among respondents who quit smoking beyond age 40 years, most have quit smoking due to "health concerns" (59%) more than any other reason. The most common reasons to quit among respondents who have quit smoking within 25-39 years were, "dislike/ useless" (37%) and "health concerns" (32%).

Table 19 (2.4.4.5) Reasons to quit smoking by age groups (in %), 2018-2019

	2018			2019		
	15-24 years	**25-39 years**	**40 and above**	**15-24 years**	**25-39 years**	**40 and above**
Physiological reasons	-	-	-	2.58	-	-
Psychological reasons	-	-	-	7.75	-	8.20
Exposure to prevention	-	-	-	-	2.72	-
Influence of others	12.60	15.20	16.50	13.28	11.09	5.47
Dislike/useless	45.80	36.70	22.00	-	-	-
Financial issues	10.60	13.40	11.00	7.75	8.37	5.47
Family concerns	-	-	-	13.28	9.73	11.33
Health concerns	26.50	32.20	58.70	13.28	19.46	39.06
Due to occupation	-	-	-	-	4.09	-
Change of preference	-	-	-	34.32	29.18	22.27
Change of availability	-	-	-	-	-	2.73
Change of opportunities	-	-	-	2.58	1.36	0.00
Change of price	-	-	-	-	7.00	5.47
No special reason				5.17	5.64	-
Other issues				-	1.36	-

Source: ADIC Reports 2018-2019http://adicsrilanka.org/2020/05/28/tobacco-trend-survey-2019;http://adicsrilanka.org/wp-content/uploads/2019/10/TS-Tobacco-Smoking-Report-2018.pdf

In 2019, the majority of people in the age groups of 15-24 and 25-39 quit smoking due to their "change in preference," while the prominent reason for quitting in the 40 and above age group was due to "health concerns." "Family concerns" was of considerable influence for all age groups in quitting smoking. Furthermore, "psychological reasons" and "financial issues" also influenced quitting smoking across all age

groups.

2.5. Consumer knowledge and awareness about different forms of tobacco use

Using warning labels on packs, media and awareness programs, government, international agencies and NGOs are trying to inform the mass population regarding the harmful effects of tobacco use, but there is a gap in availability of data on this topic. Findings from the GYTS 2015 revealed a number of interesting results (World Health Organization, 2015). In the past 30 days from the day of the interview, 88.0% saw anti-tobacco media messages while 83.1% reported that they saw tobacco use on television, video or movies, and 44.6% reported that they saw tobacco marketing at points of sale in the past 30 days (Table 2.5.1). Among current smokers, 61.7% had thought about quitting smoking because of health warnings on cigarette packages while 37.3% of never smokers thought about not starting to smoke because of the health warnings on cigarette packages. However, no gender difference in awareness of tobacco marketing by media messages was noted.

Table 20 (2.5.1) Exposure of students on media advertising (2015) (%)

Category	% Who saw ant-tobacco media message in the past 30 days	% who saw anyone using tobacco on television video or movies	% of youth who saw tobacco marketing at point of sale in the past 30 days	% current smokers who noticed health warnings on cigarette packages in the past 30 days
Total	88	83.1	44	91.6
Male	88.5	85	47.5	96.2
Female	87	81.2	41.6	0.0

Source: World Health Organization (2015)[3]

According to GYTS 2015, 2.9% reported that they have an object with a tobacco brand logo, and 2.0% were offered one or more free tobacco products by a tobacco company representative in 2015 (Table 2.5.2). In 1999, 10.5% reported that they have an object with a tobacco brand logo, and 6.4% had been offered one or more free tobacco products by a tobacco company representative. Exposure of students to tobacco advertising is in a declining trend over the years. According to GYTS 2015, male exposure to such advertising is significantly higher than that of females (Table 2.5.2). Also, among never tobacco users, 5.5% own something with a tobacco product brand logo/picture (World Health Organization, 2015).

Table 21 (2.5.2) Exposure of students to tobacco company advertising (in %), 2015

						2015	
	1999	2003	2007	2010	Total	Males	Females

% who have an object with a tobacco producer brand logo	10.5	11	5.7	4.6	2.9	3.8	1.9
% who were offered free tobacco product by a tobacco company representative	6.4	5.9	3	2.9	2	2.9	1.2

Source: (World Health Organization, 2015)

3. Supply side of tobacco

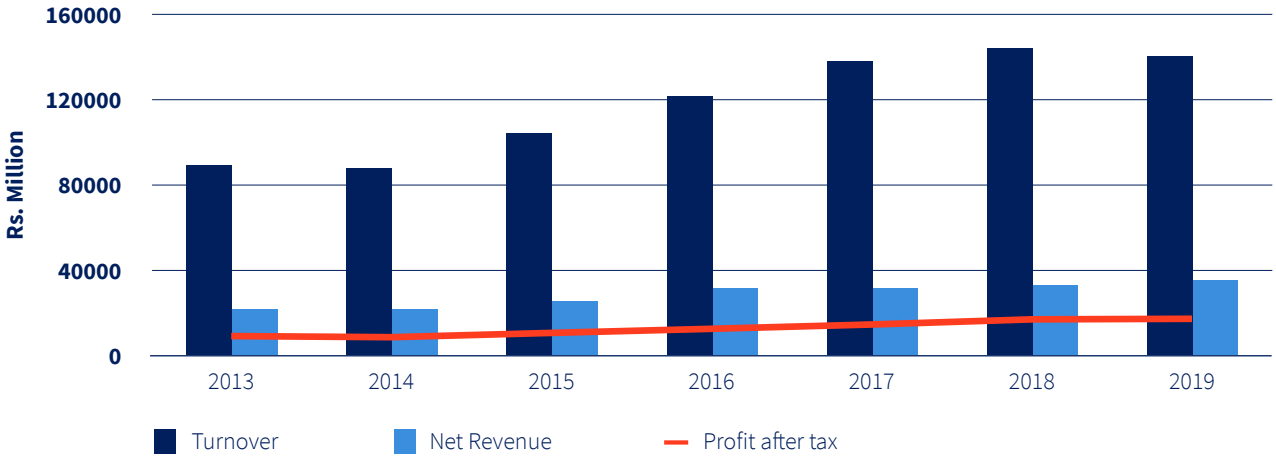
In 2008, there were 4.47 billion cigarettes produced in Sri Lanka (Ministry of Finance, 2013). By 2019, this declined to 2.62 billion (Ministry of Finance, 2020). The production of unmanufactured tobacco was 3,770 tons in 2008, whereas 5,903 tons of unmanufactured tobacco was produced in 2018. A total of Rs. 87,367 million was collected by the Department of Customs as excise duty from cigarettes, which is equivalent to 5% of total tax revenue in 2019. Below, we discuss various aspects of the supply side of the tobacco market.

3.1. Tobacco market structure

3.1.1. Market share

Sri Lanka mainly produces three types of smoking tobacco products: cigarettes, bidi, and cigars. The tobacco market is primarily dominated by cigarette manufacturers. 100% of the tobacco used for cigarette manufacturing in Sri Lanka is cultivated in the country, which accounted for approximately 3000 tons of tobacco in 2018. British American Tobacco (BAT) owns 84.13% of the shares of the CTC, which is responsible for the entire manufacturing process from tobacco cultivation to cigarette production in Sri Lanka (Ceylon Tobacco Company, 2020). According to the World Bank, CTC owns a monopoly share (99%) of the domestic cigarette market, with the remaining 1% comprised of imported cigarettes (World Bank Group, 2017), while another estimate notes that CTC owns 96% of the cigarette market with the remaining 4% comprising of illicit cigarettes (Rajasekaran, 2008). The company has been on an increasing trend in terms of net revenue and profits (Figure 3.1.1.1).

Figure 10 (3.1.1.1) Performance highlights of CTC sales (2013-2019)



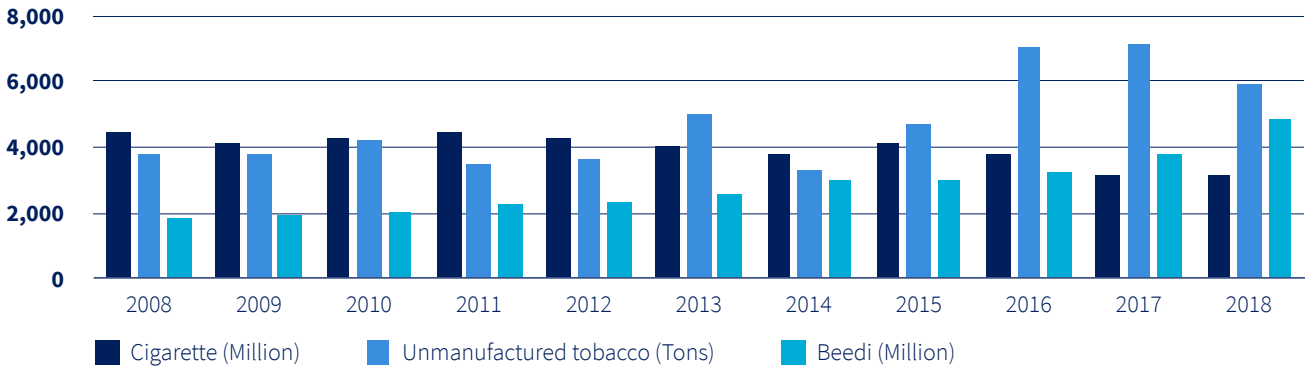
Source: CTC Annual Reports 2013-2019 (Ceylon Tobacco Company , n.d.)

There are a number of bidi and cigar manufacturers in Sri Lanka, but data on the exact number are difficult to obtain. The All Sri Lanka Bidi Manufacturer's Society has a membership of 64 bidi manufacturers, of which most are large-scale bidi manufacturers. In addition, there are a number of small- scale bidi manufacturers (Arunatilake & Opatha, 2003). According to the Export Development Board (EDB) there are three other tobacco manufacturing companies in Sri Lanka other than CTC, namely, United Tobacco Processing Pvt Ltd; Thansher and Company; and Agio Tobacco Processing Company Pvt Ltd., the latter of which produces cigars, tobacco cuts and semi-manufactured tobacco mainly for export market (Tobacco Unmasked, 2020).

3.1.2. Production

In Sri Lanka, the total production of cigarettes has decreased significantly from 2008 to 2018 while bidi production has increased significantly. With occasional fluctuations, unmanufactured tobacco production is also increasing over time. Figure 3.1.2.1 demonstrates that cigarette production has decreased by 30% in Sri Lanka in just 10 years. However, bidi production increased significantly by 2.5 times from 2008 to 2018. Similarly, production of unmanufactured tobacco has also increased by 56% during the same period.

Figure 11 (3.1.2.1) Cigarette, bidi & unmanufactured tobacco production in Sri Lanka



Source: Ministry of Finance, Annual Reports; CTC Annual Report 2019

3.1.3 Employment

The tobacco industry also generates employment in tobacco cultivation and tobacco manufacturing. However, compared to other sectors, the total number of formal workers employed in this sector is not significant. Employment in tobacco cultivation can be mainly divided as “barn-owners” who cure tobacco from their own farms and from other farmers in the area, and “sub-growers” who sell their tobacco to barn-owners (Arunatilake & Opatha, 2003). Most tobacco farmers grow more than one crop at a time, and employment in tobacco cultivation is seasonal. Therefore, the data on the number of tobacco farmers is not accurate. However, the number of tobacco farmers is in a declining trend.

Table 22 (3.1.3.1) Tobacco leaf suppliers to CTC, 1990-1999

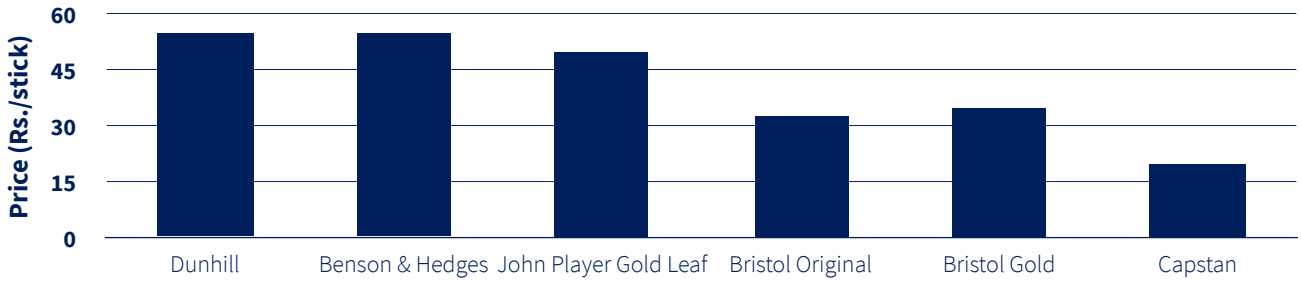
Year	Barn-owners	Sub-growers
1990	3,210	25,680
1991	4,150	29,050
1992	5,240	36,680
1993	5,475	32,850
1994	6,702	33,510
1995	6,336	31,680
1996	7,420	29,680
1997	8,743	34,972
1998	3,518	21,108
1999	3,412	22,156

Source: Arunatilake & Opatha, 2003

3.1.4. Price by type, by quality, by category, by domestic and foreign, retail, wholesale, by pack, by stick or loose

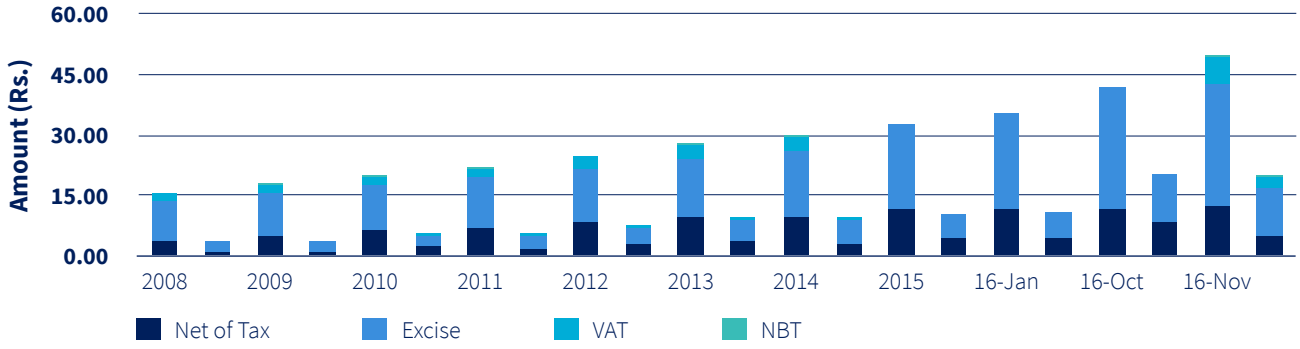
Cigarette prices vary considerably across different brands (Figure 3.1.4.1) and cigarettes of different price categories have different excise rates. In 2008-2016, both excise rates and the net-of-tax part of the price for JPGL cigarettes increased more than three-fold, keeping the tax share almost the same at 76% in 2008 and 2016 (Figure 3.1.4.2). A similar situation is observed for Capstan cigarettes, where both the excise rate and the net-of-tax price increased five-fold, but the total tax share is still about 73% (World Bank Group, 2017). Chewing tobacco prices have only increased by 1.5%, from Rs. 53 in 2008 to Rs. 76 in 2017 (Central Bank of Sri Lanka, 2018).

Figure 12 (3.1.4.1) Price of locally produced cigarette brands (Rs./stick)



Source: http://synergyy.com/2016/11/new-cigarette-prices-in-sri-lanka-2-29732/ (Synergy, 2016)

Figure 13 (3.1.4.2) Price components of JPGL and Capstan cigarette (Rs./stick)

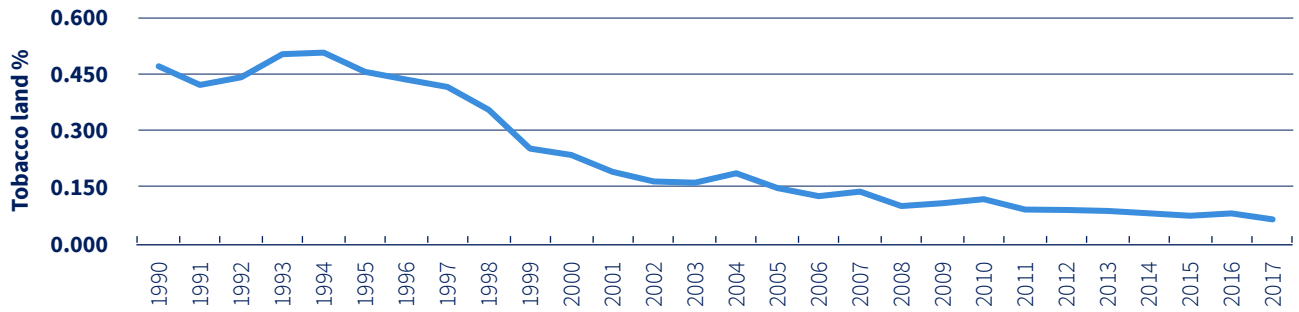


Source: World Bank Group, 2017

3.2. Tobacco farming

Tobacco farming is insignificant in Sri Lanka. The overall contribution of tobacco farming is very small when assessed in terms of employment, cultivated extent and the production of tobacco farming in the agricultural sector. FAOSTAT data indicate that both tobacco production and the cultivated area of tobacco in Sri Lanka have decreased significantly over the last few decades, dropping by more than three-quarters since 1980. Approximately 0.47% of agricultural land, equivalent to 8,920 hectares, was under tobacco cultivation in 1990. However, the latest statistics indicate a cultivated area of 1,471 hectares, a mere 0.06% of agricultural land, in 2017 (Figure 3.2.1). Production has also declined dramatically, from 16,670 MT in 1982 to 3,273 MT in 2017. This highlights a drastic decline in the importance of tobacco in the cultivated crop mix (Thibbotuwawa & Dissanayake, 2019).

Figure 14 (3.2.1) Tobacco land percentage from crop lands in Sri Lanka, 1990-2016

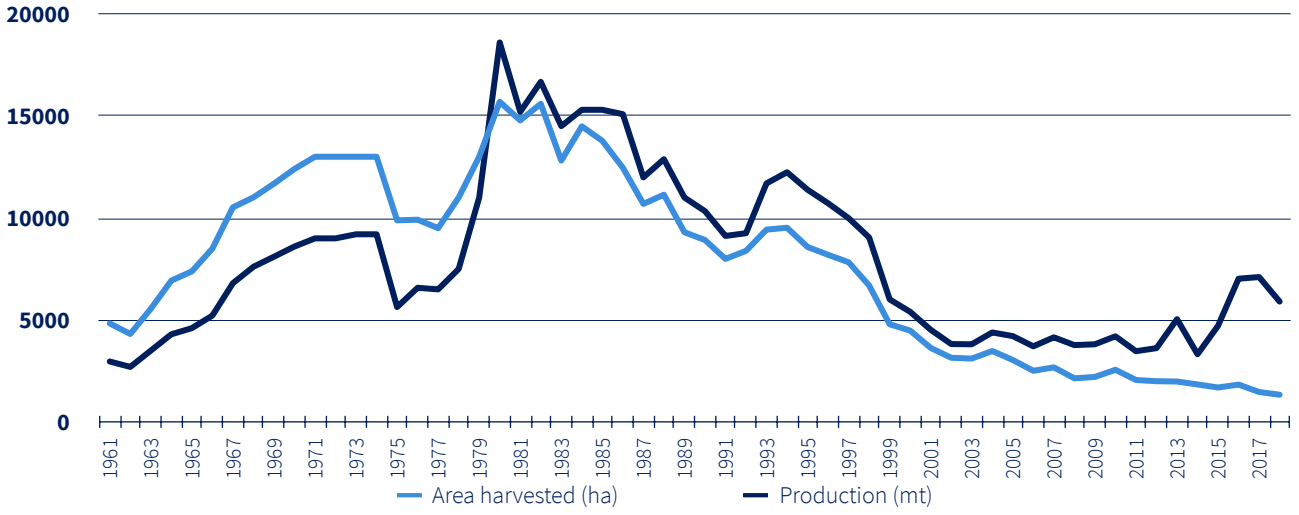


Source: Authors illustration based on http://www.fao.org/faostat/en/#data/QC

The total number of tobacco farmers has declined drastically, from over 40,000 in 1990s to less than 20,000 farmers, and remains concentrated in certain areas of Pollonaruwa, Anuradhapura, Ampara, Badulla, Matale, Kandy, Nuwara Eliya, Kurunegala and Jaffna Districts.[4] The number of registered farmers with the Department of Agriculture is less than 3,000 farmers.[5]

Figure 3.2.2 shows that the total area harvested increased from 4,832 ha in 1961 to 15,692 ha in 1980, while production increased from 2,966 mt in 1961 to 18,602 mt in 1980. Then, both the harvested area and the production started to decline and ended up at 1,338 ha and 5,903 mt respectively in 2018. However, with the continuous reduction in the total amount of harvesting land for tobacco over the years, achieving some stability for production since the year 2010 and an upsurge since 2014 was particularly significant. While the ban on tobacco cultivation in environmentally sensitive areas and the reduction in state support for tobacco cultivation might have played a part in this declining trend, it can be attributed mainly to declining demand for cigarettes, due to rising prices with increased taxation. Further, in 2016, the government of Sri Lanka announced a ban on tobacco cultivation by the end of 2020 and introduced an alternative crop programme (Thibbotuwawa & Dissanayake, 2019). This response was motivated by the WHO FCTC's Article 17 and was aimed at promoting economically viable alternative livelihoods for tobacco workers and growers.

Figure 15 (3.2.2) Unmanufactured tobacco production in Sri Lanka 1961-2018



Source: Authors illustration based on http://www.fao.org/faostat/en/#data/QC

3.3 Tobacco farming and alternative crops

Tobacco is considered to be a viable cash crop because of the high profits it generates, the availability of a significant market, and its ease of cultivation. Based on the authors' calculations, an average farmer received an approximate profit of Rs. 1,638,522 per hectare in the 2018 Yala season, considering upper limit values of CTC for the farm-gate price (Table 3.3.1). However, further analysis shows that there are several potential alternative crops that can be cultivated under the same agro-ecological conditions and generate comparable profits for tobacco, including green chili and certain vegetables (Thibbotuwawa & Dissanayake, 2019). Also, perennial crops such as papaw, guava, and grapes can be suitable alternatives, as they generate year-round incomes and high profits, incur a low cost of cultivation, and require less labour.

Table 23 (3.3.1) Comparison of profitability of alternative crops (2018 Yala)

Crop	Yield (Kg/ha)	Price (Rs/Kg)	Cost (Rs/Kg)	Profit (Rs/Ha)
Green chili	10,143	214	33.23	1,833,660
Brinjal	22,545	89.4	12.18	1,741,056
Tobacco	4,791	400	58	1,638,522
Tomato	20,860	90.3	15.93	1,551,466
Carrot	12,879	143.5	28.62	1,479,580
Bitter gourd	14,814	113.2	24.84	1,308,958

Source: Thibbotuwawa & Dissanayake, 2019

However, there are certain factors that have led to farmers continuing to grow tobacco, despite the availability of alternatives. Most of the farmers who cultivate tobacco are under a contract with the CTC. Having a readymade market for their crops, with some additional benefits such as free extensions, is one of the main perks of tobacco cultivation. Also, tobacco plants are more resilient to droughts as they require less water.

Under the government programme on introducing alternative crops, in Kurunegala District, 141 tobacco farmers have been transformed to cultivate red onion in 60 acres. In Puttalam District, 78 tobacco farmers have been transformed to cultivate beet-root in 40 acres. In Kandy District, 155 acres of tobacco lands have been converted to pepper cultivation with micro water supply systems. In Polonnaruwa, 185 and 75 acres were converted to big onion and ground-nut cultivation respectively (Ministry of Agriculture, 2019).

3.4. Exports and imports by type of products and volume/value

There are substantial amounts of imports and exports of unmanufactured tobacco in Sri Lanka. Manufactured cigarettes and cigars are also traded but comparatively in much smaller quantities (Table 3.4.1). The Sri Lankan tobacco industry has also imported manufactured and unmanufactured tobacco (Table 3.4.2). It is noticeable in the data presented by FAOSTAT that the total value of imports of manufactured and unmanufactured tobacco has been increasing over the years. Sri Lanka is a net importer of cigarettes and unmanufactured tobacco in most of the years since 2010 (Figure 3.4.1). In terms of cigars and other tobacco products, Sri Lanka has generally been a next exporter. Since 2000, Sri Lanka has been a net tobacco exporter except for 2000-01, 2006-07 and 2018. The trade balance for tobacco products, which was +40.0 million USD in 2017, declined in 2018 to -7 million USD.

Table 24 (3.4.1) Export quantity and quality by types of tobacco products

Year	Export Quantity (tonnes)				Export Value (1000 US$)			
	Cigarettes	Cigars, cheroots	Tobacco other	Tobacco, unmanufactured	Cigarettes	Cigars, cheroots	Tobacco other	Tobacco, unmanufactured
2000	368	0	0	1,888	1,685	2	0	37,445
2001	474	0	0	1,874	2,181	1	0	35,858
2002	422	1	0	2,147	1,912	16	2	37,771
2003	156	14	101	1,893	764	170	7,402	37,211
2004	101	47	161	1,656	588	632	14,983	39,722
2005	116	89	235	1,598	798	2,020	17,262	35,086
2006	49	2	5	1,572	1,056	18	142	27,776
2007	5	0	5	1,539	57	10	142	29,223
2008	55	159	314	1,278	390	3,190	23,981	39,503
2009	61	196	214	687	427	3,949	19,895	33,545
2010	53	205	206	807	394	4,489	19,003	32,624
2011	91	303	273	708	1,653	6,768	32,574	38,382
2012	177	227	388	1,027	1,847	5,751	39,952	42,199
2013	136	235	370	1,142	2,154	6,106	40,939	47,658
2014	327	264	385	1,163	5,463	7,208	43,045	41,333
2015	169	207	530	1,078	3,249	5,653	48,767	31,956
2016	226	234	562	1,157	4,444	5,750	62,865	31,735
2017	248	150	706	1,300	2,939	3,799	66,777	37,037
2018	36	294	0	1,213	525	6,326	1	69,564

Source : http://www.fao.org/faostat/en/#data

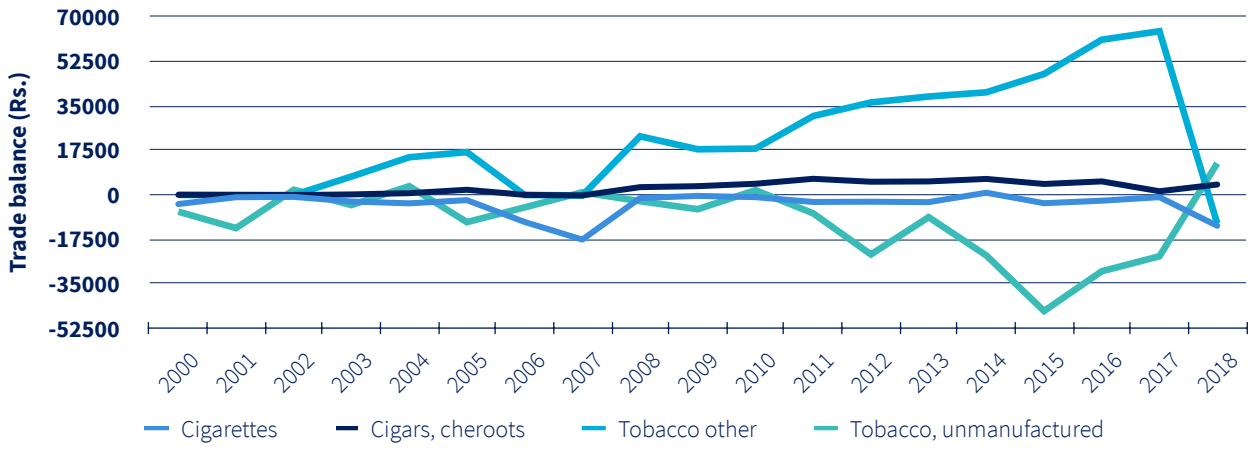
Table 25 (3.4.2) Import quantity and quality by types of tobacco products

Year	Import Quantity (tonnes)				Import Value (1000 US$)			
	Cigarettes	Cigars, cheroots	Tobacco other	Tobacco, unmanufactured	Cigarettes	Cigars, cheroots	Tobacco other	Tobacco, unmanufactured
2000	188	3	2	5,559	5,345	39	61	44,098
2001	115	1	10	4,417	3,166	57	157	48,966
2002	99	13	32	2,739	2,765	157	132	35,841
2003	110	2	82	2,608	3,424	50	262	41,285

2004	140	1	84	2,194	3,972	27	273	36,369
2005	101	3	84	2,308	2,926	77	539	45,841
2006	554	1	36	3,120	11,748	77	234	32,749
2007	888	1	140	2,558	17,666	297	435	28,262
2008	70	6	975	2,088	1,700	218	1,056	42,040
2009	55	22	936	2,341	889	592	2,051	39,238
2010	83	12	1,144	1,446	1,350	186	901	30,852
2011	171	31	1,373	1,936	4,501	516	1,691	45,690
2012	180	19	870	2,581	4,595	650	3,730	65,642
2013	215	11	679	1,885	5,065	887	2,396	56,479
2014	150	14	941	2,344	4,677	1,011	2,838	65,185
2015	169	14	892	3,311	6,579	1,433	1,366	77,612
2016	239	8	1,344	3,344	6,793	521	2,013	61,776
2017	200	36	1,180	3,482	3,903	2,429	2,602	61,194
2018	521	40	1,118	5,068	12,717	2,327	11,284	57,229

Source : http://www.fao.org/faostat/en/#data

Figure 16 (3.4.1) Trade balance by types of tobacco products



3.5. Illicit trade

According to a study conducted in 2018, the main sources of the illicit cigarette trade in Sri Lanka include both large and small scale smuggling (Colombage, Morais, & Wcikramasinghe, 2018). Large scale smuggling is carried out through container shipments, since infrastructure facilities and human resources available at customs are inadequate to monitor the increasing volume of port traffic. Other than that, large scale smuggling occurs by concealing illicit cigarettes inside other items, giving rise to the presence of "low volume-high frequency" illicit cigarette smuggling. Small scale smuggling is carried out by individuals (especially foreign migrant workers) smuggling cigarettes into the country in their luggage, either individually or in a coordinated manner (Colombage, Morais, & Wcikramasinghe, 2018).

According to the cigarette butt survey, illicit cigarettes account for 15.6 percent of total cigarette consumption. The share of illicit cigarettes varies across districts; 26.5 percent in Matara, 23.0 percent in Galle, 15.2 percent in Gampaha, 13.2 percent in Kalutara, 10.7 percent in Colombo and 9.3 percent in Ampara. As per the empty pack survey, illicit cigarettes account for 10.8 percent of the total packs collected. District-wise, the illicit cigarette market share in relation to packs is 14.7 percent in Kalutara, 10.8 percent in Gampaha, 10.3 percent in Colombo, 10.2 percent in Matara, 9.7 percent in Ampara and 8.4 percent in Galle. However, interestingly, only 3% of cigarettes sold in the open market were illicit based on test purchases. Their estimates of quantities of illicit cigarettes for 2017 were in the range of 383 million sticks to 583 million sticks, and the tax loss was in the range of Rs. 11.5 billion to Rs. 17.5 billion (Colombage, Morais, & Wcikramasinghe, 2018).

However, these estimates are questionable because the study relied on tobacco company expertise to distinguish formal butts from illicit butts, and the data has been collected from high tourist density districts (Weerasekera, 2019). By comparing 2016 cigarette consumption data against 2019 sales data, another report estimated the illicit cigarette share to be 21% of the total market (Research Intelligence Unit , 2019). CTC claims that due to the Government increasing taxes on legal cigarettes in Sri Lanka, cigarette smuggling grew by 45% to 740 million illicit sticks in 2019, accounting for 8% of the total tobacco market (Ceylon Tobacco Company, 2020). According to the CTC, the smuggled cigarette industry has grown exponentially over the past 3 years in the absence of a level playing field with high taxes on legal cigarettes, where Sri Lanka currently has the highest cigarette prices in the world in relation to purchasing power parity (Ceylon Tobacco Company, n.d.).

4. Health consequences of tobacco use

Tobacco use is uniquely harmful, and is considered as one of the leading reasons of preventable deaths and morbidity across the world. Tobacco use is associated with many diseases, and the list continues to grow. For most diseases, the association with smoking is strong and viewed as causal. The health burden of tobacco use and its impact on health care costs are discussed in the following sections.

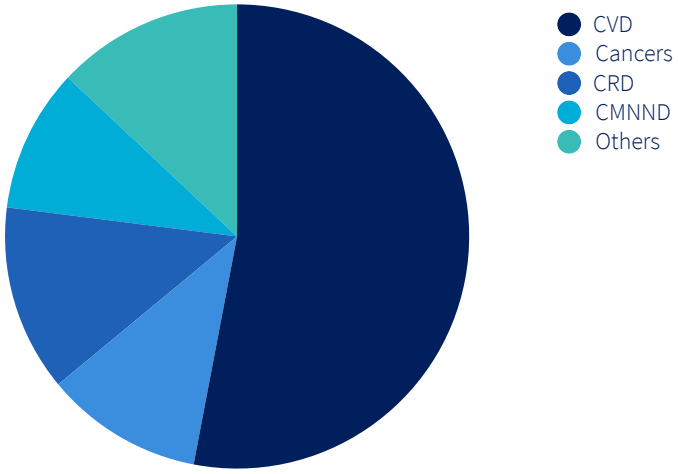
4.1. Overview of health burden

4.1.1. Prevalence of tobacco-attributable diseases

Smoking causes serious health-related casualties in Sri Lanka. Every year, more than 12,351 people die from tobacco-caused illness, which is equivalent to 10% of all deaths in Sri Lanka (World Health Organization, 2018). The prevalence of tobacco related disease is high in Sri Lanka, given that more than 6,000 children (10-14 years old) and 1,685,000 adults (15+ years old) continue to use tobacco each day (The Tobacco Atlas, 2016). Moreover, over 2 million current smokers and a substantial number of people exposed to secondhand smoke are at increased risk of CVDs (World Health Organization, 2018).

According to the WHO Factsheet Sri Lanka-2018, cardiovascular diseases (CVDs) are the most common ways by which tobacco kills people in Sri Lanka (Figure 4.1.1.1). Moreover, CVD deaths due to tobacco use are around 15% (6,530 deaths) of all CVD deaths. Other major ways that tobacco kills people in Sri Lanka include chronic respiratory diseases (CRD) (13%); cancers (11%); communicable, maternal, neonatal, and nutritional diseases (CMNND) (10%) and others (13%) (World Health Organization, 2018). Some people are affected directly and others are affected indirectly by these diseases. School children are often exposed to secondhand smoking by the parents or elders at home, increasing their health risks and these children often develop cough, nasal and throat problems at night, along with wheezing and asthma.

Figure 17 (4.1.1.1) Distribution of tobacco deaths in Sri Lanka by cause



Source: WHO Factsheet Sri Lanka, 2018

The economic cost of smoking in Sri Lanka amounts to Rs. 99,965 million (The Tobacco Atlas, 2016). This includes direct costs related to healthcare expenditures and indirect costs related to lost productivity due to early mortality and morbidity. The economic cost of tobacco to society was Rs. 89.37 billion (US$ 662.0 million) in 2015. Ischemic heart diseases (ICD) have imposed the highest costs of tobacco consumption, which

amounted to Rs. 22,007.8 Million. Among all the cancers that were studied, lung cancer has demonstrated the highest attributable fraction to tobacco smoking. The total cost imposed by lung cancer was Rs. 4,342 million (World Health Organization, 2017).

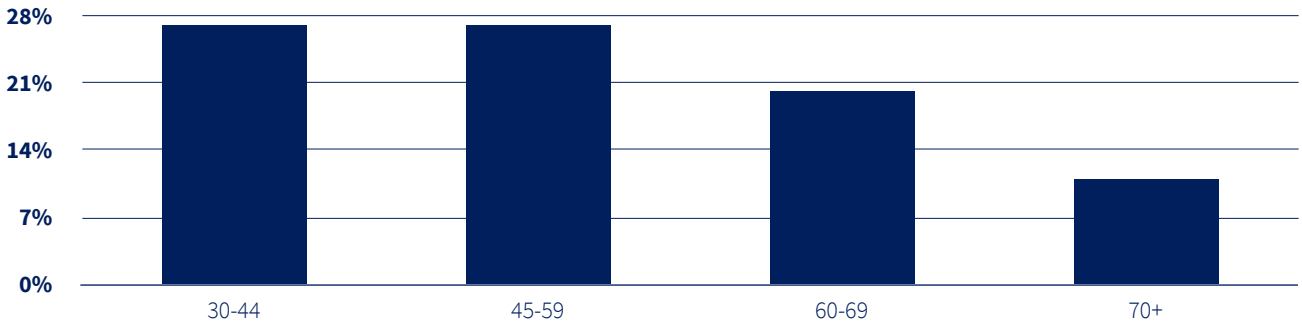
4.1.2. Mortality and morbidity

Tobacco-related mortality and morbidity are significantly high in Sri Lanka. Even though fewer men (13.71%) die from tobacco in Sri Lanka than on average in high-HDI countries, tobacco still kills 191 men every week (The Tobacco Atlas, 2016). Similarly, even though fewer women (4.73%) die from tobacco in Sri Lanka than on average in high-HDI countries, tobacco still kills 46 women every week.

4.2. Inequality in health burden

According to the WHO Fact Sheet 2018, CVDs in younger people are more likely to be caused by tobacco use (Figure 4.2.1). There is a significant difference between male and female of attributable fractions in smokeless tobacco related cancers and NCDs (Table 4.2.1). However, there is no such gender difference in health burden of smokeless tobacco.

Figure 18 (4.2.1) Distribution of tobacco related CVD deaths by age



Source: WHO Factsheet, 2018

Table 26 (4.2.1) Attributable fractions used for morbidity & mortality due to tobacco

	Morbidity		Mortality	
	Male %	**Female %**	**Male %**	**Female %**
Smoked Tobacco related cancers				
Lip, Oral Cavity, pharynx	41.41	0.1	41.4	0.1
Esophagus	30.67	0.05	27.4	0.1
Stomach	17.72	0.02	15.3	0
Pancreas	15.49	0.03	20.8	0
Larynx	63.51	0.24	63.5	0.2
Trachea, Lung, Bronchus	72.08	0.26	73.9	0.4

Cervix, Uterine	0	0.03	0	0
Urinary Bladder	34.37	0.07	48.5	0
Kidney and renal pelvis	14.65	0.01	13.6	0
Breast	16.32	0.03	16.3	0
Liver	13.36	0.03	13.4	0
Colorectal	6.53	0.01	6.5	0
Smokeless tobacco related cancers				
Lip, Oral cavity, Pharynx	3.43	3.23	3.43	3.23
Esophagus	2.53	2.28	2.52	2.28
Non-communicable diseases				
Ischemic heart disease	38.73	11.88	52	45
Supra Ventricular Cardiac Arrhythmia	31.85	3.76	52	45
Other heart disease	30.77	3.16	24	1
Diabetes Mellitus	14.58	0.35		
Cerebrovascular disease	35.22	10.26	43	38
Tuberculosis	2.1	0.11		
COPD	15.24	2.31	83	81
Asthma	20.9	1.81		
LRTI	2.08	2.59	19	67
Fire injuries/ burning			28	28

4.3. Health care services and costs

The economic burden of tobacco related illness and deaths are substantial in Sri Lanka. A study on the direct and indirect costs of the use of tobacco were done by the NATA and WHO, in collaboration with the Ministry of Health and Nutrition of Sri Lanka and the Sri Lanka Medical Association (SLMA) (World Health Organization, 2017). According to the results, the direct and indirect costs of tobacco in Sri Lanka were estimated to be Rs. 89.37 billion (US$ 662.0 million) for the year 2015, of which Rs. 37.6 million were direct costs and the remaining Rs. 51.77 million were indirect costs (Table 4.3.1). The contribution from smoked tobacco was higher than that of smokeless tobacco.

Table 27 (4.3.1) Total direct and indirect costs of tobacco related health care

	WHO 2017 (LKR mil)			Amarasinghe et al 2018 (USD mil)		
	Direct cost	**Indirect cost**	**Total**	**Direct cost**	**Indirect cost**	**Total**
Smoked Tobacco	35.89	48.43	84.32	29.5	54.3	83.8
Smokeless Tobacco	1.71	3.34	5.05	12.6	24.7	37.3
Total	37.6	51.77	89.37	42.1	79.0	121.1

Another research study conducted in 2017 (Amarasinghe, et al., 2018) concluded that the total estimated direct healthcare cost was US$29.5 million for smoking and US$12.6 million for smokeless tobacco (Table 4.3.1). Total direct and indirect costs account for 35% and 65% of the total economic cost attributable to tobacco. The indirect cost of tobacco smoking was estimated to be approximately US$54.3 million in 2015. The indirect costs of smokeless tobacco were estimated at approximately US$24.7 million.

Distributional costs have also been calculated for cancers and NCDs by World Health Organization, 2017. The costs for tobacco related cancers were Rs. 16.3 billion (US$ 121.1 million) (Table 4.3.2), while those for tobacco-related non-communicable diseases were Rs. 73.0 billion (US$ 540.7 million) (Table 4.3.3). According to Amarasinghe, et al., 2018, cancer of the lip, oral cavity and pharynx accounted for the highest direct healthcare costs of smoking (US$10 mil), while lung cancer was the second highest (US$ 9.8mil). Lung cancer also accounted for the highest indirect cost (US$22 mil).

Table 28 (4.3.2) Total direct and indirect costs of tobacco related cancers (LKR Million)

Disease	Direct cost				Indirect costs			
	In patient	Out patient	Out of pocket	Total direct	Absenteeism	Premature Mortality	Total indirect	Total costs
Smoked tobacco related								
Lip,Oral,Cavity,Pharynx	793	40	529	1363	1031	1328	2359	3722
Esophagus	178	5	128	311	247	555	802	1113
Stomach	45	1	25	71	41	181	222	293
Pancreas	36	0	6	42	17	63	80	122
Larynx	316	21	200	537	358	…..	358	896
Trachea,lung,broanchus	932	10	389	1330	882	2130	3012	4342
Cervix,Uterine	0	0	0	0	0	0	1	1
Utinary bladder	91	6	66	163	178	133	310	473
Kidney and renal pelvis	26	1	11	38	21	…..	21	59
Breast	7	2	10	18	15	2	17	35
Liver	29	0	10	39	22	41	62	101
Colorectal	40	2	24	66	45	45	90	157
Smokeless tobacco related								
Lip,Oral,Cavity,Pharynx	802	41	535	1372	1061	1296	2358	3735
Esophagus	186	5	134	325	407	568	974	1299
Total	3481	133	2067	5681	4326	6342	10668	16348

Source: World Health Organization, 2017

Table 29 (4.3.3) Total direct and indirect costs of tobacco related NCDs (LKR Million)

Disease	Direct cost				Indirect costs			Total cost
	In patient	Out patient	Out of pocket	Total	Absenteeism	Premature Mortality	Total	
Hypertension	957	158	627	1742	484	3355	3840	5582
Ischemic heart disease	12936	78	722	13736	501	7771	8272	22008
Other heart disease	383	32	156	570	117	8503	8620	9190
Diabetes mellitus	545	33	109	687	170	1953	2122	2809
Cerebrovascular	1054	81	571	1707	407	4430	4837	6543
Fire injuries/Burning	1131	7	546	1683	351	833	1184	2867
Tuberculosis	5	1	5	10	3	58	61	71
COPD	800	35	171	1006	128	4462	4590	5596
Asthma	2460	52	590	3102	403	1134	1537	4639
LRTI	443	3	118	564	77	1580	1656	2220
Undiagnosed/	5514	167	1420	7100	1231	3140	4371	11471
Total	26227	646	5034	31907	3872	37217	41089	72997

Source: World Health Organization, 2017

4.4. Health insurance

There is no nationally representative data on health insurance coverage for diseases attributable to tobacco and HRPs. Moreover, there is no nationally representative data on the existing health insurance system and government subsidies considering cessation drugs.

5. Policy measures related to tobacco use, production and trade

This section presents a brief overview of current tobacco control legislation and policies (including taxation policy) in Sri Lanka, based on the data and information collected from various sources.

5.1. Tobacco control policy measures in Sri Lanka

In Sri Lanka, tobacco control policies were formulated in the late 1990s with the introduction of the Tobacco Tax Act No. 08 of 1999, which aimed at imposing a tax on cigarettes, cigars, bidis, cigarette substitutes and pipe tobacco manufactured in Sri Lanka (Tobacco Control Laws, 2020). Since then, the Act has been an important tool for successive governments for controlling tobacco and raising government revenue. As the first country in Asia and the fourth globally, Sri Lanka became a Party to the WHO Framework Convention on Tobacco Control on February 27, 2005. It is also the first country in the South East Asian Region (SEAR) to introduce tobacco control legislation (University of Bath, 2020).

At present, the law governing tobacco control in Sri Lanka is the National Authority on Tobacco and Alcohol Act (NATA Act) No. 27, which was enacted in 2006 to protect public health from tobacco and alcohol related harm. It includes measures relating to restrictions on smoking in public places; packaging and labeling requirements; tobacco advertising, promotion and sponsorship; the establishment of the National Authority on Tobacco and Alcohol; and offenses and penalties. The Act also authorizes the Minister of Health to issue regulations under the law and Food and Drugs Inspectors and Public Health Inspectors as Authorized Officers for purposes of NATA (Tobacco Control Laws, 2020).

The NATA (Amendment) Act was passed in March 2015, to introduce pictorial health warnings to cover 80 percent of the front and back of a packet, package or a carton of tobacco products. A ban of most tobacco advertising activities was introduced in 2006 and as of 2016, tobacco advertising is banned in most media. In 2016, regulations prohibiting the manufacture, importation, and sale of smokeless tobacco products, e-cigarettes containing tobacco, and cigarettes that are flavored, colored, or sweetened were issued (Tobacco Control Laws, 2020).

Tobacco control policies, acts and regulations in Sri Lanka conforms to both the core demand reduction provisions (articles 6-14) and the core supply reduction provisions (articles 15-17) in the WHO FCTC.[6] Also, Sri Lanka has committed to the use of all measures of the WHO MPOWER package (World Bank Group, 2017). A timeline of tobacco control policies in Sri Lanka is illustrated in Table 5.1.1.

Considering the problem of smuggled cigarettes in the country and the associated global trends, Sri Lanka participated actively in the Intergovernmental Negotiating Body (INB) that drafted the Protocol to Eliminate Illicit Trade in Tobacco Products from 2008-2012. On 30th December 2015, the Minister of Health submitted a draft cabinet memorandum seeking approval from the cabinet of ministers for accession to the Protocol. Subsequently, the cabinet approval for accession to the protocol was granted on 13th January 2016. Illustrating the high political commitment, the President signed the instrument of accession on 27th January 2016 and forwarded it to the Ministry of Foreign Affairs on 1st February 2016, requesting them to deposit it at the UN treaty section in New York. On 08th February 2016, Sri Lanka became the first WHO FCTC Party in the South-East Asia to accede to the Protocol. The main conditions that led to the accession to the Protocol by Sri Lanka were: high political commitment and the country's policy of prioritizing the health of the nation; dedication by health ministry officials; coordinated action lead by the health sector with other stakeholders including Customs and Foreign Affairs; and awareness raising through the media (WHO, n.d.).

Table 30 (5.1.1) Tobacco control policies, acts and regulations in Sri Lanka

Year	Policy, Act or Regulation	Policy Type	
		WHO FCTC	WHO MPOWER
April 3, 1999	Tobacco Tax Act No. 08 of 1999 (An act to impose a tax on cigarettes, cigars, bidies, cigarette substitutes and pipe tobacco, manufactured in Sri Lanka)	Article 6	R
October 8, 2004	Tobacco Tax (Amendment) Act, No. 9 of 2004 (Repeal of the expression "cigarette substitute", and substitution of the words "tobacco leaf or bidi tobacco" by the words "tobacco leaf".	Article 6	R
December 1, 2006	National Authority on Tobacco and Alcohol Act, No. 27 of 2006 (An act to provide for the establishment of the national authority on tobacco and alcohol for the purpose of identifying the policy on protecting public health ; for the elimination of tobacco and alcohol related harm through the assessment and monitoring of the production, marketing and consumption of tobacco products and alcohol products ; to make provision discouraging persons especially children from smoking or consuming alcohol, by curtailing their access to tobacco products and alcohol products)		
January 4, 2007	Government Notification: Appointment of Authorized Officers under Section 16(a) of the National Authority on Tobacco and Alcohol Act (Issued under NATA, the Government Notification establishes all Food and Drugs Inspectors and Public Health Inspectors as Authorized Officers for purposes of NATA.)		
September 1, 2011	National Authority on Tobacco Control Instructions to TV channels regarding airing of programmes depicting smoking and drinking scenes (These instructions issued by the Chairman of NATA, prohibit smoking scenes in television programs produced after NATA became effective in 2006 and provide details regarding the health messages that must be aired when an older television programs contains smoking and drinking scenes.)		
August 8, 2012	The Tobacco Products (Labelling and Packaging) regulations, No. 01 of 2012 (This specifies components of the health warnings such as content, size, etc.; Prohibitions on misleading descriptors and concealing the health warnings on the package remain in the 2012 regulations unaltered.)		
November 8, 2012	Regulation Amending the Effective Date of the Tobacco Products (Labelling and Packaging) Regulations, No. 01 of 2012 (These regulations change the effective date of the 2012 regulations, but were rescinded by the May 2014 amendment.)		
February 15, 2013	2013 Regulation Amending the Tobacco Products (Labelling and Packaging) Regulations, No. 01 of 2012 (These regulations contain substitute language for the 2012 regulations, but were rescinded by the May 2014 amendment.)		
January 1, 2015	2014 Regulation Amending the Tobacco Products (Labelling and Packaging) Regulations, No. 01 of 2012 (This contains substitute language on the size and placement of the health warnings and the content of constituent and emissions statements, among other issues. The Original Language file is in Sinhala and Tamil.)		
June 1, 2015	National Authority on Tobacco and Alcohol (Amendment) Act, No. 3 of 2015 (This Act increases the size of health warnings required to appear on tobacco product packaging to 80% of the front and back. The law also increases the fines associated with violations of certain packaging requirements. The Original Language file is in Sinhala and Tamil.)		
January 13, 2016	Cabinet approval for accession to the protocol to Eliminate Illicit Trade in Tobacco Products was granted on 13th January 2016		
September 1, 2016	Prohibited Tobacco Products Regulations, No. 1 of 2016 (This regulation bans the manufacture, import, and sale of smokeless tobacco products, e-cigarettes containing tobacco, and flavored, colored, or sweetened cigarettes.)		
November 21, 2016	Ban on tobacco cultivation by 2020 was communicated to the Secretary to the Ministry of Agriculture by the President Secretariat with letter PS/DP/11/02 dated November 21, 2016		

Sources: Tobacco Control Laws. (n.d.). Legislation by country, Sri Lanka. Retrieved 25 June, 2020, from Tobacco Control Laws: https://www.tobaccocontrollaws.org/legislation/country/sri-lanka/laws

5.2. State of policy implementation

5.2.1. Progress with implementation of policies

The degree of implementation and corresponding success rates of some anti-tobacco policies implemented by the government of Sri Lanka is discussed below.

a) Smoke free places

In Sri Lanka, smoking is prohibited in many indoor public places and workplaces and on public transport. However, smoking is permitted in smoking areas or spaces in airports, hotels having 30 rooms or more, and restaurants having a seating capacity of a minimum of 30 persons (Tobacco Control Laws, 2020). A summary of smoke free regulations in Sri Lanka, categorized according to places with a 100% ban, partial restriction or no restriction, is presented in Table 5.2.1.1.

Table 31 (5.2.1.1) Places with complete bans, partial bans, and no restrictions for smoking

Places	Description	100% Ban	Partial Restriction	No Restriction
Indoor workplaces/ Indoor public places	The law prohibits smoking in many enclosed public places including government departments and office premises, but permits the establishment of smoking areas or spaces in airports, hotels having 30 rooms or more, and restaurants having a seating capacity of a minimum of 30 persons.		X	
All public transport	The law prohibits smoking in public conveyances. The term "public conveyances" is undefined, however, making it difficult to determine if the prohibition includes all public transport. "Public conveyances" is interpreted, however, to include all public means of transportation. Therefore, the regulatory status "100% Smoke Free" is given.	X		
Government facilities	The law prohibits smoking in government departments, office premises, court houses, libraries, and educational institutions.	X		
Private offices	The law prohibits smoking in office premises and places to which the public has access, whether as a right or otherwise. The law is interpreted as requiring private offices to be 100% smoke free.	X		
Hospitals	The law prohibits smoking in hospitals.	X		
Residential healthcare facilities, public areas	The law prohibits smoking in hospitals, clinics, dispensaries and laboratories. Although the law does not specifically address the public areas of residential healthcare facilities, the law is interpreted as requiring them to be 100% smoke free.	X		
Non-residential healthcare facilities	The law prohibits smoking in hospitals, clinics, dispensaries and laboratories. Although the law does not specifically address non-residential healthcare facilities, the law is interpreted as requiring these places to be 100% smoke free.	X		
Childcare, pre-schools	The law prohibits smoking in schools, universities or other educational institutions	X		
Primary and secondary schools	The law prohibits smoking in many enclosed public places including schools, universities or other educational institutions.	X		

Universities/ vocational facility	The law prohibits smoking in many enclosed public places including universities or other educational institutions.	X		
Shops	The law prohibits smoking in supermarkets and places to which the public has access. Although the law does not specifically address shops, the law is interpreted as requiring these places to be 100% smoke free.	X		
Cultural facilities	The law prohibits smoking in libraries, museums, theatres and places to which the public has access. Although the law does not specifically address cultural facilities, the law is interpreted as requiring these places to be 100% smoke free.	X		
Indoor stadiums, arenas	The law prohibits smoking in sports complexes and places to which the public has access. Although the law does not specifically address indoor stadiums and arenas, the law is interpreted as requiring these places to be 100% smoke free.	X		
Restaurants	The law prohibits smoking in certain restaurants, but provides that smoking areas or spaces may be located in restaurants having a seating capacity of a minimum of 30 persons.		X	
Bars/pubs/ night clubs	The law prohibits smoking in including clubs with a seating capacity of less than 30 persons, but allows smoking in bars and pubs.		X	
Casinos	The law does not prohibit or restrict smoking in casinos.			X
Hotels/ lodging, public areas, guest rooms	The law prohibits smoking in certain hotels,but provides that smoking areas or spaces may be located in hotels having 30 rooms or more. The law does not differentiate between public spaces and guest rooms with regard to the location of smoking areas or spaces.		X	
Prisons, public areas	The law prohibits smoking in many enclosed public places including government departments, public institutions and places to which the public has access. Although the law does not specifically address the public areas of prisons and detentions facilities, the law is interpreted as requiring these places to be 100% smoke free.	X		
Trains, buses & other shared ground transportation	The law prohibits smoking in public conveyances, but the term “public conveyances” is undefined. This term, however, is interpreted to include trains, buses, and other shared ground transportation.	X		
Hire-vehicle	The law prohibits smoking in public conveyances. The term “public conveyances” is undefined; however, it is interpreted to include taxis.	X		
Commercial aircraft	The law prohibits smoking in public conveyances. The term “public conveyances” is undefined. It is interpreted to include commercial aircraft.	X		
Commercial watercraft	The law prohibits smoking in public conveyances. The term “public conveyances” is undefined. It is interpreted to include commercial watercraft.	X		

b) Regulated forms of advertising, promotion and sponsorship

According to Tobacco Atlas (2016), there are a number of possible direct and indirect advertising bans which can serve as best practices to achieve the reduction of tobacco consumption. These include direct bans on advertising in media like national television and radio, local magazines and newspaper, billboard and outdoor advertising, advertising at the point of sale, and advertising on the Internet. In addition, there are also indirect bans that include free distribution in mail or through other means, promotional discounts, non-tobacco products identified with tobacco brand names, appearances in television and/ or films especially tobacco brands, appearances in TV and/or films (especially of tobacco products) and bans

on the publicity of financial or other sponsorship or support by the tobacco industry of events, activities, individuals (The Tobacco Atlas, 2016).

At present, advertising through most forms of mass media is prohibited in Sri Lanka. From 1st September 2011, all programmes aired on TV channels may not have smoking or drinking scenes. However, in the case of programmes produced before the date on which the NATA Act became operative (i.e. 01 Dec 2006), if there are formidable practical difficulties in deleting such scenes, TV channels must air the opening message provided by NATA without any obstruction or comment in the full 20 seconds preceding the commencement of the programme. Also, whenever smoking/drinking scenes appear during a programme, an appropriate message provided by NATA should be aired on the bottom or top of the screen in an area occupying not less than 1/5 of the screen. These instructions apply to all TV channels (Tobacco Control Laws, 2020).

Other than that, any writing and/or visual image that promotes the use of a tobacco product, such as advertisements in newspapers and magazines, on the Internet and in any place to which the public has access, such as outdoor advertising and promotion, are prohibited. However, at the point of sale, the law permits a notice of a particular size to identify the tobacco products sold and their price, although this law is interpreted as banning advertising and promotion at the point of sale. Moreover, tobacco advertising and promotion via brand marking on physical structures and the distribution or sale of non-tobacco articles that bear the characteristic trademark symbols, distinctive logo or brand name of a tobacco product are also prohibited under the law (Tobacco Control Laws, 2020).

Also, there are some restrictions on tobacco sponsorship and the publicity of such sponsorship. Contributions to any event, individual, organization, or government that promotes a tobacco product or tobacco use are allowed. However, publicity of such contributions for organizations, activities, and events, so organization, activity and event sponsorships intrinsically using a tobacco trademark or brand name is restricted. Also, indicating any financial or other assistance given by a manufacturer, distributor, or importer of tobacco products is prohibited. Moreover, use of a brand name or trademark or any symbol associated with a tobacco product or tobacco manufacturer, whether directly or indirectly, in connection with the promotion of any educational, cultural, or social organization, activity, or event is prohibited. However, publicity that does not use brand names or trademarks are allowed, as well as publicity of sponsored individuals (Tobacco Control Laws, 2020). A summary of tobacco advertising, promotion and sponsorship activities in Sri Lanka, categorized according to whether they have a 100% ban, partial restriction or no restriction, is presented in Table 5.2.1.2.

Table 32 (5.2.1.2) Bans on tobacco advertising, promotion and sponsorship

Item	Present Status of FCTC Article 13		
	Banned	Some Restrictions	Allowed
Domestic TV and radio	X		
Domestic newspapers and magazines	X		
Other domestic print media	X		
International TV and radio		X	
International newspapers and magazines		X	
Internet communications	X		

Internet sales	X		
Outdoor advertising	X		
Point of sale advertising	X		
Point of sale product display	X		
Vending machines	X		
Conventional mail	X		
Telephone and cellular phone		X	
Brand marking	X		
Free distribution of tobacco products	X		
Promotional gifts in conjunction with product purchase	X		
Competitions associated with products	X		
Direct targeting of individuals		X	
Brand stretching	X		
Reverse brand stretching		X	
Toys resembling tobacco products	X		
Candy resembling tobacco products	X		
Retailer incentive programs		X	
Paid placement in TV, film, or other media	X		
Unpaid depiction in TV, film, or other media	X		
Financial support to groups, events, etc.		X	
Publicity of financial support to groups, etc.		X	
Promotion by false, misleading, or deceptive means			X

Source: Tobacco Control Laws, 2020

c) Packaging and labelling of tobacco products

Smoked tobacco product packages are required to have pictorial and text health warnings that cover 80 percent of the top front and back of packages and rotate every six months. Misleading packaging and labeling, including terms such as “light” and “low,” is prohibited, but it is unclear if this prohibition also includes trademarks and figurative and other signs. It is prohibited to manufacture, import, or sell smokeless tobacco products. A summary of the status of health warnings in Sri Lanka is presented in Table 5.2.1.3.

Table 33 (5.2.1.3) FCTC Guidelines on health warnings on tobacco packages and their implementation in Sri Lanka

Health warning	Present Status of FCTC Article 11		
	Required	Some Restrictions	Not Required
Warnings on unit packaging and labelling (e.g. packs)	X		
Warnings on outside packaging and labelling (e.g. cartons)	X		

Warning texts in the principal language(s) of the country	X		
Warnings may not be placed where they may be concealed or damaged when opening the pack		X	
Tax stamps or other required markings may not be placed where they may conceal warnings	X		
Qualitative (descriptive) constituents and emissions disclosures		X	
Ban on display of figures for emission yields (including tar, nicotine, etc.)		X	
Plain or standardized packaging		X	
Prohibition on misleading packaging and labelling	X		

Source: Tobacco Control Laws, 2020

d) Regulated contents in cigarettes

Aligning with FCTC Articles 9 and 10, which regulate ingredients used to increase palatability, the use of specified contents of cigarettes, including sugars and sweeteners; menthol, mint, and spearmint; spices and herbs; and other flavors not previously specified are regulated from use in cigarettes in Sri Lanka. The NATA Act authorizes the Ministry of Health, Nutrition and Indigenous Medicine to issue regulations under the Act. However, the law does not regulate ingredients that facilitate nicotine uptake such as ammonia, therefore the use of such ingredients in cigarettes is allowed. Also, ingredients that may create an impression of health benefits such as vitamins, fruits and vegetables, amino acids and essential fatty acids, and ingredients associated with energy and vitality such as caffeine are allowed. Also, the law does not regulate, nor does it grant any authority to regulate, emissions of cigarettes. (Tobacco Control Laws, 2020).

e) Sales related regulations

The law does not require a minimum number of cigarette sticks per unit package and the sale of single cigarette sticks is not prohibited. A specific retail license is not required to sell tobacco products and the sale of tobacco products through the Internet is not prohibited. However, aligning with FCTC Article 13 Guidelines and FCTC Article 16 with respect to vending machine sales, vending machine sales of tobacco products are prohibited in Sri Lanka. The law prohibits the manufacture, import, sale and offer for sale of smokeless tobacco products, but the sale of water-pipe tobacco is not prohibited. In Sri Lanka, there are no location-based sales restrictions, which means that sales of tobacco products are permitted around schools/educational facilities, on playgrounds, in stadiums/arenas, in healthcare facilities and in cultural facilities. The manufacture, import, sale and offer for sale of “e-cigarettes that contain tobacco” are banned despite the fact that there is no law addressing the use of e-cigarettes in indoor public places, workplaces, and public transport, or addressing e-cigarette advertising, promotion, and sponsorship (Tobacco Control Laws, 2020).

f) Illicit trade

Even before Sri Lanka became a WHO FCTC Party in the South-East Asia to accede to the Protocol on 08th February 2016, Sri Lanka had taken several measures against illicit trade in tobacco products, some which highlighted in Table 5.2.1.4.

Table 34 (5.2.1.4): Overview of measures taken against illicit trade in tobacco products in Sri Lanka

Paragraph in Art. 15	Content	Level of compliance	Comments and identified gaps
2	Each Party shall adopt and implement effective legislative, executive, administrative or other measures to ensure that all unit packets and packages of tobacco products and any outside packaging of such products are marked to assist Parties in determining the origin of tobacco products.	NOT YET IMPLEMENTED	There are no measures that mandate markings on tobacco product packaging to indicate origin.
2(a) and 3	Require that unit packets and packages of tobacco products for retail and wholesale use that are sold on its domestic market carry the statement: "Sales only allowed in (insert name of the country, subnational, regional or federal unit)" or carry any other effective marking indicating the final destination or which would assist authorities in determining whether the product is legally for sale on the domestic market.	NOT YET IMPLEMENTED	
2(b) and 3	Consider, as appropriate, developing a practical tracking and tracing regime that would further secure the distribution system and assist in the investigation of illicit trade	NOT YET IMPLEMENTED	There is no tracking and tracing system.
4(a)	Monitor and collect data on cross-border trade in tobacco products, including illicit trade, and exchange information among customs, tax and other authorities, as appropriate, and in accordance with national law and relevant applicable bilateral or multilateral agreements.	OBLIGATION MET	The Excise, Customs and Police Departments are responsible for the enforcement of relevant regulations, have their own requirements and have been collecting data on tobacco products. Information sharing and coordination of activities still need to be improved.
4(b)	Enact or strengthen legislation, with appropriate penalties and remedies,	OBLIGATION MET	This provision is addressed by Article 15(1)–(7) of the
	against illicit trade in tobacco products, including counterfeit and contraband cigarettes.		Tobacco Tax Act.
4(c)	take appropriate steps to ensure that all confiscated manufacturing equipment, counterfeit and contraband cigarettes and other tobacco products are destroyed, using environmentally-friendly methods where feasible, or dispose of in accordance with national law.	OBLIGATION MET	This provision is addressed by Article 15(7) of the Tobacco Tax Act and Article 18 of the Act. Seized products are incinerated at a cement factory.
4(d)	Adopt and implement measures to monitor, document and control the storage and distribution of tobacco products held or moving under suspension of taxes or duties within its jurisdiction.	OBLIGATION MET	This provision is addressed by Article 17(8) of the Act that states that any tobacco product seized may, at the discretion of an Authorized Officer, be kept or stored in the building or place where it was seized or be removed to any other place.
4(e)	Adopt measures as appropriate to enable the confiscation of proceeds derived from the illicit trade in tobacco products.	OBLIGATION MET	

6	Promote cooperation between national agencies, as well as relevant regional and international intergovernmental organizations as it relates to investigations, prosecutions and proceedings, with a view to eliminating illicit trade in tobacco products. Special emphasis shall be placed on cooperation at regional and subregional levels to combat illicit trade of tobacco products.	PARTIAL COMPLIANCE	Sri Lanka is a member of the Customs Enforcement Network (developed by the World Customs Organization), which is a communication tool facilitating the exchange and use of information and intelligence.
7	Each Party shall endeavour to adopt and implement further measures including licensing, where appropriate, to control or regulate the production and distribution of tobacco products in order to prevent illicit trade.	PARTIAL COMPLIANCE	Article 5 of the Tobacco Tax Act requires manufacturers and importers to register and obtain a licence with the Commission General of Excise. There is no provision requiring sellers to obtain a license.

Source: WHO Framework Convention on Tobacco Control. (2014). Needs assessment for implementation of the WHO Framework Convention on Tobacco Control in Sri Lanka. Retrieved 20 June, 2020, from _WHO Framework Convention on Tobacco Control: https://www.who.int/fctc/implementation/needs/Sri_Lanka_Needs_assessment_report_english.pdf?ua=1

g) Price and tax measures

Tobacco taxes have been important to successive governments for controlling tobacco prevalence and for raising government revenue. (Arunatilake & Opatha, 2003). The Department of Excise implements the excise policies of the Government and conducts various activities including the protection and collection of excise revenue. The Department of Excise also proposes annual excise tax increases to the Ministry of Finance and Planning (MOFP). The Inland Revenue Department collects taxes such as the value-added tax (VAT) and nation building tax (NBT). Sri Lanka Customs is responsible for collecting excise, import and export taxes, for facilitating legitimate trade, for controlling and monitoring imports and exports of restricted and prohibited goods, and for collecting import and export data.

Tobacco taxes in Sri Lanka are governed the Tobacco Tax Act No. 8 of 1999 and the Tobacco Tax (Amendment) Act No. 9 of 2004. All forms of tobacco including cigarettes, cigars, bidis, and pipe tobacco are taxed at present. Cigarettes are divided into five categories according to length for tax purposes (World Bank Group, 2017).

Table 35 (5.2.1.5) Excise tax rates for cigarettes (LKR per 1000)

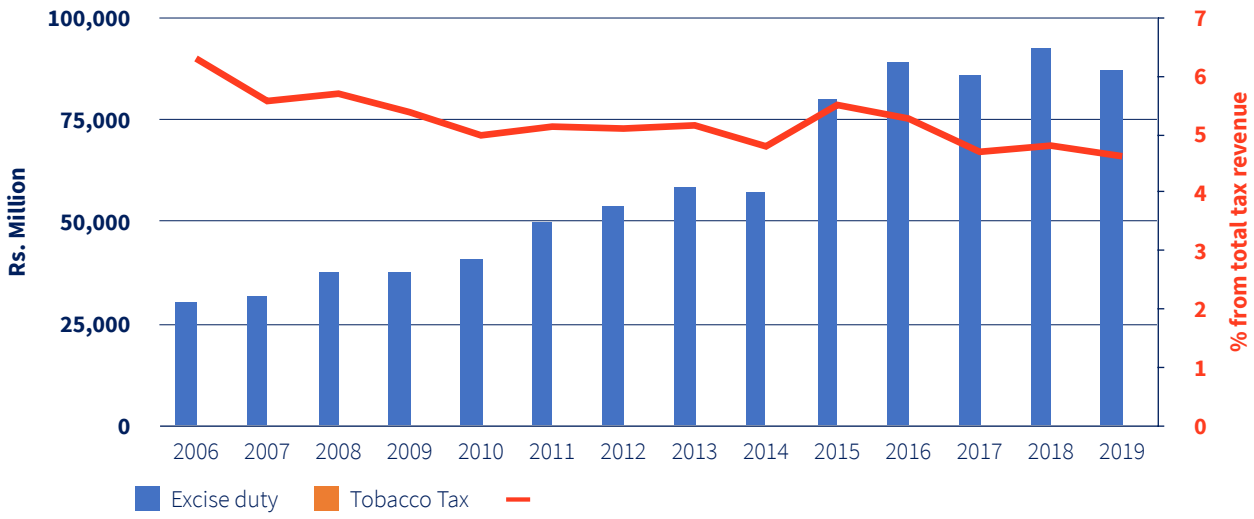
	Cigarette (Length)				
	Length below 60mm (Capstan)	**Length 60-67mm (Four Aces)**	**Length 67-72mm (Bristol)**	**Length 72-84mm (Gold Leaf)**	**Length Exceeding 84mm (Benson)**
2005	1,640	3,137	5,088	5,904	6,150
2007	2,215	4,520	7,219	8,850	9,870
2008	2,289	5,215	7,991	9,681	11,170
2009	2,289	5,706	8,485	10,715	12,710
June 2010	2,630	6,246	9,028	11,260	13,170
Jan 2011	3,465	6,973	9,811	12,108	15,000
Oct 2011	3,465	7,540	10,381	13,243	16,400

March 2012	4,037	8,112	10,953	13,819	17,100
Oct 2012	4,612	9,258	12,100	14,963	18,500
July 2013	5,722	10,355	12,100	16,610	20,000
2014	6,975	12,675	14,660	21,610	25,100
2015	6,975	12,675	14,660	23,750	27,240
2016	11,675	17,375	20,500	30,500	34,250
2017	11,675	17,375	20,500	30,500	34,250
2018	11,675	19,500	23,000	37,580	42,200
2019	13,360	22,300	37,650	43,100	48,350

Source: World Bank Group, 2017; Ministry of Finance, 2006-2020

Tax revenue from cigarettes and tobacco make a significant contribution (4.6% in 2019) to government revenue, although its share has declined from 6.3% in 2006 to 4.6% in 2019. More than 99% of this amount is from the excise tax component on cigarettes, which is primarily locally generated, while the remainder is from a tobacco tax that has both a local and imported component. The local component is imposed on locally produced tobacco used for manufacturing tobacco products such as cigarettes, cigars, bidis, and pipe tobacco. The imported component is imposed on imported tobacco and cigarettes. In addition to the above-mentioned taxes, tobacco companies are taxed at the highest corporate tax rate (40 per cent) in the country (Ministry of Finance, 2020).

Figure 19 (5.2.1.1) Excise and tobacco taxes



Excise tax rates on manufactured tobacco products have increased substantially over the years. The average excise tax on cigarettes, which was 27.6% of the retail sales price in January 1995, was increased substantially to 76.8% by December 2000 (Arunatilake & Opatha, 2003). However, it remained almost constant at 60-70% as summarized in Table 5.2.1.6.

Table 36 (5.2.1.6) Percent of the total tax from price and specific taxes from the total tax

		% Total Tax from Price	% specific taxes from total taxes		
			Excise	VAT	NBT
2008	Gold Leaf	75.58	80.20	17.32	2.49
	Capstan	72.42	79.23	18.00	2.77
2009	Gold Leaf	72.30	82.15	14.79	3.07
	Capstan	69.99	81.78	15.36	2.86
2010	Gold Leaf	69.00	81.59	15.51	2.90
	Capstan	56.59	77.58	18.88	3.54
2011	Gold Leaf	67.68	81.44	15.87	2.69
	Capstan	70.12	82.01	15.15	2.84
2012	Gold Leaf	67.97	81.27	15.78	2.94
	Capstan	63.84	80.08	16.80	3.13
2013	Gold Leaf	66.14	80.60	16.16	3.23
	Capstan	65.90	80.67	16.29	3.04
2014	Gold Leaf	68.02	81.34	15.72	2.94
	Capstan	68.91	81.51	15.57	2.91
2015	Gold Leaf	65.45	100.00	0.00	0.00
	Capstan	60.00	100.00	0.00	0.00
16-Jan	Gold Leaf	67.38	100.00	0.00	0.00
	Capstan	63.55	100.00	0.00	0.00
16-Oct	Gold Leaf	72.62	100.00	0.00	0.00
	Capstan	58.45	100.00	0.00	0.00
16-Nov	Gold Leaf	76.01	80.22	17.15	2.63
	Capstan	73.48	79.50	17.77	2.72

Source: World Bank Group, 2017.

Excise tax has the largest contribution to total tax revenue over the years (> 28%), followed by VAT (MoF Annual Report 2019). From 2015 to late 2016, there was no VAT liability on cigarettes, which made excise duty the sole tax levied on cigarettes. However, an upward revision of excise taxes left the overall tax burden unchanged. In late 2016, there were increases in both excise rates (by 26-28% for two higher tiers, by 37-40% for two middle ties, and by 67% for the lowest tier) and VAT rates (0 to 12% and again to 15%). The current government reduced the VAT rate to 8% and the excise tax rates were further increased. Other than that, a high corporate income tax rate of 40% is applied on tobacco.

An analysis of the affordability of tobacco published in 2010 found that increases in the prices of cigarettes during 2006-2009 have not kept up with inflation rates and increases in gross domestic product (Verité Research, 2010). This meant that cigarettes were more affordable post-2005 than previously (1980–2000). In order to correct the affordability gap and achieve the same affordability level as existed in 1980,

cigarette prices would have had to be increased by 51% in 2009 or 64% in 2010. This study highlights the need to further increase the price and tax rates of tobacco products to reduce affordability and thereby reduce consumption.

h) Measures concerning tobacco dependence and cessation

Sri Lanka does not have guidelines concerning tobacco dependence and cessation. Cessation support services have been highlighted in various health and development policies and plans as well as within the NCD prevention and control programme as described in the section on Article 5.1 – namely, the Mahinda Chintana 2010–2016[7], the Health Master Plan 2007–2016[8], the National Health Development Plan 2013–2017[9], the National NCD Medium Term Development Plan, the MOH Annual Action Plan 2013 and the Second Health Sector Development Project 2013–2018[10].

In all districts of Sri Lanka, mental health professionals working in health care facilities such as hospitals, clinics and healthy lifestyle centres, as well as those in educational institutions, provide tobacco cessation services. In addition, the Angoda National Mental Health Institute, a state-run hospital under the MOH, and Mel Madura, an NGO-run facility, also provide counselling and cognitive behavioural therapy services to treat tobacco dependence.

Doctors and other health-care workers in hospitals, clinics and healthy lifestyle centres screen patients for their risks and indicate their smoking status in the medical records. The healthy lifestyle centres under the WHO Package of Essential Non-communicable Disease Interventions for Primary Health Care in Low-Resource Settings (WHO PEN) project, monitor and follow up with heavy smokers. There are currently 668 healthy lifestyle centres and the MOH aims to set up two healthy lifestyle centres per MOH area[11].

Sri Lanka has a national toll-free quit line, which became operational in 2010. This service is connected to approximately five mobile and land networks, and is open from 08:00 to 16:00 on weekdays. Telephone quit line counselors are trained in the 5As (Ask, Advise, Assess, Assist and Arrange)[12][13] method, but at present they only provide information on the location of the nearest facility at which tobacco cessation services may be obtained.

6. Conclusion

For assessing the situation on tobacco control in Sri Lanka, this chapter has utilized a variety of data sets. For demand analysis, the main data sources used are GYTS (2007), (2011), (2015); ADIC (2014, 2016, 2017, 2018, 2019); WHO STEP (2003, 2006, 2015), Ministry of Health, Nutrition and Indigenous Medicine (2015, 2016); WHO (2018); and World Bank (2017). For supply side analysis, data sources are: CTC Annual reports (2019); ADIC (2019); (2020); Central Bank of Sri Lanka (2018); and World Bank (2017). On health consequences, main data sources are: WHO Fact sheet (2018); NATA (2015); and The Tobacco Atlas (n. d). On the policy side, the main data sources are: GYTS (2011); NATA (1999, 2004, 2006, 2011, 2013, 2015, 2016); Tobacco Control Law (2019); and WHO (2018, 2019).

Nonetheless, there are significant gaps in the data. On the demand side, for Sri Lanka, there is no data available on (a) perceptions of harmfulness between different tobacco products in Sri Lanka; (b) prevalence of cigarette smoking and other tobacco use among health professions and students; (c) HRPs by type and brand; (d) prevalence of e-cigarette use; (e) consumer knowledge and awareness about different forms of tobacco use; (f) public perception about different forms of tobacco use; and (g) comparison of perception of harmfulness between different tobacco products. On the supply side, there is no data available on the number of farmers in leaf production, leaf processing and manufacturing separately; female and child labour in tobacco production ; socio-economic status of tobacco growers and by type of leaf (e.g., price, average yield per acre). There is also a lack of recent data on the number of farmers, sub-growers and barn owners. On health consequences, there is no data available on the health impact of HRPs; prevalence of tobacco-related illness by socio-economic characteristics (by age, education, income, expenditure); tobacco related deaths and disabilities by SES (by age, education, income, expenditure), and the health impact of HRPs and health insurance. On policy issues, key data gaps relate to the unavailability of data on tobacco control laws in cultivation. Moreover, there is no nationally representative data on health insurance coverage for diseases attributable to tobacco and HRPs.

Based on the available data and evidence, below we summarize the main findings.

Demand for tobacco in Sri Lanka

The overall smoking prevalence rate was 24.03% in 2019 but this has been on the decline. This is consistent with trends in smoking intensity. Over the years, frequencies of "daily smoking" and "only in special occasions" have also shown a declining trend, while the smoking frequency of "few times a month" is increasing. However, there are considerable socio-economic differences noted in tobacco use. Prevalence is high among males (29.4%) compared to females (0.1%), suggesting a large gender gap in smoking prevalence. The frequency of tobacco smoking was negatively associated with the level of education. The rural-urban gap is modest (prevalence rates of 34.5% and 31.6% respectively) though the difference in prevalence of smokeless tobacco is significant (14.4% in rural areas vs 30.5% in urban areas). The prevalence of smoking is highest among the poorest households (40% compared to 24% among the richest). "Skilled agricultural and fishery workers" (42.9%) and "Craft and related workers" (41.6%) have more current smokers versus other occupational groups.

By product types, cigarettes (88.3% in 2019) and bidi (10.10%in 2019) are the two dominant types of smoked tobacco. In 2018, JPGL (73.47%) was the cigarette brand most preferred by smokers, followed by Dunhill (12.2%), while only 5.7% preferred Bristol and remarkably none of the respondents preferred the local brands Capstan and Navy Cut.

In recent years, as a result of price increases, smokers have switched from premium brands to low-priced legal cigarettes and bidi as well as illegal cigarettes. This is also reflected in the reduction in production of cigarette sticks since 2007 in the "premium" category, while the production of "low priced cigarettes" have shown an increasing trend.

Sri Lankan people generally start consuming smoked tobacco products in the age group of 16- 20 years. Nearly 60% of smokers had initiated smoking under social influence i.e. "with friends," 34.4% of daily smokers and 16% of daily smokeless users have quit smoking. In 2019, the majority from the age groups of 15-24 and 25-39 had quit smoking due to their "change in preference" while the prominent reason for quitting in the 40 and above age group was due to "health concerns".

Supply of tobacco in Sri Lanka

CTC, largely owned by BAT, enjoys a monopoly share (99%) of the domestic cigarette market (World Bank Group, 2017). It is responsible for the entire manufacturing process from tobacco cultivation to cigarette production in Sri Lanka (Ceylon Tobacco Company, 2020).

Sri Lanka mainly produces three types of smoking tobacco products, namely cigarettes, bidi, and cigars, but the tobacco market is primarily dominated by cigarette manufacturers. Ceylon Tobacco Company offers a strong portfolio of brands, namely Dunhill (premium segment); JPGL (aspirational premium segment); Navy Cut and Bristol (value for money segment) and Capstan (low end segment). Nonetheless, the total production of cigarettes has decreased significantly from 2008 to 2018, while the bidi production has increased significantly. Cigar exports have shown a relative increase, but in the case of cigarettes, exports have decreased.

CTC claims that they currently source 100% of their tobacco leaf requirements from more than 20,000 local tobacco farmers. However, according to the DOA, only 3,000 farmers have cultivated tobacco in the 2016 Yala

Season. FAOSTAT data indicate that both tobacco production and cultivated area for tobacco in Sri Lanka have decreased significantly over the last few decades, declining by more than three-quarters since 1980. A review of the literature suggests that there are several potential alternative crops that can be cultivated under the same agro-ecological conditions and generate comparable profits for tobacco, including green chili and certain vegetables.

In Sri Lanka, smuggling of tobacco products happens on both a large and a small scale. CTC claims that due to the government increasing taxes on legal cigarettes in Sri Lanka, cigarette smuggling grew by 45% to 740 million illicit sticks in 2019, accounting for 8% of the total tobacco market.

Health consequences of tobacco use in Sri Lanka

The prevalence of tobacco-attributable disease is high in Sri Lanka. According to the WHO 2018 Survey, heart disease and stroke are the most common ways by which tobacco kills people. The most common way tobacco kills is from cardiovascular diseases (CVDs). Tobacco kills 12 351 people each year, representing 10% of all deaths. CVD deaths due to tobacco use are around 15% (6530 deaths).

The economic burden of tobacco-related illness and deaths are considerably high in Sri Lanka. The direct and indirect costs of alcohol and tobacco in Sri Lanka was estimated to be Rs. 209.03 billion (US$ 1,548.37 million) for the year 2015 and the cost of tobacco was Rs. 89.37 billion (US$ 662.0 million) (According to the results of Alcohol and Tobacco, a study which was conducted by the National Authority on Tobacco and Alcohol (NATA) and the World Health Organization (WHO), in collaboration with the Ministry of Health and Nutrition of Sri Lanka and the Sri Lanka Medical Association (SLMA)).

Costs for tobacco-related cancers were Rs. 16.3 billion (US$ 121.1 million), while for the tobacco related non-communicable diseases it was Rs. 73.0 billion (US$ 540.7 million).

Policy measures related to tobacco use, production and trade in Sri Lanka

After joining the WHO FCTC in 2003, Sri Lanka adopted WHO's MPOWER strategy. The Sri Lanka Tobacco Control Programme is implementing its activities in line with the six policies recommended in the "WHO Report on the Global Tobacco Epidemic 2008".

To help achieve a smoke free lifestyle in Sri Lanka, smoking is prohibited in many indoor public places, workplaces and on public transport. Supermarkets and places to which the public has access, as well as public places such as government departments and public institutions, have been declared as 100% smoke free areas by law.

Bans on most tobacco advertising activities were introduced in 2006 in Sri Lanka. As of 2016, tobacco advertising is banned in most media except for international ones. In Sri Lanka, the Act does not prohibit the sale of tobacco products by persons under 21 years of age. It does, however, specify fines and other penalties for violations of its provisions.

Manufacturing, importing, selling and offering for sale "e-cigarettes that contain tobacco" is banned in Sri Lanka. However, use of e-cigarettes is not prohibited in indoor public places, workplaces, and public transport; therefore, the use of e-cigarettes is allowed by law. Moreover, there is no law addressing e-cigarette advertising, promotion, and sponsorship; therefore, advertising, promotion, and sponsorship of e-cigarettes

are allowed.

Sri Lanka participated actively in the Intergovernmental Negotiating Body (INB) that drafted the Protocol to Eliminate Illicit Trade in Tobacco Products from 2008-2012. The Tobacco Tax Act No. 8 of 1999 and the Tobacco Tax (Amendment) Act No. 9 of 2004 regulate and control the illegal importation of tobacco products. Nonetheless, tobacco smuggling is still prevalent.

Lastly, smoking cessation help is provided within the country through a toll-free telephone quit-line/help-line as well as smoking cessation support in most health care facilities.

Bibliography

ADIC. (2016). ADIC Spot Survey July 2015. Colombo: Alcohol and Drug Information Centre.

ADIC. (2020). Analysis of Tobacco Market in Sri Lanka-2019. Colombo: Alcohol and Drug Information Centre .

Alcohol & Drug Information Centre. (2020, August). Trend Surveys. Retrieved from http://adicsrilanka.org: http://adicsrilanka.org/trend-surveys/

Alcohol and Drug Information Centre. (2019). Annual Trend Survey on Tobacco Smoking in Sri Lanka 2018. Colombo: Alcohol and Drug Information Centre (ADIC). Retrieved 2019, from http://adicsrilanka.org/2019/10/17/tobacco-smoking-report-2018/

Alcohol and Drug Information Centre. (2020). Annual Trend Survey on Tobacco Smoking in Sri Lanka-2019. Colombo: Alcohol and Drug Information Centre.

Alcohol and Drug Information Centre. (2020). Annual Trend Survey on Tobacco Smoking in Sri Lanka-2019 . Colombo : Alcohol and Drug Information Centre.

Amarasinghe, H., Ranaweera, S., Ranasinghe, T., Chandraratne, N., Kumara, D. R., Thavorncharoensap, M., . . . Silva, A. d. (2018). Economic cost of tobacco-related cancers in Sri Lanka. Tobacco Control (27), 542–546. Retrieved from https://tobaccocontrol.bmj.com/content/tobaccocontrol/27/5/542.full.pdf

Amba Research. (2013). Ceylon Tobacco Company PLC. Colombo: Amba Research Private Limited.

Arunatilake, N., & Opatha, M. (2003). The Economics of Tobacco in Sri Lanka. Washington DC: World Bank.

CBSL. (2020). Annual Report-2019. Colombo: Central Bank of Sri Lanka .

Central Bank of Sri Lanka. (2018). Economic and Social Statistics of Sri Lanka. Colombo: Central Bank of Sri Lanka.

Ceylon Tobacco Company. (2019). Annual Report 2018. Colombo: Ceylon Tobacco Company. Retrieved from https://cdn.cse.lk/cmt/upload_report_file/460_1555498758602.pdf

Ceylon Tobacco Company. (2020). Annual Report-2019. Colombo: Ceylon Tobacco Company. Retrieved from http://www.ceylontobaccocompany.com/group/sites/sri_9pmjn9.nsf/vwPagesWebLive/DOBJBG7K/$FILE/medMDBPYLK8.pdf?openelement

Ceylon Tobacco Company. (n.d.). How illicit trade impacts Sri Lanka. Retrieved from http://www.ceylontobaccocompany.com/: http://www.ceylontobaccocompany.com/group/sites/SRI_9PMJN9.nsf/vwPagesWebLive/DOBJBG6Z

Colombage, S., Morais, N., & Wcikramasinghe, C. (2018). A BASELINE STUDY ON THE ILLICIT CIGARETTE MARKET AND THE RESULTING TAX IMPLICATIONS FOR SRI LANKA: Academic programme evaluation View project. . Colombo: Open University.

Department of Census and Statistic. (2016). Demographic and Health Survey. . Colombo : Department of Census and Statistics.

Dissanayaka, N. (2020, June 22). Tobacco cultivation: A threat to Sri Lanka's food security amidst COVID-19. Retrieved from https://www.ips.lk/talkingeconomics: https://www.ips.lk/talkingeconomics/2020/06/22/tobacco-cultivation-a-threat-to-sri-lankas-food-security-amidst-covid-19/

Fernando, H. N., Wimaladasa, I. T., Sathkoralage, A. N., Ariyadasa, A. N., Udeni, C., Galgamuwa, L. S., . . . Kumarasinghe, N. (2019). Socioeconomic factors associated with tobacco smoking among adult males in Sri Lanka. BMC Public Health volume 19 (778). Retrieved from https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-019-7147-9#citeas

Fonseka, C. (2009). Tobacco, alcohol and doctors. Ceylon Medical Journal 54(3), 71–74.

Michael Eriksen, J. M. (2015). The Tobacco Atlas: Fifth Edition. American Cancer Society.

Ministry of Environment and Renewable Energy. (2014). National Action Program (NAP) for Combating Land Degradation in Sri Lanka 2015-2024. Colombo: Ministry of Environment and Renewable Energy, Sri Lanka.

Ministry of Finance. (2013). Annual Report 2012. Colombo: Ministry of Finance. Retrieved from http://www.treasury.gov.lk/documents/10181/12870/2012/ff6bcb87-3e8d-4af0-b9d6-d67c57e81f38

Ministry of Finance. (2020). Annual Report-2019. Colombo: Ministry of Finance. Retrieved from http://www.treasury.gov.lk/documents/10181/12870/Annual+Report+2019-20200625-rev2-eng/5952fd01-ba62-4186-a270-fe87fd87fd5c

Ministry of Health, Nutrition and Indigenous Medicine and WHO. (2015). Non Communicable disease Resk Factor Survey (STEP). Colombo: Ministry of Health, Nutrition and Indigenous Medicine.

NDDCB. (2020). Handbook of Drug Abuse Information in Sri Lanka (2018 – 2002). Rajagiriya, Sri Lanka: National Dangerous Drugs Control Board. Retrieved from https://drive.google.com/file/d/1PsnVIS57aFFjFsrhrlWKRsIRMd2_JBMr/view

Perera B, F. P. (2005). Smoking in adults in Sri Lanka: prevalence and attitudes. Asia Pac J Public Health 17(1), 40-45. Retrieved from https://pubmed.ncbi.nlm.nih.gov/16044832/

Rajasekaran, S. (2008). Ceylon Tobacco Company (CTC): Corporate Update . Colombo: John Keels Stock Brokers Reserch .

Research Intelligence Unit . (2019). Economics of Tobacco Taxation in Sri Lanka: Effects and The Need for a Prudent Framework. Colombo: Research Intelligence Unit (Pvt) Ltd . Retrieved from https://www.riunit.com/wp-content/uploads/2019/09/Cricket%20Report%20Final.pdf

Samarasinghe, N. (2017, April 01). The Politics of Tobacco Control Policy-Making In Sri Lanka. Retrieved from https://www.colombotelegraph.com/index.php/the-politics-of-tobacco-control-policy-making-in-sri-lanka/

The Tobacco Atlas. (2016). Sri Lanka Factsheet. Retrieved from https://tobaccoatlas.org: https://tobaccoatlas.org/country/sri-lanka/

Thibbotuwawa, M., & Dissanayake, N. (2019, November 13). Ban on Tobacco Cultivation: A Blessing in Disguise for Sri Lankan Farmers. Retrieved from ww.ips.lk/talkingeconomics: https://www.ips.lk/talkingeconomics/2019/11/13/ban-on-tobacco-cultivation-a-blessing-in-disguise-for-sri-lankan-farmers/

Tobacco Control Laws. (2020, July). LEGISLATION BY COUNTRY. Retrieved from https://www.tobaccocontrollaws.org/: https://www.tobaccocontrollaws.org/legislation/country/sri-lanka/summary

Tobacco Unmasked. (2020, July 31). Main Page. Retrieved from http://www.tobaccounmasked.com: http://www.tobaccounmasked.com/index.php/Main_Page

Tobacco Unmasked. (2020, June 15). Tobacco Industry Country Profile – Sri Lanka. Retrieved from http://www.tobaccounmasked.lk/: http://www.tobaccounmasked.lk/index.php/Tobacco_Industry_Country_Profile_%E2%80%93_Sri_Lanka

UNDP. (2019). Investment Case for Tobacco Control in Sri Lanka. New York: United Nations Development Programme. Retrieved from https://web.archive.org/web/20200219110254/https://www.undp.org/content/dam/undp/library/people/health/WHO%20FCTC%20Implementation/Investment_Case_for_Tobacco_Control_in_Sri_Lanka.pdf

Uragoda, C. (1987). A History of Medicine in Sri Lanka. Colombo: Sri Lanka Medical Association.

Weerasekera, H. (2019, 10 14). Cigarette Smuggling in Sri Lanka: Hype vs. Reality. Retrieved from https://

www.ips.lk/talkingeconomics: https://www.ips.lk/talkingeconomics/2019/10/14/cigarette-smuggling-in-sri-lanka-a-case-for-tax-revisions-or-smoke-without-fire/

Weerasekera, H. (2019, 10 14). https://www.ips.lk/talkingeconomics. Retrieved from Cigarette Smuggling in Sri Lanka: Hype vs. Reality: https://www.ips.lk/talkingeconomics/2019/10/14/cigarette-smuggling-in-sri-lanka-a-case-for-tax-revisions-or-smoke-without-fire/

WHO. (2018). Factsheet Sri Lanka. New Delhi: World Health Organization.

World Bank. (2020, July 01). World Bank Blogs. Retrieved from World Bank: https://blogs.worldbank.org/opendata/new-world-bank-country-classifications-income-level-2020-2021

World Bank Group. (2017). Overview of Tobacco Use, Tobacco Control, Legislation and Taxation. Washington DC: World Bank.

World Health Organization. (2014). Needs assessment for implementation of the WHO Framework Convention on Tobacco Control in Sri Lanka. Geneva: World Health Organization.

World Health Organization. (2015). Global Youth Tobacco Survey (GYTS) Sri Lanka Country Report. Sri Lanka: World Health Organization. Retrieved from https://apps.who.int/iris/bitstream/handle/10665/250251/gyts_sri_lanka_2015_report.pdf?sequence=1

World Health Organization. (2017). Economic and Social Costs of Tobacco and Alcohol in Sri Lanka 2015. World Health Organization .

World Health Organization. (2018). Fact Sheet 2018 Sri Lanka. World Health Organization Regional Office for South East Asia. Retrieved 2019, from https://apps.who.int/iris/bitstream/handle/10665/272688/wntd_2018_srilanka_fs.pdf?sequence=1

World Health Organization. (2019, December 19). WHO launches new report on global tobacco use trends. Retrieved from https://www.who.int/news-room: https://www.who.int/news-room/detail/19-12-2019-who-launches-new-report-on-global-tobacco-use-trends

World Health Organization; Ministry of Health, Nutrition and Indigenous Medicine. (2015). Non-Communicable Disease Risk Factor Survey Sri Lanka. Colombo: World Health Organization and Ministry of Health, Nutrition and Indigenous Medicine.

[1] Bidi is also known as *Beedi* in Sri Lanka.

[2] Tobacco control laws (2019).Sri Lanka tobacco control policies. Retrieved July 8, 2020 from Tobacco control laws : https://www.tobaccocontrollaws.org/legislation/factsheet/policy_status/sri-lanka

[3] https://apps.who.int/iris/bitstream/handle/10665/250251/gyts_sri_lanka_2015_report.pdf?sequence=1

[4] http://www.ceylontobaccocompany.com/group/sites/SRI_9PMJN9.nsf/vwPagesWebLive/DOBJBG7Q

[5] http://archive.tobaccounmasked.com/wp-content/uploads/2019/09/Department-of-Agriculture-data-on-tobacco-cultivation.pdf

[6] Article 6 (Price and tax measures to reduce the demand for tobacco); Article 8 (Protection from exposure to tobacco smoke); Article 9 (Regulation of the contents of tobacco products); Article 10 (Regulation of tobacco product disclosures); Article 11 (Packaging and labelling of tobacco products); Article 12 (Education, communication, training and public awareness); Article 13 (Tobacco advertising, promotion and sponsorship); Article 14 (Demand reduction measures concerning tobacco dependence and cessation); Article 15 (Illicit trade in tobacco products); Article 16 (Sales to and by minors); Article 17 (Provision of support for economically viable alternative activities); and Article 18 (Protection of the environment and the health of persons)

[7] http://www.asiantribune.com/sites/asiantribune.com/files/Mahinda_Chinthana.pdf

[8] Ministry of Health care and Nutrition Health World health. (2010). *Health master plan 2007-2016 Healthy and shining Island in the 21st century annual action plan 2010 for programmes and directorates*. Retrieved 26, July, 2020, from http://koha.ips.lk/cgi-bin/koha/opac-detail.pl?biblionumber=62750&shelfbrowse_itemnumber=55519#holdings

[9]http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/list_publi/NHDP2013-2017-page-201-300.pdf

[10] https://projects.worldbank.org/en/projects-operations/project-detail/P118806?lang=en&tab=overview

[11] http://www.health.gov.lk/moh_final/english/public/elfinder/files/Downloade/NCDbook2018.pdf

[12] https://www.who.int/fctc/implementation/needs/Sri_Lanka_Needs_assessment_report_english.pdf?ua=1

[13]http://documents1.worldbank.org/curated/en/478361561398136333/pdf/Sri-Lanka-Overview-of-Tobacco-Use-Tobacco-Control-Legislation-and-Taxation.pdf