

# **Endline Survey Report**

### **Ministry of Railways**

Initiative to Make Bangladesh Railways Tobacco-Free (IMBRTF) Project

#### **Study and Report**

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## Initiative to Make Bangladesh Railway Tobacco Free (IMBRTF)

**Endline Survey** 

**Final Report** 

February 2024





Survey always plays vital role to demonstrate the outcomes of a key project. Keeping in view the importance of survey, I am happy to know that the end line survey report on enforcement of tobacco control law at railway stations has been prepared.

Tobacco control must be a responsibility of every citizen, because tobacco usage constitutes very negative impacts on human health & well-being. It creates negative impact on national economy and productivity of our nation. Due to tobacco related diseases, annually more than 1,61,000 persons die (Tobacco Atlas 2018 - 6<sup>th</sup> Edition). The cost of treatment of tobacco related disease is also a huge financial burden for affected individual and their family members. Moreover, the exposure to tobacco smoking is also harmful for non-smokers. In this regard, protecting non-smoking passengers from second-hand smoking is responsibility of the Ministry of Railways as well as Bangladesh Railway.

It is worth to mention that our Honorable Prime Minister Sheikh Hasina has declared in the South Asian Speakers Summit, 2016 that Bangladesh would be a tobacco free country by 2040. Hon'ble PM also has expressed her commitment to take necessary measures for enforcement of relevant laws in Bangladesh. In this regard, Ministry of Railways has strong commitment for the enforcement of tobacco control laws at the railway stations and trains. It is also relevant with the vision of the Ministry: 'safe, affordable, modern and environment friendly railway transport system'.

I hope this end line survey report will provide us guidance for taking necessary steps to create tobacco free railway transportation system. The Ministry of Railways has been implementing the two-year long project, Initiative to Make Tobacco Free Railways that would contribute to make the country tobacco free by 2040, as vision made by Honorable Prime Minister.

I thank everyone involved with this initiative.

Dr. Md. Humayun Kabir



Director General Bangladesh Railway



Message

Bangladesh Railway (BR), a principal transportation agency in the country, is a Government owned and Government –managed organization. It aims to provide safe, reliable, cost-effective and time efficient rail transport service in the country through modernizing, expanding & maintaining rail system in a manner which supports government strategies for economic, social & environmental development.

To ensure safety and environment-friendly environment at railway stations and trains, ensuring tobacco free environment has become Bangladesh Railway's responsibility as well. Our own law, the Bangladesh Railways Act has restricted tobacco smoking at train compartments. The Subsidiary Rules under this Act has banned smoking of BR staffs while they are on duty and while wearing uniform. Moreover, the Government has passed tobacco control laws and banned smoking in many public places and public transports. These laws includes territorial jurisdiction under BR, such as rail stations, platforms (including queue for waiting passengers), waiting rooms, office rooms of BR infrastructure and trains. The subsequent Rule under tobacco control law includes First Class officials of BR as enforcement officer under this law.

Most importantly, our Honorable Prime Minister has declared this country to be tobacco free by 2040 and has expressed her commitment that her Government will take all necessary measures for the enforcement of existing tobacco control law. I think, this is our inspiration. Every Government official is responsible to ensure the most effective enforcement of tobacco control law. BR officials will take necessary measures to ensure smoke free environment at the railway stations and trains too in this regard.

I am happy to learn that end line survey has been done in 10 (Ten) selected rail stations. I hope, finding of this survey will provide us with guidance which we may apply to all rail stations to create a tobacco free Bangladesh.

Md. Quamrul Ahsan





Project Director Initiatives to Make Bangladesh Railways Tobacco Free project Ministry of Railways

#### Message

I am glad that a survey report relevant section of tobacco control law at the railway stations has been finalized. This survey produced endline data on tobacco use and smoking at the railway stations, display of no-smoking signage's at the station premises, public announcement on smoking ban at the stations and trains. This survey covered 10 large rail stations, five from each of West and East of Bangladesh Railway. It is noted that this survey conducted as a part of "Initiatives to Make Bangladesh Tobacco Free Railways" project of the Ministry of Railways.

We're inspired to take this project to make tobacco free rail transportation system as our honorable Prime Minister declare this country to be tobacco free by 2040. Her kind direction to ensure enforcement of tobacco control law provided us clear guidance. Although, the enforcement of tobacco control law is main responsibility of the National Tobacco Control Cell, Health Services Division, and they are working on various ways. But enforcement of this law at train and station, especially, ensure healthy environment at train and station is our responsibility. In addition of safe and comfortable journey, protecting railway passengers from exposure to tobacco smoke is also our duty. In this regard, this survey report will provide basic information on current scenario on enforcement of tobacco control law.

I am grateful to Honorable Minister, Ministry of Railways for inaugurating this tobacco free project. I am thankful to Secretary, Ministry of Railways for his continues supervision of progress of Ministry of Railways and as well as guidance regarding various aspects for implementation of the tobacco-free project. I am also thankful to Director General, Bangladesh Railway for his leadership and cooperation implementation this project.

I thank everyone for involved with this survey, including officials of Ministry of Railways and Bangladesh Railway, including concerned station managers, station masters and other concerned employees. I also thankful to Vital Strategies for their technical and financial supports and ARK Foundation for conducting this survey.

I strongly believe that, this survey report will guide us to take necessary initiatives to stop prevalence of tobacco use, as well as to protect everyone from the exposure to second hand smoke at railway station and train.

Jalal Uddin Ahmmed





Message

I congratulate the Ministry of Railways for their timely initiative in undertaking this important study. I express my gratitude to the Ministry of Railways for providing the opportunity to conduct the end-line survey.

I am very pleased that the end-line survey of the Initiatives to Make Tobacco Free Railways project of the Ministry of Railways has been successfully completed. This report effectively demonstrates the potential for establishing smoke-free environments within public transportation systems in Bangladesh. The findings and recommendations outlined here can serve as a valuable blueprint for implementing similar tobacco control measures across other public places. This would represent a significant stride towards achieving a tobacco-free Bangladesh, aligning with national public health goals.In Bangladesh, tobacco use presents a substantial public health challenge, incurring significant economic burdens and leading to a multitude of adverse health outcomes.

The Prime Minister's ambition to make the country tobacco-free by 2040 highlights the importance of addressing tobacco use across all public transportation, including railways. Conducting studies to raise awareness among the public and authorities can promote adherence to tobacco control regulations. Controlling tobacco consumption requires collective efforts from individuals, communities, policymakers, and stakeholders, leading to the implementation and sustainability of effective measures and ultimately contributing to a healthier, tobacco-free society.

I strongly believe that this survey will be a valuable tool in tobacco control at railway stations and across public transportation. This, in turn, can contribute to a considerable reduction in tobacco use.

Rumana Inque

Professor Dr. Rumana Huque





Project Coordinator Initiatives to Make Bangladesh Railways Tobacco Free Project Ministry of Railways

Forward

Tobacco is a DEADLY product that kills half of its users. According to Bangladesh Cancer Society, more than 7 million people seriously sick with stroke, heart attack, lung and oral cancer, chronic lung disease etc due to tobacco use. According to Tobacco Atlas 2018, more than 1,61,000 people die in Bangladesh due to tobacco. That is why tobacco control is essential component for prosperous of this country.

Tobacco smoke contains more than 7000 chemicals in which more than 250 chemicals are dangerous and 70 chemicals causes to cancer in various parts of human body. That is why, exposure to tobacco smoke (Second Hand Smoke) is also dangerous for non-smokers including children and women. To protect non-smokers from SHS, government banned smoking in various public places that includes railway stations, all offices, & queue for passengers (such as platform in station) and public transports that includes train.

It is remarkable that Honorable Prime Minister Sheikh Hasina declared Bangladesh to be tobacco free by 2040. To achieve this tremendous vision, Honorable Prime Minister has directed three specific actions to be taken. Including the commitment expressed by Honorable Prime Minister: 'my government will take all possible measures for effective implementation of existing laws'.

To make this country tobacco free, ensure tobacco free rail station and train is important. The Honorable Minister, Ministry of Railways already declared tobacco free rail station and train. In this regard, Ministry of Railways is implementing a project titled Initiative to Make Tobacco Free Railways Project.

Under this project, an end line survey on tobacco control law enforcement and relevant issues have been conducted. The outcome of this survey will guide us for taking necessary actions to make the tobacco free rail station and train.

Mir Alamgir Hossain

#### Acknowledgement

The study team thankful to the Ministry of Railways for taking tobacco free railways project under which this study has been carried out. This is inspiring that the Former Honorable Minister, Ministry of Railways, Mr. Md. Nurul Islam Sujon MP inaugurated this project and declared the train and stations to be tobacco free.

We are grateful to the Secretary, Ministry of Railways, Dr. Md. Humayun Kabir, who has been guiding the project team since the inception of this project. The Secretary provided his experienced suggestion regarding the survey report.

Director General, Bangladesh Railway is key person who cooperated the study team and project team with his extra-ordinary leadership. We thank him for his continue guidance and cooperation.

We are thankful to Mr Jalal Uddin Ahmmed, Joint Secretary (Admin) and Project Director, Mr. Mir Alamgir Hossain, Deputy Secretary (Admin 4) and Project Coordinator, Ministry of Railways for their technical input in the design and implementation of this study.

The study team also received excellent contribution and feedback from various government and non-government organizations. Particularly, we thank the National Tobacco Control Cell, Health Services Division, Ministry of Health and Family Welfare regarding the feedback before and during the survey. We acknowledge their contribution.

We also thank the policy makers, officials and experts at the Ministry of Railways and Bangladesh Railway for providing guidance, sharing information and facilitating the implementation of this study. We acknowledge the support of the railway station officials for conducting the surveys.

On behalf of Study team							
Rumana Huque, PhD,	Sazia Binte Saleh						
Professor, Department of Economics	Program Officer (Consultant)						
and	Ministry of Railways						
Executive Director, ARK Foundation							

#### **Executive Summary**

Annually, more than 90 million passengers travelled by train and many more than visits rail stations. As train is safe, cost effective and environment friendly transport. It is also comfortable as it has toilets in the train, so it is popular among all ages. Particularly accompanied by children, women & pregnant women, elderly persons and sick persons) choose train for long distance travel. Many of them are women and elderly persons. It is responsibility of Ministry of Railways (MoR) and Bangladesh Railways (BR) to protect these passengers from exposure to tobacco smoke (Second-hand smoke – SHS) at trains and rail stations. SHS is dangerous as tobacco smoke contains more than 7,000 chemicals compound and 70 of them known as cancer carcinogen. Due to SHS, more than 1.3 million non-smokers die in world and, more than 25,000 non-smokers die in Bangladesh.

Railway Act 1890 restricted smoking in train compartment and General Rules and Subsidiary Rules banned smoking among BR staff while they are on-duty and or wearing uniform (official dress).

Moreover, the Smoking and Tobacco Products Usage (Control) Act 2005 (amended in 2013) banned smoking in train and rail stations. First class officers of Bangladesh Railway has been included as authorized officer of this law. So, it is moral and legal obligation of railway employees to protect passengers from SHS.

The Honourable Prime Minister of Bangladesh has emphasized on making the country tobacco free by 2040. Initiative to Make Bangladesh Railways Tobacco Free (IMBRTF) is an endeavor by the MoR to make railway stations and trains tobacco and smoking free. Under this project, ARK Foundation, has conducted this Endline study in 10 model stations which attempts to understand the overall scenario of the implementation of tobacco laws in the railway stations of Bangladesh after the intervention implementation by Ministry of Railways under this project. Through an observational study, it found that implementation and monitoring of existing tobacco control laws are exemplary improved in the selected model railway stations after the intervention. However, gaps and different challenges still persist in reducing tobacco consumption and sales. The need for stronger policy measures along with stricter implementation of existing policies and integrated monitoring mechanism still stand. The railway authority should increase the volume of awareness among general passengers and sellers to control the sales and consumption of tobacco. The number of anti-smoking signage, audio-visual messages through digital display and announcement through PSA should be increased to ensure proper compliance. However, we believe that the initiatives undertaken by Ministry of Railways could be an excellent example for other ministries who are responsible for managing different public spaces to protect passengers from second-hand smoking and tobacco sales and to contribute to achieve the objectives declared by the Honourable Prime Minister.

**Keywords:** Smoke-free, tobacco free, second-hand smoke, public transport, railways, Ministry of Railways, Bangladesh Railway,

#### Introduction

Tobacco use presents a significant global public health issue, resulting in millions of deaths and illnesses. Each year, more than 8 million individuals die prematurely due to tobacco, with 7.7 million from direct smoking and 1.3 million from exposure to second-hand smoke <sup>1</sup>. Approximately 1.3 billion people worldwide use tobacco, with 36.7% of men and 7.8% of women being users <sup>1</sup>. The annual global economic cost of tobacco use exceeds USD 1 trillion, covering healthcare expenses, reduced productivity, and premature deaths <sup>2</sup>. Smoking is the primary preventable cause of death, contributing to various chronic conditions such as cancer, heart disease, stroke, lung diseases, and diabetes <sup>3</sup>. Secondhand smoke disease, lung cancer, and other conditions <sup>1</sup>. It is concerning that young people are using e-cigarettes and other alternative tobacco products more frequently because it may lead to nicotine addiction and ultimate smoking <sup>3</sup>.

The widespread use of tobacco is a serious threat to public health in Bangladesh. It stands at sixth place worldwide for the highest adult tobacco usage rate (43.7%), encompassing both smoking (23.5%) and smokeless tobacco (SLT) use (27.5%). In Bangladesh, tobacco use caused nearly 126,000 deaths in 2018, a staggering 13.5% of all deaths that year. It not only affects individuals (1.5 million adults suffer from tobacco-related illnesses), but also burdens the healthcare system <sup>4</sup>. More than 61,000 children below the age of 15 suffer from illnesses resulting from exposure to secondhand smoke, highlighting the long-term consequences of tobacco use <sup>4</sup>.

In Bangladesh, about 92 billion cigarettes were smoked in 2018 alone, exposing a significant tobacco business <sup>4</sup>. British American Tobacco is the top cigarette seller in Bangladesh (66.6%), followed by Dhaka Tobacco (20.5%) <sup>5</sup>.

The World Health Organization (WHO) has been actively involved in addressing tobacco-related issues worldwide, including in Bangladesh, through its Framework Convention on Tobacco Control (FCTC). The FCTC is the first international treaty negotiated under the auspices of the WHO, aiming to reduce tobacco-related harm by implementing evidence-based strategies. Bangladesh ratified the FCTC in 2005, demonstrating its commitment to addressing tobacco control comprehensively. Bangladesh has taken several measures to implement the provisions of the FCTC, including: enacting comprehensive tobacco control

<sup>&</sup>lt;sup>1</sup> World Health Organization (WHO). (2023). Tobacco. Retrieved from <u>https://www.who.int/news-room/fact-sheets/detail/tobacco</u>

<sup>&</sup>lt;sup>2</sup> World Bank. (2020). The Economic Costs of Tobacco Use. Retrieved from https://openknowledge.worldbank.org/handle/10986/33702

<sup>&</sup>lt;sup>3</sup> Centers for Disease Control and Prevention (CDC). (2023). Smoking and Tobacco Use. Retrieved from https://www.cdc.gov/tobacco/index.htm

<sup>&</sup>lt;sup>4</sup> British American Tobacco Bangladesh: https://www.batbangladesh.com/

<sup>&</sup>lt;sup>5</sup> Bangladesh Country Profile - TobaccoTactics: https://tobaccotactics.org/article/bangladesh-country-profile/

legislation, implementing smoke-free policies in public places and workplaces and regulating tobacco advertising, promotion, and sponsorship.

The World Health Organization (WHO) actively targets tobacco-related issues globally, including in Bangladesh, through the Framework Convention on Tobacco Control (FCTC), which was ratified by Bangladesh in 2005. The FCTC seeks to reduce tobacco-related harm through evidence-based approaches. Bangladesh has implemented some FCTC provisions, such as comprehensive tobacco control laws, smoke-free programs, and tobacco advertising regulations. These actions indicate Bangladesh's commitment to a comprehensive tobacco control strategy.

The prime minister of Bangladesh has emphasized that the country should be tobacco-free by 2040. To ensure that train stations and compartments are free of tobacco use, the Ministry of Railways launched the Initiative to Make Bangladesh Railways Tobacco Free (IMBRTF) in accordance with this vision. This program is a result of Bangladesh's wider policy of prohibiting smoking in public areas. The tobacco control law forbids smoking in public areas and on transportation systems. The law also requires "No-smoking" signs to be displayed in all offices, trains, and railroad stations, which emphasizes the importance of establishing tobacco-free environments.

In Bangladesh, Section 110 of the Railways Act 1890, which was inherited from the British colonial era, is critical for passenger and employee safety. It prohibits smoking in designated areas of railway stations, offices, and trains, demonstrating Bangladesh's dedication to public health. With millions of people relying on railways every day, implementing this law is critical for ensuring a safe environment. It lowers the risk of fires and encourages cleaner air by enforcing "No-smoking" signs and rigorous compliance. Despite updates, Bangladesh remains dedicated to safety and public health, ensuring a pleasant railway journey for all.

This endline study conducted across 10 model stations aimed to assess the implementation status of tobacco control laws following interventions in Bangladeshi railway stations. The survey provides insights into the current situation after the intervention provided regarding compliance with "Smoking and Tobacco Products Usage (control) Act 2005 with amendments in 2013" and regulations prohibiting tobacco use in public areas within railway stations.

#### Objectives of the study

- To assess the compliance with smoke-free laws in railway stations of Bangladesh.
- To understand the enforcement strategies undertaken to increase compliance levels.
- To increase awareness among the policymakers, employees, and the general public about the existence of the smoke-free laws and the status of compliance.
- To provide railway authorities with evidence on the loopholes and deficiencies in the implementation of the existing laws.
- To expedite the implementation of the IMBRTF project by suggesting policies on the basis of findings.

#### **Methods**

**Study Design:** Out of a total of 489 rail stations connected with 43 districts in Bangladesh (Railway Information Book 2020), this observational study was conducted at ten model railway stations. The railway stations were chosen on the basis of consultation with Bangladesh Railway. A team of trained researchers, consisting of one member in each team, observed the implementation status of tobacco control laws and regulations at the designated stations. In addition to noting the observations against the checklist, they also recorded the implementation status by taking images of different places in the railway stations.

**Selection of railway station:** A total of 10 railway stations were selected in consultation with Bangladesh Railway. Five of the observed railway stations were from the East Zone and the other 5 from the West Zone (see Table 1).

**Data collection tool:** Observation checklists from the baseline survey were adapted for minor revisions to assess the enforcement status of the tobacco control law in the selected stations. The survey questionnaire for endline survey is presented in Annex-C. The tool has three broad sections:

Section 1 (Features of the Station): Section 1 captures variables such as the room numbers by type of room and the number of platforms in each station.

Section 2 (Compliance of Tobacco Control Law /Smoke-free provisions): Section 2 investigates compliance with tobacco control laws by recording variables such as the prevalence of active smoking in the stations, places of active smoking, display of signage, evidence of recent smoking such as cigarette butts or bidi

ends, the presence of smoking aids, enforcement of regulations by railway authorities, and the display of contact number of reporting or responsible officer.

Section 3 [Compliance of Point of Sale (POS) vendors]: Section 3 investigates the compliance of POS vendors through variables such as the numbers of POS observed in each station, type of POS, location of POS, existence of tobacco advertisement, promotion, and sponsorship (TAPS), and display of tobacco products at POS.

**Operational definitions:** Following operational definitions from the "Smoking and Tobacco Products Usage (Control) Act 2005 (amended in 2013)" have been used:

- a) "Tobacco" means any Nicotiana tabacum or Nicotiana rustica plant or any other related plants or its leaf or crop, root, branch or any part of it;
- b) "Tobacco Products" means any product made from tobacco, tobacco leaves, or its extract which can be sucked or chewed, or inhaled through smoking, and shall include bidi, cigarette, cheroot, granulated, plug cuts, snuff, chewing tobacco, cigar and mixtures used in pipe;
- c) "Smoking" means inhaling or exhaling the smoke of tobacco, and also includes keeping or controlling any flamed tobacco products;
- d) "Smoking Zone" means any public place or any area specified for smoking in the public vehicles;
- e) "Public Place" means educational institution, government office, semi government office, autonomous office and private office, library, lift, indoor workplace, hospital and clinic building, court building, airport building, seaport building, river-port building, railway station building, bus terminal building, cinema hall, exhibition centre, theatre hall, shopping centre, restaurants surrounded by walls in all sides, public toilet, children park, fairs, designated queues or places for passengers waiting to ride on public transports, any other public area to be combined used by the general people or, any or all places declared time to time by the government or local government organization by a general or special order;
- f) "Public Transport" means motor car, bus, train, tram, ship, launch, all kinds of mechanized public transport, aircraft and any other transport determined or declared by the government by notification in the Official Gazette.
- g) "No Smoking Signage" to be displayed in all public places and public transport as per the Tobacco Control Law; the size should be 40 cm X 20 cm (2:1).

**Pre-testing of the tool:** Pre-testing of the tool was done in Tongi railway station. Necessary changes were made in the observational checklist on the basis of the lessons learnt and in consultation with the railway authority. The tool was finalized after addressing all the comments and suggestions received from the railway authority.

**Data collection:** Study formed a team of three researchers for data collection. The dates of field visits are shown in Table 1.

SI No	Name of the station	Date of data collection	Observation start time	Observation end time
1.	Sylhet	January 16, 2024	9.00 am	12.00pm
2.	Mymensingh	January 16, 2024	11.30am	2.30pm
3.	Rangpur	January 16, 2024	7.30am	11.00am
4.	Saidpur	January 17, 2024	9.30am	1.30pm
5.	Khulna	January 17, 2024	12:00pm	4:00pm
6.	Chittagong	January 18, 2024	7.35am	10.35am
7.	Rajshahi	January 21, 2024	5.30am	11.30am
8.	Dhaka Airport	January 22, 2024	10.40 am	1.40pm
9.	Kamalapur	January 22, 2024	10.30am	3.00pm
10.	Ishwardi	January 22, 2024	9.00am	12.00pm

Table 1: Selected Railway Stations and Date-Time of Observation

**Data Collection Approach:** A training session was held for researchers at the ARK Foundation office, focusing on the objectives and methodologies for data collection. Three individual researchers were subsequently assigned to conduct simultaneous observations and data collection at different railway stations. Prior to visiting their assigned stations on a predetermined date, the researchers notified the central railway authority of their potential visit timeframe. However, no prior notification was given to the specific station authorities. Each observation period lasted approximately three hours, coinciding with peak passenger activity at the stations. This ensured data collection during moments of high passenger volume, both for arrivals and departures.

A dissemination workshop was held at the Bangladesh Railway Bhaban on February 28, 2024 amongst the presence of high-level officials from Ministry of Railways, other ministries, departments and technical experts from development partners and non-governmental organisations. The results from the endline survey were shared at the meeting and the recommendations received from that meeting were incorporated into this study report.

#### Results

The study examined a total of ten model railway stations. The level of compliance with tobacco control regulations was assessed using several variables that were discussed in the methodology section.

**Rail-lines in the stations:** All 10 observed stations had some active rail lines, with Chittagong and Dhaka Airport, Ishwardi, Khulna, Rajshahi, and Rangpur boasting full activity. The remaining stations showed varying degrees of inactive lines. Among the 10 stations, Kamalapur leads in total rail lines (39), but only 21 were active. Mymensingh follows with 21 lines, of which 11 were operational. Saidpur and Sylhet had fewer lines overall, with 3 and 9 inactive lines, respectively. Figure 1 shows the numbers of total and active rail-lines in different railway stations.



Figure 1: Number of Rail-lines in the Stations

Type of the stations observed: Chittagong, Khulna, Kamalapur, Rajshahi, Sylhet, and Iswardi stations could be recognized as big stations with 3 or more platforms out of the ten stations that were observed. Junctions could be found at the stations at Mymensingh and Saidpur. Dhaka



Figure 2: Type of Observed Railway Stations

Airport and Rangpur station could be identified as a medium station with at least 2 platforms. Of the ten stations, there were not any small stations.

**Frequency of active smoking:** Active smoking occurred at all ten observed stations, ranging from only 9 individuals in Sylhet to a peak of 50 in Ishwardi, with Dhaka Airport, Mymensingh, and Dhaka Kamalapur each exceeding 20 instances which is presented in figure 3.



Figure 3: Active Smoking in Different Railway Stations

Pailway		Active sn	noking in	Different	areas of st	ations		Total
station	Platform	Waiting room	Ticket booth	Office room	Parking area	Wash room	Other areas	(%)
Chittagong	11	0	0	0	3	2	0	16 (7.14%)
Dhaka Airport	25	0	0	0	7	3	0	35 (15.63%)
Ishwardi	33	0	12	0	5	0	0	50 (22.32%)
Kamalapur	2	0	0	0	19	0	0	21 (9.38%)
Khulna	8	0	0	0	7	0	0	15 (6.70%)
Mymensingh	19	0	0	1	7	1	0	28 (12.50%)
Rajshahi	4	0	0	0	11	0	0	15 (6.70%)
Rangpur	15	0	2	0	3	0	0	20 (8.93%)
Saidpur	10	0	0	0	0	5	0	15 (6.70%)
Sylhet	7	0	0	0	2	0	0	9(4.02%)
Total	134	0	14	1	64	11	0	224 (100%)

Table 2: Frequency of active smoking in different areas of the stations

A total of 224 cases of active smoking were observed in 10 model stations across Bangladesh which is shown in Table 1. Notably, each of the major stations -Khulna, Rajshahi, and Saidpur - contributed less than 7% of the total observed cases. Platforms appear to be the main hotspot for smoking activity. Stations like Ishwardi (33 out of 50 cases) and Dhaka Airport (25 out of 35 cases) saw a significant majority of smokers on platforms. Parking areas also attract smokers although not as much as platforms. For example, Dhaka Kamalapur station had 19 smoking incidents in its parking area.

The platform area was the most common location for active smoking, accounting for 134 (61.18%) of the 224 cases of active smoking that were reported across all stations. The parking area was the second most frequent location of active smoking in train stations, with 64 (29.22%) incidents of smoking identified there (Figure 4). The observation revealed 14 cases of smoking near the ticket booth and one person was smoking in the office room. All smokers observed, both adults and minors, were men. Only 5 minor smokers were found in the study, all in Dhaka Kamalapur station.



Figure 4: Active Smoking in Different Areas

#### Compliance of Tobacco Control Law/Smoke free provisions

Tobacco control law compliance in railway stations refers to the extent to which individuals and entities within the station follow the specific tobacco-related regulations and prohibitions established in the law and the compliance rates differ by category and station. Annex A shows how different railway stations follow various laws and regulations.



Despite a smoking ban, Bangladesh railway Figure 6: Railway Employee Smoking in Uniform authorities neither enforced it nor provided designated smoking areas in any stations.







Figure 5: No Smoking Sign at Main Entrance

Figure 7: Announcement to Refrain from Smoking

Additionally, officials were observed smoking at multiple stations. Figure-5 shows that out of 10 stations, employees were seen smoking in 3 stations (Chittagong, Rangpur, Ishwardi).

"No smoking" signs were seen at main entrance on 80% of stations. while anti-smoking announcements were even less common. appearing on only 30% of stations. Digital displays hadn't been seen in 3 railway stations (Saidpur, Rajshai and Ishwardi).



Figure 8: Digital Display at Railway Stations

#### No Smoking Signage in various areas at railway stations

"No Smoking" signages at railway stations play a vital role in promoting public health and creating a smoke-free environment for everyone. These signs assist discourage people from smoking and it is one of the key requirements for complying with the Tobacco Control Act. Table 3 illustrates whether no smoking signages were visible in different areas of the visited railway stations. The Rajshahi station had the largest number of no-smoking signs in different areas, with Chittagong station following closely behind, each with a single sign.

Name of the Stations								
Sidiions		No Smoking						
	Platform	Waiting room	Ticket booth	Office room	Parking area	Wash room	Other Places (Tea stalls)	Requirement Fulfilment
Chittagong	$\mathbf{\overline{\mathbf{A}}}$	$\mathbf{\overline{\mathbf{A}}}$	$\checkmark$	$\checkmark$	$\checkmark$	×	×	
Dhaka Airport		$\mathbf{\nabla}$	×	$\square$	×	×	×	${\bf \overline{\Delta}}$
Ishwardi	$\mathbf{\overline{\mathbf{A}}}$	$\checkmark$	$\square$	$\checkmark$	×	×	×	${\bf \overline{\Delta}}$
Kamalapur		×	×	$\square$	×	×	×	$\blacksquare$
Khulna	$\checkmark$	$\mathbf{\overline{\mathbf{A}}}$	$\square$	$\square$	×	×	×	$\mathbf{\overline{\mathbf{A}}}$
Mymensingh		$\mathbf{\nabla}$	×	$\square$	$\checkmark$	$\square$	×	V
Rajshahi	$\square$	$\mathbf{\overline{\mathbf{A}}}$	$\checkmark$	$\square$	V	$\checkmark$	×	$\mathbf{\nabla}$
Rangpur		$\mathbf{\nabla}$	$\checkmark$	$\square$	×	×	×	V
Saidpur		V	V	V	×	×	×	V
Sylhet	$\square$	V	×		×	×	×	$\overline{\mathbf{A}}$

Table 3: Compliance- No Smoking signage

This observation revealed that all railway stations had "no smoking signage" at the platform and office room. Except for Kamalapur, 9 railway stations had no smoking signage in waiting rooms and no smoking signage was found at the ticket booth of 6 railway stations (Chittagong, Ishwardi, Khulna, Rajshahi, Rangpur, Saidpur), at the parking area of 3 stations (Chittagong, Mymensingh, Rajshahi), and at the washroom of 2 stations (Mymensingh, Rajshahi). Figure 9 shows the total number of stations displaying no smoking signage in different places. All of the stations met the signage requirement as per law.



Figure 9: Existence of No-Smoking Signage

The total numbers of anti-smoking signs in various train stations are depicted in figure 10. The greatest quantity of signage was 115 for paper signage, followed by 40 for PVC board signage, and 10 for metal signage.



Figure 10: Numbers of No-Smoking Signage

According to the figure 11, Rajshahi railway station had the most signage, followed by Chittagong railway station, and Dhaka Airport railway station had the fewest.



Figure 11: No-Smoking Signage in Different Railway Stations

#### Visibility of cigarette filters/butts/bidi ends

Every station under observation had cigarette filters visible in various places. The study team mostly observed filters on the stations' train lines and platforms. The data in table revealed that 80% of stations had filters on platforms and 90% had on train lines. Filters were also found around parking areas (60% of stations), near ticket booths (30%), and even in waiting rooms (20%). Only one station had filters in the office area.

Table 4. VISIDIIITY OF CIgarette Filler	Table	4:	Visibility	of	Cigarette	Filters
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Name of the	Visibility of cigarette filters Different areas									
stations	Platform	Waiting	Ticket	Office	Parking	Wash	Rail-Line	Others		
		room	boot h	room	area	room				
Chittagong	$\mathbf{\overline{\mathbf{A}}}$	×	×	×	$\checkmark$	×	$\checkmark$	×		
Dhaka Airport	$\mathbf{\overline{\mathbf{A}}}$	×	×	×	×	×	$\overline{\mathbf{A}}$	×		
Ishwardi	$\mathbf{\overline{\mathbf{A}}}$	$\mathbf{\overline{\mathbf{A}}}$	$\checkmark$	×	$\checkmark$	$\square$	$\checkmark$	×		
Kamalapur	×	×	×	×	$\checkmark$	×	$\mathbf{\overline{\mathbf{A}}}$	×		
Khulna	$\mathbf{\overline{\mathbf{A}}}$	×	×	×	$\checkmark$	×	×	×		
Mymensingh	$\mathbf{\overline{\mathbf{A}}}$	×	$\square$	$\mathbf{\nabla}$	×	×	$\mathbf{\overline{\mathbf{A}}}$	×		
Rajshahi	$\mathbf{\overline{\mathbf{A}}}$	×	×	×	$\checkmark$	×	$\checkmark$	×		
Rangpur	$\mathbf{\overline{\mathbf{A}}}$		$\square$	×	$\checkmark$	×	$\mathbf{\overline{\mathbf{A}}}$	×		
Saidpur	$\mathbf{\overline{\mathbf{A}}}$	x	×	×	×	$\mathbf{\overline{\mathbf{A}}}$	$\checkmark$	$\checkmark$		
Sylhet	×	×	×	×	×	×	V	×		

# Point of Sales (POS) and compliance with Tobacco product promotion and advertisement

According to this study, tobacco POS was found at 9 out of 10 railway stations, and tobacco items were easily accessible at almost all of the stations that were surveyed. Particularly, Rajshahi station was the only exception, lacking any tobacco vendors.

Tobacco products were available in two varieties: smoked and smokeless. Figure 12 illustrates that just 14% of the stations had smoked products, while the majority (86%) had both types of products.



Figure 12: Types of Tobacco products at the POS

Figure 13 & 14 depict the presence and number of tobacco POS observed in various stations. In Ishwardi, the greatest number of POS has been observed. The station had 16 POS. Dhaka Airport, Mymensingh and Chittagong had the second-highest number of tobacco points of sales (POS), with 15. There were only 4 POS detected at Khulna station and no tobacco points of sale were found at Rajshahi railway station.



Figure 13: Numbers of Tobacco POS

Figure-15 represents the types of points of sale in ten railway stations. The POS are usually tea stalls, only tobacco products shop, ordinary or departmental store, carts and hawkers.

Figures 15 illustrates tobacco being sold at different types of sales stores in the observed stations. It is observed that most tobacco products are being sold at the tea stalls either permanent or mobile located around the train stations.

Figure 15 shows the percentage of different forms of POS observed in stations. Nearly half (48%) of the points of sale were tea stalls, followed by only tobacco products shops at 18%, and hawkers at 2%.

Table 5 displays the total point of sale (POS) at various stations. During the observation period, POS were detected at all stations. 10% • Yes • No 90%

Figure 14: Presence of Tobacco POS



Figure 15: Different Forms of POS

The majority of POS were tea shops.

According to the study team, there were 47 tea stalls. Hawkers were also discovered to be among the most popular POS systems. In all stations, 19 tobacco product shops were observed by the study team across the 10 stations under observation.

Railway		To	bacco POS at diff	erent stati	ons		Total POS
station	Tea stall	Only tobacco products shop	Ordinary or departmental store	Cart	Hawker	Others	at the stations (%)
Chittagong	6	3	0	2	4	0	15 (15.46%)
Dhaka Airport	10	1	1	0	3	0	15 (15.46%)
Ishwardi	6	7	0	0	3	0	16 (16.49%)
Kamalapur	1	2	0	0	3	0	6 (6.18%)
Khulna	0	1	2	0	1	0	4 (4.12%)
Mymensingh	7	3	2	0	3	0	15 (15.46%)
Rajshahi	0	0	0	0	0	0	0
Rangpur	10	0	0	0	3	0	13 (13.40%)
Saidpur	4	2	0	0	0	1	7 (7.22%)
Sylhet	3	0	2	0	1	0	6 (6.19%)
Total POS	47	19	7	2	21	1	97 (100%)

#### Table 5: Tobacco POS in Different Stations

Table 6 shows the number of point-of-sale (POS) at different locations in railway stations. The platform had the most tobacco point of sale, with 39. The parking area had the second-highest number of tobacco points of sale, with 27. The old part of the station had 20 tobacco POS, and the washroom had only 1 tobacco POS.

The observer found 15 tobacco points of sale (POS) at Chittagong railway station, all located in the old part of the station, making them easily accessible to the public. No tobacco related POS were found inside the station and the platform in Chittagong railway station. Specifically, 2 POS were discovered at Ishwardi railway station and 3 POS were found at Sylhet railway station. In Saidpur, tobacco was sold in front of washroom by the washroom vendor.

Name of the		Total POS at					
stations	Platform	Ticket booth	Old part of the station	Parking area	Washroom	Other	the stations (%)
Chittagong	0	0	15	0	0	0	15 (15.46%)
Dhaka Airport	6	0	0	9	0	0	15 (15.46%)
Ishwardi	9	3	2	2	0	0	16 (16.49%)
Kamalapur	0	0	0	6	0	0	6 (6.18%)
Khulna	2	0	0	2	0	0	4 (4.12%)
Mymensingh	13	0	0	2	0	0	15 (15.46%)
Rajshahi	0	0	0	0	0	0	0
Rangpur	8	1	0	4	0	0	13 (13.40%)
Saidpur	0	0	0	0	1	6	7 (7.22%)
Sylhet	1	0	3	2	0	0	6 (6.19%)
Total	39	4	20	27	1	6	97 (100%)

Table 6: Tobacco POS in different locations of stations

Table 7 shows the presence or absence of different forms of advertisement, promotion, and sponsorship of tobacco products. The study team found limited tobacco advertisements in the observed 10 railway stations. Only 3 stations had posters or leaflets, and 2 displayed packs. No billboards, signs, stickers, or common promotional sources were found. However, one station had boxes with brand logos and price lists, suggesting indirect promotion.

	ns						
Name of the stations	Display of packs	Stickers/poster/lea flet	Billboar d	Box with brand logo	Stickers/ Advertisemen ts	Price list	Other s
Chittagong	×	×	×	×	×	×	×
Dhaka Airport	×		×	X	×	×	×
Ishwardi	×	×	×	×	×	×	×
Kamalapur	×	×	×	×	×	×	×
Khulna	×	×	×	×	×	×	×
Mymensingh	×	×	×	×	×	×	×
Rajshahi	×	×	×	×	×	×	×
Rangpur	${\bf \boxtimes}$		×	×	×	×	×
Saidpur	V	×	×	Ø	×	x	×
Sylhet	×		×	X	×	V	×

Table 7: Tobacco Advertisement in Different Stations

#### Discussion

This endline study attempts to understand the level of compliance and enforcement of tobacco control laws in the railway stations of Bangladesh. In terms of active smoking in railway stations, the highest smoking incidents were observed in Ishwardi station. The second-highest smoking incident was observed at Dhaka Airport station. Table 1 shows the lowest incidence of active smoking in Sylhet and the second-lowest in Khulna, Rajshahi and Saidpur stations. So, in terms of active smoking, compliance is high in Sylhet, Khulna, Rajshahi and Saidpur stations.

The big stations in this study are Chittagong, Khulna, Rajshahi, Sylhet, and Ishwardi. Since these stations have more platforms than other stations, the number of people travelling from and to these stations is naturally higher. Besides, activities of locals and non-travellers also tend to be higher in big stations. However, from the observation, the incidence of active smoking is relatively lower in big stations like Khulna, Rajshahi, Chittagong, and Sylhet compared to junction, mediumsized stations like Mymensingh, Ishwardi and Dhaka Airport. Of the ten stations, there were not any small stations. From observation, it is evident that the level of compliance in terms of active smoking was higher in big stations.

Although signage is an essential requirement according to tobacco control law, observation found that signage requirements were fulfilled in all stations. That is, all stations have proper signage (Table 3). Rajshahi and Chittagong stations have a greater amount of signage inside the station compared to other stations.

Rajshahi station has signage in all the seven important places like platform, waiting room, washroom, ticket booth, office room, parking area and main entrance. In contrast, Chittagong has signage on the platform, waiting room, ticket booth, office room, parking area and main entrance. Dhaka Kamalapur station has a lower number of signage in the stations. The compliance level is higher in Rajshahi and Chittagong in terms of signage compared to other stations.

Observation found platform and parking areas to be the most common place of active smoking in railway stations; however, smoking signage on the platform was found in all stations and smoking signage in the parking area was found only in 3 stations.

The cigarette filters were visible in platforms in 8 stations and parking areas in 6 stations (Table 4), corroborating the fact that most smoking incident takes place in these two areas of the stations. Although observation did not find any smoking

incidents in the waiting rooms, it has been observed that cigarette filters around the waiting rooms of Iswardi and Rangpur stations.

During the observation, responsible authorities were not found to stop anyone while smoking, indicating weak implementation of tobacco control laws. The study team unfortunately found railway officials smoking with railway uniforms on in Chittagong, Rangpur, and Ishwardi. Moreover, the announcement to refrain from smoking was also heard in different stations during the observation period. Since there is no designated smoking zone in any of the observed stations, public smoking appears to be a common phenomenon. Also, the observers did not find ashtrays in any stations. Text "Refrain from smoking" on digital display has been seen in Dhaka Kamalapur, Khulna and Mymensingh stations and digital display has not been seen in Saidpur, Rajshai and Ishwardi stations.

The number of tobacco POS is highest in Ishwardi railway stations, which facilitates easy availability of tobacco products which might contribute to higher cases of active smoking (22.32%) in observation. In Dhaka Airport station, where the number of active smoking was the second highest, the number of POS observed was 15 (Table 5). POS was also found to be higher in Mymensingh railway stations, where the number of active smoking cases was also found to be higher. The number of tobacco POS were relatively lower in Khulna and Sylhet stations, where the number of active smoking cases was also somewhat lower. There was no POS at Rajshahi station.

The study team also observed that Rajshahi stations show better compliance regarding signage and visibility of filters compared to the other stations. This could also be a reason behind fewer cases of observed smoking incidents in these stations. However, this study cannot establish any causal relationship based on such a small sample size.

#### Comparison between Baseline and Endline Survey

After implementing the intervention, there were some changes at the station that were observed in the endline survey, which can be seen by comparing the endline survey with the baseline survey.

Rangpur had the highest rate of smoking incidence in the baseline survey, and Ishwardi had the highest rate in the endline study. On the other hand, Sylhet had the lowest rates of active smoking in the endline survey, but Khulna had the lowest rates in the baseline survey. The overall number of smokers across all locations dropped from 402 (baseline) to 224 (endline). This significant decrease suggests that the initiatives taken by the Ministry of Railways may have raised awareness



and reduced smoking prevalence, regardless of which specific areas saw the most or least change.

Figure 16: Differences in Active Smoking (Baseline and Endline Survey)



Figure 17: Differences of Active Smoking at Different Areas of Railway Station

The effectiveness of the intervention at railway stations can be assessed by the significant improvement in signage compliance. While only Khulna and Rajshahi met signage requirements in the initial survey (baseline), all stations met signage requirements in the endline survey. This widespread improvement suggests that the intervention of authorities to implement the signage guidelines, played a crucial role in achieving the intended goals. By examining the number of signage, one can observe the improvements made in reducing and controlling tobacco consumption in the railway stations. For example, Chittagong had one sign at the ticket counter in the baseline survey, but by the endline study, there were five.



#### Figure 18: Increase of No-Smoking Signage

Initially, during the baseline survey, both Iswardi and Sylhet railway stations completely lacked no-smoking signage. However, the follow-up endline survey revealed a remarkable improvement: Iswardi now displayed signage in four key locations (platform, waiting room, ticket counter, and office room), while Sylhet had signage in three key areas (platform, waiting room, and office room). This positive shift demonstrates a significant overall improvement in compliance with displaying no-smoking signage at various points within the stations. The number of signage is remarkably increased at the main entrance of all stations compared to baseline study. Figure 19: No Smoking Signage at Main Entrance of Railway Station



The initial survey (baseline) found cigarette butts dispersed across platforms and parking areas in nearly all stations. However, the final survey (endline) revealed a slight improvement: cigarette butts were now only seen on platforms in 8 stations and parking areas in 6 stations indicates which small a improvement occurred after implying intervention.

It was discovered in both surveys that responsible authorities were not found to stop anyone while studv smokina. The team unfortunately found railway officials smoking with railway uniforms on in 4 stations in baseline survey whereas endline survey found officials smoking in - 3 stations. The announcement to abstain from smoking was also heard in two stations during the baseline survey, but it was heard in seven stations during the endline observation survey period indicating that the authorities



showed commitment towards Figure 20: Signage Requirement by Tobacco Control Act encouraging passengers to

abstain from smoking. There are no ashtrays or designated smoking areas in any of the stations that were observed in either survey.





It was also observed that the stations (Dhaka Airport, Mymensingh, Ishwardi and Rangpur) where active smoking and the presence of hawkers, and mobile tea stalls are more prevalent, are mostly open stations with no designated boundaries. This could be a potential reason for the higher prevalence of active smoking and number of tobacco points of sale compared to other stations, where the stations, and platforms are more closed and restricted to access for general people.



Figure 22: Number of Tobacco POS decreased between Baseline and Endline Survey

In the baseline survey, the study team noted that all stations except Chittagong had tobacco points of sale (POS). In the endline survey, the observers did not find any tobacco POS inside Chittagong station platform, however, there are 15 POS situated at the old part of the station and did not included at the study analysis as the old part of the station was not part of the study area. Dhaka Airport station had the highest number with 19 POS in the baseline survey. However, there were positive changes observed, such as a decrease in POS from 19 to 15 in Dhaka Airport station and from 15 to 13 in Rangpur station. The number of POS increased in Ishwardi and remain unchanged in Mymensingh and slightly reduced in Rangpur. Moreover, Sylhet station had 12 POS in the baseline survey, which decreased to 6 in the endline survey, with 3 located in the old part of the station. Additionally, Rajshahi railway station had 1 POS in the baseline survey, which dropped to 0 in the endline survey. These findings collectively indicate an overall improvement in the management of tobacco points of sale within the railway system.

#### **Recommendations**

While the overall adherence to the Smoking and Tobacco Products (Usage) Control Act 2005 and its amendment of 2013 has demonstrably improved within the observed railway stations since the implementation of intervention by the Ministry of Railways, certain key areas still present notable shortcomings. Consequently, the following recommendations are offered for consideration, to foster further progress towards comprehensive compliance:

- Encouragement and awareness among Railway Officers and Staff: Railway officials and staff must possess a thorough understanding of the provisions stipulated within the Smoking and Tobacco Products (Usage) Control Act 2005 and its amendment of 2013. This will empower them to undertake appropriate enforcement actions against individuals found smoking in stations. Furthermore, rewarding personnel with exemplary records in enforcing Tobacco Control Acts within a specified timeframe can motivate others to raise awareness and enforce laws. Sharing success stories of esteemed railway staff who have successfully addressed smoking issues can be instrumental in inspiring and encouraging their peers and colleagues.
- Strict Adherence by Railway Officials and Staff: Setting a positive example is crucial. Therefore, it is vital that railway officials and all staff themselves refrain from smoking on the premises of railway stations.
- Increased Signage and Announcements: To ensure a more effective smoking ban and encourage passenger adherence, a comprehensive strategy is

necessary. This includes increasing the visibility and frequency of no-smoking signage through the strategic deployment of digital displays and audiovisual systems across all stations. These displays should continuously circulate clear no-smoking messages, including informative videos. The frequency of public service announcements (PSAs) reminding passengers of the ban and the importance of refraining from tobacco use should be amplified through the existing Public Address system, reaching passengers both within train coaches and throughout stations. For wider reach of no-smoking messaging, consideration should be given to installing digital displays at stations where they are currently absent.

- Elimination of Mobile Vendors: The illicit sale of tobacco products by mobile hawkers and carts undermines the objectives of the Tobacco Control Act. Consequently, appropriate measures must be taken by the authorities to eradicate this practice. This may involve stricter enforcement, designated confiscation procedures, and potential penalties for vendors who disregard the regulations.
- Sales Restrictions: The research team observed instances of tobacco products being sold at various stations and platforms. To address this issue, the authorities should be stricter in implementing penalties. This may involve designated inspection routines, clear communication, display of "No Tobacco Products" signage at points of sale, and the enforcement of appropriate sanctions against vendors who disregard the regulations. The responsible authorities should adhere to the rules and regulations and impose strict penalties on those who are found responsible for selling tobacco products inside railway stations.
- Strengthening Enforcement Agency: The Government Railway Police (GRP) and Railway Nirapotta Bahini (RnB) are responsible for maintaining law and order in and around railway stations. Strengthening and reinforcing this force and providing them with comprehensive skill development training can contribute significantly to reducing the prevalence of smoking and active tobacco use within railway premises. Their vigilance in enforcing the Tobacco Control Act should be heightened to discourage individuals from smoking and the consumption of tobacco products. The amount of penalties should be increased, and enforcement agencies should ensure that penalties are collected from people who smoke in public. Such measures are critical for successfully expressing the prohibition on smoking in railway stations to all passengers. It is necessary to strengthen the magistrative power of the Government Railway Police (GRP) and Railway and Bridge (RnB). This includes increasing the number of mobile courts and intensifying their operations.
- Establish Surveillance System: Establishing an integrated surveillance system is crucial for creating smoke-free environments in railway stations and reducing

the occurrences of active smoking and tobacco sales. The Government Railway Police (GRP) and Railway Nirapotta Bahini (RnB) should intensify their regular patrols to promptly identify and address violations of tobacco control laws. Implementing a reporting mechanism would enable passengers and staff to report instances of tobacco consumption and sales to the appropriate authorities efficiently. ultimately fostering a healthier and safer environment in railway stations for all stakeholders.

#### Limitations of the study

The observed number of active smokers at railway stations may require further analysis due to potential confounding factors. Notably, the research period coincided with a severe winter cold wave impacting the entire country, particularly the northern regions. This could have suggestively influenced active smoking behaviour during the observation window. However, the study design did not delve into a causal relationship between weather patterns and smoking activity. Therefore, establishing a definitive link between observation time, weather, and active smoking based on these findings alone is not possible.

During our study, we only observed the trends of active smoking inside the railway stations. We did not observe and include the trends of tobacco consumption in any other form. For instance, smokeless tobacco consumption or chewing tobacco consumption.

#### Future Scope of Research

Given the cross-sectional nature of this endline study, we propose undertaking a time series study. This would involve collecting data across various railway stations at different time points and periods. Such a study could shed light on the incidence of active smoking and the presence of mobile hawkers selling tobacco products both inside and outside stations and platforms at different time points in a day. By gathering data throughout the year, we can account for potential seasonal variations, including the impact of weather, and provide a more comprehensive understanding of smoking trends and hawker activity.

In future studies, we propose to include observing the trends of smokeless tobacco or tobacco consumption in other forms. Including train coaches and observe the trends of active smoking and tobacco consumption inside train coaches can be considered for future research scope.

#### Conclusions

Despite sales of tobacco products and active smoking at all stations, it is evident that the interventions taken by the Ministry of Railways to prevent passengers from smoking at the railway stations have a wider impact on the passengers. Installing anti-smoking signages, showing awareness videos on the adverse impact of smoking on digital displays, and regular announcements through the public service announcement services have created awareness among the passengers. Given the volume of passengers and busy schedule of trains, there are some miscreants who are avoiding the rules and selling tobacco products and participate in active smoking despite the authority's strict action. The initiatives that have been taken by the Ministry of Railways should be extended in terms of appointing designated manpower and resources to make it more successful. This can be implemented and replicated in other public services such as bus stations, naval stations and river ports to reduce the number of active smoking and sales of tobacco products to realise the vision of the Honourable Prime Minister to make Bangladesh tobacco-free by 2040.

### Annexes

#### Annex-A:

Name of the stations	Railway authorities stopping anyone while smoking	Railway officials smoking with uniforms on	Presence of Digital Displays	Text displays to refrain from smoking	Audio Messages to refrain from smoking	PSA* to refrain from smoking	Designated smoking areas	Presence of ashtrays in the railway station
Chittagong	×	$\mathbf{\nabla}$	$\mathbf{\nabla}$	×	$\mathbf{N}$	$\mathbf{N}$	×	×
Dhaka Airport	X	X	M	X	X	Ø	X	X
Ishwardi	×	$\mathbf{N}$	×	×	X	×	×	X
Kamalapur	×	×	M	M	M	M	×	X
Khulna	×	×	N	$\mathbf{\nabla}$	X	$\mathbf{N}$	×	X
Mymensingh	×	×	M	M	×	×	×	×
Rajshahi	×	×	×	×	X	×	×	X
Rangpur	×	M	M	×	X	×	×	×
Saidpur	×	×	×	×	×	×	×	x
Sylhet	×	×	M	×			×	X

Scenario of compliance with smoke-free laws

★ Public Service Announcements

#### Annex-B: Key Findings from Baseline Survey Report



Name of the stations	Active smoking in Different areas of stations							(%)
	Platform	Waiting Room	Ticket Counter	Office Room	Parking area	Washroom	Other places (Shops, Tea stalls)	
Khulna	7	0	0	0	11	0	0	18(4.48%)
Rajshahi	5	0	0	0	17	0	1	23(5.72%)
Dhaka Kamalapur	14	0	0	0	40	0	0	54(13.4%)
Dhaka Airport	38	0	0	0	15	0	0	53(13.18%)
Iswardi	5	0	4	0	7	0	5	20 (4.97%)
Sylhet	30	0	1	0	2	0	1	34(8.45%)
Mymensingh	51	0	0	0	0	0	0	51(12.68%)
Rangpur	80	0	6	0	12	0	0	98 (24.37%)
Chittagong	25	0	0	0	2	0	0	27(6.71%)
Saidpur	6	0	0	0	0	0	18	24(5.97%)
Total	261	0	11	0	106	0	25	402 (100%)

Name of the stations	Table	: Complie	ance with	n displa	ying no sm places	noking si	gnage at different	No Smoking Sign
	Platform	Waiting Room	Ticket Counter	Office Room	Main Entrance	Parking area	Other places (Shops. Tea stalls etc)	Requirement Fulfillment
Khulna	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\boxtimes$	$\checkmark$
Rajshahi	X	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	X	$\boxtimes$	$\checkmark$
Dhaka Kamalapur	$\checkmark$	$\boxtimes$	X	$\checkmark$	X	$\boxtimes$	X	X
Dhaka Airpor	<b>↓</b> ✓	X	X	X	$\boxtimes$	$\boxtimes$	$\boxtimes$	X
Iswardi	X	X	X	X	X	X	$\boxtimes$	X
Sylhet	X	X	X	X	$\boxtimes$	$\mathbf{X}$	$\boxtimes$	X
Mymensingh	X	X	X	$\checkmark$	$\mathbf{X}$	$\mathbf{X}$	$\checkmark$	X
Rangpur	X	X	$\checkmark$	X	$\boxtimes$	$\mathbf{X}$	$\boxtimes$	X
Chittagong	X	X	$\checkmark$	X	$\checkmark$	X	$\boxtimes$	X
Saidpur	$\checkmark$	X	X	X	$\checkmark$	X	$\boxtimes$	X

Name of the		Tal	ole: Visibility of	cigarette	e filters in	Different a	reas	
stations	Platform	Waiting	Permanent	Ticket	Office	Parking	Washroom	Others
		Room	Shop/cabi	Room	Area	Area		
			n		_			_
Khulna	$\checkmark$	X	X	X	X	$\checkmark$	X	X
Rajshahi	$\checkmark$	$\boxtimes$	X	X	$\boxtimes$	$\checkmark$	X	X
Dhaka Kamalapur	✓	X	X	$\boxtimes$	✓	✓	$\checkmark$	X
Dhaka Airport	✓	X	√	✓	√	✓	✓	X
Iswardi	$\checkmark$	$\boxtimes$	X	$\checkmark$	$\checkmark$	$\checkmark$	X	$\boxtimes$
Sylhet	$\checkmark$	$\checkmark$	X	$\checkmark$	$\boxtimes$	$\checkmark$	X	X
Mymensingh	✓	X	X	✓	X	✓	X	X
Rangpur	$\checkmark$	$\boxtimes$	$\checkmark$	$\checkmark$	$\boxtimes$	$\checkmark$	X	X
Chittagong	$\checkmark$	$\boxtimes$	X	X	X	$\checkmark$	X	X
Saidpur	$\checkmark$	$\boxtimes$	$\checkmark$	X	$\boxtimes$	$\boxtimes$	X	$\boxtimes$

#### Table: Scenario of compliance with smoke-free laws

Name of the Stations	Railway authorities stopping anyone while smoking	Railway officials smoking with uniforms on	Announceme nt to refrain from smoking	Designate d smoking area	No-smoking sign at main entrance	Presence of ashtray in the railway station
Khulna	$\boxtimes$	X	$\boxtimes$	X	√	X
Rajshahi	X	X	$\boxtimes$	X	$\checkmark$	X
Dhaka Kamalapur		√	✓	X	$\boxtimes$	$\boxtimes$
Dhaka Airport	X	X	$\boxtimes$	X	X	X
Iswardi	X	√	$\boxtimes$	X	X	X
Sylhet	X	$\checkmark$	$\boxtimes$	X	X	X
Mymensingh	$\boxtimes$	✓	$\boxtimes$	X	X	X
Rangpur	X	X	$\boxtimes$	$\boxtimes$	X	X
Chittagong	×	X	$\boxtimes$	X	✓	$\boxtimes$
Saidpur	X	X	$\checkmark$	X	$\checkmark$	X

Name of the			Table: POS	6 at different s	station	S		Total POS
stations	Tea Stall	Only Tobacco Selling Shop	Daily Essential Product Shops	Food Shops/ Court/ Restaurant	Cart	Hawker s	Others	at the stations (%)
Khulna	0	0	0	0	0	6	0	6(6.74%)
Rajshahi	0	0	0	0	0	1	0	1(1.12%)
Dhaka Kamalapur	0	0	0	0	0	7	0	7(7.86%)
Dhaka Airport	3	0	12	0	0	4	0	19 (21.34%)
Iswardi	2	0	3	3	0	3	0	11(12.35%)
Sylhet	2	0	8	0	0	2	0	12(13.48%)
Mymensingh	8	0	0	0	0	7	0	15(16.85%)
Rangpur	2	0	9	0	0	4	0	15(16.85%)
Chittagong	0	0	0	0	0	0	0	0
Saidpur	0	2	1	0	0	0	0	3(3.37%)
Total POS	17	2	33	3	0	34	0	89

#### Annex-C: Endline Survey Observation Questionnaire

Government of the People's Republic of Bangladesh

Initiative to Make Bangladesh Railways Tobacco- Free Project

Ministry of Railways

www.mor.gov.bd

#### Tobacco Control Law Compliance at 10 Railway Stations in Bangladesh: An Endline Observational Survey

Identification	Name	Code	Data Collector's Information (Name and Code)			
Name of Railway Station			Interviewer:			
Division			Supervisor:			
District			d d m m y y y y Date of the Interview:			
Time of Intervio Start: End:	ew:		Signature of the interviewer:			

#### **Observation Checklist**

#### Section 1: Features of the Station

#### 1.1. Total number of rooms in the station:

Type of room	Yes/No	Number of rooms
Ticket booth		
Waiting room		
Office room		
Wash room		
Prayer room		
Designated smoking area		
Other room		

- **1.2.** \*Total rail lines in the station:
- **1.3.** \*Active rail lines in the station:
- **1.4.** Type of railway station:

Туре	Yes/No
Big station (3 or more platforms)	
Junction	
Medium station (at least 2 platforms)	
Small station (single platform)	

#### Section 2: Compliance of Tobacco Control Law/Smoke free provisions

SI No	Question	Response	
2.1	Did you see anyone smoking inside the	Yes=1 (ask Q 2.2)	
	railway station?	No=0 (Go to question no 2.7)	
2.2	Where did you seem them smoking?	Platform = 1	
		Waiting room=2	
		Ticket booth =3	

		Office room=4 Parking area=5 *Washroom=6			
		Other=99	۷(Wri	te in details)	
2.3	How many persons were smoking during the observation?	Total:			
2.4	How many adults (18 years and above) were smoking in different areas?	Male		Female	*Others (Transgender)
	Platform=1				
	Waiting room=2				
	Ticket booth=3				
	Office room=4				
	Parking area=5				
	Washroom=6				
	Other area (please specify) =99				
2.5	*How many minors (below 18 years) were smoking in different areas?	Male		Female	Others (Transgender)
	Platform=1				
	Waiting room=2				
	Ticket booth =3				
	Office room=4				
	Parking area=5				
	Washroom=6				
	Other area (please specify) =99				
2.6	Have you seen Bangladesh authorities taking measure against who were smoking during the observ	Railway people ation?	Yes= No=(	1 D	

2.7	If 2.6 is yes, what kind of measures have been taken by the authorities of Bangladesh	Penalty imposed=1	
	Kaliway ?	Remove the smoker from station=2	
		Verbal warning=3	
		Other = 99	
		(Please write in details)	
2.8	Have you seen anyone smoking in the	Yes=1	
	station wearing the railway Uniform?	No=0	
2.9	Have you heard any announcement in the	Yes=1	
	railway station to retrain from smoking?	No=0	
2.10	*Have you seen any digital display at railway	Yes=1	
	stations auring the observation period?	No=0	
2.11	*Have public service announcements	Yes=1	
	seen on digital displays at railway stations	No=0	
	during observation?	Not	
		applicable=66	
2.12	*Have you seen the text "Refrain from	Yes=1	
	stations during the observation period?	No=0	
		Not	
		applicable=66	

SI No	Question	Response
2.13 Are there any stations?	Are there any designated smoking areas in railway	Yes=1
		No=0 (Go to question No. 2.15)
2.14		Yes=1

	Is "designated smoking areas" compliant with tobacco control laws?	No=0		
2.15	Is there any "No smoking, it is a punishable offence"	Yes=1		
	(no-smoking) signage at the main entrance of the station?	No=0		
	(Take a picture of the signage)			
2.16	Is there "No smoking" or "abstain from smoking, it is a punishable offence" (No-Smoking) signage at <b>other places / visible places</b> in the station?	Platform = 1		
		Restroom = 2		
		Ticket booth=3		
	If applicable, fill in the information as per the adjacent table.	Office room=4		
		Parking area=5		
		Washroom =6		
		Other=99 (write in details)		
	(Take a picture of the signage)			
2.17	Does the displayed "no-smoking" signage fulfil the requirements of the Tobacco Control Law?	Yes=1		
		No=0		
	(A picture of 'No Smoking signage' is attached to this checklist.)			
2.18	*What is the total number of anti-smoking signage?	Paper signage=		
		Metal signage=		
		PVC board signage=		
		Big board =		
		Other =		

2.19	Have any ashtrays been seen at the railway station?	Yes=1		
		No=0		
2.20	Where have ashtrays been seen in the station?	Restroom=1		
		Ticket booth =2		
		Office room=3		
		In designated smo	oking area=4	
		Parking area=5		
		*Washroom =6		
		In perman	ent/temporary	
		sioles-7		
		Other=99 (write in	details)	

SI No	Question	Response
2.21	Was lighter and matches required to light	Yes=1
		No=0
2.22	Are cigarette/biri filters/ends visible in the station?	Yes=1
		No=0
2.23	Where did you see the cigarette/biri filters/ends/buts?	Platform = 1
		Restroom = 2
		Ticket booth=3
		Office room=4
		Parking area=5
		Washroom =6
		*Rail- line=7
		Other = 99

Section 3: Enforcement of regulations on tobacco product advertising in stores and the sale of tobacco to children

SI No	Question	Response				
3.1	Have you seen any tobacco	Yes=1				
	the railway station?	No=0				
	(Take a picture of the shop)					
3.2	*What kind of tobacco products have you seen at the point of sale?	Smoked=1	SI	mokel	ess=2	Both=3
3.3	How many outlets have you seen?	Total Number:	:			
3.4	*Where is the point of sales	sales Platform   Ticket booth   Old part of the station				
		Parking area				
		Washroom				
		Other				
3.5	Type and number of stores	Permanent sales point	Tempo sales p	orary ooint	Numb	ber
	Take pictures					
	Tea stall					
	Only tobacco products shop					
	Ordinary or departmental store					

	Cart				
	Hawker				
	Other (please specify)				
3.6	Is there any advertisement or	Yes=1			
	at the point of sale?	No=0			
	(If yes, take picture)				
3.7	If 3.5 is yes, what kind of activities	Display of packs=1			
	have you seen?	Sticker/poster/leaflet=2			
		Billboard=3			
		Box with brand logo=4			
		Corporate Social Responsibility stickers or advertisements by companies selling tobacco products = 5			
		*Price list =6			
		(Image attached with checklist)			
		Other (specify) =99			
3.8	Have you ever seen a minor <b>buying</b> tobacco product from a vendor?	Yes=	1	No=0	
	Tea stall				
	Only tobacco products shop				
	Ordinary or departmental store				
	Cart				
	Hawker				
	Other (please specify)		<b>I</b>		

3.9	Have you seen a minor <b>selling</b> tobacco product?	Yes=1	No=0
	Tea stall		
	Only tobacco products shop		
	Ordinary or departmental store		
	Cart		
	Hawker		
	Other (please specify)		

# \* This mark shows that new questions have been added to the endline survey report.

#### **Operational definitions**

a) 'Smoking' means smoking of tobacco in any form whether in the form of cigarette, cigar, bidis or otherwise with the aid of pipe, wrapper or any other instrument.

b) Any pictorial, graphical or textual message displayed in a public place, which warns the smoking is prohibited in a public place, will be recorded as a 'signage. Signages for size, textual content, colour, font and design are recorded as 'smoke-free-compliant signage.

c) The presence of 'indirect indicators' of smoking at public places was defined as 'any place visited by general public where "no smoking" signage was not displayed, there is a presence of smell of cigarette/bidi smoke and/or cigarette/bidi stubs are found littered",

d) Authorized Officer means Upazilla Nirbahi Officer or Upazilla Health and Family Planning Officer or any equivalent or superior officer of the Directorate of Health and shall include any or all officers empowered by different laws, or empowered by the Government, by notification in the Official Gazette to carry out the concerned duties.

e) Tobacco means any Nicotiana tabacum or Nicotiana rustica plant or any other related plants or its leaf or crop, root, branch or any part of it,

f) Tobacco Products means any product made from tobacco, tobacco leaves, or its extract which can be sucked or chewed, or inhaled through smoking, and shall include

bidi, cigarette, cheroot, granulated, plug cuts, snuff, chewing tobacco, cigar and mixtures used in pipe.

g) Public Place means educational institution, government office, semigovernment office, autonomous office and private office, library, lift, indoor work place, hospital and clinic building, court building, airport building, seaport building, river-port building, railway station building, bus terminal building, cinema hall, exhibition center, theatre hall, shopping center, restaurants surrounded by walls in all sides, public toilet, children park, fairs, designated queues or places for passengers waiting to ride on public transports, any other public area to be combinedly used by the general people or, any or all places declared time to time by the government or local government organization by a general or special order;

h) No Smoking Signage to be displayed in all public place and public transport as per the Tobacco Control Law.

Size should be 40 cm X 20 cm (2:1) and its sample is as follows:



#### Image: No-smoking signage provided by the project



Image: No-Smoking Signage issued by National Tobacco Control Cell (NTCC), Health Services Division, Ministry of Health and Family Welfare, (MoHFW)

#### Annex-D: Observation Images During the Endline Survey

#### Compliance with Tobacco Control Law/Smoke free provisions

Presence of No-Smoking Signage and Visual Messages



Rajshahi Station- Observation Date: Jan 21, 2024



Dhaka Kamalapur Railway Station- Observation Date: Jan 22, 2024





Khulna Railway Station- Observation Date: Jan 17, 2024

Incidence of Active Smoking in Different Railway Stations





Ishwardi Station- Observation Date: Jan 22, 2024





Dhaka Bimanbandar- Observation Date: Jan 22, 2024





Mymensingh Station- Observation Date: Jan 16, 2024

#### Tobacco POS in Different Stations





Rangpur Railway Station- Observation Date: Jan 16, 2024





Mymensingh Station- Observation Date: Jan 16, 2024



Ishwardi Station- Observation Date: Jan 22, 2024





