RESEARCH REPORT 2025-26

THE NICOTINE NEXUS

Commerce, Culture, and Consequences in Smokeless Tobacco Industry

The Economics Society
Shri Ram College of Commerce

TABLE OF

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ABBREVIATIONS

GOVERNMENT BODIES & SURVEYS

ASI	Annual Survey of Industries
ASUSE	Annual Survey of Unincorporated Sector Enterprises
CBIC	Central Board of Indirect Taxes and Customs
CTRI	Central Tobacco Research Institute
GATS-2	Global Adult Tobacco Survey (2nd round, India 2016-17)
GLOBOCAN	Global Cancer Observatory (IARC/WHO)
GYTS-4	Global Youth Tobacco Survey (4th round, India 2019)
ICMR	Indian Council of Medical Research
MoHFW	Ministry of Health and Family Welfare
MoHUA	Ministry of Housing and Urban Affairs
ASTRAMOD	A State-Transition Model for estimating tobacco-related disease burden and costs

ECONOMIC AND FINANCIAL

CMDR	Centre for Multi-Disciplinary Development Research
IBEF	India Brand Equity Foundation
IES	Interest Equalisation Scheme
NIPFP	National Institute of Public Finance and Policy

OAME	Own Account Manufacturing Enterprise
OEC	Observatory of Economic Complexity
TFP	Total Factor Productivity
INDUSTRY, COMPANIES & OTHERS	
ANVISA	Agência Nacional de Vigilância Sanitária
CDC	Centers for Disease Control and Prevention (USA)
cGMP	Current Good Manufacturing Practice
HHT	Hand Held Terminal (used in Tobacco Board e-auctions)
MSA	Master Settlement Agreement
RSWR	Right Sharing of World Resources
HEALTH & MEDICAL	
COPD	Chronic Obstructive Pulmonary Disease
CVD	Cardiovascular Disease
DALY	Disability-Adjusted Life Year
FDA	Food and Drug Administration (USA)
GTS	Green Tobacco Sickness
IHD	Ischaemic Heart Disease
NCI	National Cancer Institute (USA)
YLL	Years of Life Lost

KEYWORDS

1	**Ad Valorem:** In proportion to the estimated value of the goods or transaction concerned
2	**Affordability: A**bility to be afforded; inexpensiveness.
3	**Areca Nut:** The astringent seed of an areca palm (Areca catechu), which is often chewed with betel leaves.
4	**Betel Quid:** A traditional, stimulating, and addictive preparation made by wrapping areca nut (often mistaken for "betel nut") and slaked lime (calcium hydroxide) in a betel vine leaf.
5	**Cancer (oral cancer):** A type of head and neck cancer that develops when abnormal cells, typically squamous cells, grow uncontrollably.
6	**Cardiovascular diseases:** A group of disorders affecting the heart and blood vessels.
7	**Chewing tobacco:** Tobacco that is chewed or held in the mouth, typically between the cheek and gums, rather than smoked.
8	**Consumption patterns:** Habitual, observable behaviours and methods by which individuals, households, or societies select, purchase, and utilise goods, services, and resources to meet needs or desires.
9	**Economic burden:** Total financial strain, cost, or negative impact imposed on individuals, households, businesses, or society due to a specific issue.
10	**Employment generation:** Process of creating new job opportunities within an economy, aiming to reduce unemployment, stimulate economic growth, and improve livelihoods.
11	**Epidemiological evidence:** Data and scientific findings that analyse the distribution (who, where, when) and determinants (causes, risk factors) of health-related states or events within specific populations.
12	**Exports (FCV tobacco): I**nternational sale and shipment of a specific, high-quality type of tobacco leaf that has been cured using a specialised, artificial heat process (flue-curing).
13	**Flue Cured Virginia Tobacco:** A type of bright, yellow-to-orange leaf cured using artificial heat piped into barns, preventing smoke contact.

KEY WORDS

14	**Gross Value Added (GVA):** GVA measures the value of goods and services produced in an economy, sector, or industry, calculated as total output minus intermediate consumption (costs of production inputs).
15	**Gutkha:** A highly addictive, commercial, smokeless tobacco product prevalent in South Asia.
16	**Healthcare costs:** The total financial expenditures incurred for medical services, including treatment, prevention, diagnosis, and rehabilitation.
17	**Khaini:** A popular form of smokeless chewing tobacco in South Asia, made from sun-dried or fermented raw tobacco leaves or mixed with slaked lime.
18	**Leukoplakia:** A condition characterised by thick, white, or grey patches that form on the gums, tongue, or inner cheeks.
19	**Liver Cirrhosis:** The late stage of scarring (fibrosis) of the liver caused by long-term liver diseases and conditions.
20	**M-Cessation Programme:** A free, mobile-based initiative launched by the Government of India in 2016 to support individuals wishing to quit tobacco.
21	**Mishri:** A natural, unrefined, and crystallised form of sugar made from sugarcane juice or palm sap.
22	**Oesophageal Cancer:** A malignant tumour arising from the lining of the food pipe (esophagus) that connects the throat to the stomach.
23	**Prevalence rate:** The proportion of a population affected by a specific characteristic at a specific time or over a defined period, calculated as total cases divided by the population at risk.
24	**Productivity losses:** The measurable decline in an organisation's output, efficiency, or quality, occurring when actual performance falls below established baselines or potential capacity.
25	**Public health impact:** The measurable effect (positive or negative) that an event, policy, environmental factor, or intervention has on the overall health and well-being of a population, rather than an individual.
26	**Sin Goods: P**roducts deemed harmful to individuals or society.

KEY WORDS

27	**Smokeless Tobacco (SLT):** Chewing tobacco; tobacco that is chewed or held in the mouth, typically between the cheek and gums, rather than smoked.
28	**Snuff: T**obacco which people breathe up into the nose in the form of a powder
29	**Tax revenue (sin goods taxation):** A specialised excise tax imposed on goods considered harmful to individuals or society ("sin goods"), to discourage consumption and raise revenue for public health costs.
30	**Tobacco Board of India:** A statutory body established on January 1, 1976, under the Tobacco Board Act, 1975, to regulate, develop, and promote the Indian tobacco industry.
31	**Tobacco cultivation:** The agricultural process of growing Nicotiana tabacum or N. rustica plants for their leaves, which are harvested, cured, and processed for use in cigarettes, cigars, snuff, and chewing tobacco.
32	**Youth & adult prevalence:** Prevalence in youth and adults.

RESEARCH FRAMEWORK

AN OVERVIEW OF THE SMOKELESS TOBACCO INDUSTRY, THE PURPOSE OF THE STUDY, AND THE APPROACH UNDERTAKEN.

INTRODUCTION

Smokeless tobacco (SLT) refers to a variety of tobacco products that are consumed without burning and includes *Khaini*, *Gutkha*, snuff, betel quid, chewing tobacco and many other regional variations.

The consumption of SLT products is deeply embedded across various regions of India, showing significant variation in both user demographics and product preferences. In most states, there is a higher prevalence of SLT consumption in males, but in north-eastern India, women consume more SLT products than males. The variations are believed to be due to the differences in the socio-cultural norms.

In many areas, SLT products are seen as a "safer option" to smoking, which reflects a widespread lack of awareness regarding their health implications. In reality, SLT consumption is strongly associated with severe health risks, including cardiovascular diseases, multiple forms of cancer, and increased mortality.

The production of smokeless tobacco in India takes place across both formal and informal sectors, with the informal sector accounting for a dominant share. This dominance complicates the accurate estimation of employment in the industry. According to the National Sample Survey Organisation (NSSO), there is an estimated number of 7 million workers that were directly or indirectly engaged in the tobacco industry in India in 2004-05, constituting 1.5% of the total workforce employment.

The production process itself causes various harmful diseases, but the exploitation of farmers engaged in the production process in the form of harmful working conditions and a corrupt compensation system adds to the already existing problem.

The government charges heavy taxes on SLT products, and it helps the government treasury positively. Moreover, during FY2024, India exported 1,43,316 tonnes of Flue Cured Virginia (FCV) tobacco, having a monetary value of Rs. 5,932 crore. And given the sector's large employment base, the livelihoods of millions depend on tobacco production, and the industry contributes to the economy in several measurable ways.

OVERVIEW

To understand the current state of the industry, we first look at the historical timeline of how tobacco was introduced in India and evolved across multiple dynasties and regimes to develop into the current state that it is. This sets up a foundation of understanding the operations of the Tobacco Industry.

Next, we identify and quantify the various contributions of the industry to the economy of the nation, including employment generation, contribution to the GDP, generation of wealth for the government, and other such economic factors. This helps in establishing the importance and need of the industry. Furthermore, we look at the harms produced by the industry, including social harms and costs incurred by the public healthcare system. This helps us in setting up the grounds for a comparative analysis of the economic benefits and social costs and derive a net impact on the nation's well-being due to the operations of the industry and the consumption of its products.

Additionally, the report conducts a policy analysis of the existing regulatory framework and its evolution throughout history. This addresses the gaps that were present in the previous policies and how they were solved by the subsequent acts. Moreover, an analysis of the global framework has been done to benchmark India's current legal stance against the global standard. This helps in understanding the gaps present in the current framework and suggests recommendations for the same.

Finally, we have conducted a stakeholder analysis, which includes key players of the industry, such as producer companies, farmers, middlemen, consumers, etc., to understand their roles and impact in the production and consumption cycle of tobacco.

PURPOSE OF STUDY

The purpose of writing a detailed research report on the complete analysis of the smokeless tobacco industry in India, in comparison with major global stakeholders, was two-fold. Firstly, the objective was to analyse whether this industry is actually profitable when economic benefits are compared with the social costs associated with its consumption.

While assessing this, one can't overlook the fact that the smokeless tobacco sector contributes substantially to India's economic health in various spheres, among them being employment, agricultural linkages, the participation of the informal sector, and tax revenues. At the same time, it is equally important to acknowledge the drastic public health impacts, productivity losses, and healthcare costs in the long run that come with the widespread use of tobacco.

In this context, it is mostly the level of restriction that should be imposed in order to reach an ethical and economic balance, which could only be known through direct short and long-term comparison of costs and benefits.

Moreover, there are several ways in which smokeless tobacco is perceived in the global arena. In some countries, it is considered a part of tradition, a cultural practice, embedded in everyday life, while in others it is viewed as a healthier substitute for cigarettes. At the same time, there are economies where industries associated with smokeless tobacco thrive on the grounds of economic stability, contribution to GDP growth, employment generation, and profitability, whereas other nations attempt to slow this industry down on ethical and social grounds.

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METHODOLOGY

This report provides an in-depth study of the Indian tobacco industry and the complex pull that exists between its economic contributions and its public health consequences. The report opens by tracing the historical path of tobacco use in India, from its introduction during the 17th century to the proliferation of modern SLT products, establishing the cultural context that drives current consumption patterns.

For the research study, we adopted a systematic review approach to secondary data emanating from national and international authoritative sources to build a holistic picture of the industry. Trends on the prevalence rate and demographic usage in public health were tracked by synthesising data from GATS-2 and GYTS-4. Epidemiological evidence from the Mumbai Cohort Study and GLOBOCAN was cross-referenced with the findings above to establish the specific link of tobacco products with morbidity rates, such as oral cancer.

It also reconstructs the economic footprint of the sector in the same stroke. Based on an analysis of data on workforce and manufacturing from the ASI and NSSO, we assessed the relative contribution of the industry to employment generation and GVA. We present this quantitative data in a qualitative Cost-Benefit Analysis and weigh these "Economic Gains" against the "Social Costs" constituted by healthcare expenditure and productivity losses created by tobacco-related diseases.

Additionally, the study expands its scope by undertaking a Comparative Policy Analysis,

In order to benchmark the regulatory framework of India, we studied case studies from Sweden, Bhutan, and Nepal.

This comparison enables us to find the lacunae in enforcement regarding compliance with the COTPA and make evidence-based recommendations for future policy interventions.

INDUSTRY ORIGINS

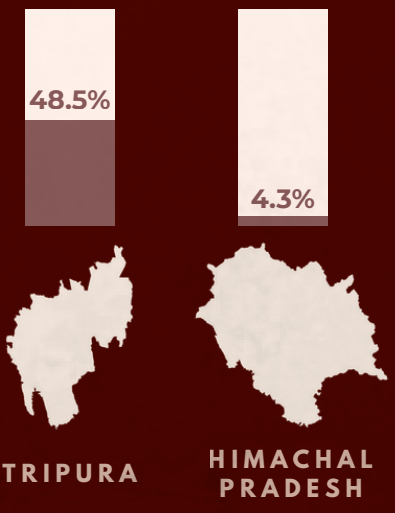
TRACING HOW SMOKELESS TOBACCO DEVELOPED INTO A MAJOR CONSUMER MARKET.

TOBACCO USE ACROSS INDIA

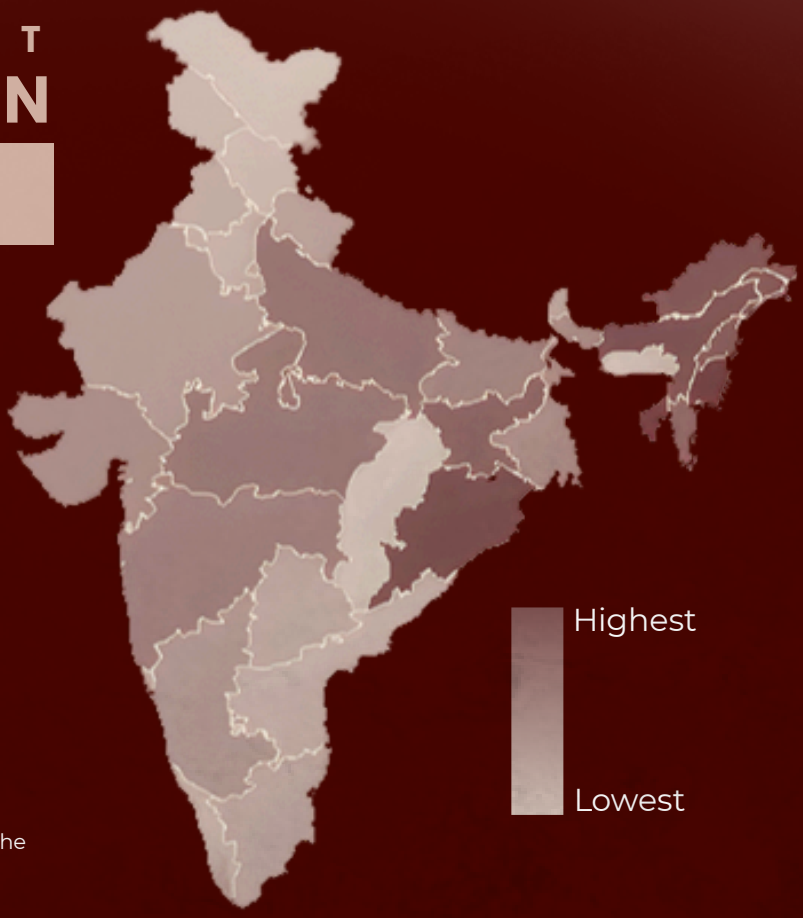
NATIONAL SLT CONSUMPTION

21.4%

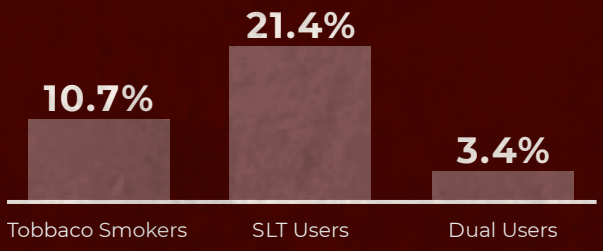
of the adult population.



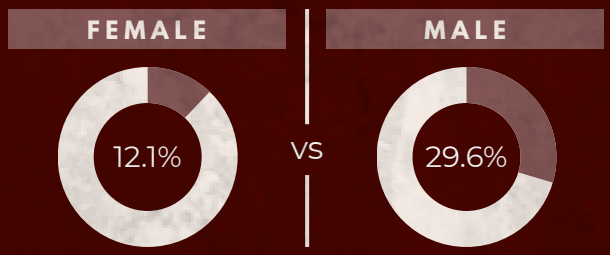
The difference in SLT consumption between the two states indicates substantial variation.



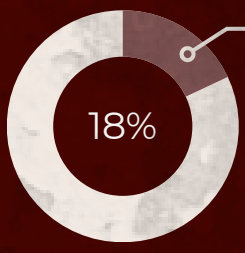
INCIDENCE OF TOBACCO USE



% of the total adult population.



SLT use is higher among males, but in some North-eastern states, female consumption exceeds male consumption, highlighting regional gender differences.

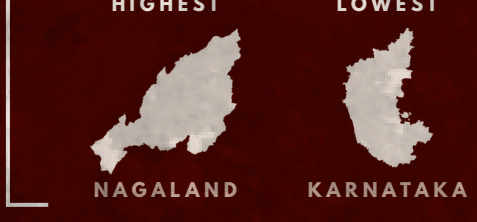


% of the students aged 13-15 have used any of the tobacco products ever.

>1/5TH

of total student population.

STUDENT SLT CONSUMPTION



THE EARLY BEGINNINGS

Human civilisations have been using tobacco for thousands of years. There is evidence that the tobacco plant (scientifically known as Nicotiana) originated in prehistoric times in the Americas. By the 1400s, tobacco was being used for religious and medical purposes throughout the Americas. From there, it travelled to Europe and other nations through seaports, eventually reaching every continent. It had spread throughout most of Asia, the Middle East, and Africa by the 17th century.

The growth of cigarettes and other forms of tobacco was observed. Sailors played a significant role in popularising chewing tobacco. As cigarettes were considered a fire hazard on ships, many preferred tobacco and snuff. Tobacco was easier to consume than cigarettes and was seen as an alternative to smoking by many. By the 19th century, well-established factories could be found in Britain and the USA, producing cigars, cigarettes, chewing tobacco, and other products. These products became a part of cultures around the world, taking part in their daily life.

In the 1500s, tobacco was introduced to India by the Portuguese. The 19th century saw the development of products like tobacco-infused paan, *zarda*, and khaini. Their forms included fragrance and pleasant flavours, becoming a traditional mouth freshener in Indian culture, continuing to be one of the most consumed forms of chewable tobacco in India. British colonial rule had a major role in the cultivation and production of tobacco. Sources from 1920-21 state that over 4,25,000 hectares of land were used to cultivate tobacco, spread across the states of India. Other than consumption, tobacco was an important cash crop and used for trade during this period. Exports of raw tobacco were valued at Rs. 7 million, and imports of cigarettes were valued at Rs. 16 million. The import of cigarettes did see a fall as domestic production of finished tobacco goods increased. The region of British India was ranked 3rd in global tobacco production.

The Swadeshi movement's boycott of British products promoted domestic production of tobacco as India neared independence. With even greater land dedicated to tobacco production and cultivation after independence, the trend continued through the 1950s. The industry for tobacco was growing through the decades, but the population of India was expanding at an incredibly high rate. Due to this, the individual per capita consumption of tobacco fell from 900g in 1950-60 to 700g in 1980-83. It was observed that the use of chewing tobacco went down, but the use of smoking tobacco, predominantly cigarettes and bidis, went up.

Although nations like the USA were aware of the medical risks linked to tobacco products since the 19th and 20th centuries, India was not. The Government of India did not mandate that chewing tobacco products have a health warning on the package until the 1990s. The Prevention of Food Adulteration Act of 1955 was used to achieve this.

The total area for tobacco cultivation did decline in the 2000s, being approximately 3,57,000 hectares. However, the average yield of tobacco still saw an increase. The total sales value of major cigarette and chewing tobacco companies was Rs. 99.38 billion and Rs. 12 billion, respectively, in 2001-2002. Evidently, the industry continued to see large earnings despite the attempts to spread awareness about the health concerns of tobacco.

Evolution in India

Portuguese Merchants

The Portuguese introduced tobacco cultivation in India in 1605. The diversified soils and fecundity of the nation, and the agricultural expertise of the growers, soon spawned many native variants of tobacco. Commercial cultivation of the crop started in Mehsana and Kaira districts of Gujarat and further expanded all over the country. Other early commercial centres included the ports of Masulipatnam and Surat.

The Mughal Era

The Mughal Era brought a popular way of smoking tobacco: the hookah, a waterpipe where smoke went through the water to soften its bitterness. The original hookah was replaced by a lighter and less expensive model called chillum, afterwards by bidis (rolled tobacco in the leaves of the tendu vine). The Mughal Emperor Jahangir banned smoking in 1617, a move that demonstrates how quickly smoking had spread throughout the population. Two primary sea trade routes emerged:

- Eastern Route: Masulipatnam → Burma → Malacca → Java → Sumatra
- Western Route: Surat → Thatta → Diu → Persian Gulf.

These networks subsequently facilitated the trade in opium and tobacco by the British to integrate them into the imperial economy structurally. It also got introduced into religious rites, particularly in Orissa and Bengal.

British Colonial Expansion and the "Triangular Trade" (1757–1914)

The East India Company gained total control over Bengal's revenues through the Battle of Plassey (1757) and the Battle of Buxar (1764). The Permanent Settlement Act of 1793 gave it monopoly control over the zamindars and, in turn, the cash crop export market over the whole Suba of Bengal.

Cultivation of tobacco began in Midnapore (Bengal) under the company's supervision in the 1770s, despite the soil not being suitable for mass-scale export production. The tobacco for the Triangular Trade system was included in the trade between India and China, along with the trade of opium, which was regulated by companies like the Matheson, Dent & Co., and Russell & Co.
Bengal's closeness to opium regions (Bihar, UP) made it favourable for joint cultivation, reducing transport expenses. The existing trade networks of the Indian Ocean were employed by the British to create networks for colonial capital.

The industry for bidis also gathered momentum around the end of the 19th century, particularly after the Deccan famine of 1899, when the manufacturing of bidis was predominantly for survival. Its growth also continued to be spurred further by the Swadeshi Movement, by its advocacy for boycotting British products and promoting home industry.

While China industrialised tobacco production by the 1930s, Indian tobacco remained agrarian in response to London's wishes to forbid local mechanisation. India became the world's second-largest tobacco producer by 1938 (499,000 tonnes) after the United States.

In the ancient Indian social and cultural system, tobacco-flavoured paan or betel leaf preparation entered popular consumption by the end of the 18th century. Different indigenous variants such as *Khaini, Zarda,* and *Gutkha* co-existed over time, popular amongst the lower sections of society and also in particular geographically located sections. A chewable, drinkable form of tobacco called zarda emerged in the 1860s, followed later by khaini - a mixture of raw tobacco and slaked lime that continues to be amongst the most popular smokeless tobacco products in the country.

Following the Deccan famine of 1899, when most of the bidi manufacturing happened for subsistence, the bidi industry for mass domestic sale and export gained traction. The Swadeshi Movement of 1905, which followed the policy of boycotting British-made goods and promoting locally made Indian goods, further added to its growth.

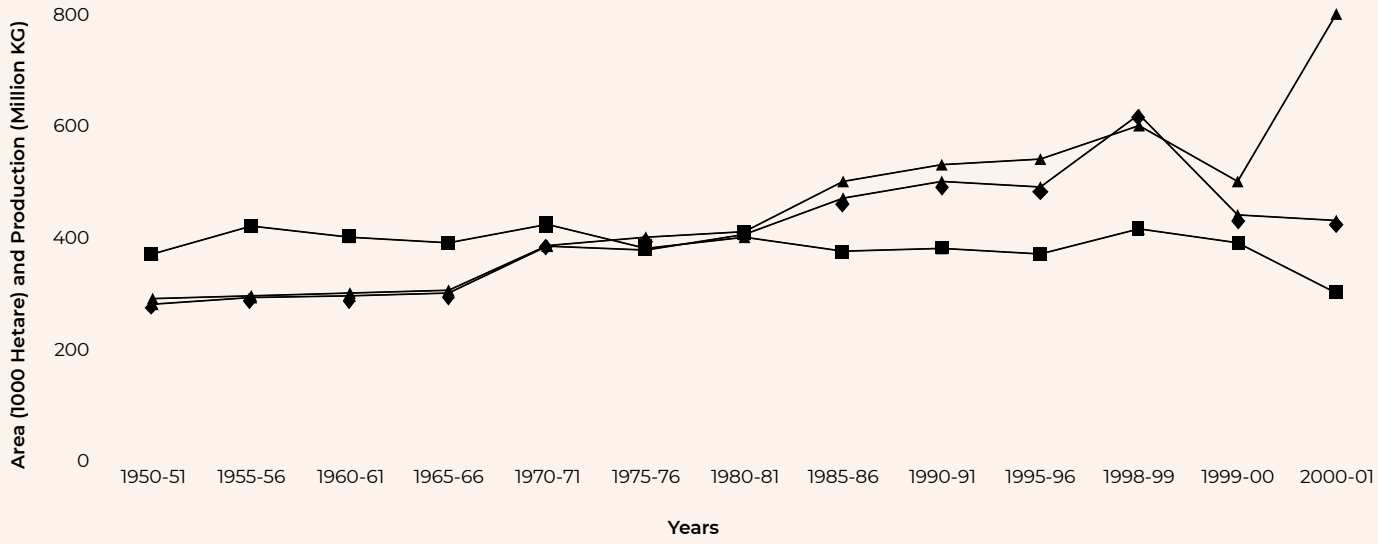
Post-Independence Period

Even though most parts of India cultivated tobacco in the 1950s, the highest quality crop of tobacco was grown in Bihar, West Bengal, Tamil Nadu, Karnataka, Maharashtra, Punjab and Andhra Pradesh. Cultivation of the flue-cured Virginia (FCV) type of tobacco spread to Tamil Nadu (1957-1958), Maharashtra (1961-1962) and West Bengal (1966). Until the 1960s, FCV-type cultivation of tobacco was a traditional feature of the black soils of India. But to meet the demand for light-bodied leaves and lower nicotine/traditional contents that increased in the ensuing years, cultivation spread to Karnataka's light soils.

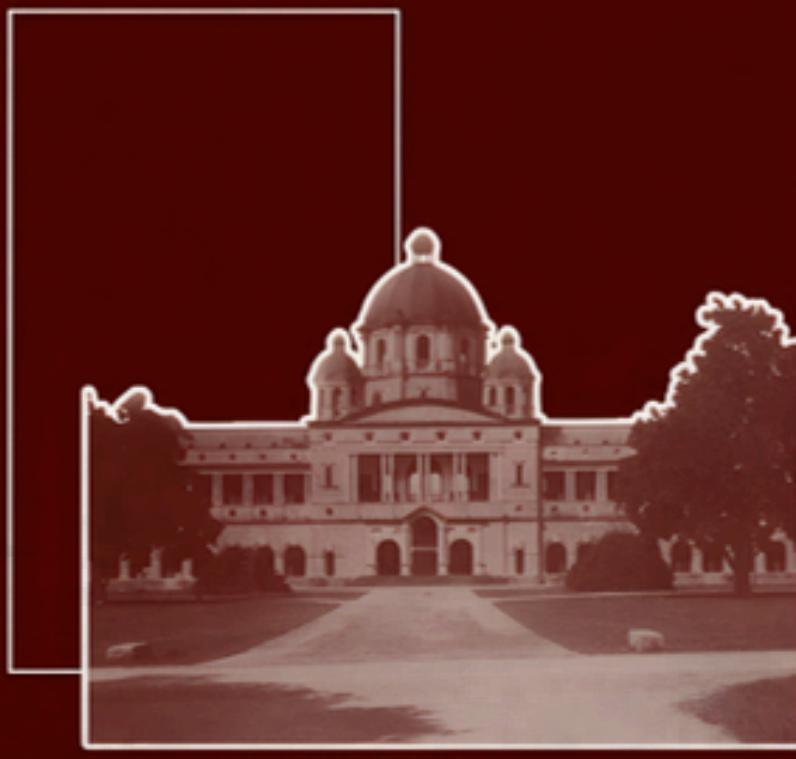
Madras (now Chennai) led tobacco cultivation until the 1953 bifurcation, with West Bengal also a key producer before 1947. The cultivated area grew in the first two decades post-Independence, dipped in 1975–76, then rose by 22% by 1980–81 due to efforts by the Tobacco Board (est. 1975).

A decline in 2001 followed a crop holiday in Andhra Pradesh due to surplus stock. Overall, cultivation has largely remained around four lakh hectares, limited to states with suitable soil conditions.

Tobacco Production throughout the Years



From Early Use to Widespread CONSUMPTION



INTRODUCTION of Tobacco

Establishment of the Botanical Gardens at **Sibpur, Calcutta.**

1787 **1829** **1875** **19**

Imported Seeds

were made available to the **Agrihorticulture Society of Calcutta**, and trials on an improved variety continued for several years.

Growing and curing of tobacco continued in the **Pusa** farm in **Bihar.**

IMPERIAL AGRICULTURAL RESEARCH INSTITUTE AND COLLEGE

was established at the Pusa farm to initiate the cultivation of a **new variety** of tobacco.

VIRGINIA TOBACCO

The Indian Leaf Tobacco Division (ILTD) of ITC experimented on the black soils of **Guntur**, Andhra Pradesh and successfully cultivated the plant in **1928**.

01 1903 1920 1929

The British and American Tobacco Company set up three companies, which later together became the Imperial Tobacco Company India, i.e. the present

INDIAN TOBACCO COMPANY

Commercial and large-scale production of tobacco was initiated by the ILTD.

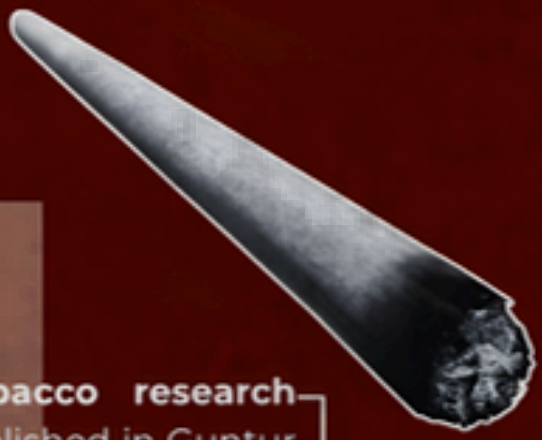
The ILTD introduced flue-cured Virginia (FCV) tobacco into the international market.

499

MILLION KILOGRAMS

Tobbaco produced by Indian making it the second in production next to the **USA (628.7 million kg)**. **China** was the third largest producer **(446.8 million kg)**.

1933 1936 1937 1938



A **cigarette tobacco research station** was established in Guntur to study the effect of soil and manure on the flavour of tobacco.

M

Toba
was
the N
Com

The government set apart an annual, non-lapsable

grant of Rs 10 lakh

from the proceeds of excise duty imposed to extend the cultivation of high-quality leaf and improve the production of tobacco.

B 1940S 1943 1945

YSORE

cco cultivation introduced by Mysore Tobacco pany Ltd.

Indian Central Tobacco Committee (ICTC) was set up to look after the cultivation, technical and economic aspects of tobacco cultivation in India.

Cultivation of FCV tobacco was initiated in north **Bihar (1940), Uttar Pradesh (1940)** and **Gujarat (1945–1946)**.

UNEVEN PATTERNS

UNDERSTANDING THE REGIONAL DISPARITIES SHAPING THE SMOKELESS TOBACCO LANDSCAPE.

REGIONAL DISPARITIES

Adults

India is a very culturally diverse country, and this diversity continues to show in SLT consumption levels too.
In terms of such inequalities, there are variations across states and regions in terms of smokeless tobacco usage.
The data given by GATS-2 (Global Adult Tobacco Survey - 2016-17) observed a high prevalence of smoking and smokeless tobacco consumption in the medium wealth quintiles at the national level and across all regions except the East and West regions for smoking and the North and North East regions for smokeless tobacco consumption, respectively. The consumption of smoking tobacco and smokeless tobacco was observed to be higher in the poor and the poorest quantiles when compared with the rich and the richest quantiles.

The national SLT consumption among the adult population is 21.4%; however, the differences can be observed on a micro level. The difference in SLT consumption between the state with the highest consumption levels (Tripura, 48.5%) and the lowest consumption levels (Himachal Pradesh, 4.3%) is 44.2%, indicating the presence of vast variations.
It can be observed that the north-eastern states exhibit a higher prevalence of SLT consumption among adults, indicating widespread cultural acceptance across the region. The regions with the lowest SLT consumption levels are southern India and northern India, with states often showing the consumption level of below 15%, as suggested by the data.

Moreover, it is clear that the consumption of SLTs is prevalent mostly in males; however, in some of the north-eastern states (Mizoram, Meghalaya, and Tripura), the female SLT consumption rate is either higher or almost twice the male SLT consumption rate, marking further differences based on gender, too.

Youth

The fourth round of the Global Youth Tobacco Survey (GYTS-4) provides us with comprehensive insights into the patterns and prevalence of tobacco use among youth in India. It highlighted the extent to which the industry is embedded within the country's population.
Key findings include:
Nearly 1/5th (18%) of the students aged 13-15 have used any of the tobacco products ever.
The use of any type of tobacco (smoking tobacco and Smokeless Tobacco (SLT) is higher among boys than girls, in rural areas and in public schools, compared with students from urban and private schools.

- The prevalence of use of any type of tobacco among students aged 13-15 years is eight per cent. The current use of SLT products was reported by four per cent of students.

- The prevalence of current use of any form of tobacco among students across the States/UTs ranges from the highest in Arunachal Pradesh (65%) to the lowest in Himachal Pradesh (1%). In the case of the current use of SLT, it is highest in Nagaland (35%) and the lowest in Karnataka (0.3%).

Region / State or UT	SLT Consumption Among Adults (%)	SLT Consumption Among Males (%)	SLT Consumption Among Females (%)	SLT Consumption among the Youth aged 13-15 years (%)
Tripura	48.5	40.8	56.5	5.9
Manipur	47.7	50.2	45.2	12.7
Odisha	42.9	52.1	33.6	2.2
Assam	41.7	50.5	32.5	5.4
Arunachal Pradesh	39.3	50.1	27.7	33.3
Nagaland	39	46	31.5	35.1
Chhatisgarh	36	47.7	24.5	
Jharkhand	35.4	54.1	15.7	2.7
Mizoram	33.5	21.3	46	32.9
Uttar Pradesh	29.4	42.6	15.2	12.3
Madhya Pradesh	28.1	38.7	16.8	1.1
Maharashtra	24.4	31.7	16.6	2.4
Bihar	23.5	41.9	3.6	3.2
Meghalya	20.3	11.6	29.1	24.3
West bengal	20.1	22.8	17.2	3.3
Gujarat	19.2	27.6	10	1.9
Karnataka	16.3	22.2	10.3	0.3
Uttarakhand	12.4	21.2	3.4	2.6
Tamil Nadu	10.6	11.9	9.3	1.6
Telangana	10.1	11.3	9	-
Sikkim	9.7	13.8	5.1	10.5

Region / State or UT	SLT Consumption Among Adults (%)	SLT Consumption Among Males (%)	SLT Consumption Among Females (%)	SLT Consumption among the Youth aged 13-15 years (%)
Delhi	8.8	13.7	3.2	1.3
Punjab	8	15	0.3	-
Andhra Pradesh	7.1	7.6	6.6	1.1
Goa	6.5	9.2	3.6	-
Haryana	6.3	10	2.2	1.6
Chandigarh	6.1	10.4	0.8	1.2
Kerala	5.4	7.4	3.6	1.3
Puducherry	4.7	4.5	4.9	1.2
Jammu and Kashmir	4.3	6.8	1.5	1.9
Himachal Pradesh	3.1	6.1	0.1	-

SOURCE: GATS INDIA 2016-17 SURVEY

Through the survey and subsequent field observations, it was seen that among the States/UTs, the prevalence of current use of smoking and Smokeless Tobacco products is higher in the states from the north-eastern region of India. The prevalence of smoking as well as smokeless tobacco among students is lower than the national average in the States/UTs from the central, western, and southern parts of the country.

Over the years, data indicate a notable decline in youth tobacco use across the country. The prevalence of tobacco reduced from 17 per cent in 2003 to eight per cent in 2019, i.e., a 50 per cent reduction over a period of 16 years. Smoking tobacco only saw a small decline, marginally from eight per cent in 2003 to seven per cent in 2019, while that of SLT declined sharply from 14 per cent to four per cent. (GYTS-4, 2019)

INDUSTRY RETURNS

EXPLORING THE FINANCIAL SIGNIFICANCE AND ECONOMIC IMPACT OF SMOKELESS TOBACCO.

ECONOMIC GAINS

Revenue Generation

Although the government has launched multiple initiatives to control the use of tobacco, tobacco is one of the highest revenue-generating industries for the government. This is because Smokeless Tobacco or Tobacco in general is considered a “sin good”, which means that it is heavily taxed and undergoes various layers of taxation, making it highly revenue-yielding for the government.

The taxation system charges GST, Central Excise duty, Compensation Cess, and NCCD; additionally, the customs duty charged during exports forms part of indirect revenue generation for the government. A better picture comes when the tobacco sector’s market is analysed at different levels.

Contribution to GDP

The contribution of tobacco in the gross value added (GVA) in 2018-19 was INR287.96 billion, which constituted about 1% of the total manufacturing GVA. The tobacco sector employs approximately 2.2% of the total workforce, with SLT accounting for a significant portion. The total tobacco sector tax contribution to government revenue stands at around 0.99% of GDP. The total revenues from excise amounted to INR217.19 billion in the year 2016-17.

Notwithstanding the contribution of tobacco usage to the economy, the tobacco industry also generates a huge economic burden in the form of the negative impacts it has in the long run.

According to the World Health Organisation, for every Rs 100 received as excise taxes from tobacco products, the Indian economy loses Rs 816, indicating that although the economic gains are present, the costs outweigh them by a huge margin.

Market Overview

The Indian Smokeless Tobacco Market was valued at USD 2024 1.48 billion, and is expected to reach USD 2.73 billion by 2030, rising at a CAGR of 4.87%. The key market drivers include surging disposable income, unregulated local production, and the smoking substitution effect.

- **Surging Disposable Incomes:** The rapid urbanisation and rise in the disposable incomes of the people are also contributing to the growth of the SLT market in India. Since higher disposable income enables users to purchase more SLTs. The migration of people in search of work also increases SLT sales as it becomes convenient for them to purchase SLTs owing to the lesser social stigma when compared with cigarettes and smoking.
- **Unregulated Local Production:** The government policies and regulations have significantly shaped the SLT market. COTPA (2003) prohibits the advertisement of tobacco products, mandates warnings regarding the health consequences, and restricts the sale of the products near educational institutes. Such policies have helped curb the tobacco production; however, the local production of SLTs still needs structured and strict policy implementation with stronger enforcement and monitoring mechanisms in place.

- **The Smoking Substitution Effect:** The decline in the consumption of smoking tobacco (cigarettes) has indirectly led to an increase in the consumption of SLTs in India. This reduction in the consumption of smoking tobacco is attributed to the awareness campaigns in schools and advertisements showing the harmful consequences before movie screenings, leading to the formation of social stigma around smoking. But this decline in cigarette use has not led to any proportionate decline in SLT consumption. Instead, there has been an increase in the consumption levels of SLTs, as people are perceiving them as "less harmful options."
- **Easy Accessibility:** When compared to cigarettes, SLTs usually have lower prices, making them a viable option among low-income groups. And just like cigarettes, SLTs are readily available at small local shops, catering to easy accessibility.

The revenue model of SLT in India is complex, considering that on one hand, it generates revenue directly through taxation and sales (particularly in the unorganised sector). On the other hand, it incurs significant health costs, making it unsustainable in the long run.

Employment Generation

The smokeless tobacco sector is well entrenched and forms a significant part of India's economy. One reason for this is its contribution to the country's overall employment. Understanding employment in this sector is crucial for the complete analysis of the economic face of this industry. However, measuring employment in the SLT sector presents challenges due to the coexistence of formal, registered manufacturing units and a large informal workforce operating in small-scale, home-based, or unregistered settings.

Government data provides insights into organised manufacturing employment. There is no single dataset that isolates SLT employment exclusively. This report analyses government sources to estimate employment in India's SLT sector, drawing from the Annual Survey of Industries (ASI), the Tobacco Board, National Sample Survey Organisation (NSSO), and Ministry of Health & Family Welfare publications.

Workforce Size Distribution

According to the National Sample Survey Organisation (NSSO), approximately 7 million workers formed the direct and indirect tobacco workforce in India during 2004-05, constituting around 1.5% of the overall employment in the formal sector. *(NSSO, cited in "The Economics of Tobacco and Tobacco Taxation in India," National Institute of Public Finance and Policy, 2010).* This total included workers engaged in:

- tobacco cultivation
- manufacturing tobacco products (including smokeless forms)
- Wholesale and retail trade of tobacco goods.

Regional Employment Concentrations

Employment in SLT and tobacco product manufacturing is regionally concentrated, owing to the location of manufacturing hubs and industrial infrastructure.

ASI 2022–23 marks the following states as having the highest employment in tobacco product manufacturing:

- Tamil Nadu
- Maharashtra
- Gujarat
- Uttar Pradesh
- Karnataka

These states account for more than half of the total manufacturing workforce in the sector, underscoring their critical role in sustaining employment opportunities in SLT production. The prominence of these states in tobacco manufacturing suggests a significant SLT workforce is embedded within these numbers.

Broader Economic Significance

The formal SLT manufacturing sector not only generates direct employment but also contributes to industrial wages and value addition. The sector's significant contribution to the industrial GDP is demonstrated by its value addition of 11812 crores in 2022-23, and worker wages of 1163 crores. The tobacco value chain, which also includes tobacco cultivation, processing, manufacturing, and trade, supports the livelihood of around 45.7 million people. Although this includes informal workers and is not exclusively SLT, it emphasises the sector's critical role in livelihood generation.

Observations

- **Steady Employment Growth:** The formal sector has increased consistently, indicating its ability to create jobs within the industry in the long term.
- **Regional Hubs:** The five key states together account for the majority of organised employment in the sector.
- **Economic Contributions:** The sector continues to contribute to industrial wage and value addition, linking itself to ancillary segments like logistics and packaging.
- **Data Limitation:** Official datasets do not separately quantify SLT-specific employment. Moreover, there is some limitation on the availability of data pertaining to informal units, which constitute a large portion of the market space.

State/Region	Smokeless Tobacco Prevalence	Economic/Revenue Significance
Bihar	~33% users	4.34% economic burden from tobacco-related losses
Uttar Pradesh	~29% users	3.98% burden; largest processing hub
Madhya Pradesh	~25% users	2.9% GDP impact, notable tax base
Assam & Northeast	40–49% users	High prevalence but limited formal taxation
Maharashtra & Gujarat	<10% users	Major exporters; high excise revenue

STATE-LEVEL REVENUE COLLECTION

Formal & Informal Sector

As per the Bidi and Cigar Workers Act of 1996, factories with 20 or more workers or at least 10 workers plus electricity are required to be registered. The data collection of formal production units is systematic and conducted through government surveys like the Annual Survey of India (ASI). However, the vast majority of SLT products are typically blended with herbs, spices, areca nuts, betel leaves, and slaked lime and made in the unorganised sector, where they are poorly regulated.

There are a large number of informal tobacco producers in India who operate outside the control of any tax or policy framework, which becomes a domestic source of poor quality products and evading tax.

This includes small-scale producers working from home, market stalls or small workshops. The data collected from the informal sector by the National Sample Survey Organisation (NSSO) has gaps due to the unregistered nature of units.

Size & Economic Contribution

Using NSSO data, we can see the Gross Value Added (GVA) of India's SLT industry, which is the value of total output minus total input costs. The reason for the unregistered sector contributing only 2% in the data from 2000-01 is the lack of available data. This underrepresentation suggests that the actual contribution of the unregistered sector is likely significantly higher than reported.

2000-2001			
Product	**Unregistered**	**Registered**	**Total**
Snuff	16.40	1060.00	1076.40
Zarda	7.40	1200.00	1207.40
Katha and Chewing Lime	38.20	126.00	164.20
Pan Masala	115.00	632.00	747.00
Chewing Tobacco	181.00	9140.00	9321.00
Total SLT	358.00	12158.00	12516.00
Share of Registered & Unregistered (%)	2.86	97.14	100
Share in total tobacco (%)			19

2005-2006			
Product	**Unregistered**	**Registered**	**Total**
Snuff	136.00	86.10	222.10
Zarda	88.80	1870.00	1958.80
Chewing Lime	160.00	295.00	455.00
Pan Masala	1330.00	3540.00	4870.00
Chewing Tobacco	404.00	545.00	949.00
Total SLT	2118.80	6336.10	8454.90
Share of Registered & Unregistered (%)	25.06	74.94	100
Total tobacco (%)			10
2010-2011			
Product	**Unregistered**	**Registered**	**Total**
Snuff	97.00	274.00	371.00
Zarda	89.80	3780.00	3869.80
Chewing Lime	92.70	494.00	586.70
Pan Masala	280.00	1720.00	2000.00
Chewing Tobacco	497.00	2290.00	2787.00
Total SLT	1056.50	8558.00	9614.50
Share of Registered & Unregistered (%)	10.99	89.01	100
Total tobacco (%)			7

SOURCE: ESTIMATED FROM THE UNIT LEVEL RECORDS OF ASI AND NSS DATA

The accurate numbers would be much higher, which can be seen in the 2005-06 and 2010-11 data, when the informal sector's data was attempted to be collected as well.

Among the products, Pan Masala and other chewing tobacco products had the highest contribution to the overall SLT industry. Overall, the GVA for SLT products declined over the decade by approximately 32%. This is likely the result of the implementation of tobacco control laws.

These laws have restricted the advertising, promotion, and sale of particular smokeless tobacco products like gutka and pan masala.

Employment

Tobacco manufacturing has most workers in the sector working informally. In 2011-12, 6,82,000 people were employed across tobacco cultivation, manufacturing, and trade, making up 1.26% of total employment. About 75% of the tobacco workforce was in manufacturing, with trade and cultivation making up the rest. The bidi industry employs a large portion of the manufacturing workforce. Total tobacco employment hardly changed from 2004-05 to 2011-12, dropping by only 1%, but employment in the tobacco trade fell by 50% in that period, likely because of the tobacco control laws. In manufacturing, the share of contract workers declined from 41.2% in 2000-01 to 36.76% in 2013-14.

Productivity in informal units (OAME) and formal establishments also remained low. In 2010-11, their relative total factor productivity (TFP) was 0.192 and 0.288, respectively, meaning both segments operate far below peak efficiency (Productivity Growth and Levels - A comparison of Formal and Informal Manufacturing in India, CDE, Sept 2018).

The tobacco industry, like many other industries in India, has also seen the trend of informalisation of the workforce. Specifically, the rise of temporary or contract workers in the industry in place of permanent workers helps employers to provide lower wages and reduced social benefits. This also reduces the wage bargaining power of the workforce. The share of contract workers as a percentage of total workers in the industry has sharply risen - 10.76% of total workers in the tobacco industry in 2000-01 were contract workers, and this number rose to 16.28% by 2013-14 (Informalization of the formal sector: Evidence from India's manufacturing industries, IZA Journal of Development and Migration, 2023).

Regulatory Environment & Challenges in the Informal Sector

The Indian government has consistently pushed for the formalisation and regulation of the tobacco industry in recent times, recognising the health dangers and economic potential of better governance. Tobacco control laws since 2003, such as bans on specific products like gutka, mandatory health warnings on packages, and video warnings played on televisions, and food safety regulations targeting smokeless tobacco manufacture, have all sought to curb unregulated production and consumption.

Yet, enforcement remains a challenge. These laws are only followed by the registered units of the tobacco industry. Many informal manufacturers work around bans by selling unpackaged tobacco for mixing at the point of sale.

Gutka and other banned SLT products remain widely available in certain states despite official prohibition (Banned but thriving: How loopholes keep Gutkha alive in India, India Today, Feb 2025). This limits the effectiveness of current controls in the informal sector.

Exports

India is the world's second-largest exporter of tobacco after Brazil. It exports different forms of tobacco, namely stripped, wholly stemmed, cigar cheroots, smoking tobacco, homogenised, flue-cured, sun-cured, extract and essence, FCV tobacco, unmanufactured tobacco, and various other niche forms. It recently emerged as the largest exporter of unmanufactured tobacco in the world (Press Information Bureau, 2025; Statista, 2023). But majorly, most of the exports are of low-value raw form (IBEF,2024).

The resilience of this market comes clear under global tendencies towards reducing tobacco consumption, as India remains a major player thanks to its solid home demand and strong export contributions. It is a high-revenue source for the government, due to huge taxation gains and is a major source of foreign exchange. The Tobacco Board of India plays a major role in protecting the interests of farmers as it ensures fair pricing and improves export prospects (Ministry of Commerce and Industry, 2025).

Export expansion has been aided by government initiatives that aim at improving existing infrastructure alongside the development of new efficient infrastructure, liberalising export procedures by relaxing export control measures, integrating with open world economies, alongside supply chains, and export market diversification.

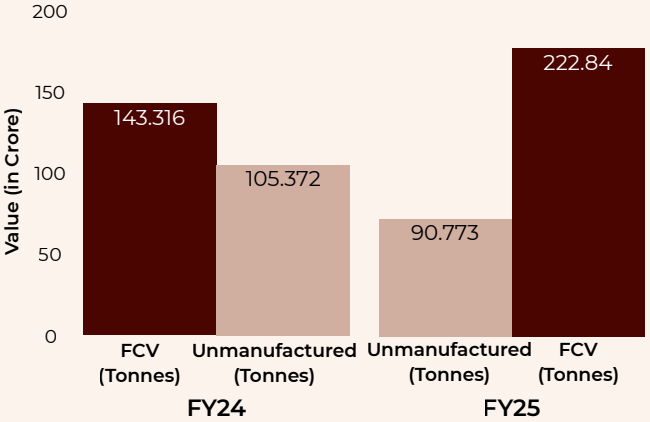
Its chief export crops are Virginia tobacco as well as sun-cured country tobacco, which are highly sought after worldwide.
Tobacco is a livelihood for millions of Indian farmers in the states of Karnataka, Andhra Pradesh, and Gujarat. Respective state governments provide extensive support that integrates welfare programs, export development initiatives, and price stabilisation measures, which make tobacco farming sustainable. (Ministry of Commerce and Industry 2025).

Export Volumes

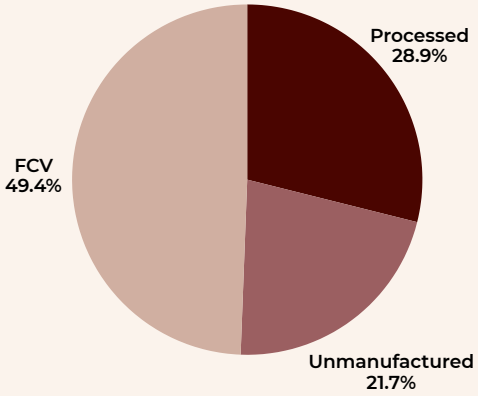
During FY '24, India exported 1,43,316 tonnes of FCV tobacco, having a monetary value of Rs. 5,932 crore (US $716.15 million). During FY '25 (April-October), India exported 90,773.01 tonnes of FCV tobacco, worth Rs. 4,502 crore (US $537.86 million). During FY '24, India exported 105,372 tonnes of unmanufactured tobacco, having a monetary value of Rs. 2,603 crore (US $314.42 million). The export of unmanufactured tobacco during FY '25 (April-October) was 2,22,840 tonnes, worth a huge Rs. 9,954 crore (US $1.189 billion).

On export, a portion of Indian-grown tobacco gets value addition in final products domestically, predominantly in the case of cigarettes, bidis, and chewing tobacco for the home market, with the rest being exported as unmanufactured leaf. In FY '23- FY '24, India exported ~250,000 tons of raw tobacco (valuing around $1.1 billion and $395 million of processed tobacco products, such as *hookah* tobacco, *pan masala* containing tobacco, snuff, etc.) (Statista, 2023; PIB, 2025). This indicates that the principal exporter of export revenues continues to be raw leaf.

Export Volumes: FCV vs Unmanufactured (Tonnes) and Values



Export Composition by Value (FY24) - US$ Million



Markets

India remains the sole nation that cultivates tobacco within two seasons. It exports to 200 countries worldwide. The country ships its tobacco to the UAE, Belgium, Indonesia, Egypt, the USA, Turkey, Korea, Russia, and a few other nations globally.

In FY '24, among these countries, the UAE stood as the largest importer of tobacco at around 19.76% of the total exports from India. Belgium and Indonesia are two of the largest tobacco export destinations.

In FY '25 (until February 2025), the UAE continued as the largest importer of smoking at approximately 21.30% of total Indian export data, showing that Indonesia and Belgium are among its key export destinations for tobacco. India imports about 17.62% and 7.92% of that amount.

India accounts for approximately 18.57% and 6.09% of overall importations. Furthermore, the nation exports to Egypt, France, Russia, Korea, Sri Lanka, the USA, Venezuela, Ethiopia, and Nigeria. India exported US$269.22 million of tobacco to Belgium in FY '24. UAE comes in as a Major importer of Indian tobacco, with FY '24 import value at US $286.44 million.

The value of shipments to Singapore and the US in this period was US $33.57 million and US $46.32 million, respectively. To Russia and Egypt, India exported US $72.11 million and US $48.06 million worth of tobacco during FY24, respectively.

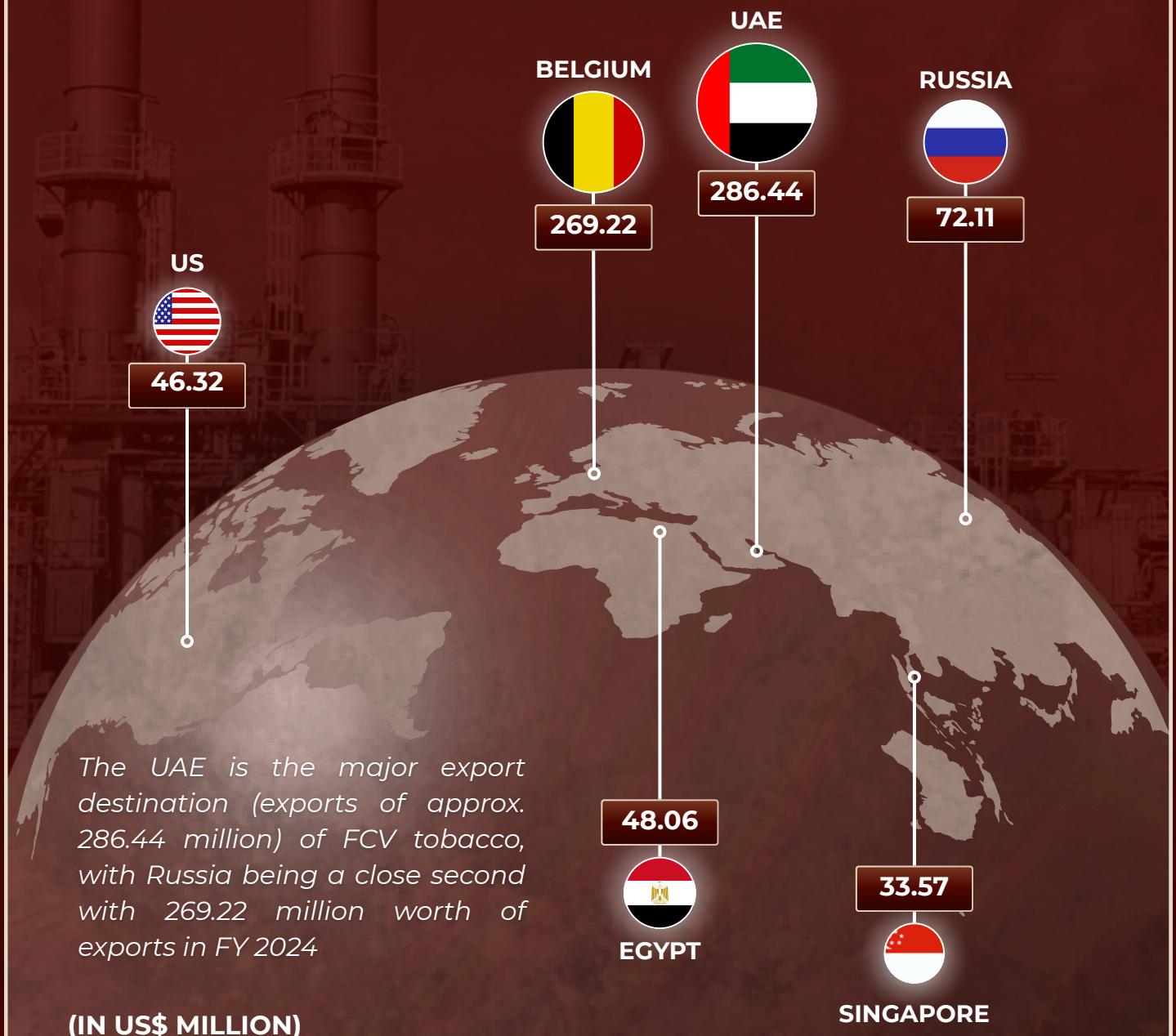
Latest Momentum: For the first time, India's tobacco export surpassed a record of ₹12,005.8 crore ($1.5 billion) in FY '23 - FY '24. Manufactured chewing tobacco export was roughly $395 million during FY24 (Statista, 2023; PIB, 2025). Dozens of Indian firms started producing Western-style snus, locally known as *filter khainI*, export packaging of nicotine, with export markets ranging from Russia, the US and China to the Middle East. This nascent industry reveals India's competitiveness in high-value areas (Schmid, 2023; Morung Express,2024).

Market and Export Concentration Analysis

The mean distance of importing countries from India is roughly 4,197 km, which means that Indian chewing tobacco Products embody a great survival in both proximate and distant markets. The export concentration index of 0.18 shows that India's tobacco exports are comparatively distributed across several nations, decreasing reliance upon a solitary exchange that pays for the risk associated with

MAJOR EXPORT DESTINATIONS

BY EXPORT VALUE (FY24)



The UAE is the major export destination (exports of approx. 286.44 million) of FCV tobacco, with Russia being a close second with 269.22 million worth of exports in FY 2024

(IN US$ MILLION)

market failure, as also for externalities that might arise out of unexpected geopolitical or geo-economic developments.

Institutional Support and Farmers' Incomes

Tobacco Board of India is the apex body that oversees the production of Flue-Cured Virginia (FCV) tobacco via license as well as auction mechanisms, thereby assisting farmers in receiving improved prices with quality as well as traceability. Its primary mandate includes licensing and supervising the cultivation of Flue-Cured Virginia (FCV) tobacco, managing auction platforms so as to ensure transparency and create competitive prices, overseeing quality assurance, grading, and traceability in exports.

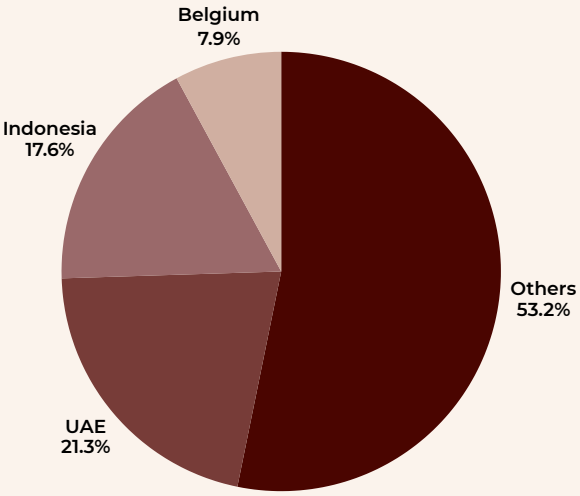
The Board's interventions have ensured fair price realisation for farmers, advanced sustainable production methods, and enabled greater market access by being compliant with WTO and global standards. It is an interface between farmers, exporters, and government agencies, thus maintaining market stability and export competitiveness.

During 2024, auctions saw high demand – India's cumulative tobacco Exports rose 20.8% (proc + raw), a record high, partly due to surging prices to farmers as global buyers wanted Indian leaf (PIB, 2025). Non-FCV tobacco (for smokeless tobacco controlled), farmers might simply sell directly to local buyers or firms with more fluctuations in prices.

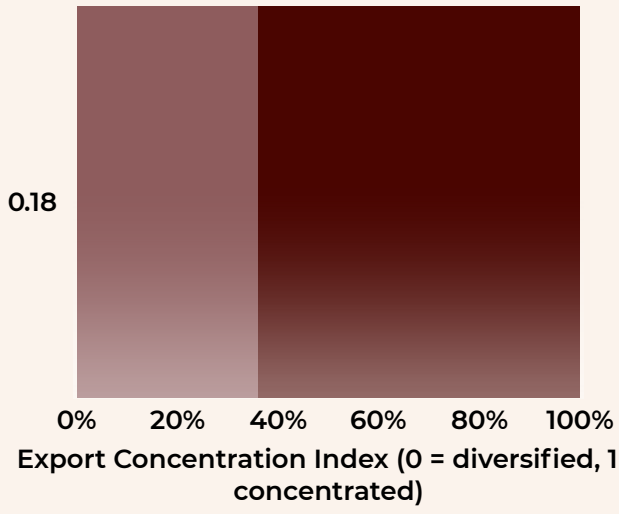
According to the Press Information Bureau (2025), farmers' incomes from FCV tobacco have nearly doubled in the last five years, following consistent price support and demand growth in export markets. Auction-based and export promotion models have led to higher average returns per hectare than most competing cash crops in the states of Andhra Pradesh and Karnataka.

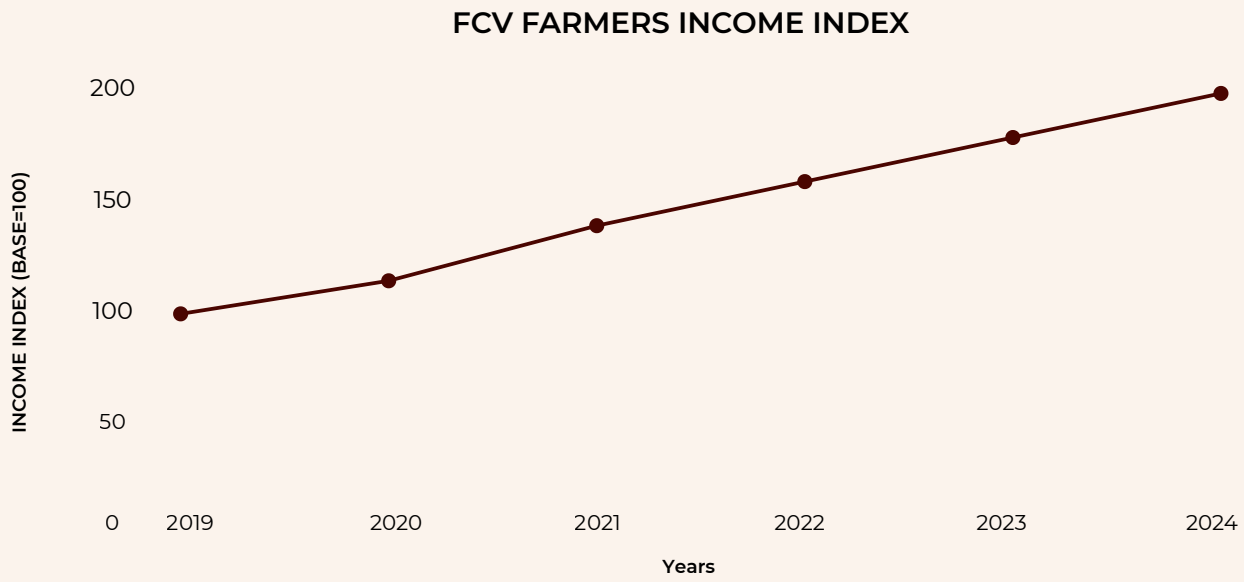
Here, the farmers gained fair compensation based on leaf quality and moisture content, safeguarding them from the exploitation of middlemen. It is a monsoon-resilient cash crop and provides rural farmer households with income during the off-season.

Regional Market Shares (FY25 up to Feb 2025)



EXPORT CONCENTRATION INDEX





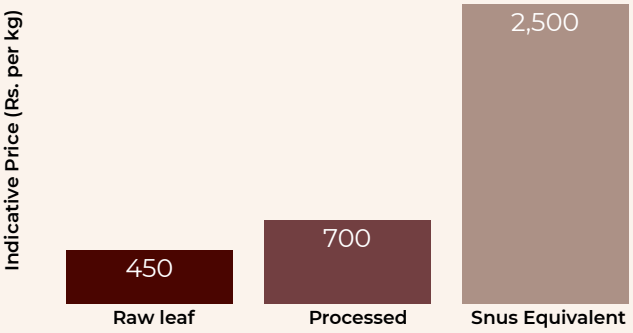
Value Addition & Industry Dynamics

Reports show that value addition, i.e. the blending, flavouring, and packaging, is done overseas or not at all. The value the group now is top-heavy in agribusiness and raw trading, with little activity in India beyond primary processing such as drying and sorting (IBEF, 2024). India remains mainly an exporter of raw leaf and not a processing centre for it.

Value Addition Potential: Transforming raw tobacco to snus, pouches of nic, and other locally produced oral products would greatly increase value per kg. Rather than exporting leaf at a few dollars/kg, India had been producing products that cost several times that amount. This would increase farmer costs immediately for high-quality trees and create factory employment. Government revenues would grow from corporate taxation as well as excise levies, come what may, including if export of finished products continues.

WTO Compliance: India can incentivise value addition domestically as per WTO regulations by not being overt as well as excessive in export subsidies, and ensuring that export incentives are WTO-compatible. Core markets implement regulatory barriers (the EU forbids marketing snus beyond Sweden, the US bans certain flavoured tobaccos), but such are generally health measures that India must abide by as per the WTO's technical and health exceptions. No fundamental WTO rules inhibit India from exporting oral tobacco/nicotine products, as long as products comply with importing countries' regulations and frameworks.

Value Chain Comparison



Global Benchmarks & Lessons for India

A comparability study indicates that Zimbabwe, Brazil, Indonesia, and Sweden provide profitable lessons. The business of snus in Sweden demonstrates how a

high-end smokeless product has high margins and a worldwide brand name (Statista, 2023a; Statista, 2022).

Zimbabwe and Brazil provide examples of local processing as crucial- Zimbabwe hopes to increase local manufacture of cigarettes from 2% to 30% of its crops in order to capture value, and Brazil's contract-agricultural system has made it a significant raw leaf exporter (OEC, Farmonaut, 2024).

Indonesia's clove-flavoured kretek cigarettes market - which produces ~10% of a government tax income and millions of jobs - reveals the financial benefits of a thriving local tobacco products market, while at the same time highlighting export challenges if foreign regulations for health are different (Research and Markets,2024). Zimbabwe's record (An Export Nation of Tobacco) indicated that exporting raw leaf generates only 50-70% of the terminal price; typical processing, like de-stemming, will raise exports by 30-50% Price (Farmonaut, 2024). For much more expensive products like snus, this gap is wider: raw tobacco might sell at ₹400-500/kg ($5-6), whereas that same tobacco, as has been converted to snus, might sell several times more in the consumer business.

Swedish Match, for example, had operating margins of around 45% on its snus brands, indicative of heavy value appropriation by branding, refining, and retailing (Statista, 2022; Statista, 2023a). They now go, though, to manufacturers during the procurement of unprocessed Indian tobacco for producing products. This indicates a lost opportunity – India is literally —giving away‖ high the high-value dimension of the supply chain.
5-Year Prospective: With a High Value-Addition scenario, India's exportations of tobacco may about to double to ~$3 billion+ by Year 5, driven by fast-growing, rapid snus and pouch export sales(Schmid, 2023; Morung Express, 2024). Even a moderate expansion scenario yields ~$2.4–2.5 billion in export income by Year 5, from ~$1.8 billion under a business-as-usual scenario. Such expansion would bring about high rural incomes through higher prices and volumes and larger government income from taxation of processing work as well as increased economic production (Market Research Future, 2025).

Introduction of Snus and Manufacturing of Nicotine Pouches in India

In recent decades, Indian entrepreneurs began taking note of this opportunity and capitalised on increased worldwide demand for non-traditional mouthpiece products for nicotine. New versions of Pouch smokeless tobacco, similar to Swedish snus, are also locally produced under various names like filter Khaini. Interestingly, Harsh International (Delhi)introduced India's first snus-like product ever (Chaini Khaini) in 2002, and in 2020 successfully exported flavoured snus pouches to Central Asia as well as Europe.

As reported by Harsh International, having discovered that their brands hit the jackpot‖ abroad, some 20 others‖ in India subsequently released their own variety of snus products (Schmid, 2023; Morung Express, 2024).

Yet another, LA Group (Punjab), launched its Green Dragon and Gold Rush snus pouch products during 2020–22, mixing Indian rustica with flavourings custom-designed for U.S., Chinese, and Middle Eastern preferences. One Indian facility has received pharmaceutical-grade cGMP certification for the production of smokeless nicotine products, suggesting a movement

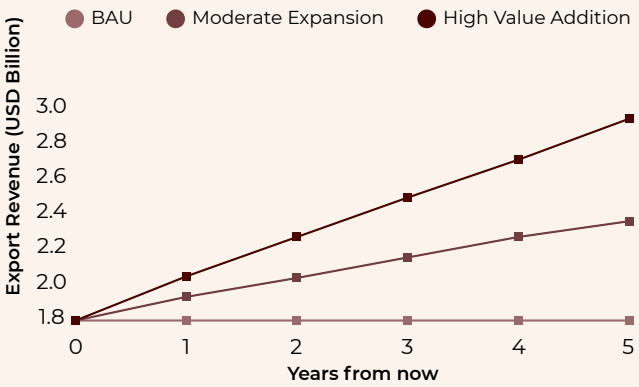
towards global quality benchmarks (Market Research Future, 2025). Concurrently, enterprises in India are currently manufacturing tobacco-free nicotine pouches (white pouches with extracted nicotine). Some firms offer private-label production for export. This exploits existing capacities for chemical extraction (extraction of nicotine for pharmaceutical use) and its cost of production (TIFAC, 2001). India's prohibition of local marketing of e-cigarettes as well as some oral products does not apply to export production, thus firms are free to manufacture pouches of nicotine at home as long After exportation, such expansion of the firms in the United States, United Kingdom, European Union, and Gulf economies, indicates that it was feasible for such a large portion of the value chain to be undertaken domestically (BMJ Open, 2023).

Increasing Farmers' Incomes: Its high-value product range may be directly extended to Indian tobacco farmers. A large proportion of India's smokeless-tobacco farmers grow Nicotiana rustica (high nicotine content) in Bihar or Uttar Pradesh.

Traditionally, the rustica leaf was consumed in cheap chewing or even as an organic pesticide, with low farm-gate prices. But this variety excels for nicotine extraction as well as high-strength snus. If Indian rustica demand increases to fill nicotine pouch plants, farmers may receive a premium for their crop. Similarly, farmers making premium quality sun-cured tobacco for snus may receive more under quality- and characteristic-specific payment agreements that are typical for Brazil- and multi-country-based models of contract farming. (Farmonaut, 2024). Domestic processing, in a word, generates a market pull for premium-quality leaf as well as nicotine, which translates to more stable farm income.

India's recent history with FCV tobacco offers a parallel example with the Tobacco Board auction system, as well as export promotion, average FCV prices and farmer incomes increased (PIB, 2025). The government reported that incomes for tobacco farmers increased approximately double in the past 5 years (SPRF, 2024). Expansion of value-added products can transfer such benefits to producers of other forms of tobacco.

Projected Export Revenue Scenarios



Taxation

Current Updates: 1st Feb, 2026 onwards, India has implemented a 40% tax rate on tobacco products, significantly hiking the price to encourage less consumption. The change was brought during 2025's GST reforms. However, the implementation was delayed, keeping GST cess compensation payment in mind. A stark contrast can be seen in the taxation imposed on bidis, where the tax rate has been reduced from 28% to 18%. The taxation rate would now be applicable to the retail sale price printed on the package, regardless of the actual transaction price.

Taxation Structure

In 2017, the excise taxes and VAT applied to tobacco products were replaced by GST. The National Calamity Contingent Duty (NCCD) continued to be applicable for tobacco products. All tobacco products in

India were included in the highest GST slab, which was 28%. Additionally, a compensation cess was applied on Cigarettes and Smokeless Tobacco, while Bidis were excluded from it. In 2019-2020, earlier applied Central excise taxes were reintroduced at nominal rates.

- GST: The Goods and Services Tax is an indirect tax imposed on the supply of goods and services. It is a destination-based tax imposed on every value addition. The purpose of GST was to merge several indirect taxes into one centralised tax. Before the implementation of GST, tobacco products were taxed using Excise duty, VAT and NCCD.

Product	GST	NCCD INR per 1000 sticks)	Compensation Cess		Excise (INR per 100 tickets)
			Specific (INR per 1000 sticks)	Ad valorem	
Cigarettes					
Non-Filter <65 cm	28%	200	2076	5%	5
Non-Filter 65-70 cm	28%	250	3668	5%	5
Filter <65 cm	28%	440	2076	5%	5
Filter 65-70 cm	28%	440	2747	5%	5
Filter 70-75 cm	28%	545	3668	5%	5
Filter 75-85 cm	28%	735	4170	36%	10
Other	28%	735	4170	36%	10
Bidis	28%	1.02	0	0	0.05
Smokeless Tobacco	28%	25%	0	104%	0.50%

SOURCE: (MOHFW, 2022)

- **NCCD:** The National Calamity Contingent Duty is a tax charged upon the manufacturing and sale of specific types of goods in India. The purpose of the tax is to fund the National Disaster Response Fund. It helps in providing budgetary support during times of natural calamities.

- **Compensation cess:** GST Compensation Cess was introduced along with the Goods and Services Tax in 2017. The objective of levying this cess is to compensate states for any revenue loss that was suffered due to the implementation of GST. It consists of two components, namely ad valorem and specific duty. Ad Valorem is charged as a percentage of the assessed value of the product, while specific duty is charged on a specified number of units.

- **Excise:** An excise tax is levied by the government on the manufacturing, sale, and consumption of certain goods such as luxury goods, sin goods, fuels, etc. The purpose of charging this additional tax on tobacco products is to discourage consumption and help generate additional government revenue.

Adding all the tax components, the total tax burden (as a % of the final retail price inclusive of tax) is 52% on average for cigarettes, 22% on bidis, and 64% for Smokeless Tobacco Products. Before the implementation of GST, the tax burden was 16%,53%, and 57% for bidis, cigarettes, and smokeless tobacco. Both these sets of figures are lower than the WHO recommendation of 75% of the retail price.

Impact of Taxation on Tobacco Usage

Increasing tax on tobacco products is considered to be one of the most useful methods of controlling tobacco consumption. A tax increase ultimately increases the retail prices, leading to a decrease in consumption.

The price elasticity of tobacco products for high-income countries is estimated to be -0.4, while that of low- and middle-income countries is more varied but is generally estimated to be around -0.5. High price elasticity doesn't only affect consumption, but also other aspects of tobacco usage, such as:

- Prevalence
- Cessation
- Initiation
- Duration of smoking
- Frequency of smoking
- Conditional demand.

Similarly, the income elasticity of tobacco products is positive in India, i.e., with an increase in income, the demand for tobacco products also increases. Hence, to reduce the prevalence of tobacco consumption, the price effect must outweigh the income effect. (WHO, 2016)

BEYOND PROFIT

ASSESSING EXPLOITATION, HEALTHCARE EXPENDITURE, AND THE BROADER DRAWBACKS OF SMOKELESS TOBACCO.

SOCIAL COSTS

Health Concerns

Mortality Studies

During the 1980s, there were multiple cohort studies being conducted among tobacco users in various parts of India. In the largest of these cohort studies, conducted between 1968 and 1971, a total of 101,761 individuals were interviewed who were above the age of 15 years regarding their tobacco consumption levels and were examined for oral precancerous lesions.
Then the participants were followed up for 8 years. The results of the study showed that the age-adjusted mortality rate among the chewers was 29 deaths per 1000, and for the bidi smokers, the rate was found to be higher at 47 deaths per 1000.
Taking into consideration the results given by a more recent study by Gupta and colleagues (in 2005), the most commonly used SLT products were found to be Betel Quid and *Mishri*, while the relative risks were found to be highest among the other SLT products, which mainly incorporated tobacco with lime (*Khaini*).
Surprisingly, the relative risks were not significant for areca nut and betel quid.

Relative risks of all-cause mortality by type of SLT used

	Person-Years	Deaths	Age-adjusted Mortality Rate	Relative Risk	95% Confience Interval
Women					
Mishri	88,002	743	12.3	1.21	1.10-1.34
Mishri + Other	71,817	1,323	14.1	1.36	1.24-1.48
Betel Quid	20,153	236	9.8	0.96	0.83-1.11
Other Tobacco	5,020	80	14.1	1.37	1.09-1.73
Areca Nut	6,633	88	9.9	1.05	0.84-1.31
Never Used Tobacco	1,30,294	907	8.9	1.00	

SOURCE: MUMBAI COHORT STUDY 2005

Relative risks of all-cause mortality by type of SLT used					
	Person-Years	Deaths	Age-adjusted Mortality Rate	Relative Risk	95% Confience Interval
Men					
Mishri	14,658	226	16.1	1.14	0.97-1.33
Mishri + Other	38,981	782	18.3	1.18	1.07-1.31
Betel Quid	24,368	436	16.2	1.10	0.98-1.24
Other Tobacco	17,039	316	18.5	1.24	1.08-1.41
Areca Nut	1,838	27	11.5	0.83	0.56-1.21
Never Used Tobacco	55,717	854	13.6	1.00	

SOURCE: MUMBAI COHORT STUDY 2005

SLT and BMI

A cohort study on SLT consumption was conducted in Mumbai in 2005. In the study, the joint effects of body mass and SLT consumption were investigated. The study's results showed a higher risk for individuals who fall at the extreme ends of the BMI spectrum. The people who had never consumed tobacco, having a BMI of 25.0-30.0, were taken as the reference category. When SLT users from different BMI categories were compared with the reference category, an elevated risk of death was observed among the SLT users.
The study concluded that SLT consumption, along with high body mass, would have independent as well as joint effects on the mortality of any person.

Cardiovascular Diseases Associated with SLTs

Tobacco use (including SLT) is well known to have a severe impact on cardiovascular health. What tobacco consumption actually does is it decreases the capacity of blood cells to carry oxygen, increases myocardial workload, and increases catecholamine release, resulting in the increased risk of coronary syndromes.

It has been demonstrated that peak levels of nicotine are similar after a single exposure to SLT or cigarette smoking. The consumption of SLT leads to more prolonged levels of nicotine spikes, unlike smoking cigarettes, which produce peaks and troughs in nicotine levels.

A study by Benowitz and Colleagues showed that consumption of SLT produced a higher venous concentration of nicotine than the levels that are present or observed when cigarette smoking.

Product	Bio-availability Per Dose	Time to maximum concentration
Cigarette	1-2 mg	5 minutes
Nicotine Gum	1 mg, 2 mg	30 minutes
Ni. Inhaler	2 mg/ cartridge	20-30 minutes
Ni. Nasal Spray	0.5 mg	10 minutes
Ni. Patch	15-22 mg	4-9 hours
SLT	3.6-4.5 mg	20-30 minutes

SOURCE: A STUDY BY BENOWITZ AND COLLEAGUES

SLT Consumption and Cancer

- In India, nearly 0.7 million new cancer cases are reported every year. And an estimated 34% of cancer cases are tobacco-related. The burden of cancers on health systems is so high that the current medication and financial allocations cannot treat the load.

- Among the cancers, pharynx and oral cancer are major public health problems, with nearly 85000 new cases in men, and 34000 new cases among women. When the mortality rates of these are compared with the rest of the world, even then, the elevation of the rates can be seen.

The various types of cancer caused by SLT consumption include oesophageal cancer, pancreatic cancer, oral cancer, and leukoplakia, etc.

Oral Health Consequences

The prominent cause of oral cancer is observed to be the practice of chewing betel quid along with paan since the beginning of the 20th century, and after that, numerous reports have been finalised stating a correlation between tobacco use (SLT) and oral cancer. Through these studies, it has been estimated that 90% of oral cancer cases have emerged owing to the use of any kind of tobacco (smoking or smokeless).

It has been estimated that more than half of the oral cancer cases are owing to the smokeless tobacco consumption, which is 52.5% among men and 51.6% among women. The number of oral cancer cases caused by SLT use has been estimated to be 27,304 per year among men and 8,827 among women, according to a review by Bofetta and Colleagues (2008).

Effects On Pregnant Women and Reproductive Health

Studies show that SLT use among women harms their fetuses, and during pregnancy, the continuous intake might affect the body weight of the newborn. Birthweight is an important determinant of morbidity and mortality of infants, and the consumption of SLT by the mother correlates with the reduction of body weight, and this was observed in all the indian studies. In an interventional study in rural Maharashtra, it was observed that quitting SLT led to improvement of the birthweight of the infants delivered by these women. In this study, 13.3% of 209 Mishri users stopped consuming it by 28 weeks. Gestation, 16.5% reduced consumption or stopped at 32 weeks, and 70.2% did not change their

consumption habits at all. The birthweight was most prominent in those who did not stop the consumption throughout their pregnancy.

Additionally, SLT use was associated with a reduction in average gestational age by 6.2 days in a population-based study undertaken in Mumbai.

Health Impacts on Farmers

When we talk about tobacco farming, it is believed to have higher returns than normal crops. However, after the cost-effective analysis of the whole process, what we see is that the costs of tobacco farming are much more than the returns, considering the vast amount of pesticides and fertilisers being used for production.

In India, tobacco production is very labour-intensive, and 80-90% of workers employed are women, so the labour cost of the females working in the fields is not realised. Women, while farming, usually carry infants on their backs; this leads to the infant ingesting the tobacco fumes and the other chemicals that are present in the process. The women, due to insufficient facilities, face frequent miscarriages and abortions.

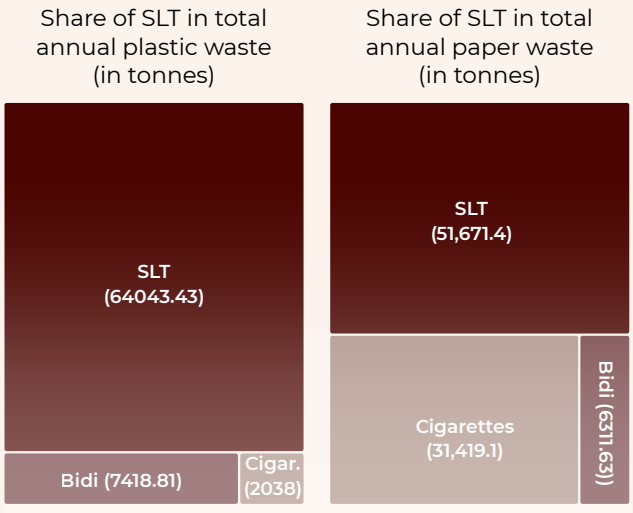
Higher risks of developing cancers and liver cirrhosis are observed among the communities that indulge in tobacco farming. The bio-monitoring studies have shown that the constant inhaling of tobacco flakes and dust particles leads to exposure to nicotine in the same way as for actual tobacco users.

Since tobacco farming requires the use of pesticides in large amounts and more frequently, the process to do the same results in several harmful health consequences relating to nerves, skin, respiratory organs, and liver.

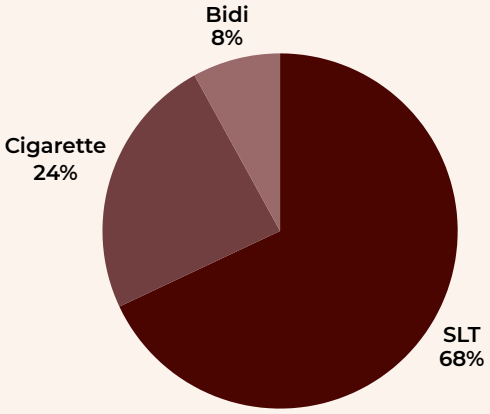
Environmental Costs

Every year, the tobacco industry costs the world more than 8 million human lives, 600 million trees, 200,000 hectares of land, 22 billion tonnes of water, and 84 million tonnes of CO2. SLT produces a substantial amount of environmental externalities in addition to the adverse health concerns. These externalities arise at various stages of the SLT life cycle - cultivation, processing, and packaging, as well as post-consumption waste, imposing measurable burdens on land, water, and municipal waste systems.

Recent national estimates indicate that SLT products account for the largest share of tobacco product waste in India.



Contribution of different tobacco types to the overall tobacco waste (in%)



Land Use and Ecological Depletion

Tobacco farming takes up a lot of land. The things we need to do for tobacco farming are bad for the earth. The World Health Organisation wrote a report called Tobacco and Its Environmental Impact: An Overview in 2017. This report says that tobacco farming is very bad for the soil. It hurts the soil faster than the things we grow to eat. Because of this, tobacco farming needs a lot of fertiliser and pesticides. Tobacco farming is bad for the earth. It needs a lot of extra things to keep it going. In India, land that is used for tobacco, and the associated processes, mainly the curing, contribute to deforestation and the land-use change resulting in less land for growing food crops and disrupting local biodiversity (WHO, 2022 report). The Central Tobacco Research Institute explains that the practice of continuous tobacco monocropping leads to soil nutrient depletion and thus necessitates soil replenishment and crop rotation more frequently.

Global Resources Exploitation and Opportunity Costs

The tobacco industry worldwide is, according to the WHO, the root cause of the loss of hundreds of millions of trees and the diversion of billions of tonnes of water every year. This shows the great extent of resource exploitation that is associated with the production of tobacco. These kinds of demands are especially put upon low- and middle-income regions where water and farmland are already limited; hence, the environmental opportunity costs of using scarce resources to grow tobacco are high.

Chemical Inputs and Pollution

Tobacco cultivation is resource-intensive, and it is a heavy user of pesticides and fertilisers. These chemicals degrade the soil and pollute the aquatic environment. through the process of runoff. They end up in lakes, rivers, and people's drinking water supplies. Once the area is devoted to tobacco, it has a lesser capability of producing other crops, like food, because tobacco takes away soil fertility. The money-making appeal of tobacco as a cash crop may still fall short of making up for the harm caused to the supply of sustainable food in low and middle-income countries.

Soil Degradation and Biodiversity Loss

WHO states that tobacco farming leads to soil erosion and deforestation, and the release of agrochemicals that can pollute waters and reduce agricultural biodiversity. The studies that have been referred to by the World Health Organisation show that the nutrient removal rate of tobacco leaves can be as high as three times that of normal cereal crops, and as a result, it hastens the process of land degradation in areas that are heavily reliant on tobacco farming (WHO, 2017).

Water Depletion

Tobacco requires up to eight times as much water as, for example, tomatoes or potatoes. For every kilogram (kg) of tobacco that is not produced, consumed, and disposed of, the potable water needs of one person can be met for an entire year. These water-use estimates are likely an underestimate.

Pollution from Packaging and Processing

Smokeless tobacco, in forms such as chewing tobacco and nicotine pouches, is made of single-use plastic and metal for packaging, which results in additional pressure on landfills, as well as toxic chemical leakage into the environment from landfills. Post-consumption disposal of SLT sachets and packaging is a significant pathway for environmental contamination. SLT products are usually sold in plastic packets that people throw away and do not dispose of properly. These packets

contribute to pollution clogging drainage systems and increasing cleanup costs for municipalities. The World Health Organisation's analysis shows that tobacco product waste, including filters and packaging, costs cities and municipalities a lot to clean up. These costs are paid by taxpayers, not the producers.

In cities, the non-biodegradable packaging of SLT products makes the cleanup and waste management even more difficult. The SLT sachets and packaging are a contributor to this problem. The SLT products are widely available. Their packaging is not biodegradable. This causes problems for local municipalities.

The processing and packaging stage of SLT production generates substantial solid waste, much of it non-biodegradable. The India fact sheet reports segregated annual waste volumes for different tobacco product components (plastic, paper, foil, filters), and identifies SLT as the dominant contributor to total tobacco product waste by weight. Specifically, the fact sheet's product-level breakdown shows that SLT is responsible for the largest share of paper and plastic waste compared with cigarettes and bidis; SLT packaging and single-use sachets are a principal source of persistent plastic litter in urban and peri-urban environments. The cumulative weight of packaging waste translates into great demands for raw materials (paper and aluminium) and creates disposal challenges for municipal systems.

Urban Sanitation and Public Space Pollution

Smokeless tobacco (SLT) use is a major cause of environmental pollution due to excessive spitting and the improper disposal of the residues. As per the World Health Organisation (WHO, 2022), stating that spitting goes hand in hand with SLT usage, is a profoundly distressing and troublesome problem for the environment and sanitation in South Asian countries, especially India, where products like Gutkha and Khaini are extensively used in public areas. According to the Ministry of Housing and Urban Affairs, through the Swachh Bharat Mission (SBM, 2021), the spitting of tobacco in public places not only creates a major problem for the provision of hygienic conditions in cities but also constitutes a source of surface staining and bio-contamination of public infrastructure that lasts for a long time.

The spit residue resulting from SLT is a mixture of nicotine, saliva, heavy metals, and organic compounds, out of which several are highly toxic to soil and water ecosystems.

These residues have the potential to pollute urban surfaces and, with the occurrence of rain, get washed into drainage systems and local waterways along with the harmful chemicals. If these pollutants are not removed on time, they have the potential to alter soil microbiota compositions, decrease the urban aesthetic value, and produce unsanitary conditions that are difficult and expensive to clean and maintain.

Repeatedly, the sanitation reports from municipal bodies of the cities like Delhi, Mumbai, and Varanasi have pointed to the act of spitting in the gutkha-related areas as the factor mainly responsible for the proliferating cleaning costs, thus demanding that specific resources be allocated for removing the stains and residues from roads, pavements, and building facades (MoHUA, 2021; SBM Urban Annual Report, 2022). These expenses are mostly covered by the local governments and taxpayers, the same as the tobacco-waste observational studies of WHO, which

lead to the conclusion that waste from tobacco products causes hidden costs for public systems that are borne by others.

Besides those that come from deteriorating the environment, there are also public health risks involved with SLT spitting. WHO and the National Centre for Disease Control (NCDC, India, 2020) have reported that spitting in public allows infectious diseases to spread like tuberculosis (TB), influenza, and COVID-19, because the saliva droplets may contain pathogens that infect and transmit diseases. The main issue, which is exacerbated by the existence of these problems, is that these practices usually happen in overcrowded urban areas where spitting in shared public places such as markets, transportation hubs, and government offices is a common occurrence. At the same time, this unhealthy habit goes against the goals of the national sanitation programs such as Swachh Bharat Abhiyan, where spitting is not only prohibited but also accounted for in the anti-littering and hygiene campaigns that it runs (MoHUA, 2021).

Moreover, the research projects cited in WHO's Tobacco and Its Environmental Impact: An Overview (2017) publication underline that the nicotine-rich residues from the SLT-related spitting may become a source of toxic chemicals for even tiny beings, thus negatively influencing urban biodiversity and becoming a source of polluted stormwater runoff, as well. The stains that can be seen on walls and pavements are not just unattractive things —they are the markers of the continuing chemical pollution that interacts with air humidity, sunshine, and dust, thus progressively damaging the public infrastructure surfaces. The action of SLT spitting can be considered an intersection of environmental, economic, and health externalities, thus walking hand-in-hand with each other. It raises the issue of municipal cleaning that needs more people, the chemical pollutants that get trapped in the ecosystem, and at the same time, it increases the risk of the spread of communicable diseases, especially in the condition of resource-poor Indian cities. Both the WHO and the Indian government agencies agree on the point that public awareness campaigns and strict enforcement of anti-spitting regulations are necessary to alleviate these complex problems.

Impact on Households

Addiction Cycles of Smokeless Tobacco

The tobacco plant carries the alkaloid nicotine in its leaves, which is responsible not only for several physiological changes in the body but also for developing tolerance to its own action with repeated use. It is the alpha-4 beta-2 nicotine acetylcholine receptor that mediates nicotine dependence. Nicotine acts on these receptors that mediate its dependence to facilitate the release of hormones like dopamine, producing pleasure and mood modulation. With tolerance development, higher nicotine levels are needed to produce effects that lower doses earlier produced, with significant tolerance developing even within a single day. Gutka contains higher nicotine than smoking cigarettes, showing how some smokeless tobacco products could have more adverse effects than even cigarettes.

In a study conducted on tobacco users, 24.6% of SLT users reported a six-month abstinence from tobacco. Almost all relapses occurred within 30 days and were consistent in patterns (Tobacco Use Among Hospitalised Patients in Mumbai. Nicotine Tob Res. 2020 March). As of 2016, 28.6% of

Indian adults consumed tobacco, with smokeless tobacco used by 21.4%. Although SLT products are more prevalent among males, certain products for oral application were used by females at higher rates.

Withdrawal symptoms are the effects of stopping the use of a product after an addiction has developed. The withdrawal symptoms of smokeless tobacco products include irritability, anxiety, increased eating, dysphoria, and more (Biological basis of tobacco addiction, Indian J Psychiatry, 2010 October). Abstinence from smokeless tobacco can lead to higher withdrawal responses and even impair cognitive performance. Among tobacco-dependent consumers, the consequences of abstaining from tobacco could trigger withdrawal responses within a few hours, and often peak within a few days.

Economic Impact: National level

As per data from 2017-18, the total economic costs related to the use of tobacco in India amounted to Rs. 1,773.4 billion, which accounted for approximately 1.04% of India's GDP. Smokeless tobacco products contributed to 26% of these costs. Men were responsible for approximately 91% of tobacco costs, while women were responsible for 9%. When the tax collection from tobacco is compared to the health expenditures, we can see that Rs. 100 received as tax on tobacco imposes a cost of Rs. 816 on society (Economic Costs Attributable to Tobacco Use in India, 2017-2018. Nicotine Tob Res. 2021 January).

Healthcare Costs

5.3% of the total private and public health spending in India is accounted towards direct health expenditure on treating tobacco-related diseases annually. INR 37,344 crore is the amount spent on direct medical costs due to tobacco-attributable diseases, while non-medical costs amounted to INR 6,181 crore. According to the Indian Council of Medical Research, in India, tobacco-related cancers accounted for 27% of the country's cancer burden for the year 2020. Further, females' relative contribution was much larger (56%) towards direct medical costs attributable to SLT than smoking (13%). Only 3% of the cost of premature mortality, however, is borne by females. This could be on account of lower annual average earnings and the lower present value of lifetime earnings for females in India compared to their male counterparts.

The relative share of the ≥70 age group is higher (10.6%) for SLT compared to smoked tobacco, where the contribution by the ≥70 is limited to only about 5.3%. Out of the total economic burden for smokeless tobacco, 89.3% of the costs were borne by those in the age group 35-69, while those 70 and above shared the remaining 10.7%. For the direct medical costs, females incurred more costs than males in both age groups. However, males incurred significantly more indirect costs than females in both age categories.

Annual Economic Burden by Tobacco Use & Gender (in INR million)								
Direct Costs				Indirect Costs				Total
Medical			Non-medical	Subtotal	Morbidity	Mortality	Sub-total	
Age	Gender	SLT						
35-69	Male	37,439	1,310	38,749	7,766	2,84,064	2,91,830	3,30,579
	Female	50,882	2,137	53,019	5,870	25,380	31,251	84,270
≥70	Male	17,083	640	17,723	1,917	8,011	9,928	27,651
	Female	19,178	651	19,829	1,405	460	1,865	21,694
≥35	Male	54,522	1,950	56,472	9,683	2,92,075	3,01,759	3,58,230
	Female	70,060	2,788	72,848	7,275	25,841	33,116	1,05,964
Sub-total		1,24,582	4,738	1,29,320	16,958	3,17,916	3,34,874	4,64,194

SOURCE: ECONOMIC COSTS ATTRIBUTABLE TO TOBACCO USE IN INDIA, 2017-2018. NICOTINE TOB RES. 2021 JANUARY

Productivity Losses

Lost income for households due to hospitalisation and hospital visits amounted to INR 6,181 crore, whereas the cost from premature death was estimated at INR 1,32,452 crore. Of the total economic burden of SLT, 27% is direct cost and 73% is indirect cost. Tobacco-related morbidity and mortality are high in the productive age group of 24 to 69 years. Of all the states, Uttar Pradesh, West Bengal, and Andhra Pradesh have higher expenditure, which aligns with the prevalent use of SLT products in these states being considerably higher among all the states in India.

In India, 52% of households reported some type of tobacco use. Also, 9% of households reported multiple forms of tobacco use, the dominant form being smokeless tobacco at 22%, followed by bidi at 17% and cigarettes at 4%. The range for households reporting any tobacco use across states was 19–77%, and multiple tobacco use ranged from 1% (states like Delhi) to 27% (states like Assam). There was considerable variation among states in the proportion of households reporting exclusive smokeless tobacco use, ranging from 1.7% to 57.5%. (Socio-economic patterning of tobacco use in Indian states Int J Tuberc Lung Dis. 2013 August).

Tobacco use and Poverty

Due to multiple reasons like lack of education and ease of access, the percentage of cost on consumption of tobacco as a percentage of total household expenditure in rural areas is considerably high. According to the results of a study in Puducherry, health expenditure on SLT among households with low socioeconomic status and no health insurance schemes was high. Households with low socioeconomic status had higher tobacco and alcohol expenditure. Increased expenditure on items like tobacco and alcohol among households was negatively correlated with food and education expenditure. (Expenditure on health care, tobacco, and alcohol: Evidence from household surveys in rural Puducherry (J Family Med Prim Care. 2019 March).

This sheds light on another trend, that money used for tobacco is a substitute for expenditure that could have been put towards healthcare and education. Spending on healthcare and sin goods has an overall negative influence on investment in the development of human capital and overall quality of life.

About 18.4 million people (1.5% of all Indians) are pushed into poverty due to either direct expenditures or healthcare spending related to tobacco. The likelihood of entering poverty increases by 3.4-3.7% in households that use tobacco products. Between 2000-2012, the prevalence of any tobacco use remained consistent in the poorest households (61.5% to 62.7%) and declined among the richest (43.8% to 36.8%). This could likely be a result of the government-run as well as non-governmental awareness campaign, supported by improved education in urban areas.

Farmer Exploitation

The cultivation of tobacco remains a source of livelihood for nearly 60 lakh farmers and 200 lakh farm labour. The majority of the tobacco cultivated in India and the world consists of Flue-cured Virginia (FCV) as opposed to fire-cured tobacco, which takes up to 4 weeks to dry up. The Central Tobacco Research Institute released training manuals for the cultivation of FCV tobacco in India in 2019. The major tobacco-producing states for different types in India are Andhra Pradesh (FCV, Burley, Oriental, Bidi Natu), Karnataka (FCV, Bidi), Gujarat (Bidi, Chewing, Rustica), U.P (Bidi, Chewing), Tamil Nadu (Chewing, Cigar), West Bengal (Hookah, Rustica) and Bihar (Chewing). Out of these Gujarat, Andhra Pradesh, and Uttar Pradesh account for around 45%, 20% and 15% of the country's total production respectively. Karnataka accounts for around 8% and the rest of the states account for about 2-3% of the country’s total tobacco production.

Why do farmers choose to grow tobacco?
Known for its ability to withstand drought, its hardiness, and short growth cycle, tobacco can be cultivated in soils that are not suitable for other profitable crops. In India, tobacco is cultivated across an area of 0.45 million hectares, which accounts for 0.27% of the total cultivated land. According to Tobacco Economics in India (2025) tobacco offers up to 300% more profit than other crops being farmed in major producing states. Tobacco also offers an export gateway to the farmers, something that other crops cannot offer.

Health Hazards

A study in Karnataka by CMDR found that the frequent and unabated use of chemicals was adversely affecting the health of the farmers, causing respiratory

ailments, skin irritation and allergies. Many types of pesticides are used in tobacco farming, including some containing heavy metals and others containing toxic compounds such as organophosphates; workers are exposed to these, which have adverse health impacts.
Occupational exposure to tobacco dust among women workers in Karnataka was associated with risk of developing cervical cancer. Women workers in Telangana were found to have low literacy and poor awareness of occupational health hazards and hygienic practices. Workers engaged in tobacco cultivation often suffer from an occupational illness known as "green tobacco sickness" (GTS), found to be caused by the absorption of nicotine from wet tobacco plants. Low birth weight babies, treatment for infertility, and premature menopause were also reported by women working in industry.

Child Labour

Although there has been no official report regarding the number of child labourers employed in the tobacco industry, Children from the ages of 5 work in tobacco fields. The work is hard and dangerous. The children have to prepare seedbeds by turning soil and cutting down trees. They remove weeds on the fields and bring out fertilizers and pesticides without protective gear. During harvesting the green tobacco leaves, children are exposed to the risk of contracting nicotine poisoning because nicotine can enter the body through the skin. Even small amounts of the neurotoxic substance can cause a severe nicotine poisoning called Green Tobacco Sickness. It causes nausea, vomiting, headaches, dizziness and episodes of weakness.

Lack of Transparency on Tobacco Auctions

In the case of Indian tobacco markets, specific charges of corruption directed at Tobacco Board officials are used to express the resentment tobacco farmers and traders feel about the broader direction of the state's regulatory actions.

Before the Tobacco Board began conducting auctions for cigarette tobacco in the mid-80s, Indian farmers relied on private-sector traders to grade and price tobacco. This dependence allowed traders to set grades and prices in their favor. In the most egregious cases of exploitation, traders reneged on payments to farmers. Responding to the outcry that followed, the Board introduced state-mediated auctions for cigarette tobacco. Alongside the new auction system, the Board introduced a simple alpha-numeric grading system to enable farmers to grade their own tobacco. The Board also required all tobacco traders and farmers to register with them before participating in auctions, mediated all trade in cigarette tobacco, and maintained a written record of every transaction.

But the Board has incentives to erroneously overstate and understate grades. If the Board assigns a bale a grade higher than its true grade and buyers take the Board's evaluation at face value, the tobacco bale will be sold at a higher price. The farmer who owns the bale will earn a higher price for lower grade tobacco. At the same time, the Board can assign a lower grade to a bale, only to alert the buyer to this fact during bidding. The buyer will then have to pay a higher price for the bale, and the auction record will reflect a higher price for what has been registered as lower-grade tobacco. In both cases, the Board will get credit from the Central Government for selling tobacco at higher prices.

In India, the market for tobacco is an oligopsony. A handful of domestic

companies and exporters dominate markets, giving them inordinate price-setting power. The Board has limited abilities to push prices higher and cannot consistently assure farmers of a fair price. As a result, farmers are forced to accept a lower price or hold onto perishable crops until a buyer, who will give a better price comes along, with little certainty if or when this will happen.

In 2011, the board introduced e-auctions relying on technology to enact market transparency without addressing underlying issues such as the lack of market competition, price stagnation, and limited state capacity to influence prices has worked in favor of traders and undermined the state's capabilities. The double-blind process does not allow officials to spur competition among buyers by pitting them against each other. With reduced state oversight, buyers can hide behind handheld devices and collectively refrain from bidding, driving prices down in the process.

Loans

A CMDR study of households that had taken crop loans, for tobacco cultivation indicates that more farmers take crop loans for growing tobacco than for other crops. The study also indicated the possibility of many tobacco farmers with small holdings being in a debt trap of moneylenders and commission agents. This led them into a vicious cycle of tobacco cultivation with increased use of fertilizers and other inputs to get the maximum productivity(ready cash) out of the tobacco produced.

Soil Erosion

The production of tobacco includes nearly seventy species of the crop that are intensively grown in rainforest areas; it has led to the depletion of more than 4.5 lakh hectares of forest land over 15 states, including more than 45% in Andhra Pradesh and 26% in Karnataka.

The industrial processing of tobacco also further causes air pollution. The crop, which requires high chemical pesticides, is also erosive, practised in mono-crop patterns that reduce the pH level of the soil and drain the fertility of the land, also contributing to soil erosion. As a result of severe soil erosion in tobacco-growing regions, the water retention in soil also becomes poor. And there is also evidence to suggest that tobacco growing depletes soil nutrients at a much faster rate than many other crops, thus rapidly decreasing the fertility of the soil. Since it depletes the nutrients at a heavy rate, tobacco requires a much larger input of chemical fertilizers, especially potassium.

Cost of Rehabilitation

Need for Rehabilitation

The Indian economy loses Rs 816 for every Rs 100 which the government collects through excise taxes on tobacco products. The Economic Cost of all diseases and deaths stemming from tobacco usage between 2017 and 2018 for the age group of 35 and above is US$27 billion. The tax revenue from tobacco during 2016-17 only reached 12.2% of the total economic costs. Tobacco-specific diseases require direct healthcare treatment costs, which represent 5.3% of India's total healthcare expenses that include both public and private spending.

Rehabilitation needs to be conducted because economic costs and medical expenses, as well as costs from various indirect effects and premature death expenses, need to be considered. (World Health Organisation).

Consumer's Perspective

The Global Adult Tobacco Survey of India (2016-17) discovered that about 267 million tobacco users in India, which constitutes 29 per cent of the adult population. The World Health Organisation reports that tobacco-related diseases lead to approximately 1.35 million annual deaths among tobacco users. The users of tobacco products spend their money on unnecessary items, which results in reduced educational and medical resources, while their health gets damaged.

The Task Force on Tobacco Control Report provides different pharmacological methods which assist people in quitting tobacco use. The system of Nicotine Replacement Therapy (NRT) provides users with various nicotine delivery methods through its products, which include nicotine gums, lozenges, patches and nasal sprays. Users who combine multiple nicotine products experience superior results according to research.

Rehabilitation Initiatives for Consumers: District hospital networks are facilitating free medication and counselling services via Tobacco Cessation Centres created by the National Tobacco Control Programme.
A toll-free number service 1800-112-356 is offered by the Ministry of Health and Family Welfare. It provides this service through the National Quitline Services and is available in multiple languages.
The Government, in January 2016, also established the M-Cessation programme to help people who wish to quit tobacco. The people who want to quit tobacco would simply need to give a missed call to the toll-free number 011-22901701.

Producer's Perspective

India employs approximately 4.57 crore people who work in the tobacco industry through direct employment and indirect connections. The tobacco control rules, together with the public's increasing understanding of tobacco use, will result in job losses for people who work in this particular field. A Study conducted on 683 tobacco field workers in Gujarat found that 47% of these workers developed Green Tobacco Sickness (GTS), a type of nicotine poisoning caused by handling wet and uncured tobacco leaves. Tobacco industry workers must pursue other employment opportunities because their work status threatens both their health and their financial stability. (MoHFW, 2022) A primary survey which researchers conducted among tobacco workers showed that 90% of workers would choose to switch to different employment options if they received adequate training.

Rehabilitation Initiatives for Producers: The Kerala Government established a program which the Kerala Beedi and Cigar Workers Welfare Fund Board administers. The program received funding of Rs 20 crore to help rehabilitate tobacco industry workers who wanted to pursue new job options, which included poultry farming, stitching centres, mobile recharge centres and fancy shops.
The Right Sharing of World Resources (RSWR) provided grants to Rural Women Development Trusts and Social Integrated Rural Development Society. The Trusts and Society gave out loans to female bidi rolling workers who wanted to start their own businesses and leave the tobacco industry.
The Voluntary Health Association of India established a computer literacy and skill development program for children who worked in the tobacco industry.

FINAL BALANCE

WEIGHING INDUSTRY PROFITS AGAINST THEIR BROADER CONSEQUENCES.

COST BENEFIT ANALYSIS

Economic Benefits

Government Revenue: The tobacco industry is one of the highest revenue-generating industries for the government due to its being a sin good, i.e, multiple levels of taxes are levied upon it. The new tax rates brought in by the 56th GST Council levy a 40% tax on tobacco products; however, the implementation of these rates has currently been deferred till the loan and interest payment under the GST compensation cess mechanism are discharged. For now, tobacco products are charged at a 28% GST rate along with an additional compensation cess for all products except bidis and smokeless tobacco. The total revenue from excise in the year 2016-17 amounted to INR 217.19 billion. The tax contribution to the government stood at 0.99% of GDP. According to the World Health Organisation, for every INR 100 that was received as excise taxes, India's economy lost INR 816, highlighting the huge gap between the gains and the costs.

Employment: Measuring the exact number of workers employed in the tobacco industry is difficult, as a major portion of these workers are employed in the informal sector, operating in small-scale, home-based and unregistered settings.

According to the **National Sample Survey Organisation (NSSO)**, there is an estimated number of 7 million workers that were directly or indirectly engaged in the tobacco industry in India in 2004-05, constituting 1.5% of the overall formal sector employment. Another study suggests that 725 million workers are employed in the tobacco sector, the majority of them working as bidi rollers and tendu leaf pluckers. However, this figure may understate the number of bidi workers, which could revise the total employment to 865 million. Only a small portion of these figures are engaged in the formal tobacco sector.

Exports: India is the world's second-largest exporter of tobacco after Brazil. It exports tobacco products to 200 countries worldwide, major ones being the UAE, Belgium, Indonesia, Egypt, the USA, Turkey, the Republic of Korea, Russia, and a few other nations. Most of the exports are usually of low-value raw form, with the primary exported product being raw leaf. During the financial year of 2024, India exported 1,43,316 tonnes of FCV tobacco, which amounts to a monetary value of INR 5,932 crore. The next financial year (i.e, 2025), from the month of April till October, the exported amount was 90,773.01 tonnes of FCV tobacco, amounting to INR 4,502 crore. Similarly, India exported a value of INR 2603 crore of manufactured tobacco, which was around 105,372 tonnes in FY '24 and a value of INR 9,954 crore of around 2,22,840 tonnes in FY '25 (April-October). In FY '23 - FY '24, India exported approximately USD 395 million worth of processed tobacco products and 250,000 tonnes of raw tobacco, estimated to be worth USD 1.1 billion.

India's exported tobacco products during FY '24 were valued at USD 1449.54 million, concluding that these exports serve as a major source of foreign exchange.

Contribution to GDP: The Smokeless Tobacco market in India was estimated to be valued at USD 1.48 billion in 2024 and is expected to rise to USD 2.73 billion in 2030. This amounts to a CAGR of 4.87%. The gross value added by the tobacco industry in 2018-19 was INR 287.96 billion, constituting about 1% of total manufacturing GVA. The share of smoking tobacco in this is estimated to be 82%, which is followed by SLT and processing.

Social Costs

In the previous sections, we have provided a qualitative breakdown of the social costs of SLT. Here, we quantify them to come full circle. We would be continuing with the following formula for our cost estimation under cost-benefit analysis.
Total Economic Cost=Direct Medical Costs+Indirect Costs (Morbidity + Mortality) (source: MOHFW).

Unlike developed nations, where healthcare costs (Direct Costs) dominate, in India, the loss of human productivity drives the economic loss. The direct and indirect costs are highly imbalanced, with ~78% as indirect costs (lost wages, diseases, and premature mortality), highlighting a catastrophic loss of human capital and productivity.

Productivity Health Crisis

Oral Cancer Risk: SLT is the primary cause of oral cancer in India, with recent genetic studies indicating that the disease can develop in as little as 10 years.

TB Link: Tobacco use is strongly linked to Tuberculosis (TB), with TB treatment costs accounting for a significant percentage of total tobacco-related healthcare expenditure.

Overview		
Cost Component	**Magnitude**	**Metric**
Total Economic Cost	(INR 1773.4 billion} ($27.5 billion)	1.04% of India's GDP
SLT Contribution	(INR 461.08 billion) $ (approx.)	26% of the total cost
Fiscal Inefficiency	INR 816 in losses	For every INR 100 collected in taxes.
Premature Mortality	Approx. 1.35 million deaths annually	Underestimation of cost, considering premature mortality and the number of workdays and potential wages that could have been earned are lost.

Cost Category	Estimated Value (INR Crores)	% of Total	Analytical Inference
Direct Medical Costs	₹ 28,189 Cr	16%	Includes hospitalisation, outpatient care, and drugs. This is the "visible" cost to the healthcare system.
Indirect Morbidity	₹ 10,758 Cr	6%	Value of days lost from work due to tobacco-related illness/hospitalisation.
Indirect Mortality	₹ 138,395 Cr	78%	The dominant factor. The Net Present Value (NPV) of future income lost due to premature death.
TOTAL	₹ 177,342 Cr	100%	1.04% of India's GDP

SOURCE: R.M. JOHN ET AL. (2021), COMMISSIONED BY MOHFW

Based on the modelling used by the ASTRAMOD study (2024), it is projected that the lifetime cost of treating SLT-related diseases in India will exceed US $19 billion (approximately ₹1.5 lakh crore) if the status quo remains unchanged.

Per-Person Savings: Eliminating SLT use would result in an estimated healthcare cost saving of roughly US $18 per individual over their lifetime. While this seems small per person, when scaled across India's population of 1.4 billion, it represents a massive national saving.

Human Capital Loss

The greatest economic loss is not medicine, but manpower. Premature death and disability (morbidity) account for 78% of the total economic cost.

Impact on Youth: The burden is heaviest on the younger population, who are yet to initiate or are in the early stages of addiction. The model shows that if SLT were eliminated:

- A typical 15-year-old Indian male would gain 0.18 life years (roughly 2+ months of additional life expectancy).
- He would also avert 0.19 DALYs (years of healthy life lost to disability).

Poverty Amplification: SLT use pushes approximately 18.4 million Indians into poverty annually. In low-income households, spending on SLT decreases the budget for essential food and education, leading to a cycle of malnutrition and illiteracy.

Data from the Household Consumption Expenditure Survey (2022-23) revealed a disturbing trend in rural India.

- Tobacco Spending: Rural households spent approximately 3.79% of their total expenditure on tobacco/intoxicants (up from 3.21% in 2011-12).
- Education Spending: In contrast, spending on education in rural areas fell to 3.30% (down from 3.49%).

The Trade-off: For the first time, rural Indian households are spending more on tobacco and intoxicants than on the education of their children.

Tobacco is an addictive good with low price elasticity. When household incomes fall due to inflation or unemployment, tobacco consumption remains constant while other expenditures are decreased to make up for it. Households spending on tobacco allocate approximately 20% less to education and 15% less to high-nutrient foods compared to non-tobacco households of similar income.

The data proves that labour productivity is the primary casualty of SLT. The economy loses ₹4.9 in productivity for every ₹1 spent on healthcare.

This is a direct blow to India's "Demographic Dividend, since it not only kills people, it kills them exactly when they are most economically productive, i.e., in the peak working age of 35-69.

Environmental and Producer Exploitation

- **The Plastic Crisis:** SLT products are the single largest contributor to tobacco-related waste, accounting for 87% of plastic and 57% of paper waste in the sector. This amplifies the expenditure on waste management. The cost of managing this waste is borne by Municipal Corporations (public tax money), effectively serve as a hidden subsidy to the tobacco industry.
- **Occupational Hazards:** The cost of production includes the health of the farmer. Harvesters, including children, frequently suffer from Green Tobacco Sickness (GTS), which is acute nicotine poisoning absorbed through the skin. Studies in major tobacco-producing states of Karnataka and Andhra Pradesh indicated a prevalence rate among farmers ranging from 8.2% to over 50% during harvest seasons of tobacco.
- **Resource Depletion:** Tobacco cultivation is resource-intensive, requiring up to 8x more water than food staples like potatoes, depleting groundwater, which could have been used to produce other cash crops. Tobacco requires 2925 m3/tonne of water. In comparison, food crops vital for India's security require significantly less. Tobacco depletes soil potassium at a rate six times higher than equivalent rotation crops.
- **Loss in Forest Cover:** Between 1962 and 2002, India lost an average of 1,700 hectares of forest annually, specifically

Metric	Value	Context
Rural Spending Shift	3.79% (Tobacco) vs. 3.30% (Education)	Households now prioritise addiction over education.
Forest Loss (Karnataka)	300 Hectares / Year	Direct loss due to fuel wood for curing.
Plastic Waste Share	87%	Percentage of tobacco plastic waste from SLT.
Economic Loss	₹816 Loss	For every ₹100 gained in tax revenue.
Poverty Creation	15 Million People	Pushed into poverty annually by tobacco costs.

due to tobacco cultivation and curing requirements. In Karnataka alone, approximately 300 hectares of forest land is lost every year to provide fuel wood for curing Virginia tobacco.

Cost & Benefit Analysis Table				
Category	**Economic Gains**		**Social Costs**	
Output	132629460000	Industry revenue	281,890,000,000	Healthcare expenditure on SLT-related diseases
Employment	20,000,000	Direct and indirect jobs	107,580,000,000	Informal labour exploitation, job precarity
Fiscal	750,000,000,000	GST, Excise, Licensing	500,000,000	Government spending on public health treatment
Social	63,130,000,000.00	Income for farmers/retail	1,383,950,000,000	Addiction, Premature deaths, Burden on families
Net Outcome	945,759,460,000	Short-term economic gain	1,773,920,000,000	Long-term health + social losses to society
Net Loss	828,160,540,000			

Estimation of Costs	
Social Costs	**In INR**
Healthcare Burden	281,890,000,000
Productivity Loss	107,580,000,000
Premature Death	1,383,950,000,000

Estimation of Revenues	
Economic Gains	**In INR**
Market Output	132,629,460,000
Employment Generated	20,000,000
Government Revenue	750,000,000,000

Executive Summary: What Do the Numbers Say?

- **Total economic cost (all tobacco-related, as computed):** ₹177,342 crore (₹1,773.42 billion, that is, approximately ₹1.77 trillion).
- **Share attributable to SLT (given):** ₹46,108 crore (~₹461.08 billion), which is in turn, ~26% of the total cost.
- **Cost as a share of GDP (given):** 1.04% of India's GDP.
- **Cost composition:** Direct medical costs approximately 16%, Indirect morbidity ~ 6%, Indirect mortality ~ 78% (mortality is the dominant driver).
- **Fiscal inefficiency**: For every ₹100 collected in tax, ₹816 of broader economic loss occurs (i.e., net fiscal burden > tax receipts).
- **Human toll:** ~1.35 million premature deaths per year, attributed (used to compute the very large mortality cost).
- Environmental/production externalities (waste, water, deforestation, GTS) add further unpriced costs and reinforce that the fiscal figures are conservative.

Key interpretations

Mortality dominates the economic loss: At 78%, the NPV of lost future income from premature deaths is the single largest component. This means policies reducing premature deaths will yield the largest economic returns.

Productivity loss > healthcare costs: The economy loses ~₹4.9 in productivity for every ₹1 spent on healthcare for SLT- this flips the usual "healthcare-dominant" story seen in richer countries. In India, lost wages & future earnings are the primary loss.

SLT-specific burden is material: Even if SLT is "only" 26% of the total tobacco cost, that is ~₹46k crore. Policy targeting SLT can yield substantial national savings.

Per-capita lifetime health savings (stated): US$18 per person if SLT were eliminated. These per-person savings are small, but they become very large when summed up for 1.4 billion people (aggregate savings scale to tens of billions USD).

Fiscal conundrum: The excise/GST revenues are visible and substantial, but if we compare them with the costs of lost output, lower labour supply, and higher welfare/waste costs, the overall net public finance position is profoundly negative (therefore, the 816 loss for every 100 revenue).

Ratios

- SLT share of total economic cost: 461.08/1,773.42 ~26%
- Direct: Indirect (Morbidity+Mortality) split: 16%: 84% (indirect dominates).
- Mortality cost in crores: Indirect mortality = ₹138,395 crore (~₹1.38395 trillion). This single term accounts for ~78% of ₹177,342 crore.
- Healthcare vs productivity ratio: Productivity losses ~4.9x direct healthcare costs.
- Per-tax inefficiency: Net economic loss per ₹100 tax = ₹816 (i.e., short-run tax receipts are dwarfed by the economy-wide loss).

Social Impacts

Age Bias: Losses concentrate around the economically prime age (39-69)

How? SLT-related diseases (oral cancer, CVD, COPD, TB complications) peak between ages 35–69, the phase of highest labour-force participation and highest lifetime earnings.

Significance: Deaths/disability in this band erase the largest chunk of future income. This is why 78% of the total economic cost = indirect productivity + mortality loss.

It directly weakens India's demographic dividend.

Poverty and Household Trade-Offs (15-18 million people pushed into poverty)

How?
SLT is addictive and price-inelastic. Households do not reduce consumption even when income falls.
So spending is cut from essentials instead:

- Rural households now spend 3.79% on tobacco vs 3.30% on education.
- Tobacco-consuming households spend 20% less on education and 15% less on nutritious food than in non-tobacco households.

Significance: Money shifts away from human capital formation (education + nutrition) to an addictive good → creating a long-term poverty trap across generations.
This is pure welfare loss, not investment.

Premature Mortality (1.35 million deaths annually)

How? SLT causes diseases that kill early, especially oral cancer.
India has a young tobacco user base. So deaths occur long before retirement age.

Significance: Every premature death removes decades of potential earnings.
This is why mortality alone forms ₹138,395 crore (78%) of the total cost. Economically, SLT destroys human capital at peak productivity.

Morbidity Cost (Workdays wiped out)

How? SLT causes chronic conditions requiring repeated hospital visits, long treatments, and recovery periods → especially oral lesions, TB complications, and cardiovascular issues.

Significance: Lost working days = lost wages + lower household income + lower national output.
This is the ₹10,758 crore morbidity loss, representing productivity drain even before death occurs.

Direct Medical Costs (₹28,189 crore)

How? Hospitalisation, drugs, surgeries, reconstruction for oral cancer, TB treatment, and chronic disease care.

Significance: This is the "visible" cost burdening an already stretched public health system.
It leads to the crowding out of government spending on other welfare sectors like education or disease prevention.

Plastic Waste & Environmental Damage (87% of tobacco plastic waste from SLT)

How? SLT products use small single-use sachets, which are high volume, low weight, and cannot be recycled profitably and end up in municipal waste.

Significance: Municipalities pay public money to manage this waste, effectively a hidden subsidy to SLT firms.
Environmental cleanup costs get turned into a social burden rather than being an industry cost.

Forest Loss & Resource Depletion (300 ha/year lost in Karnataka)

How? Among others, fuel wood used for curing tobacco, together with high water requirement (2925 m^3/tonne) and soil nutrient depletion (6x potassium loss), leads to this.

Significance: It leads to a significant decrease in agricultural productivity, strains groundwater, and accelerates deforestation.
Opportunity cost: land and water could produce food crops or higher-value, sustainable crops.

Occupational Hazards (GTS prevalence up to 50%)

How? Farmers start absorbing the nicotine through the skin while handling wet tobacco leaves, which becomes a leading cause of acute poisoning among the cultivators. (Green Tobacco Sickness).

Significance: Worker illness = lower farm productivity + medical costs + income loss.
Since many workers are children and women in informal work, this perpetuates intergenerational health and poverty issues.

Human Capital Loss (Youth Impact)

How? Modelling shows eliminating SLT gives the average 15-year-old male 0.18 extra life years and averts 0.19 DALYs.
Youth are early starters, which means earlier addiction, which means longer exposure, which in turn means higher lifetime disease risk.

Significance: Loss of healthy youth reduces future labour supply, skills formation, and income-generating capacity and weakens future GDP growth.

Conclusion

The CBA shows a large, net economic loss driven overwhelmingly by premature mortality and productivity losses. Targeted public-health interventions, combined with fiscal reform and supply-side transition, are not only welfare-improving but also economically justified: the returns from reducing SLT-related mortality and morbidity are likely to far exceed the fiscal benefits of the industry's present taxes.

ECONOMIC EVALUATION

AN ASSESSMENT OF INDIA'S SLT INDUSTRY

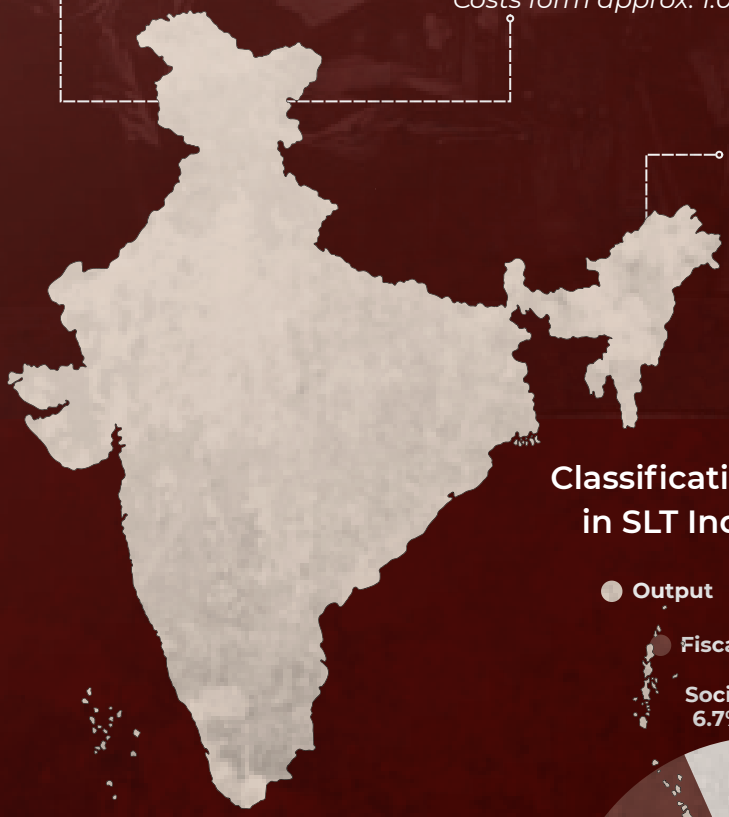
REVENUES (INR)

Government Revenue	750 Bln
Market Output	132.6 Bln
Employment	0.2 Bln

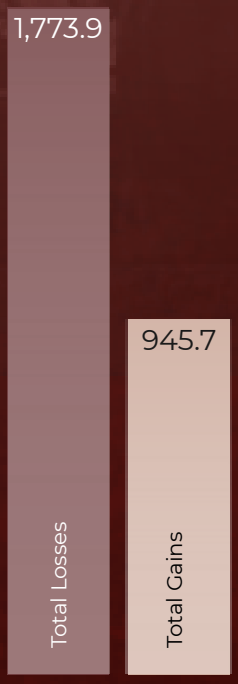
COSTS (INR)

Premature Deaths	1383.9 Bln
Healthcare Burden	281.8 Bln
Productivity Loss	107.5 Bln

Costs form approx. 1.04% of India's GDP



725 Million workers are employed in the tobacco sector



(in INR Bln)

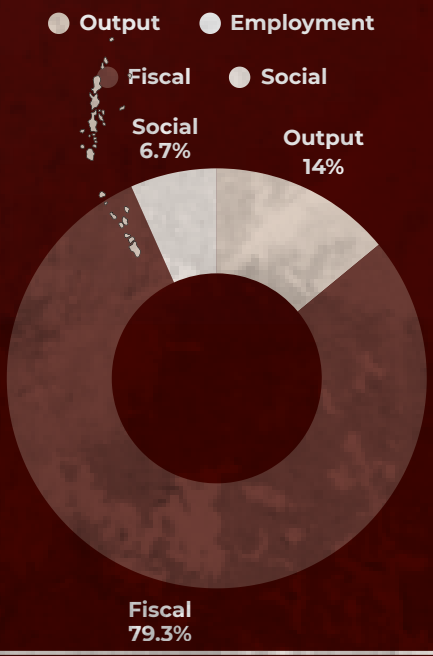
Losses are

1.87x

the profits

Distribution of total gains and total losses

Classification of Toal Gains in SLT Industry in India

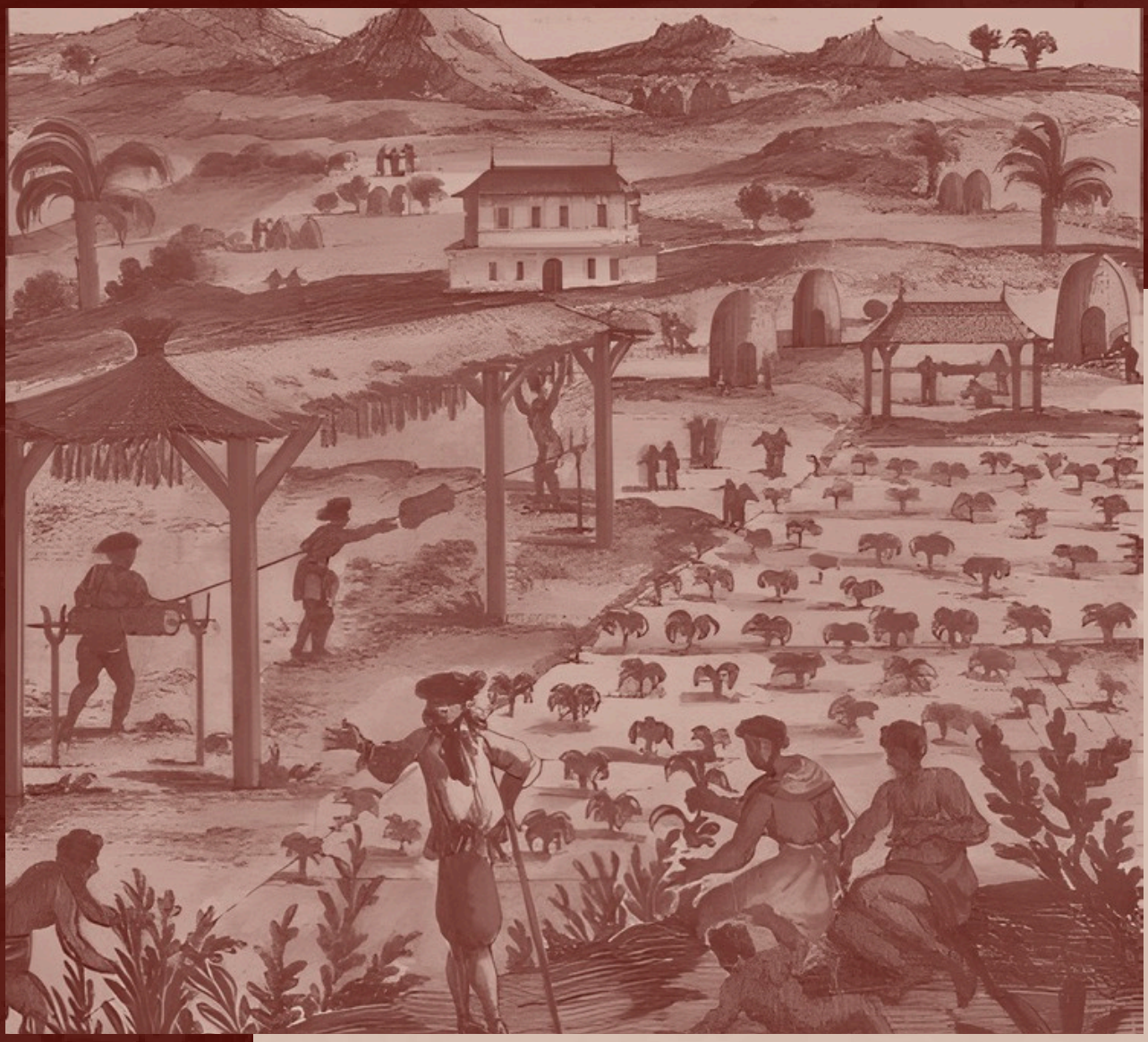


DIRECT MEDICAL COSTS: 281 Billion

NET LOSS: 828 Billion

According to the World Health Organisation, for every INR 100 collected by the government through excise taxes, the Indian economy incurred losses amounting to INR 816. This stark disparity underscores a significant imbalance between the revenue generated and the broader economic costs borne by society.

INDIA'S APPROACH



UNDERSTANDING THE POLICIES AND REGULATIONS SURROUNDING SMOKELESS TOBACCO IN INDIA.

INDIAN POLICY ANALYSIS

Existing Regulatory Framework

We have already understood in the initial sections that the increase in social stigma around cigarettes has led to an increase in the consumption of SLT products, as people believe them to be a “healthier alternative” to smoking, being ignorant of the harmful effects that SLT consumption has on the health and the family structure of the person consuming them. In order to control the increase in tobacco consumption among people, the government has started a large number of initiatives.
The policies that were initiated in the years 1987-2001 were directed towards the regulation of SLT through warnings on the products and prohibition of spitting in public places and on streets, and the Ministry of Broadcasting regulating promotion and advertising of tobacco-related products.

The existing policy framework incorporates a multifaceted approach designed to curb the harmful effects that SLT consumption has, with the help of regulations like NTCP, COTPA, and the provisions of Food Safety Standards backed by taxation, cessation, and promotional and marketing policies.
While many tobacco control measures are achieved via regulation, another aspect that needs deliberate action is the careful and effective enforcement.

The effective enforcement is not always achieved due to the constant halt by the tobacco industrialists, who in the past have managed to delay and dilute the provisions concerning tobacco control with the help of protracted litigation.

It is only since 2003-4 that the tobacco control activists started filing petitions to seek the implementation and demand to preempt any petition by the tobacco industrialists, which they do to cause implementation delays in the regulations. So, this section would cover the recent reforms and litigations by the government to control tobacco use among the stakeholders.

COTPA 2003

COTPA is the Cigarettes and Other Tobacco Products Act, 2003. It is a comprehensive law taking into account aspects of the prohibition of production, supply, distribution, and advertisement, which was only enacted in 2003 by the Indian government. The act is applicable to all products that include tobacco in any amounts, and it covers, in various sections, prohibition of smoking in public spaces, prohibition of advertisements of tobacco, prohibition of sale to minors, and restrictions on trade in production, supply and distribution.

To ensure compliance with the regulations mentioned in the act, several penalties are also mentioned in the act. A person who manufactures tobacco products and fails to adhere to the norm related to warnings on packages on first conviction shall be punished with up to 2 years in imprisonment or with fine which can extend to Rs. 5,000, in case of subsequent conviction shall be punished with up to 5 years in imprisonment or with fine which can extend to Rs. 10,000 PubMed Central.
A fine of up to Rs. 200 can be imposed for smoking in public places, selling tobacco

products to minors, or selling tobacco products within a radius of 100 metres from any educational institution, Tobacco Control Laws.
The Act also gives power to any police officer, not below the rank of a sub-inspector or any officer of State Food or Drug Administration or any other officer, holding the equivalent rank being not below the rank of Sub-Inspector of Police for search and seizure of premises where tobacco products are produced, stored or sold, if he suspects that the provision of the Act has been violated.

Litigation under FSSA

It was the Food Safety and Standards Act (2006) that led to the establishment of FSSAI as the regulatory body overseeing the enforcement of food safety standards. The Food Safety and Standards (Prohibitions and Restrictions on Sales) Regulations, 2011, prohibit the use of tobacco and nicotine in any of the food products.
When the initial ban on tobacco use under the act was enacted in some of the states, it met with several suits by the tobacco dealers and producers. The first ban under FSSA was implemented in the state of Madhya Pradesh, and it met with a lawsuit by Ghoi Foods Private Limited in the Gwaliour bench of the Madhya Pradesh High Court in 2012. Similarly, the regulation was challenged in the states of Kerala, Bihar, Karnataka, and also in the courts of Bombay and Delhi by tobacco industrialists, indicating that the passing of such a regulation always meets with challenges, as we discussed earlier. However, all the Hon'ble High Courts rejected the plea of the gutka manufacturers to hold the imposition of such a ban.

SLT: Marketing and Advertising Policy

With the enactment of COTPA 2003, the ban on advertisements incorporating tobacco products (including SLT) was imposed, and section 5 of the act also imposed restrictions on the point of sales.
But the existence of enforcement gaps allowed for the illicit advertising to continue.
The Tobacco brands aim at stretching the variety of products that they offer in the market and invest a vast amount of money to advertise their non-tobacco products like *pan masala* and ensure their visibility in the market, in this way. They phrase the advertisement in a way, as if they are addressing mouth fresheners and no tobacco content, to mislead the consumers.
The packaging is made to ensure the incorporation of the element of "freshness", just to manipulate the consumers and get rid of the legislation process.

The branding of non-tobacco products by tobacco industries is in itself harmful since these non-tobacco products act as a gateway for stakeholders in their youth and kind of instigates them to try out tobacco.
Point-of-sale advertisements often omit or minimise health warnings, and widespread use of billboards, hoardings near schools and public places, and product displays keep visibility high despite regulations.
A major area of concern is the use of attractive colours and messaging tied to cultural significance, and the brands try to target youth and vulnerable communities through appealing flavours, which, in a way, normalise tobacco use and turn it into a daily habit in many regions.

The Goa Case Study

Goa was one of the first Indian states to ban SLTs, and during the enforcement of this SLT ban, too, the SLT industrialists challenged the validity of the act in front of the Bombay HC at the Goa bench. This petition was also moved to SC, but no relief was granted, and gutka remained banned in the state of Goa.

Challenges and Opportunities

Lack of any comprehensive tobacco control measures before COTPA and the adoption of the WHO FCTC, 2004, was a challenge for tobacco control litigations in India.

The implementation of COTPA 2003 has led to a significant impact on the level of tobacco usage and the control that the government has on the industry. However, the tobacco control measures initiated by the government are always met with the challenges posed by the tobacco industry at all levels of government.

One major challenge to COTPA is the relatively weak penalties for violation of its various sections due to a mismatch with the rising inflation.

An industry tactic that the tobacco industrialists follow is to challenge tobacco-related laws at multiple high courts to increase the burden on the concerned government authorities and increase their accountability in the court to cause delays with litigation.

In contrast to this, the litigation caused by the tobacco control activists has thwarted the tobacco industry's efforts to delay and dilute the control efforts. A notable example of this can be the health warning that was issued by the MoFHW (Ministry of Health and Family Welfare) in compliance with the directive of the Hon'ble High Court of Himachal Pradesh in response to the public interest litigation. More than 50 cases were filed by the tobacco industry against the pictorial warnings rules framed between 2006 and 2009 in multiple high courts across the country.

Additionally, as per a study done on the compliance of various sections of COTPA 2003, the compliance for Sections 4, 5, 6b, and 7 was 71.97%, 58.95%, and 51.08%, respectively.

A study in 307 schools and colleges across 12 districts in 5 states found that the observed educational institutions in districts of Karnataka reported on average 4% violations, whereas all the other districts reported more than 74% violations of Section 6b of COTPA. This aligns with previous data suggesting the low production and consumption in Karnataka as compared to other states.

The gaps in COTPA 2003 include allowing designated smoking areas in airports, hotels, and restaurants, allowing point-of-sale advertising and tobacco product displays, no clear provisions for single-stick sales of cigarettes and bidis, weak penalties, and affordable fines.

Thus, the major problems faced by the government are the implementation delays that are caused by the tobacco industry through the use of such tactics. It is important to build upon the progress made by the 36 states and union territories in the ban on SLT and tobacco-related products. Enforcement agencies must give grassroots-level implementation of such regulations.

ACROSS BORDERS

A COMPARATIVE LOOK AT SMOKELESS TOBACCO INDUSTRIES ACROSS DIFFERENT COUNTRIES.

GLOBAL TAKE

Globally, more than 300 million people consume smokeless tobacco, and most of the SLT users belong to lower to middle-income countries, which results in substantial morbidity and mortality across these areas. In response to this global tobacco epidemic, on 21st May 2003, the WHO FCTC was adopted by the World Health Assembly and entered into force on 27th February 2005.

The WHO FCTC was opened for signature from June 16 to 22, 2003, in Geneva and subsequently at the United Nations Headquarters in New York. Now, the agreement is no longer available for signature, but has 168 signatories, thus making it one of the most accepted treaties in the history of the United Nations.

The policy framework of the WHO FCTC revolves around controlling both the demand and the supply side determinants. The following are the areas of action under the WHO FCTC.

Demand-Side Measures Under the WHO FCTC

Price and Tax Measures (Article 6)

This instructs the parties to implement tax policies, and wherever appropriate, price policies, on tobacco products, as well as restricting or prohibiting, as appropriate, sales to and/or importations by international travellers of tax and duty-free tobacco products. Parties will share information on the taxation of tobacco products and changes in tobacco consumption through their periodic reports to the Conference of the Parties as per Article 21.

Non-price measures (Article 7 and Article 8-13)

This states that Each Party is required to take steps locally, legislatively, executive, administratively, or in any other way to ensure the fulfilment of the obligations set out in Articles 8 to 13 and, as the case may be, to coordinate their actions mutually or through the relevant international organisations for the purpose of putting them into effect.
This includes:

- Article 8: Protection from Exposure to Tobacco Smoke
- Article 12: Education, Communication, Training, and Public Awareness

Regulation of the contents of tobacco products (Article 9)

Every Party shall, as per its national law, be responsible for the adoption and implementation of effective measures, such as legislative, executive, administrative, or other measures that compel manufacturers and importers of tobacco products to disclose to the authorities information about the contents and emissions of tobacco products. Besides that, each Party shall take steps to publish information about the harmful components of the tobacco products and the pollutants that may be released from them.

Packaging and labelling of tobacco products (Article 10-11)

Which states that each party will ensure that:

- Packaging and labelling of tobacco products must not, in any way, promote a tobacco product through false, misleading or deceptive means or by means that are likely to create an erroneous impression of the product's features, health effects, risks or emissions. This includes any word, description, trademark, figurative or any other sign which, directly or indirectly, conveys the false impression that a certain tobacco product is less harmful than other tobacco products. These can be terms like "low tar", "light", "ultra-light", or "mild", etc.

- Each unit packet and package of tobacco products and any outside packaging and labelling of such products also carry health warnings describing the harmful effects of tobacco use, and may include other appropriate messages.

Advertising, Promotion, and Sponsorship Bans (Article 13)

After acknowledging that marketing has a major impact on the consumption of tobacco, the Convention demands a comprehensive prohibition of all kinds of tobacco advertising, promotion, and sponsorship.

In situations where full bans are still allowed by constitutions, Parties are required to implement the most stringent restrictions possible.

Furthermore, steps taken to control advertising and promotion should include cross-border activities in order to stop the escape through foreign media and digital platforms.
Such measures are intended to lessen the appeal of tobacco products as well as their acceptance by society.

Supply-Side Measures Under the WHO Framework Convention on Tobacco Control

The WHO Framework Convention on Tobacco Control (WHO FCTC) is not only concentrating on demand reduction; it is also insisting on tough supply-side measures. The segments of the treaty (Articles 15–17) define three fundamental methods that, by regulating the manufacture, distribution and sale of tobacco, intend to reduce its availability and accessibility.

Illicit Trade in Tobacco Products (Article 15)

The agreement sees the abolition of illicit trade of all kinds as the very first measure for global tobacco control. Illicit trade encompasses smuggling, counterfeiting, and illegal manufacturing (Global Alliance for Tobacco Control). To this end, Parties should take the necessary steps through legislation, administration, and law enforcement to keep track of, control, and record tobacco products' trade and also to react accordingly in cases of violations. This includes marking all tobacco packaging (unit packets and outer packages) to identify their origin and legal status.

The Convention encourages the development of tracking and tracing systems for tobacco products, so that authorities can detect illegal diversion within the supply chain. Governments should not only gather data regularly on cross-border trade (both legal and illicit) but also share this information among customs, tax, and other enforcement agencies and collaborate with other states in investigations and prosecutions. Besides, Parties get a strong recommendation to introduce licensing schemes for

manufacturers and distributors to monitor production and to prevent unauthorized or illicit manufacturing. The FCTC also calls for measures to penalise illicit trade, including seizure and destruction of illegal products, as well as confiscation of proceeds from such trade.

Sales to and by Minors (Article 16)

The Convention requires Parties to prohibit the sale of tobacco products to minors, defined in national or domestic law (or up to age eighteen).
Parties must put in place regulatory or legal mechanisms to enforce this prohibition- for example, by demanding age verification during purchase, displaying warnings inside points of sale, or penalising retailers who violate the rule.

The Convention also suggests that nations impose limitations or completely forbid sales by minors (that is, minors who operate as sellers), once again, depending on local laws. In order to observe the law effectively, there should be set out clear punishments for sellers breaking the law, and there should also be national-level mechanisms for overseeing and implementation. Effective compliance requires clear penalties for sellers who break the law, as well as national-level monitoring and enforcement mechanisms.

Economically Viable Alternative Activities (Article 17)

The FCTC, in its efforts to promote a global tobacco control regime, is aware that communities which are involved in the cultivation and production of tobacco may be adversely affected by such measures. For this reason, it encourages Parties to such Agreements to support alternative means of production and livelihoods of tobacco growers, workers, and sellers. This assistance is to be designed and carried out through collaboration with various international and regional organisations, which will facilitate the transition to more sustainable and health-compatible sources of income. Such alternatives could be different agricultural products, new types of jobs, or even vocational training programs, depending on local contexts and economic situations.
The idea is to ensure that tobacco control does not become an additional source of economic hardship for those communities that are economically dependent on tobacco production, but rather a situation where public health interventions are combined with socio-economic development.

Though the WHO has implemented this worldwide policy concerning Tobacco use (including the smokeless ones), the use of SLT is not consistent among the countries as discussed before. This makes the implementation of nationwide policy reforms and initiatives very important. We'll talk about WHO FCTC in further sections, and now, we'll take a look at how policy frameworks align or differ across various countries based on their background and social practices.

The Case of Bhutan

In 2004, Bhutan became the first nation to completely ban tobacco cultivation, production, harvesting, and sale, and the ban was further solidified by the Tobacco Control Act of 2010. The enforcement of laws was strict, and non-compliance led to imprisonment. The ban was imposed more comprehensively after 2010, and the sale of all types of tobacco products was completely prohibited. The law levied a 100% sales tax rate on tobacco products imported from India and also charged an

additional 100% customs duty for tobacco products from other countries.
One thing to note was that although tobacco sales were illegal, consumption was not. Also, in contrast to Indian Tobacco industrialists, the industrialists of Bhutan didn't protest or did procedural delays of any kind. The ban lasted for a decade until the COVID-19 pandemic hit.

After the onset of the COVID-19 pandemic, the Bhutanese government deliberated the Tobacco Control (Amendment) Bill, 2021, in response to the increased smuggling of tobacco across international borders, especially from Bangladesh, which had raised concerns of cross-border transmission of COVID-19 despite border closures. In July 2021, the government amended the 2010 Act, lifting the decade-long ban on tobacco sales and permitting the sale of tobacco products in grocery and 'pan shops'. Thus, the COVID-19 pandemic forced the government to legalise the sale of tobacco in the country. Implying that the overhauling of the ban on the tobacco products was temporary in nature.

Bhutan continues to ban sales and production of tobacco within the country. Sales to minors are still prohibited, and sales near any heritage building are also not allowed. The legal framework concerning tobacco has now shifted from ban to regulation, leaving alarming questions regarding the lack of legal and policy infrastructure to back such regulation.

Nepal's Case Study

In 2006, through the successful attempt of tobacco control advocates in suing the Nepalese government to force implementation of tobacco control regulations, the nation ratified the FCTC. In 2011, despite the prevalent political turmoil in the country, tobacco control advocates, with the help of judicial support, ensured robust FCTC implementing legislation, which covered all types of tobacco products, requiring 100% public smoke-free environments, a pictorial health warning label covering 75% on both sides of the pack, completely banning tobacco advertising, promotion, and sponsorship, ban on sale of tobacco products to minors and pregnant women, introducing a health tax on tobacco and enforcing a sales and distribution license.

The number of men smoking tobacco declined from 34% to 27% from 2011 to 2016, while the number of women smoking tobacco fell from 10% to 6% from 2011 to 2016. The prevalence of any form of tobacco consumption fell for men from 66% to 56% from 2001 to 2016 and for women from 29% to 8.4%. The 2017 WHO report on the global tobacco pandemic praised Nepal's implementation of tobacco control. (Bhatta et al. 2019)

The United States's Case Study

The 2009 Family Smoking Prevention and Tobacco Control Act (Tobacco Control Act) empowers the Food and Drug Administration with the power to supervise and regulate tobacco products in the country, while enabling local and state governments to regulate tobacco advertising without requiring federal preemption.

The Act prohibits:

- Sale of tobacco products to people under the age of 21,
- Vending machine sales,
- The sale of packages of fewer than 20 cigarettes,
- Tobacco-brand sponsorships entertainment, social or cultural events,
- Free giveaways of tobacco products.

The act mandates that warning labels must cover at least 30% of the pack for smokeless tobacco advertising and 20% of the pack of tobacco advertising, on both sides.

The Swedish Tobacco Policy

The rates of smokers in Sweden are decreasing, but at the same time, an increase in the number of snus users is being observed. The use of snus was stable till 2021, but now it has reached the rate of 16%. Similar observation was seen in the case of India, where SLT were seen as a safer option when compared to smoking tobacco.

There is no absolute correlation between the decrease in cigarette consumption and the increase in nicotine snus consumption, since there is no scientific evidence for such an assertion. Snus is not a smoking cessation product. On the contrary, it has been observed that people who use e-cigarettes or tobacco snus are more likely to start smoking over time, compared with people who do not use e-cigarettes or snus are more likely to start smoking over time, compared with people who do not use e-cigarettes or snus.

The policy framework in Sweden regarding tobacco is very strict. There is a presence of wide-ranging bans on tobacco use near schools, public transport, cafes, and playgrounds. Sweden's policy recognises that the harms of different tobacco products vary, and the same is visible from the policy. The policy prohibits the use of smoking tobacco completely, but the use of snus is supported as it is seen as relatively less harmful than cigarettes. The taxation on nicotine snus is lower than the taxes on Cigarettes.

The provisions regarding the requirement of a sales permit to sell tobacco products are there in Sweden. Also, there is a ban on tobacco products in all aspects, with small exceptions in sales areas. The policy allows for point-of-sale advertisement if the product is not visible from the outside of the premises. The legal age limit for tobacco consumption has also been set at the age of 18 years.

In Europe, Sweden has the lowest tobacco prevalence of approximately 5.6%, which also explains why the country exhibits lower cases of lung cancer and mortality that occur due to tobacco use when compared to the European average.

The challenges that the government is currently facing revolve around the increased use of nicotine products that are marketed as safer options to cigarettes.

The Concept Of "Generational Ban"

Under COTPA, the sale of tobacco products to people below the age of 18 years is prohibited. Thus, there is an age restriction. So, a person after attaining the age of 18 years can consume a tobacco product. This is what a ban in a normal case looks like. But in a generational ban, a cutoff year is decided. This means that people who are born on or after that cutoff age cannot indulge in tobacco consumption of any form. So, even if a person is over the age of 18 years, she cannot consume a tobacco product if she was born on or after the cutoff age. Thus, an entire generation would be prohibited from tobacco consumption.

The Maldives is the only country in the world to impose a "generational ban" on tobacco products. Although New Zealand and the United Kingdom also considered the policy of implementing a generational ban, it never happened.

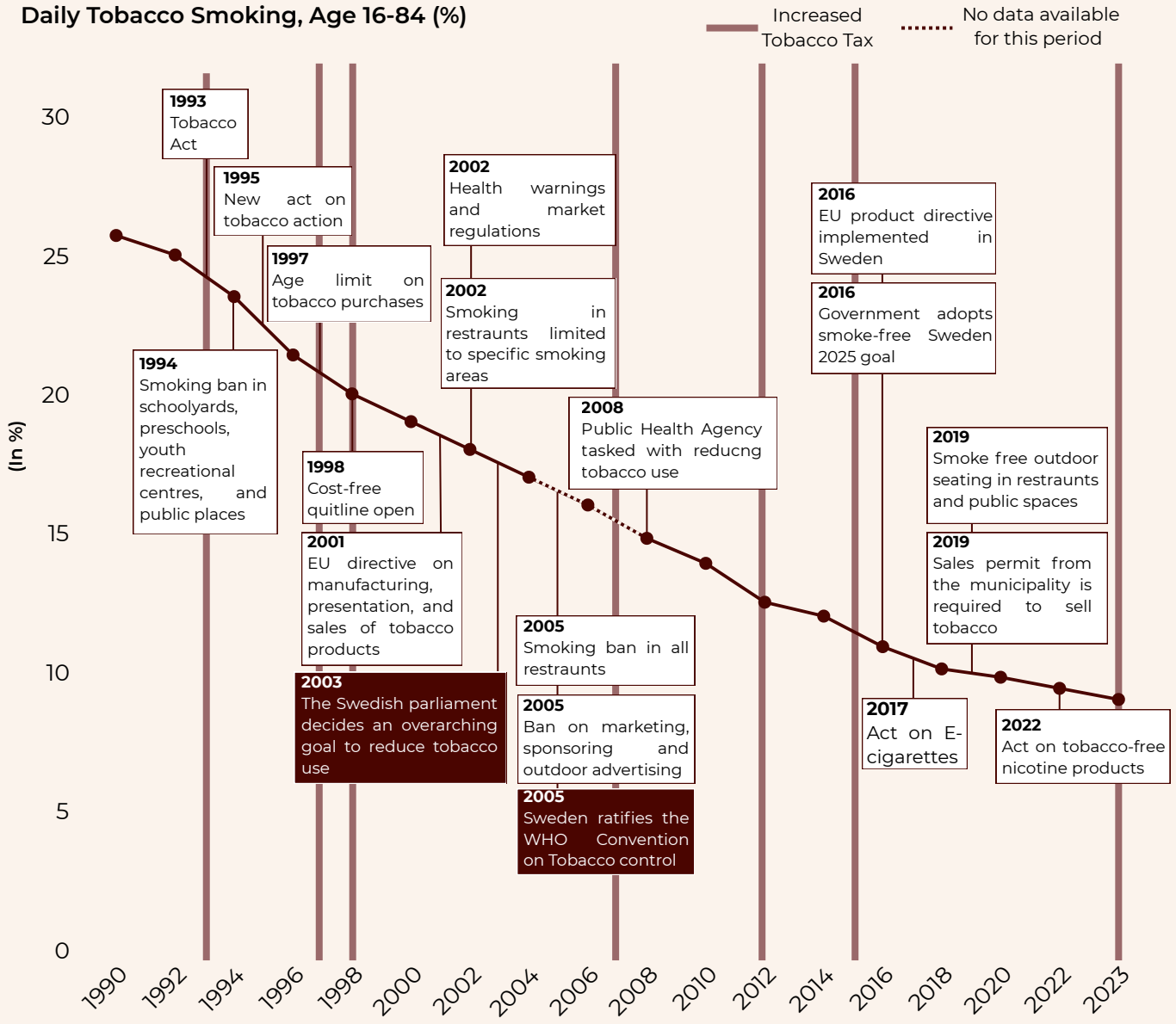
On 1st November 2025, the Maldives enacted this law, making it the first country

in the world to do so. The ban prohibits individuals born on or after 1st January 2007 from consuming tobacco-related products.

According to the WHO, over 7 million people die every year because of some form of tobacco consumption. And the sad part is that this is an avoidable form of death; people can avoid tobacco consumption, but the addiction does not let them do so.

According to data by the WHO, in 2024, about 25.5 per cent of the Maldivian population belonging to the age group of 15 to 69 years were tobacco users. In order to avoid this high tobacco consumption, the Maldives government decided to move forward with this decision.

Tobacco Policy Measures to Reduce Smoking in Sweden



SOURCE: SURVEYS OF LIVING CONDITIONS 190-2023: STATISTICS ON INCOME AND LIVING CONDITIONS (SLIC) CONDUCTED BY STATISTICS SWEDEN

Current Status and Projections

One in five adults worldwide is hooked to tobacco, contributing to millions of preventable deaths every year.

As per Dr. Mark Parascandola, Ph.D., of NCI's Tobacco Control Research Branch, 80% of tobacco users live in low and middle-income countries. Due to its large population and smoking prevalence, China accounts for 40% of the world's cigarette consumption. But Russia, the United States, and Indonesia are also relatively high tobacco consumers.

Regarding the trend of quitting tobacco, women have been in the lead, hitting the global reduction target for 2025 five years early, reaching the 30% milestone back in 2020. Prevalence of tobacco use among women dropped from 11% in 2010 to just 6.6% in 2024, with the number of female tobacco users falling from 277 million in 2010 to 206 million in 2024. The report shows that 150 countries are successfully reducing tobacco use. Brazil and the Netherlands are seeing success after they implemented MPOWER tobacco control measures, with Brazil making a relative reduction of 35% since 2010 and the Netherlands on the verge of reaching the 30% target. 176 out of 195 countries improved their MPOWER scores between 2008 and 2018, with two achieving full implementation: Brazil and Turkey.

The prevalence of tobacco use has changed little since 2010 in some countries, while six countries are still seeing tobacco use rising: Congo, Egypt, Indonesia, Jordan, Oman, and the Republic of Moldova. (Source: WHO tobacco trends report: 1 in 5 adults still addicted to tobacco)

Regional Tobacco Use Patterns

The region with the most prevalent use of tobacco in the world is Europe. Tobacco use among women is also high, at 17.4%, being the highest globally. Currently, the WHO South-East Asian Region has the highest percentage of population using tobacco at 26.5% with the European Region not far behind at 25.3%. By 2030, the WHO European Region is projected to have the highest rates globally, with a prevalence of just over 23%. Tobacco use rates among women in the WHO's European region are more than double the global average and are reducing much more slowly than in all other regions. A region-wise analysis shows us that South-East Asia was once the world's hotspot. Prevalence here among men has nearly halved, from 70% in 2000 to 37% in 2024.

The Region alone accounts for over half of the global decline. The prevalence in Africa is the lowest of all regions at 9.5% in 2024, and the Region is on track to meet the 30% target. However, because of population growth, the absolute number of tobacco users continues to rise here. Coming to the Americas, the region has achieved a 36% relative reduction, with prevalence dropping to 14% in 2024, though some countries still lack sufficient data.

This data of consumption of tobacco aligns with the data on the magnitude of production and sales of tobacco products across the world. The primary reasons for the high consumption of tobacco products in Europe are the lower costs adjusted for purchasing power and a weaker enforcement of smoke-free areas in public.

The Global Landscape and Emerging Products

The global smokeless tobacco market size was valued at USD 21.4 billion in 2024. Looking ahead, the market is anticipated to reach a value of USD 30.8 billion by 2034, exhibiting a growth rate (CAGR) of 3.69% during 2026 to 2034. Currently, the Asia Pacific region dominates in terms of market share, holding more than 37.5% in 2024. Multiple factors have contributed to the market's growth, including the increased awareness related to the injurious effects of smoking cigarettes, higher demand for flavoured smokeless tobacco, and amplified investments in products like snuff and *gutka*.

For the first time, the WHO estimated the global use of e-cigarettes; the numbers are alarming. Over 100 million people worldwide vape, including at least 86 million users who are adults and mostly in high-income countries.
In countries for which data is available, children are an average of nine times more likely to vape than adults. E-cigarettes are engendering a new wave of nicotine addiction, touted as harm reduction but in reality hooking kids on nicotine sooner, risking undoing decades of progress. More and more European countries are observing higher rates of e-cigarette use than cigarette smoking among young people, with some observing a difference of two or even three times.

Current e-cigarette use fell from 2.13 million (7.7%) youth in 2023 to 1.63 million (5.9%) youth in 2024 among those in the United States. The percentage of cigarette smokers was the lowest ever on record for the survey, with only 1.4% of students reporting current use in 2024. The global prevalence of E-cigarettes among younger people was 16.8% for ever use and 4.8% for current use.

Illicit Trade

Products like cigarettes, *Sisha*, and many smokeless tobacco products are frequently smuggled across borders. It is estimated that 1 in every 10 cigarettes and tobacco products consumed globally is illicit. As these illicit products are untaxed and unregulated, they are cheaper and more accessible, but at the same time, pose a higher health risk to the consumer and do not contribute to taxes of the country.
This illicit trade of tobacco products results in a loss of US$ 40.5 billion in revenue annually to governments. In some countries, illicit trade reaches as high as 40–50% of the overall tobacco market. Our countries are at risk since the illicit tobacco trade is more prominent in low- and middle-income countries than in high-income countries.
Experience from many countries demonstrates that illicit trade can be successfully addressed even when tobacco taxes and prices are raised, resulting in increased tax revenues and reduced tobacco use.

INTEREST MAPPING

ANALYSING WHO HOLDS INFLUENCE AND WHO BEARS THE IMPACT.

STAKEHOLDER ANALYSIS

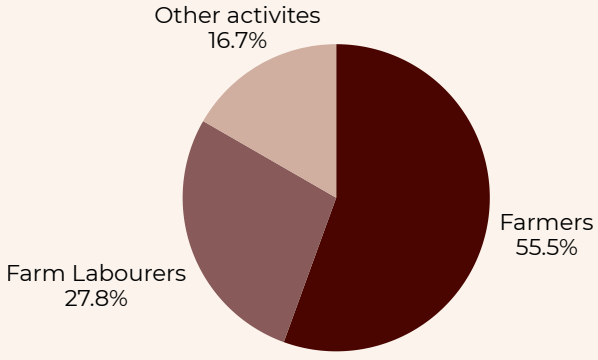
Farmers

In the previous sections, we have seen that almost 80-90% of people engaged in tobacco farming are women. We also covered the impact on reproductive health that engagement of women in such activities leads to. Thus, it is safe to imply that farmers or workers engaging in tobacco-related farm activities have to suffer severe health consequences. We'll now look at the issue from a broader perspective.

Farmers associated with Tobacco Farming

In India, tobacco farming provides a livelihood to 36 million people. Out of the 36 million, 6 million are the actual farmers, 20 million are farm labourers, and the other 10 million work in activities such as processing, manufacturing exports. A major chunk of this population is engaged in bidi rolling. Bidi rolling provides employment to almost 4.4 million people. And 2.2 million tribals are engaged in tendu leaf collection.

Distribution of Workers in Tobacco Industry



The main beneficiaries, as discussed earlier, are rural women, small and marginal farmers, tribals and people from weaker sections of the society.

The Income of Tobacco Farmers

As per data, India is the 2nd largest producer of tobacco after China, and the 4th largest producer of FCV tobacco after China, Brazil and Zimbabwe. Also, India is the second-largest exporter of raw tobacco after Brazil. The income from such exports contributes significantly to India's foreign exchange. If we talk about the year 2023-24, the total revenue generated from exports was about Rs 12005.89 crore. Thus, the income of tobacco farmers has doubled over the past 5 years. To ensure better price discovery and secure remunerative prices for farmers, the Tobacco Board has implemented an IT-enabled electronic auctioning system for **FCV tobacco**. Additionally, export promotion activities are carried out to sustain and improve India's tobacco exports. Welfare measures are extended to tobacco farmers, providing financial relief in the form of grants and loans during times of need.

The Board's policy framework for regulating production during the 2023-24 crop season was as follows:

- The objective of the policy is to regulate the area under cultivation of FCV tobacco while concentrating on the quality of the product, with a focus on controlling excess and unauthorised cultivation of tobacco.

- Area under FCV tobacco cultivation shall be reduced and diverted to other alternate crop/cropping systems.
- The excess production shall be dealt sternly to limit the production strictly to the crop size fixed so as to ensure fair and remunerative prices to the growers.
- The FCV tobacco cultivation shall not be allowed to be taken up in saline areas, paddy fallows and unsuitable soils to avoid quality problems. These areas shall be diverted to other crops.
- Stringent action shall be initiated, as per the Board Act and Rules made thereunder, against the growers who are constructing/constructed unauthorised barns and are taking up unauthorised cultivation of tobacco.

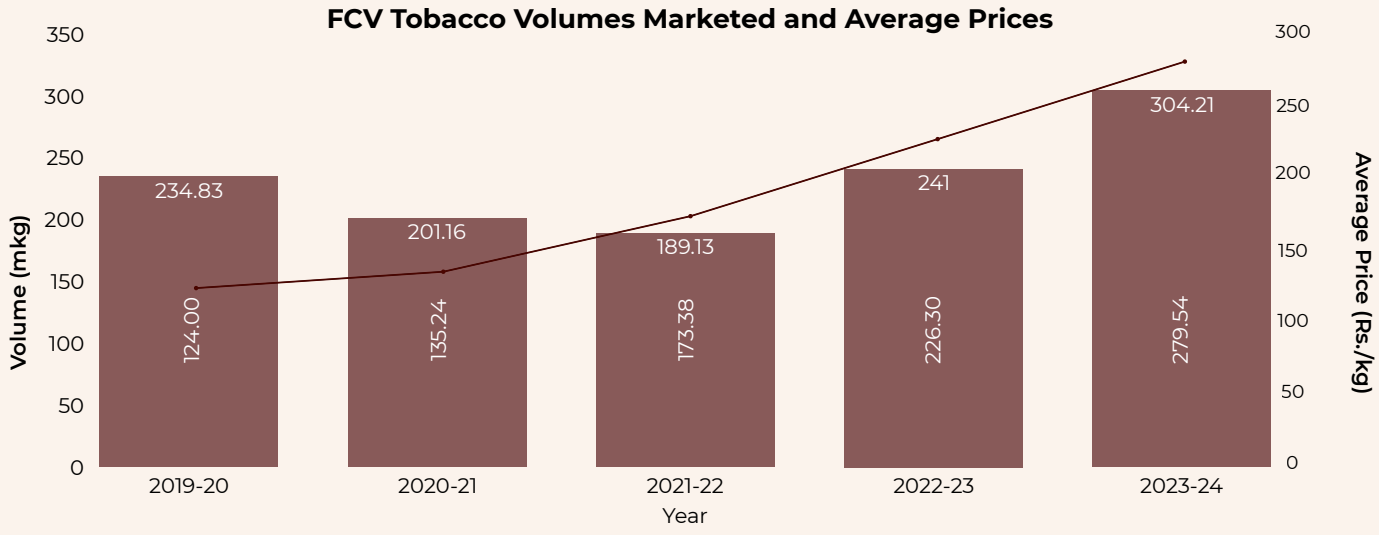
The board highlights that Flue Cured Virginia (FCV) tobacco farmers' earnings have more than doubled between 2019-20 and 2023-24, from Rs 124.00 per kg in 2019-20 to Rs 279.54 in 2023-24. This is attributed to effective government policies and efficient market mechanisms that have enhanced the livelihoods of approximately 83,000 farmers.

The Downsides

Though the incomes of tobacco farmers have increased, the income distribution is uneven between the actual farmers and the farm owners. The farmers suffer the health consequences, which decrease their real income in the long run, considering the health costs they have to bear. Farmers not only have to suffer from cancers that come due to inhalation of tobacco particles, but they also suffer from various other diseases like GTS, which is discussed further in the section. Also, since a large percentage of the population in the farming of tobacco in India is constituted by women, the consequences can be seen in the low BMI range and lower body weight of infants that they eventually reproduce.

Health Risks

The health risks that are caused by farming of tobacco were first observed by Bernardino Ramazzini in the year 1713, who is considered the father of occupational medicine as well. In his 1700s work “De Morbis Artificum Diatriba” (Diseases of Workers), he dedicated a chapter to those who worked in the production of tobacco products and revealed that inhalation of fine dust particles of tobacco led to injuries



to the trachea and the lungs (the respiratory organs). He recorded and observed the various symptoms in Italian tobacco field workers, such as headaches, stomach ailments and attributed them to dust inhalation.

He attributed these to the narcotic effects of tobacco, which disrupted stomach fermentation and animal spirits, and recommended preventive measures including covering the mouth and nose, breathing fresh outdoor air, frequent face washing with cold water, and consuming emetic beverages like water and vinegar to neutralise particles. Apart from such diseases, tobacco farmers have to suffer from many other consequences.

Green Tobacco Sickness

A disease called Green Tobacco Sickness, observed in tobacco farmers, was first described in Florida. Green Tobacco Sickness (GTS) is generally observed in farm workers or people who engage in the harvesting of tobacco leaves. GTS has multiple effects on the bodies of people. It causes nausea, vomiting, frequent headaches, excessive sweating and dizziness. GTS often leads to dehydration and consequent need for medical emergency is observed in harvesters. The cause of GTS is the constant contact of nicotine with the skin, leading to dermal absorption.

According to various studies conducted in the United States, it was observed that farmers believed that they developed GTS tolerance after working continuously in the fields. This leads to farmers undermining the health consequences that GTS has. On the other hand, farm owners are aware of the fact that it is not certain whether a farmer working in a tobacco field would develop tolerance to GTS; also, so far, there is no such evidence that constant work leads to the development of such tolerance. But the ignorance of workers leads the farm owner to not provide enough prevention amenities, leading to an escalation of the issue.

Pesticide Exposure

From the past studies, it has been observed that spraying of pesticides on tobacco farms often leads to the transfer of substantial amounts of organophosphates into the hands of the sprayers or farm workers. It has also been observed that properly washing hands significantly reduces the amount of pesticide that is transferred onto hands (reduction of 23%-96% can be observed depending upon the washing method used, the solvent used, and the time intervals between the exposure and contamination). The effects of such transfer include the workers suffering from transient psychological and neurological conditions caused by the toxicity that pesticides have on the peripheral and the central nervous system.

Consumers

The estimated number of current adult smokeless tobacco users in India is 199.4 million. The number of male smokeless tobacco users, which stands at 141.2 million, is twice more than that of female smokeless tobacco users, which stands at 58.2 million. The number of smokeless tobacco users in rural areas (150.3 million) is about three times that in urban areas (49.0 million).
Among all adults, 170.1 million use SLT every day, and 29.3 million adults use it occasionally. A little more than 18 million adults who were formerly using SLT have stopped using it completely. Currently, 733.1 million adults aged 15 or above do not use smokeless tobacco; among them, 714.6 million adults have never used smokeless

tobacco in their lifetime.

Product Wise Breakdown

The two most commonly used smokeless tobacco products in India are khaini-tobacco-lime mixture used by 11.2 percent Indians (17.9% men and 4.2% women), and gutka- mixture of tobacco, lime and areca nut used by 6.8 percent adults (10.8% men and 2.7% women). About six percent (7.1% men and 4.5% women) of adults use betel quid with tobacco; and 3.8 percent (3.3% men and 4.3% women) use tobacco products such as mishri, gul, gudakhu for oral application.

Besides these, some other products such as snuff for inhalation, paan masala with tobacco and other tobacco products are used by a small proportion of adults. The prevalence of each of the smokeless tobacco products is higher among men than women. The only exception is oral tobacco, which is used by a higher proportion of women than men.

Status of Use of SLT	Overall	Gender		Residence	
		Male	Female	Urban	Rural
Total	932488	476499	455989	321648	610839
Current SLT user	199388	141183	58206	49050	150338
Daily user	170098	119540	50558	41110	128988
Occasional user	29290	21643	7648	7940	21351
Occasional user, former daily	7103	4977	2127	1996	5107
Occasional user, never daily	22187	16666	5521	5944	16243
Non-user of SLT	733099	335316	397783	272598	460501
Former daily user	10820	6863	3957	3279	7542
Never daily user	722279	328453	3957	269320	452959
Former occasional user	7675	5691	1984	2439	5236
Never used	714604	322762	391842	266881	447723

Though among all adults as well as men, khaini is the most commonly used smokeless tobacco product, women prefer betel quid with tobacco, tobacco for oral application and khaini almost equally (4.2 - 4.5%). Among adolescents, particularly adolescent men, prevalence of gutka is higher than that of khaini. In urban areas, khaini (6.8%) and gutka (6.3%) are the most prevalent smokeless tobacco products, whereas in rural areas, khaini (13.5%) is the most prevalent product.

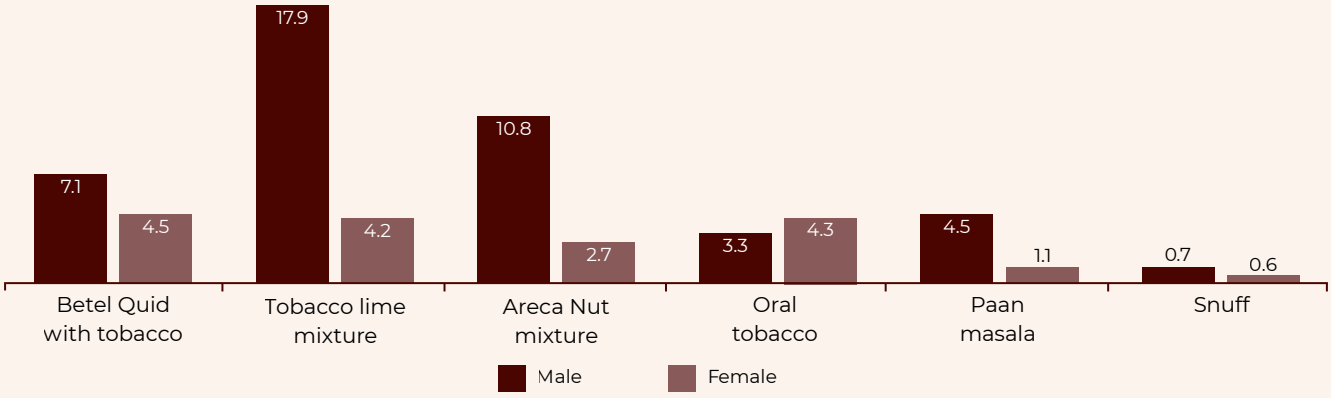
Demographic Analysis

Among current and previous SLT users, the proportion of 60+ age group, male, rural, and poor economic status are more than their respective counterparts. The share of the elderly population is more than the younger population. With respect to gender, males are consuming more SLT compared to females.

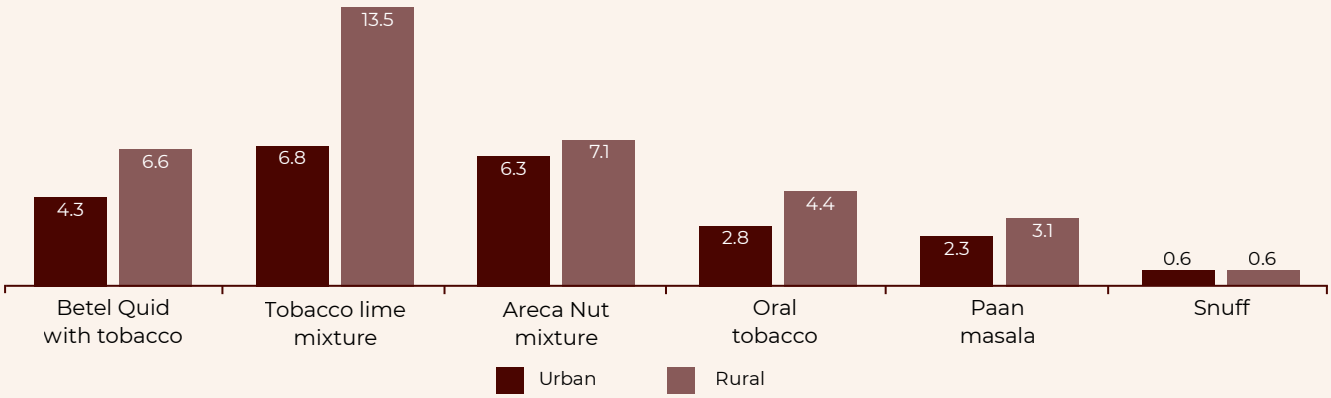
Among the four categories of castes, schedule tribes (ST) population are the maximum consumers, with a share of 31.6% in previously used and 28.4% among current users of SLT. In contrast, other backward classes (OBC) and general categories are the least frequent users of SLT in both cases. Place of residence also influences the use of SLT, as urban residents consume less than their rural counterparts.

Economic status determines SLT use, with poor and poorest respondents being the most common users. In terms of education, people with 10+ years of education are the lowest users of SLT compared to other categories of education, and there is a one

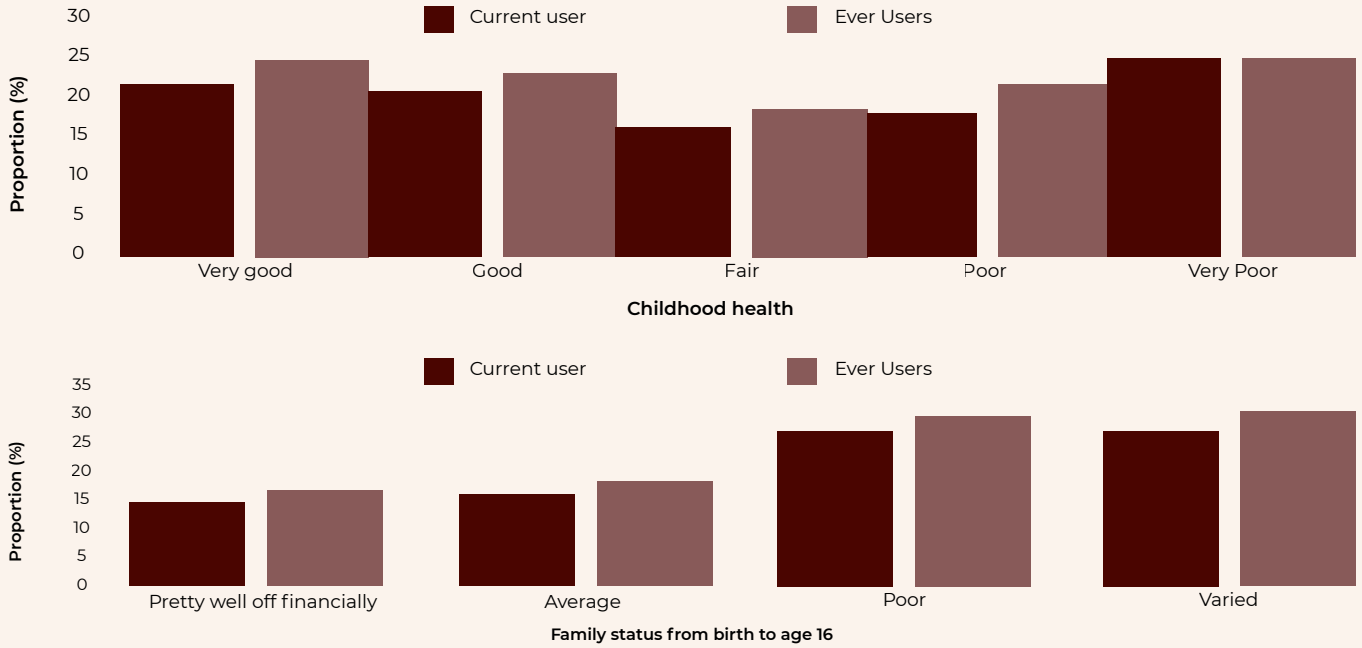
Percentage of adults aged 15 or above who are current users of various SLT products by residence, GATS 2 India, 2016-17



Percentage of adults aged 15 or above who are current users of various SLT products by gender, GATS 2 India, 2016-17



Percent difference between no-schooling and 5 to 9 years of schooling.



As shown in the figure above, in "Previous Users," both the extreme categories of childhood health have a similar percentage of SLT use (24%). In terms of very good childhood health, the quitting pattern is 2.4%, while in contrast, the very poor category has no quitting pattern. Family status in terms of finance shows that poor and varied financial status is almost similar in terms of SLT use, with around 30 and 27% in previous and current use, respectively, as seen in Figure 1B. It has been seen that there is no notable change in the quitting pattern of SLT across family status.

Employment Status Breakdown

In addition to demography and family status, occupation correlates and contributes to the use of SLT. Table 2 explains the association of type, place, kind of business, and type of employer with SLT. The analysis has been stratified between current and past workers for current users of SLT to understand the impact of occupational demands on the use of SLT. Table 2 focuses on occupational significance for SLT users in a broader aspect. We can see in the types of occupation where skilled agricultural and fishery workers are the most common consumers of SLT in both current and past workers. Among past workers, plant and machine operators share the same percentage as agricultural and fishery workers (22%). Professionals are the lowest consumers of SLT in both current and past workers, with nearly 10% having consumed SLT. Among legislators, senior officials, and managers for current workers, the share is nearly 9%, increasing to 17% for past workers. In the case of agricultural workers, the use of SLT is higher for current users and decreased by 7% points for past users.

Regarding place of occupation, for current workers, people working without a fixed location have the highest share with 31.3%, followed by 28.5% for those who own a farm or business. In contrast, for past workers, people working with fixed locations outnumber other categories at 23.4%. Across all categories, SLT use for past workers is less than for current workers. When analysed for the kind of business for current workers, use of SLT is lower for financial and insurance activities, public

administration and defence, education, information, and communication.

In contrast, previous or current use of SLT is high for agriculture, forestry, fishing, water supply, household employees, construction, and mining workers. For past workers, the pattern is nearly the same except for agricultural workers. In relation to the type of employer for current workers, people working in NGOs and trusts have the highest share (31%), whereas the share is lowest for people working in the government sector (16%). For past workers,
The government sector has the lowest share, whereas all other categories have a similar share for SLT use.

Figure 1 illustrates the impact of the different kinds of occupational characteristics in the work area. The demand for occupation plays a significant role in SLT use. When considering physical effort in current workers, those whose jobs involve constant physical effort have nearly the same use of SLT, and the same pattern is seen in past workers. As the intensity of physical effort increases, so too does the use of SLT. Most of the time, those who lift heavy loads are the maximum consumers of SLT in both current and past workers, at 31 and 24%, respectively. Those working with chemicals are the leading consumers of SLT (31%) among current workers, and the same pattern is also seen for the past workers (23.6%). Figure 2 shows no significant difference in the percentage of SLT use in current and past workers across the dedication of time of work required and the requirement of eyesight.

The use of SLT has several direct and indirect effects on different dimensions of life. Occupation has a strong association with using SLT products. India, as an agriculture-dominated society, has a vast user base of smokeless tobacco. The typical characteristics of SLT users are aged 60+, male, rural, and with a poor wealth index.

The elderly population is more likely to be SLT users than the younger population by 2%, which is a matter of concern as elderly populations are more prone to other chronic health conditions, including cancer. With regards to gender, the share of males is almost double that of females in terms of SLT consumption in India.
This inequality may be associated with employment status, as in India, 71% of men are employed compared to 22% of women, as per the "periodic labour force survey" for 2017–18 by the Ministry of Statistics and Program Implementation (MOSPI) (19). Among the four categories of castes, scheduled tribes are the maximum consumers of SLT with 28.4%, followed by scheduled caste with 24%, and a similar pattern can be observed in wealth index, with nearly 23% from both the poorer and poorest categories. In terms of place of residence, the rural population share the same percentage, respectively (23%). As we know, SLT use leads to both health and non-health complications; high use of SLT among socio-economically backward populations poses a threat to their self, family, and community.

Among adults from all the employment categories, khaini is the most prevalent smokeless tobacco product. However, there are some exceptions. In the occupational category 'government and non-government employees', use of gutka is also quite prevalent. The prevalence of smokeless tobacco use among students is quite low, although among them, too, gutka use is more prevalent. Among homemakers and retired/unemployed women, use of betel quid with tobacco and tobacco for oral application is more prevalent than khaini.

Pregnant Women: A Curious Case

Although there is evidence supporting the

link between tobacco use during pregnancy and its impact on the mother and baby, there is no data on the proportion of pregnant women who are at risk due to tobacco use. Most of the pregnant women who were using tobacco were using the smokeless variety (7.4% among pregnant women).
The prevalence of smoking among pregnant women is quite low (0.7%). Among pregnant women from rural areas and those aged 25-44 years, the prevalence of tobacco use is higher than that among their respective urban counterparts. One in every 10 pregnant women aged 25-49 uses tobacco, primarily in the smokeless form. One in 12 pregnant women in rural areas uses tobacco, also in the smokeless form.

Background Characteristic	Percentage of currently pregnant women using		
	Any type of tobacco	Smoking	SLT
Overall	7.5	0.7	7.4
Age			
15-24	4.7	0.0	4.7
25-29	10.1	1.3	9.9
Residence			
Urban	5.5	0.0	5.5
Rural	8.4	1.0	8.2

Economic Burden

It is estimated that the direct and indirect costs of SLT use for people of the age of 35 years or more for the year 2017–2018, according to which the total economic burden attributable to tobacco use amounted to INR 1,77,341 crore, that is more than 1% of the country's GDP in that year.
The study also found that the direct healthcare costs of treating tobacco-related diseases accounted for 5.3% of the total private and public health expenditures in a year. It was observed that for every INR 100 received as excise taxes from tobacco products, INR 816 of costs is imposed on society through its consumption.

While increased taxation has the effect of increasing the prices of tobacco products, the growth in people's income increases their purchasing power.

Intuitively, the sale of tobacco products shows that the income elasticity of their demand is positive in India.

A recent study, using data from 2007–2008 to 2017–2018, concluded that chewing tobacco had become more affordable.

Smokeless Tobacco (SLT)						
35-69	Male	3744	131	777	28406	33058
	Female	5088	214	587	2538	8427
70+	Male	1708	64	192	801	2765
	Female	1918	65	140	46	2169
35+	Male	5452	195	968	29208	35823
	Female	7006	279	727	2584	10596
Subtotal		12458	474	1696	31792	46419

Companies

Smokeless Tobacco companies are among the most influential stakeholders in the tobacco ecosystem. The current section investigates the enterprises along the Indian smokeless-tobacco (SLT) value chain that are: the ones manufacturing, packing, distributing, and brands that produce or market pan-masala/gutkha/other smokeless tobacco products. Their tactics about manufacturing, branding, and social responsibility (CSR) affect, in a direct way, the public health results, the regulatory milieu, and the social norms. Learning about their setting, getting to know their interests and the possibility of their engagement, is a prerequisite for a public health research on SLT.

Top-10 Companies or Suppliers: Their Role in the SLT Market

These are 10 of the most significant companies or suppliers implicated in the SLT market in India, along with their roles and involvement.

Company/Group	Description
Dharampal Satyapal Group (DS Group)	Major national manufacturer & distributor; flagship SLT/mouth-freshener brands such as Rajnigandha. Operates multiple plants; public group revenues cross ₹10,000 crore (FY 2024–25).
Manikchand Group (RMD Pan Masala, others)	Long-standing pan-masala/gutkha manufacturer with wide distribution across India; historical market presence and brand recognition.
Dharampal Premchand Ltd. (BABA Brand Family)	Legacy pan-masala/SLT firm producing pan-masala, supari, zarda, etc.; one of the early branded players in Indian SLT.
Godfrey Phillips India Ltd. (GPIL)	Publicly listed tobacco + SLT/mouth-freshener company; in addition to cigarettes, distributes pan-masala/mouth-freshener products: provides audited disclosures, sustainability/CSR reports.
Kothari Products	Major mouth-freshener/pan-masala brand; known for distribution reach and brand presence in many states.
Vimal, Rajshree and other large regional pan-masala groups	Significant presence in regional markets; supply pan-masala & SLT across many states with local distribution networks.
Packaging firms (large pouching suppliers)	These supply chain actors - though not always brand-owners - support the SLT supply chain through sachet/pouch fabrication, distribution logistics, etc.
Regional SLT manufacturers & distributors (various family-owned or regional firms)	These firms collectively contribute sizable volumes in particular states/regions; often supply unbranded or locally-branded pan-masala/gutkha/SLT products.

Market context: According to industry research, the Indian pan-masala market was estimated at ~₹46,682 crore in 2024, with a projected growth trend.
This underscores the scale and profitability potential- justifying why large groups like DS Group, GPIL, and others are deeply invested in SLT (pan-masala) businesses.

Evidence of Company Involvement & Activity

- Annual Reports & Brand Pages: Some groups (e.g. DS Group, GPIL) have detailed brand/product lists, locations of manufacturing plants, and descriptions of business segments published on their official websites. For instance, DS Group publicly announced that it had crossed ₹10,000 crore in total group revenue (FY 2024–25), with pan-masala/mouth-freshener being cited as one major vertical.
- Credit-rating/financial-agency reports: For non-publicly listed firms (e.g., DS Group's operating entity, some private pan-masala companies), the likes of ICRA/CRISIL/CARE may on occasion publish rating rationales - these papers offer an independent third-party view of the commentaries on revenue trends, leverage/ debt ratios, and margin pressures related to the SLT business.

The major and most comprehensively documented entities - DS Group, GPIL, Dharampal Premchand (BABA), Manikchand - are significantly operating in the smokeless tobacco market, as multiple sources of evidence (public revenue disclosures, brand presence, rating-agency coverage) confirm. A few medium-sized and regional companies are also contributing significantly to the market, though the level of disclosure is lower (which is typical for privately held entities).

Company Profiles of Top 3 Suppliers
A. Dharampal Satyapal Group (DS Group)

Dharampal Satyapal Group is a major *pan masala* and mouth freshener producer. For instance, "Rajnigandha." It operates several manufacturing plants across India.

Comments:

- Company-wide revenue is public, but per-brand, per-unit cost, and production-capacity data are not disclosed.
- Rating-agency reports provide credible leverage and margin commentary, but do not break down by product (e.g. pan-masala vs. other FMCG lines).

B. Dharampal Premchand Ltd (BABA)

Dharampal Premchand Ltd is a long-established *pan-masala* and SLT firm; markets pan-masala, supari, zarda and allied SLT products under the BABA brand family.

Comments: The "> ₹500 crore" revenue band gives a sense of scale, but it **cannot** be used to derive precise profit margins, production capacity or per-brand financials.

C. Manikchand Group (RMD Pan Masala, others)

Manikchand Group is a p*an-masala, gutkha* and SLT manufacturer with much historical significance. It has a very widespread distribution via regional networks.

Comments:

- Because of a lack of public financial disclosure, any revenue or profit claims are speculative or derived from secondary sources; in a formal report, these are clearly labelled "industry estimate" or "unverified."
- For this stakeholder analysis, Manikchand may be classified as a "major private sector brand with strong market presence but limited transparency."

Parameter	Publicly Available Figure/Note
Group Revenue (FY 2024-25)	₹10,000 crore
Operating company financial commentary	Net Debt/ OPBITDA = approximately 1.9 (as on March 31, 2024), note of margin pressure in FY 2023-23 due to product mix and a loss-making variant
Manufacturing footprint	Multiple manufacturing plants listed publicly; presence across major states
Product-level costs, per-unit production capacity	Not publicly disclosed- as is common for private conglomerates in the SLT category
Regulatory/ Tax burden environment	Pan-masala/gutkha taxed under high GST + cess/special sin-goods levies

DHARAMPAL SATYAPAL GROUP (DS GROUP)

Parameter	Publicly Available Figure/Note
Operating revenue (FY 2023-24)	Reported as "> INR 500 crore" (revenue-band as per registrar)
Credit rating/business-profile summary	CARE/other credit-rating documentation provides a business description, operations in SLT, and risk profile
Manufacturing & product footprint	Company brand & product pages list pan-masala/SLT products; indicates established manufacturing, but no consolidated tonnage
Publicly audited financial statements (multi-year)	Not available publicly as the company is unlisted/privately held.

DHARAMPAL PREMCHAND LTD (BABA)

Parameters	Publicly Available Figure/ Note
Consolidated audited financial statements (recent)	Not available - the group is privately held and does not publish consolidated audited annual reports publicly.
Market presence/Brand recognition	Frequently listed among the top pan-masala
Estimated scale/revenue (from secondary sources)	Some tertiary/secondary market articles list "multi-hundreds of crores" revenue, but estimates vary widely; no authoritative confirmation.
Manufacturing footprint/distribution network	Brand pages show product range; widely available in multiple states, but no public capacity or production lists.

MANIKCHAND GROUP (RMD PAN MASALA, OTHERS)

Regulatory & Market Context- Implications for Companies

- Taxation burden: Pan-masala/gutkha/SLT products are subject to 28% GST (or higher slab), plus additional compensation cess or product-specific levies (since SLT is considered a "sin good"). This raises cost and regulatory compliance burden for firms.
- State-level regulation/enforcement risk: Several Indian states periodically impose bans or strict enforcement on gutkha/pan-masala, which causes supply disruptions, risk of confiscation, and increased compliance costs. Credit-rating rationales for companies often list such regulatory risks as material.
- Market pressure & margins: Given high taxation, regulatory risk, periodic enforcement, and changing consumer behaviour (public health awareness, regulation), margins for SLT business are volatile - as seen in rating-agency reports for DS Group (margin pressures in FY2023–24).

The regulatory and tax burden represents a structural limitation on companies' profits. Therefore, companies have to include compliance, risk mitigation, and possible reduction of volumes due to enforcement or consumer change in their calculations.

Gaps between Expectation and Practice - Observations & Risks		
Expectation/Norm	**What Evidence Shows**	**Gap/Risk/Concern**
Transparent CSR policy, audited spend and impact reporting	Visible for DS Group & GPIL (policy docs and sustainability or integrated reports)	For many private firms, CSR disclosures are minimal or unavailable- difficult to verify actual expenditure or impact.
CSR directed to public-health, tobacco-harm mitigation, and farmer-livelihood alternatives	Some firms do community welfare, environmental projects, water & livelihood initiatives.	Rarely see dedicated tobacco-harm mitigation (cessation/awareness) or farmer-crop-diversification programs; many CSR projects are generic (water, education) and arguably unrelated to core business harms.
Independent, third-party evaluation of CSR outcomes	Not common; few firms publish independent audit or impact-assessment reports.	This limits public confidence in claimed benefits; opens the possibility of "CSR washing" (using CSR for branding, not real harm-remediation).

What Good Practice Would Look Like (Based on Leading Firms & Public-Interest Expectations)

For SLT/pan-masala companies, good CSR practice would involve:

- There should be a clear and understandable CSR policy for everyone to see, proper governance (board-level CSR committee), and public, audited CSR spend disclosures (like GPIL/DS Group are doing) made available to everyone.

Besides the allocation of CSR resources to welfare or community development in a generic way, significant CSR

- resources should be allocated to public-health interventions (anti-tobacco awareness, cessation clinics, community-health screening) and livelihood alternatives for tobacco-farmers (crop-diversification support, skill development, non-tobacco agriculture).
- Independent third-party audits and impact assessments should take place regularly. The results of these audits should be made public (not only the inputs or beneficiaries) - thus, the companies' accountability will be higher, and the problem of the conflict of interest will be taken into consideration.

Middlemen

The WHO Framework on Tobacco Control (FCTC) states the definition of the tobacco industry as "tobacco manufacturers, wholesale distributors and importers of tobacco products". However, this definition diverts the focus from other important stakeholders that extend beyond core entities. Other actors include seed and plant retailers, farmers, leaf processors, wholesalers, brokers, and middlemen. (Hiscock and Bloomfield, 2021)

Supply Chain intermediaries vary from region to region. For example, in India, brokers buy produce from local collectors and then sell it to tobacco industry companies. In neighbouring countries such as China, the deals are made directly with the retailer. Meanwhile, in Pakistan, Bangladesh and Nepal, manufacturers supply to 'dealers' who then deal with the wholesale retailers. These wholesalers then sell the products to small-scale retailers, from where they are sold to the consumer. More complex supply chain systems give these intermediaries the leverage to take advantage of farmers. More complex supply chain systems give these intermediaries the leverage to take advantage of farmers. (Hiscock and Bloomfield, 2021). A CMRC study on farming households shows that a higher number of farmers take loans for producing tobacco crops than for any other crops. There are many farmers, with small land holdings, in a debt trap of moneylenders and commission agents. (Prasad, 2007).

Contractors

A particular category of middlemen playing a significant role in the supply chain of the tobacco industry is contractors. Bidi manufacturing, in particular, is usually done through small households and home-based workers who are hired by these contractors. Contractors account for the largest share of the number of workers in the registered bidi sector. 89% employment in the bidi sector is unregulated, which gives these contractors the upper hand to exploit farmers without facing policy repercussions. Additionally, in the regulated sector as well, more than half of the employment is done through contractors. Farmers in Andhra Pradesh and Karnataka have also protested against the practice of contract farming, which forces them to be dependent on the mercy of traders for their livelihood. There is a need to move towards registration and decreased contractual employment, which enables workers to receive employment benefits and proper wages. (Arora et al., 2020).

Role of Intermediaries

- **Trade:** Wholesalers and Distributors are often the biggest buyers of tobacco products from the manufacturers and are responsible for supplying the same to retailers. In Flue-Cured Virginia (FCV) tobacco markets, tobacco is sold and marketed through auctions regulated by the tobacco board, which allows for transparency. (Prasad, 2007)

- **Credit:** In case of FCV markets, the tobacco board arranges for loans for the farmers, as the product is being marketed through them. The loan is then recovered through the sale proceedings of the auction (Prasad, 2007). In case of non-FCV markets, there is rarely any support from government authorities, and farmers largely rely on debt from commission agents and brokers, often leading them into a vicious cycle of debt traps.

- **Wages:** On average, a bidi worker only earns about 17% of what a worker in the registered manufacturing sector

earns. This gap in wages is often due to the exploitation of contractors (Arora et al., 2020). A case study in West Bengal further highlights this gap. A worker was supposed to earn rupees 178 for 1000 bidis, but the Munshi, or the middleman, took two handfuls of bidis as 'Patti', which is a prevalent system of bribery taken by the middlemen in the industry. She ultimately ended up with rupees 130 after having to pay for the middleman's share. The daily wage of a bidi worker can produce around 900-1000 bidi rolls after a strenuous work of 12 hours. (Chakraborty, 2023).

Regulatory Recommendations

- Auctions: the Tobacco Board organised auctions for FCV products. There is a need to expand the scope of such events to other tobacco products to ensure a transparent procedure for sale and marketing. These actions mandate legal licensing for participating middlemen.

- Labour Regulation: the government needs to implement stricter compliance for all stakeholders in the industry. Registration of work is important to ensure that they are not exploited. This enables them to receive employment benefits, legally mandated wages and access to necessary government programmes.

NATIONAL CONTEXTS

TRACING HOW SMOKELESS TOBACCO INDUSTRIES DIFFER ACROSS COUNTRIES.

BANGLADESH'S

TOBACCO INDUSTRY AT A GLANCE

PREVALENCE

43.7%

of the adult population consumes tobacco in one or other form.

27.5% SMOKELESS TOBACCO

23.5% SMOKING TOBACCO

GDP LOSS

BDT 305.6 BILLION

GDP loss due to tobacco in 2018.

GENDER DIVISION

WOMEN **MEN**

SLT use is slightly higher among women.

LEADING BRANDS

- Hakimpuri Zarda
- Baba Al-Tajer Dhaka

Most SLT products are produced by small, home-based units, contributing to market opacity.

EXPORTS

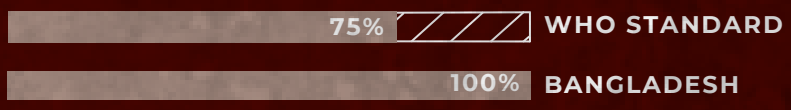
$155 MILLION

in exports in 2024.

19TH

ranking in terms of exports

TAXATION



Although total taxes on SLT products reach near 100%, enforcement is weak and tax evasion is common.

MAJOR POLICY GAPS

- The Health Policy 2011 has no clear SLT-specific strategy and superficial implementation.
- SLT was included in the Tobacco Control Act in 2013.
- Enforcement focuses largely on smoked tobacco, neglecting SLT consumption.
- Urban anti-spitting laws have existed (since 1976), but implementation is negligible.

COUNTRY PROFILES

Bangladesh

With a population of 171.2 million, Bangladesh is a South Asian country. At 43.7% of prevalence for tobacco use, it is among those countries where the prevalence of smokeless tobacco (SLT) use is greater than any smoked tobacco form.

Prevalence: Bangladesh is ranked among the top countries in the world with the highest rate of tobacco consumption; 43.7% of its adult population consumes tobacco in one or another form.

- Smokeless tobacco (SLT): 27.5%
- Smoking tobacco: 23.5%

Gender and Age Patterns: SLT use is slightly higher among women, distinguishing Bangladesh from many other countries:

- Women using SLT: over 28%
- Men using SLT: nearly 27%

Socioeconomic Determinants: SLT use is strongly associated with various social and economic parameters, which have been observed over the years as prominent highlights of this market:

- Usage rises sharply with age: 6.6% (15 to 24 years) to 56.4% (65+ years)
- Over 50% of SLT users have no formal education
- Higher prevalence among farmers (33.8%), unemployed (31.9%), and manual labourers (30.9%).

- SLT use is more common in rural areas, though certain products like gul are more prevalent in urban settings. Dual users who are engaged in the consumption of both smoking and smokeless tobacco are typically poorer, less educated, nutritionally disadvantaged, and have less healthy diets.

Market and Leading Brands

The SLT market is largely informal and unregulated. However, some brands have achieved a wide national reach:

- Hakimpuri Zarda (Kaus Chemical Works)
- Products from Baba Al-Tajer Dhaka

Most SLT products are produced by small, home-based units, contributing to market opacity.

Tobacco Farming

In Bangladesh, the tobacco market originates primarily through domestic farming. It has been observed that the small and marginal farmers, generally in the rural parts of the country, engage in SLT-related tobacco farming due to a lack of alternative cash crops.

The manner of production is informal- farmers generally sell their tobacco leaves to local traders or processors, without working based on contractual terms. Growing tobacco provides some income security in the short term, but evidence overwhelmingly shows it doesn't lead to long-term economic growth. Farmers confront income instability, health hazards associated with their work and environmental degradation caused by tobacco farming.

Supply Chain of Smokeless Tobacco (SLT)

a. Sourcing the Raw Materials: Tobacco leaves consumed as SLT are locally produced under cultivation, mainly taking

place in rural areas. Tobacco farmers are smallholders and are predominantly poor.

b. Manufacturing and Processing

- SLT production is largely informal and home-based, making the supply chain fragmented and thus weakly regulated.
- Most producers operate outside formal registration, which limits government oversight on product composition or tax regulations. This forms the most important problem in the regulation of this market through formal measures.
- Larger, semi-formal manufacturers (e.g., producers of *zarda* and *gul*) coexist with thousands of small-scale, household units.

c. Distribution and Wholesale

- SLT and bidi products are distributed through informal wholesale networks, often bypassing standard monitoring mechanisms.
- Products move from manufacturers to local wholesalers or retailers, to be sold to the final consumers.

This informal distribution structure enables easy tax evasion and undermines any enforcement of tobacco control laws.

d. Retail and Accessibility

- SLT products are sold widely through: *Paan* or betel quid shops, small grocery stores, street vendors, etc.
- Loose sales are common, increasing affordability and accessibility, especially for low-income groups and adolescents.

The retail price of SLT remains extremely low, despite high nominal taxation. Reason being the informality of the sector.

e. Regulatory and Enforcement Gaps

- Weak enforcement allows:
  a. Under-reporting of production volumes
  b. Avoidance of excise duties
  c. Sale of unlabelled or improperly labelled products.
- Absence of a strong track and trace system further weakens control, especially considering Bangladesh has not ratified the Protocol to Eliminate Illicit Trade in Tobacco Products.

f. Seasonal and Demand-linked Supply changes

The supply chain responds flexibly to seasonal demand- higher production and distribution during winter and festival periods, and reduced demand during summer months. This flexibility is enabled by informal production arrangements and low entry barriers.

g. Implications for Tobacco Control

The current SLT supply chain:

- Sustains low prices and high availability
- Limits the effectiveness of taxation policies
- Makes product regulation and health warning enforcement difficult
- Popularises SLT use among socioeconomically disadvantaged populations
- Effective SLT control in Bangladesh, therefore, requires supply chain-focused interventions, not demand-side measures alone.

Economic Impact

Tobacco imposes a net economic loss on Bangladesh:

- Total annual cost (2018): BDT 305.6 billion (~US$3.6 billion)
- ~1.4% of GDP
- Direct healthcare costs: BDT 83.9 billion
- ~9% of the national health budget
- Tobacco industry contribution to GDP: BDT 229.1 billion

Most costs are borne directly by users and their families, exacerbating poverty and inequality.

Employment

Employment associated with smokeless tobacco in Bangladesh is predominantly informal and insecure. SLT production frequently takes place in household settings, relying on family labour rather than formal wage employment. Women are commonly involved in processing and packaging activities.

Reliable news at the national level on the number of people working in the SLT sector is not available, mainly because the sector is informal. However, recent studies generally depict SLT work as poorly paying, lacking social security, and exposing workers to various health hazards.

Policy and Regulatory Environment

Bangladesh ratified the WHO Framework Convention on Tobacco Control (FCTC) in 2004, but has not ratified the Protocol to Eliminate Illicit Trade in Tobacco Products.
Some of the major policy gaps are:

- The Health Policy 2011 addresses tobacco only superficially, with no clear SLT-specific strategy
- SLT was included in the Tobacco Control Act in 2013
- Enforcement focuses largely on smoked tobacco

Urban anti-spitting laws have existed (since 1976), but implementation is negligible, and any enforcement is hardly noticeable.

Taxation and Pricing

Although total taxes on SLT products reach near 100%, enforcement is weak, and tax evasion is common. As a result, SLT retail prices continue to be some of the lowest in the world (Zarda per gram costs less than half the price of the cheapest cigarette).
Besides, seasonal variations also have an impact on the demand level, whereby during winter and festival time, SLT sales go up.

BRAZIL'S

TOBACCO INDUSTRY AT A GLANCE

PREVALENCE

15.2%

of the adult population consumes tobacco in one or other form.

0.4% SMOKELESS TOBACCO

14.7% SMOKING TOBACCO

GDP LOSS

BRL 126 BILLION

GDP loss due to tobacco in 2024.

GENDER DIVISION

WOMEN **MEN**

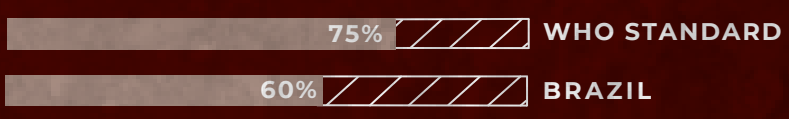
SLT use is mostly negligible amongst both the genders,

LEADING BRANDS

- Souza Cruz
- Phillip Morris Brazil

The system utilizes a mixed tax rate structure, including both specific (per-pack) and ad valorem (percentage-based) rates.

TAXATION



Taxation on tobacco products is as high as 60%.

EXPORTS

$3 BILLION

in exports in 2024.

1ST

ranking in terms of exports

MAJOR POLICY GAPS

- The sales and marketing are not explicitly prohibited, but restrictions are imposed on the promotion of such products.
- A flourishing illicit market undermines current regulations, with many products being "knock-off" devices lacking safety standards.
- The policy for SLT is relatively less restrictive compared to smoking tobacco.

Brazil

Market Outlook

The type of products provided by Brazil's smokeless tobacco market includes chewing snuff, snuff and tobacco pouches, which offer a nicotine boost without combustion. These products are consumed orally, providing users with nicotine satisfaction while minimising their exposure to harmful chemicals found in cigarettes. Generally, the smokeless tobacco products are consumed orally and provide user with nicotine satisfaction while minimising their exposure to harmful chemicals found in cigarettes.

The SmokeLess Tobacco market shows a stable growth trend in Brazil, which is believed to have resulted from a mix of cultural taste and a change in consumer preferences. Brazil, being the global leader in tobacco production, had 2.11 crores users of tobacco products in the year 2022, being the 8th largest globally and 2nd in the WHO region of the Americas. The prevalence of smoking has reduced in Brazil from 15.7% in 2006 to 9.1% in 2021, but in contrast to this, smokeless products and snus are gaining more market share due to the decline in smoking and the risk related to it. The country produced 11.5% of the unmanufactured tobacco globally in 2022. In spite of increasing regulations on the production and sale of e-cigarettes, the demand for these alternatives is increasing continuously.

According to the GATS (Global Adult Tobacco Survey), the demographic profile of consumption of SLT in Brazil is as follows:
Consumption rate is 0.4% of adults overall, with slightly higher prevalence among men (0.6%) than women (0.3%). Smokeless tobacco use was also higher in rural areas (1.2%) than in urban areas (0.3%) in earlier population surveys.

Types of Smokeless Tobacco Products

The types of SLT products prevalent in Brazil include:

- Rapé (nasal snuff)
- Chewing tobacco
- Imported or niche products like snus

Tobacco and the Economy: Employment

In Brazil's tobacco industry, the production is more dependent on rural agriculture. The tobacco industry in Brazil depends mainly on rural farmers for the production of tobacco.
It is estimated that almost 2.1 million people directly or indirectly engage in tobacco production, and within that, roughly half are directly associated with direct agricultural employment. The rest of the people are engaged in other related activities, including processing and distribution.

Exports

Brazil is a massive global tobacco exporter and is consistently among the top 5 exporters of SLT. It primarily exports leaf tobacco for smoking, generating around $3 billion in 2024. The major markets of Brazil, the countries of Europe, China, Indonesia and the countries of the Far East, while data focuses on overall tobacco, trends show increasing global interest in smokeless alternatives like nicotine pouches, presenting opportunities for Brazil to expand into these modern products, despite challenges like logistics and climate.

Policy Framework

The national authority that is responsible for related tobacco production and sale in Brazil is Agência Nacional de Vigilância Sanitária (ANVISA). When compared with the restrictions imposed on smoking tobacco products by the Brazilian government, the policy for smokeless tobacco products is relatively less restrictive.

The policies majorly align with the benchmarks of the WHO FCTC, involving a heavy ban on cigarettes and heated tobacco products.
Federal Law No. 9,294/1996 sets restrictions on tobacco product advertising, promotion, and consumption in public spaces, which apply to all tobacco-derived products, including smokeless tobacco.

The sales and marketing are not explicitly prohibited, but restrictions are imposed on the promotion of such products. In public places, the use of tobacco (whether smoking or smokeless) is completely banned.
Taxation on tobacco products is as high as 60%. Like other countries, health warnings are required on the packaging and labelling of the product covering most of the packaging.

CANADA'S

TOBACCO INDUSTRY AT A GLANCE

PREVALENCE

12.9%

of the adult population consumes tobacco in one or other form.

6.2% SMOKELESS TOBACCO

8.9% SMOKING TOBACCO

GDP LOSS

CAD 32.5 BILLION

GDP loss due to tobacco in 2024.

GENDER DIVISION

WOMEN **MEN**

SLT use is similar in both the genders.

LEADING BRANDS

- Copenhagen
- Grizzly
- Skoal

The options that they provide include moist snuff, chewing tobacco, and long-cut options.

EXPORTS

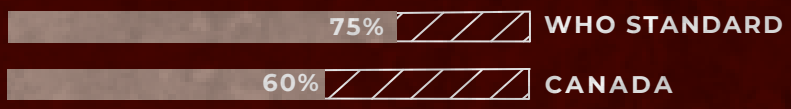
$86 MILLION

in exports in 2025.

19TH

ranking in terms of inhable tobacco and nicotine products exports.

TAXATION



The industry instigated illicit trade in Canada in the 1990s in response to tobacco tax increases at both the federal and provincial levels.

MAJOR POLICY GAPS

- Across Canada, smoking is banned in almost all indoor public places and workplaces, but smokeless products can be used in these places.
- The warnings required on smokeless tobacco products do not include images, and there is a smaller number of rotated warnings.

Canada

Market and Leading Brands

Canada is in proximity to the United States. Its relative similarity in terms of the type of consumer group and the culture makes the Canadian market an attractive place for American tobacco companies. Unlike some Asian and European countries that have imposed a ban on smokeless tobacco products, the Canadian market serves as the right fit for the American brands of chewing tobacco and snuff to establish a supply chain and channels of distribution. Canada has almost 5% of the Aboriginal population, which has a high demand for tobacco products.

The smokeless tobacco market in Canada accounted for nearly 3% of the total tobacco market in Canada, with leading products including chewing tobacco, oral snuff and nasal snuff, etc. The market is now characterised by declining usage due to strict government policies. The sales of smokeless tobacco have decreased in recent years.
Despite this decline, SLT products are legally available in Canada (though access is limited by government regulations).
The market includes two main types of products- chewing tobacco and snuff. The details of these products have been discussed earlier in the report.
The leading brands in Canada include Copenhagen, Skoal, and Grizzly. The options that they provide include moist snuff, chewing tobacco, and long-cut options.

In the current scenario, newer products like spit-free snus and dissolvable tobacco are emerging and have increasing appeal among youth.
Copenhagen and Skoal are distributed by National Smokeless Tobacco Company (NSTC), which is wholly owned by Altria Group. NSTC has been distributing smokeless tobacco products in Canada since 1913. Its headquarters are located in Kirkland, Quebec, with products manufactured in Nashville, Tennessee. These brands are part of the U.S. Smokeless Tobacco Company (USSTC). The same was acquired by Altria in January 2009. This acquisition led to the further solidification of Altria's presence in the smokeless tobacco market.

Tobacco Farming

History and Evolution of Tobacco in Canada:

Tobacco farming in Canada evolved into a regionally focused and policy-backed agricultural activity, influenced by climate, soil conditions, and demand for the end product. By the early 20th century, commercial production was mainly centred in Ontario and Quebec. Most importantly, pipe and dark tobacco were grown in Quebec, and Quebec later became the foundation for smokeless products like chewing tobacco and snuff.

The smokeless types were made to grow in heavier and more fertile soils with high organic matter, which was not the case with flue-cured tobacco used in cigarettes.

Such conditions yielded thicker leaves with more nicotine and stronger flavours, essential for smokeless consumption.
Farming methods focused on managing seed beds, applying precise fertilisation, and systematically topping and suckering to improve the body and strength of the leaves.

Quebec's tobacco sector stood out for its variety and historical continuity. Many pipe tobacco varieties trace back to the French colonial era, showing a long tradition of growing tobacco for non-cigarette purposes. This is different from Burley

tobacco, which was more sensitive to price changes and prone to cyclical overproduction. This difference helped maintain the stability of smokeless tobacco farming. Government actions also influenced production trends.

Protective tariffs and special treatment for locally grown tobacco supported the ongoing cultivation of specialised varieties, even when market demand was low. As a result, smokeless tobacco in Canada developed from a unique agronomic background, driven by intentional variety selection and curing methods, rather than being a byproduct of cigarette-focused agriculture.

Tobacco and the Economy: Employment

The Smokeless Tobacco sector in Canada is relatively small and is declining due to government policy.

There are estimates of only around 3000 people being employed in the sector. The employment in the sector is of various types, listed:

- Operational and manufacturing jobs
- Supply Chain jobs (sales and distribution)
- Administrative and product development jobs.

The SLT sector in Canada, as discussed earlier, is declining, and the decline in employment can be implied from the same. This decline is alleged to be caused by the stringent government laws, including the aim of “less than 5% tobacco by 2035” and a change in the consumption pattern showcased by the people.

The tobacco and nicotine use patterns have changed, and many tobacco firms have shifted to smoke-free tobacco and reduced-harm nicotine.

Exports

Canada exports SLT products under the category of “other manufactured products”. The destinations of export include the United States (approximately 59%), Costa Rica (35%) and Belgium.
Canada largely imports tobacco from the United States, as discussed earlier, and imports exceed the exports in large amounts. Also, when compared with other tobacco products (not smokeless) exports (approximately 3 million kg), smokeless tobacco exports are very small.

Illicit Trade

Illicit trade of SLT products is a major problem across Canada. The crimes include Illegal smuggling from the US (the US being in proximity to Canada), and illegal domestic production, including unauthorised nicotine pouches, undermining public health and tax revenue. This problem is being tackled by the Canadian government by implementing Canada's "less than 5% by 2035" tobacco endgame goal, established in 2016, which aims to drastically reduce commercial tobacco use due to its significant public health and economic costs, including over 1 million deaths since 2000 and an annual cost exceeding $16 billion.

This strategy moves beyond traditional tobacco control, seeking structural transformation and an equity-driven approach. While Canada has a strong history of reducing smoking rates, current projections detailed in this report indicate that a smoking prevalence target of 4.9% prevalence by 2035 is achievable if the accelerated decline rate observed since 2016 (6.5% annually) continues.

Policy Framework

Smokeless tobacco is subject to federal and provincial tobacco laws, including tax laws:

- Advertising of smokeless tobacco is subject to the same restrictions as advertising of cigarettes. These products can be legally advertised to adults through direct mail or through posters in bars or other places where children are not present or to retailers.
- In the case of cigarettes or little cigars, they are subject to a minimum package size. Smokeless tobacco products do not involve such restrictions, but the sale is discouraged by taxation onthe sale of quantities less than 50 grams.
- Like the manufacturers of cigarettes, manufacturers of smokeless tobacco must report the ingredients and additives they put in their products to Health Canada.

Smokeless tobacco is exempt from some federal laws or regulations that apply to cigarettes:

- Smokeless tobacco products can be sweetened with sugar or flavoured with fruit flavourings, even though such flavourings are not permitted in cigarettes or little cigars.
- The warnings required on smokeless tobacco products do not include images, and there is a smaller number of rotated warnings.
- Four rotated warnings are required on smokeless products. ("The product is highly addictive", "This product causes mouth diseases", "Use of this product can cause cancer", and "This product is not a safe alternative to cigarettes." ·
- Across Canada, smoking is banned in almost all indoor public places and workplaces, but smokeless products can be used in these places.

Availability	Yes/No
Legal to import the product for trade	Yes
Legal to buy the product online	Yes
Legal to buy from a vending machine	Yes
Legal to sell the product	Yes
Legal to use the product	Yes
Legal to import for personal use	Yes
Products are marketed	Yes

INDONESIA'S

TOBACCO INDUSTRY AT A GLANCE

PREVALENCE

28.7%

of the adult population consumes tobacco in one or other form.

<1% SMOKELESS TOBACCO

28.7% SMOKING TOBACCO

GDP LOSS

$27 BILLION USD

GDP loss due to tobacco in 2024.

GENDER DIVISION

WOMEN **MEN**

SLT use is almost negligible amongst both the genders.

LEADING BRANDS

- PT HM Sampoerna Tbk
- PT Gudang Garam Tbk

Over 95% of cigarettes sold in Indonesia are kretek, a blend of tobacco, cloves, and sauces.

EXPORTS

$2.08 BILLION

in exports in 2025.

4TH

ranking in terms of exports.

TAXATION

A complicated tiered specific tobacco excise tax system with 8 different tax rates applied on different tobacco products based on type of tobacco product

MAJOR POLICY GAPS

- Indonesia uses a multi-layered excise system (up to 8 tiers), causing smokers to switch to cheaper cigarettes instead of quitting when taxes rise.
- Despite restrictions, advertising remains widespread, especially in the vicinity of schools and in youth-accessible areas.

Indonesia

In Indonesia, SLT is neither a consumer favourite nor a commercial powerhouse but a dying tradition, yet the legislative and tax structures around it are some of the most complex in the world. While India is a majorly a "chewing" culture and the US is a "Mixed" culture, Indonesia is a “strictly” smoking culture.

Prevalence

Unlike India’s 21.4%, smokeless tobacco usage in Indonesia is negligible, estimated at ~1% of the adult population (approx. 2 million people).

- Usage is confined almost exclusively to older women in rural areas who chew Betel Quid called Nginang or Sirih(Paan in India).
- Youth Trend**:** 2024 data indicate a slight rise in SLT among youth (~1%), due to snus and nicotine pouches. This is still exceedingly low compared to India.

Importer, not an Exporter

Indonesia functions as a tobacco-importing country because it imports more tobacco than it exports. The country imports premium tobacco leaf from China and India to meet its extensive Kretek cigarette demand.

The total value of tobacco exports amounts to approximately $2.08 billion in 2024, while all but one shipment consists of Clove Cigarettes (Kretek), which Vietnam sends to Malaysia, Singapore and the Philippines. Indonesia exports almost no smokeless tobacco products at all.

Feature	India	Indonesia
Dominant Habit	Smokeless Tobacco (SLT)	Smoking (Kretek Cigarettes)
SLT Prevalence	~21.4% (Adults)	~1.0% (Adults)
Key Demographics	Widespread across all ages/genders (Men & Women).	Primarily older rural women (Nginang).
Primary Products	*Khaini, Gutka, Zarda, Pan Masala*	*Betel Quid (Sirih), Pinang*
Youth Usage	High (since sachets are cheap).	Emerging (due to new nicotine pouches), but still very low.

Feature	India	Indonesia
Global Status	Net Exporter (World's #2 Producer & Exporter).	Net Importer (World's #4 Producer, but consumes more than it grows).
Export Value	~$1.45 Billion (2023-24)	~$2.08 Billion (2024)
Primary Export	Unmanufactured Leaf + Chewing Tobacco (to 115+ countries).	Clove Cigarettes (Kretek) (to Malaysia, Singapore).
Smokeless Export	Very High	Negligible.

GDP Contribution

The tobacco industry is a massive fiscal powerhouse, contributing ~96% of all national excise revenue, totaling roughly $13.5 Billion USD).
The Net Loss: Despite this massive revenue, the economic cost of tobacco-related diseases is estimated at $27 Billion USD. The net loss is approximately 1.5% to 2.5% of Indonesia's GDP. The government spends significantly more on healthcare, mainly via the BPJS insurance scheme, than it collects in taxes.

Employment

Actual round-the-clock manufacturing jobs are somewhere between 280,000 and 300,000. Most rolling has now been mechanised. There are roughly 500,000 to 600,000 tobacco farming households. However tobacco is only a seasonal crop and many live below the poverty line.

Indonesia's industry is consolidating into mechanised factories owned by giants like Sampoerna/Philip Morris and Gudang Garam, unlike India, where household units make up most of the sector.

Global Legislations and Compliance

Indonesia is the only Southeast Asian country that did not ratify the WHO FCTC because the treaty poses a sovereignty threat to Indonesia and endangers farmers, according to their government. The Government Regulation PP No 28 of 2024 introduced new rules that raised the minimum age for tobacco purchase from 18 to 21, while it prohibited all forms of tobacco advertising and the sale of individual tobacco pouches in stores. The law raised the graphic health warning requirement, which previously demanded 40% to now demand 50% of the packaging space.

Feature	India	Indonesia
Tax Contribution	~0.32% of GDP (Value Added).	~10% of Total Tax Revenue (Huge reliance).
Economic Burden	~1.0% of GDP	~1.5% - 2.5% of GDP
Net Outcome	Negative. Healthcare costs > Tax Revenue.	Negative. Healthcare costs > Tax Revenue.
Fiscal Reliance	Moderate	High (If tobacco were to fail, tax revenue would crumble).

Feature	India	Indonesia
Total Workforce	~45.7 Million (Farmers + Laborers).	~6 Million
Manufacturing	Unorganised & Manual.	Consolidating & Mechanised. Factories (Sampoerna/Gudang Garam) use machines.
Farming Base	6 Million+ Farmers (Smallholders).	~500,000 - 600,000 Farming Households.
Labor Type	Highly labour-intensive (creates many low-paying jobs).	Capital-intensive (creates fewer, higher-paying factory jobs).

Feature	India	Indonesia
Global Treaty	Party to the WHO FCTC (Ratified).	Non-Party (Refused to sign).
Primary Law	COTPA 2003 (Cigarettes & Other Tobacco Products Act).	Health Law 2023 & PP 28/2024.
Smokeless Ban	Yes. Gutka (tobacco + areca mix) is banned nationwide, but evades via separate twin packaging.	No. No specific bans on smokeless ingredients.
Min. Legal Age	18 Years.	21 Years
Health Warnings	85% of the pack	50% of the pack

Feature	India	Indonesia
System Type	GST + Cess (Unified National Tax).	Multi-Tiered Excise (Based on production volume).
Tax Rate	28% GST + Compensation Cess.	Variable. 8-10 different tax tiers. Smaller factories pay less tax.
Smokeless Tax	High on paper, but massive evasion in the unorganised sector.	Lowest Tier. Practically 0 tax.
Revenue Flow	Goes to Central & State Govts.	2% of revenue is returned to tobacco-producing regions, giving an incentive to produce.

Taxation

Indonesia employs a multi-tiered excise system, which currently has 8 tiers. Under it, taxes are based on production volume and the technique employed. Taxes vary according to the number of sticks produced and whether they are they machine rolled or hand-rolled. Sliced tobacco is taxed at a very low rate, effectively 0, encouraging its consumption amongst the poorest of the poor.

USA'S

TOBACCO INDUSTRY AT A GLANCE

PREVALENCE

18.8%

of the adult population consumes tobacco in one or other form.

2.1% SMOKELESS TOBACCO

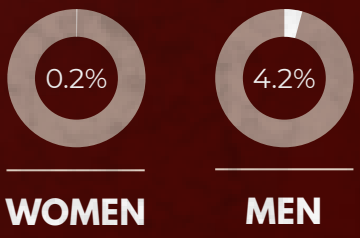
9.9% SMOKING TOBACCO

GDP LOSS

USA 621 BILLION

GDP loss due to tobacco in 2024.

GENDER DIVISION



WOMEN **MEN**

SLT use is similar in both the genders.

LEADING BRANDS

- Swedish Match
- Altria Group
- North Atlantic Trading

The declining usage of traditional tobacco products is offset by the recent rising usage of e-cigarettes.

EXPORTS

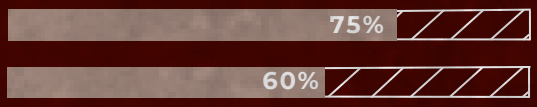
$1.6 BILLION

in exports in 2024.

8TH

ranking in terms of premium leaf and cigarettes exports.

TAXATION



Federal tobacco tax revenue has dropped by nearly 30% in the last decade from ~$14 billion in 2014 to ~$9 billion in 2024.

MAJOR POLICY GAPS

- The system is outdated and inconsistent, with weight-based taxes, no inflation adjustment, and loopholes for nicotine pouches, making newer products cheaper.
- Weak controls on marketing, product positioning, and warnings allow smokeless tobacco to be perceived as safer, especially among youth.

United States of America

Tobacco: Rooted in History

Chewing tobacco became popular in the USA only during the first half of the nineteenth century. During the 1860s, tobacco was chewed in the form of either a plug or a twist. Of the 348 tobacco factories listed in the 1860 Census for Virginia and North Carolina, only seven manufactured smoking products. American pioneers resorted to the use of a home-made sweet plug, so-named because the leaf was wadded into a hole in a log and laced with a sweetening agent (usually brandy or cane sugar), which, after removal of the fermented leaf, resulted in a tasty chew(Axton,1975).

In 1797, Adam Clarke, a famous Methodist minister, appealed to all tobacco consumers and religious followers to avoid the use of tobacco for the sake of their health and their souls. This plea was also made since it had become unsafe to kneel when praying because chewers had made the floors unsanitary!!

The J-Curve

The market for chewing tobacco passed its peak in 1890, when some 3 lb (about 1.5 kg) of plug, twist or fine-cut chewing tobacco were chewed annually per capita in the USA.

Nevertheless, chewing remained the dominant form of tobacco use in America until the expansion of the cigarette industry in 1918.
In 1945, cuspidors were removed from all federal buildings by order of the US District Court in Washington DC. However, during the second half of the 1960s through the 1970s, there was a revival of tobacco chewing in the USA.

In the mid-1970s, the US Tobacco Company (later renamed the US Smokeless Tobacco Co.) began to develop new products, new images, and an aggressive marketing program in order to expand its market, since it was the leading manufacturer of smokeless tobacco products in the USA.

The marketing campaign included a ‘graduation’ marketing strategy that was designed to recruit new, young users with low-dose nicotine ‘starter’ moist snuff products and move them to higher-dosage products as they developed tolerance and addiction to nicotine.

The result was a ninefold increase in the prevalence of snuff use among young adult men (< 24 years old) between 1970 and 1987. Tobacco (primarily Kentucky and Tennessee tobacco) is fire-cured, then fermented and processed into a dry, powdered form. The moisture content of the finished product is less than 10%. Dry snuff is packaged and sold in small metal or glass containers. Typically, in the USA, a pinch (called a ‘dip’) is held between the lip or cheek and gum.

The Changing Face of American Tobacco

American tobacco production has experienced a complete transformation during the last three decades. The U.S. had more than 93000 tobacco farms in 1997. The total decreased to 3000 farms by 2022. The United States maintains its position as the world's fifth-biggest producer of this product despite losing most of its individual farms because it has multiple active production sites.

The industry operates with high concentration throughout the United States. North Carolina and Kentucky serve as the primary sources of American tobacco production because these two states produced 77 per cent of the country's tobacco in 2022.

The Shift to Smokeless

The business aspects of farming operations currently experience changes because smokeless products have become a significant product category within the market that ranges from traditional dip and chew products to modern items such as snus and dissolvables.

The marketing machine operates continuously because it allocated more than 572 million dollars for product advertising and marketing activities during the year 2022. Actual manufacturing output has decreased slightly at this point. The manufacturers produced 113.3 million pounds of smokeless tobacco during 2022, which represents a decrease from the 131.4 million-pound production peak that occurred in 2016.

The market itself is dominated by just five big names: Altria Group, North Atlantic Trading, Reynolds American, Swedish Match, and Swisher International. The two companies together reached approximately 5 billion dollars in market control during the year 2022.

The main growth area for the company exists outside of its traditional chewing tobacco business because customers prefer modern chewing tobacco alternatives. The company has experienced a complete sales increase for its nicotine lozenges, pucks and pouches, which now surpass 1 billion dollars after starting at 452 million dollars during 2020.

Who is actually buying these products? According to current statistics, approximately 5.2 million American adults use smokeless tobacco products, which represent 2.1 per cent of the total population over 18 years old.

The data shows a significant difference between male and female populations who use the product:
Men: About 4 in every 100 men (4.2%) are current users.
Women: It's incredibly rare, with less than 1 in every 100 women (0.2%) using it. The research shows that Non-Hispanic White adults have the highest probability of using smokeless tobacco products, with a usage rate of 2.9 per cent among all racial and ethnic groups that participated in the study.

There has been a persistent decline in the usage of school students using SLT, due to the result of multiple factors, including the implementation of evidence-based strategies at the national, state and local levels. Evidence-based tobacco prevention strategies include price increases and mass media campaigns to educate youth about the harmful effects of all tobacco products. The FDA also continues to regulate the tobacco product marketplace by conducting thorough premarket review and using the full scope of its compliance and enforcement tools across the supply chain, which spans manufacturers, importers, distributors and retailers. (sourced- CDC).

Exports

The United States plays a unique role in the global market in that it is a raw material supplier, not a finished product exporter. The US exports roughly $1.4 billion to $1.6 billion worth of tobacco annually (2022-2024 data).
The vast majority of this (over 75%) is unmanufactured tobacco leaf. The US grows premium "burley" and "flue-cured" tobacco in states like North Carolina and Kentucky and ships it to countries like China, Belgium, and Germany to be turned into products there.

Group	Middle School	High School	Total
Overall	0.80%	1.50%	1.20%
Boys	1.00%	2.30%	1.70%
Girls	0.70%	0.60%	0.70%
AI/AN	--	--	3.60%
Black	--	--	0.80%
White	0.70%	1.80%	1.30%
Hispanic	1.00%	1.40%	1.30%
Multiracial	--	--	1.30%
Asian	--	--	--

CURRENT USE OF SMOKELESS TOBACCO AMONG MIDDLE AND HIGH SCHOOL STUDENTS IN 2024

For smokeless tobacco specifically, exports are minimal. Brands like Copenhagen or Skoal are almost exclusively an American habit. The US exports less than $20 million of finished chewing tobacco annually, according to the 2024 figures.
In contrast to India, the US is increasingly importing the manufacturing tech for smokeless products, which can be reinforced by the fact that Philip Morris International recently acquired Swedish Match for $16 billion to get their hands on Zyn (nicotine pouches).

GDP Contribution

The US smokeless tobacco market alone is a giant, valued at approximately $23 billion. It is a highly profitable, high-margin business for companies like Altria and Reynolds.

The direct "Value Added" of tobacco manufacturing to the US GDP is approximately 0.2% to 0.4%. This shows that the tobacco industry might be high as far as sales are concerned, but the actual contribution to GDP is far lower compared to India.

The product generates substantial profits for manufacturing companies, yet contributes almost no economic value to the entire economy.

The Centres for Disease Control (CDC) estimates that smoking and tobacco use cost the US economy more than $300 billion each year through healthcare expenses and decreased work efficiency. The economic burden of tobacco creates a drag of roughly 1% on the total US GDP.

Employment

Tobacco cultivation and manufacturing in the US is heavily mechanised, pitting it in direct contrast to India. While India employs nearly 46 million people in the tobacco sector, according to the Bureau of Labour Statistics, US employs only 11,100 people in the industry. This number has dropped by nearly 50% since the 1990s. Machines now do the work of packing moist snuff and rolling cigarettes, meaning the industry no longer serves as a major job creator for the American working class.

According to the most recent USDA Census of Agriculture, there are fewer than 6,300 tobacco farms left in the entire United States. A single US tobacco farm today produces as much leaf as hundreds of Indian farmers combined.

The actual harvesting is rarely done by hand, but by illegal migrant labourers from Mexico, since the Southern States share a border with Mexico, and the farms are concentrated in those states only.

To quote the Michigan Tobacco Research Centre, the decline of the tobacco industry does not result in a net economic loss since it is a highly automated, capital-intensive sector. This shift has actually led to net employment gain in the states where tobacco farming disappeared, since the jobs shifted to the service and retail sectors.

Legislation and Global Compliance

The United States approaches tobacco regulation with a special method because it represents one of the few countries which uses "harm reduction" as its main method for tobacco control. The United States signed the WHO Framework Convention on Tobacco Control FCTC in 2004 but never completed the ratification process.

The US is not legally bound by international treaty rules. While India must implement graphic warnings covering 85% of the pack (an FCTC mandate), the US keeps its warnings relatively small and text only on smokeless cans.

The Modified Risk Tobacco Product (MRTP) system permits specific smokeless products to receive marketing approval as safer alternatives to cigarettes, which the US FDA prohibits.

Tobacco 21 (T21) Law: In December 2019, the US passed a federal law which raised the minimum age requirement to purchase all tobacco products, including smokeless products and nicotine pouches, from 18 to 21 years.

The PACT Act (2010 & 2020): It prohibits the US Postal Service (USPS) from delivering smokeless tobacco or vapes to residential addresses. Unlike India, where tobacco can be home delivered, this forced consumers to go to physical shops where age verifications, albeit leaky, are generally stricter.

The Master Settlement Agreement of 1998: Under this lawsuit, the US Smokeless Tobacco Company signed the STMSA. This banned cartoon advertising and brand-name merchandise and erased tobacco advertising throughout the country. On the contrary, in India, chewing tobacco advertisements are everywhere.

Taxation

As enunciated in the GDP section, consumers switching from cigarettes to smokeless tobacco and nicotine pouches (like Zyn), the government is actually losing money. Federal tobacco tax revenue has dropped by nearly 30% in the last decade, from ~$14 billion in 2014 to ~$9 billion in 2024.

The tax structure is outdated, since smokeless/pouched tobacco is taxed much lower. Since modern nicotine pouches are incredibly light, they pay pennies in tax compared to dollars for cigarettes.

Federal Excise Taxes are based on weight and not price. Modern nicotine pouches are extremely light because they use dry pharmaceutical-grade nicotine powder instead of wet fermented leaves. A can of dip (heavy) generates significantly more federal tax revenue than a can of pouches (light), even if they sell for the same price.

The MSA Payments:
Under the Master Settlement Agreement (1998), major tobacco companies must pay states roughly $9 billion annually forever.

- This adds roughly 50–60 cents to the price of every can of dip. It is a "hidden tax".

Lack of Inflation Indexing

Unlike most countries where taxes automatically rise with inflation, the US Federal Excise Tax is fixed in nominal dollars.

- The federal tax on chewable tobacco has been stuck at $1.01 since 2009.
- Because of inflation, the "real value" of that $1.01 has dropped by over 40% in terms of PPP since 2009.

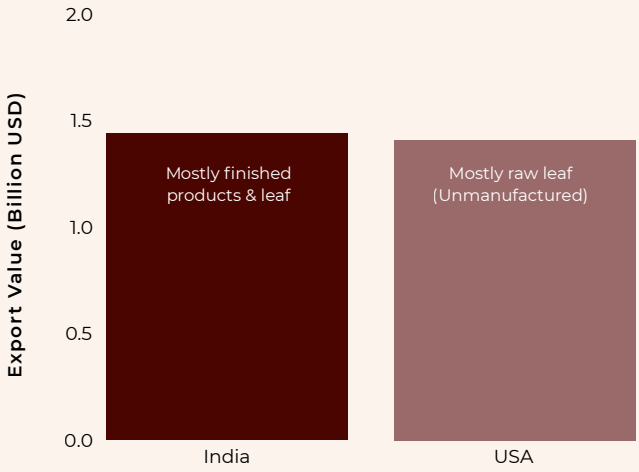
This means the tobacco industry effectively gets a tax cut. This is why US tobacco is relatively cheaper compared to Australian, UK or European counterparts.

Native American Reservations Taxation

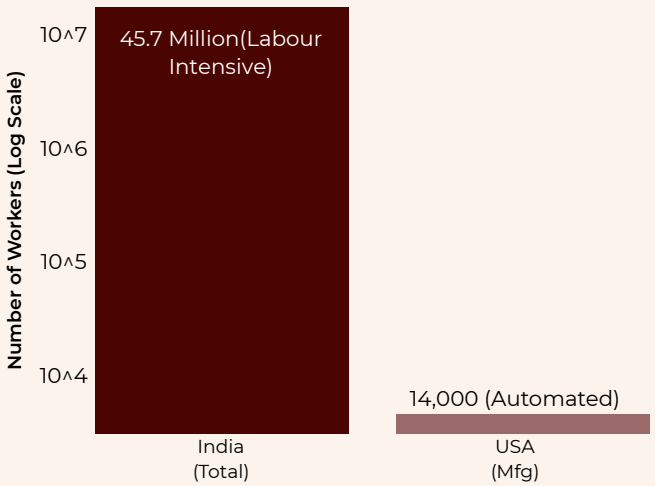
Federally recognised tribes are often exempt from state tobacco excise taxes on sales to tribal members on account of historical and cultural usage. However, many normal citizens go to reservations to buy tax-free tobacco at dirt-low prices.
In states like Oklahoma or New York, people escape the tax burden in this way. In New York State, where taxes are high at $5.35 per pack, estimates suggest up to 30-40% of all tobacco consumed is purchased from reservations or smuggled to avoid the tax.

Tax Type	Definition	Example State	Impact on Price
Ad Valorem	Tax is a % of the Price(Wholesale/Factory).	Massachusetts:210 % of wholesale price.	Extremely High. A can of dip can cost $10-$12.
Specific	Tax is a fixed $ Amount per Ounce.	Alabama: ~1 to 12 cents per ounce.	Extremely Low. A can of dip can cost $2-$3.
The "Pouch" Gap	Some states tax "tobacco."	California/NY:Strict.	Emerging Issue: Since pouches are often "tobacco-free nicotine," some states have had to scramble to pass new laws (like Washington in 2026) just to tax them.

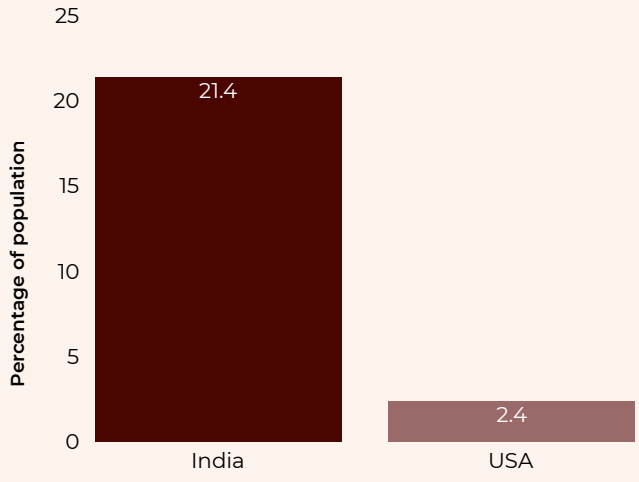
Annual Tobacco Export (2023-24)



Employment Disparity (Log Scale)



Smokeless Tobacco Prevalence (Adults)



SWEDEN'S

TOBACCO INDUSTRY AT A GLANCE

PREVALENCE

~22%

of the adult population consumes tobacco in one or other form.

7% SMOKELESS TOBACCO

14% SMOKING TOBACCO

GDP LOSS

$5.8 BILLION USD

GDP loss due to tobacco in 2024.

GENDER DIVISION

WOMEN MEN

SLT use is comparitively higher in men than women.

LEADING BRANDS

- Swedish Match AB
- Skruf Snus AB

Nicotine pouches ("white snus") are a growing segment, marketed as tobacco-free alternatives.

EXPORTS

$445 MILLION

in exports in 2025.

34TH

ranking in terms of exports.

TAXATION

The taxation of nicotine is much lower compared to tobacco taxation, making nicotine snus more affordable to cost sensitive groups.

MAJOR POLICY GAPS

- Nicotine pouches are popular among individuals who did not previously use tobacco, creating a new generation of nicotine addicts.
- The introduction of tobacco-free nicotine pouches ("white snus") has led to a sharp increase in usage, especially among young people and women.

Sweden

Sweden, officially the Kingdom of Sweden, is a Nordic country located in Northern Europe. It is a very well-defined profile marked by low prevalence of smoking and relatively high use of snus, in particular.

Prevalence

Sweden has comparatively lower tobacco use rates globally, with 21-22% of adults using tobacco in some form.

- Smokeless tobacco (SLT): 14%
- Smoking tobacco: 7%

Gender and Age Patterns: SLT use is much higher among men.

- Men using SLT: 22%
- Women using SLT: 6%

Youth patterns (15-16 years)

- Current SLT users: 11%
- Daily SLT users: 5%

SLT use rises with age among adults, with higher prevalence among men aged 24 to 44 years and lower prevalence among younger adults. Smoking remains low among all age groups.

Market and Leading Brands

The Swedish SLT market is much more formal and regulated than in most of the countries. It is dominated by established brands like:

- Swedish Match AB: leading snus producer, now owned by Philip Morris International (PMI)
- Skruf Snus AB: owned by Imperial Brands
- JTI brands: various regional snus and nicotine pouches

Nicotine pouches ("white snus") are a growing segment, marketed as tobacco-free alternatives.

Tobacco Farming

Tobacco farming in Sweden is very limited, largely small-scale production for snus production.

The domestic production is concentrated in the south of the country, and smallholders or specialised farms supply the tobacco for traditional snus production.
Farming is formal, regulated and well integrated with established manufacturers.

Supply Chain of SLT

a. Sourcing Raw Materials

Snus tobacco is cultivated taking into consideration controlled agricultural practices. Raw tobacco leaves are either sourced from domestic farms or imported from EU-approved suppliers.

b. Manufacturing and Processing

Production is centralised and regulated. Snus is pasteurised, standardised, and monitored constantly for any quality and health warnings.

c. Distribution and Wholesale

SLT products are distributed through formal wholesale and retail networks. These generally include convenience stores, supermarkets, and tobacco shops.

d. Retail and Accessibility

SLT is widely available but age-restricted (minimum 18 years). Loose sales are not common, although the packaging is regulated.

e. Regulatory and Enforcement Gaps

Regulation is strong compared to global standards. Snus sales are legal in Sweden due to an EU exemption; nicotine pouches are also regulated.

f. Seasonal and Demand-linked Supply Changes
Demand is relatively stable year-round; seasonal variations are minor compared with Bangladesh.

g. Implications for Tobacco Control
Effective regulation to the strong end is good for public health goals, keeping smoking prevalence low and reducing the uptake in young people. Harm reduction policies (snus promoted as a better alternative to smoking), among other things, have affected low rates of smoking among men.

Economic Impact

Total economic cost of tobacco use: ~US$5.8 billion

The tobacco industry's contribution to GDP is significant but proportionally lower than the total economic burden, thus creating a net economic loss for Sweden.
Employment in SLT is formal and regulated. Hence, workers are employed in factories with labour protections. Women are employed as well in this industry to some extent. However, informal household work is minimal.

Policy and Regulatory Environment

Sweden ratified the WHO Framework Convention on Tobacco Control (FCTC) in 2005. There are strong regulations on sales, advertising, health warnings, and age restrictions.
Snus sales are legal due to an EU exemption; however, nicotine pouches are regulated regularly. Urban anti-spitting laws exist, too, but are mainly public-health supportive.

Taxation and Pricing

SLT products are effectively taxed, and enforcement is effective. The prices for SLT products are higher than cigarettes on a per-nicotine basis.

Snus is affordable, but it is controlled as well. Unlike Bangladesh, where the informal markets depress the prices, here the markets are tangible and well-managed.

Key Observations

Sweden has one of the lowest smoking rates globally (~10%)but a high male SLT prevalence (22%).
The "Swedish Experience" demonstrates smokeless tobacco as a harm reduction strategy, replacing smoking with smokeless tobacco. This is contributing to low smoking-related mortality.
The SLT supply chain is transparent with effective taxation and policies with quality control and enforcement.

MYANMAR'S

TOBACCO INDUSTRY AT A GLANCE

PREVALENCE

20.85%

of the adult population consumes tobacco in one or other form.

<1.8% SMOKELESS TOBACCO

22.3% SMOKING TOBACCO

GDP LOSS

$8.2 BILLION USD

GDP loss due to tobacco in 2024.

GENDER DIVISION

WOMEN **MEN**

SLT use is almost negligible amongst both the genders.

LEADING BRANDS

- Marlboro
- Winston
- Camel
- Dunhill

Over 95% of cigarettes sold in Myanmar are kretek, a blend of tobacco, cloves, and sauces.

EXPORTS

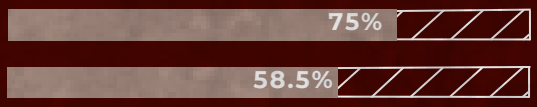
$2.02 BILLION

in exports in 2025.

8th

ranking in terms of exports.

TAXATION



A complicated tiered specific tobacco excise tax system with 8 different tax rates applied on different tobacco products based on type of tobacco product

MAJOR POLICY GAPS

- Myanmar uses a multi-layered excise system (up to 8 tiers), causing smokers to switch to cheaper cigarettes instead of quitting when taxes rise.
- Despite restrictions, advertising remains widespread, especially in the vicinity of schools and in youth-accessible areas.

Myanmar

Market leaders:

Leading players of the tobacco industry in Myanmar include major international companies such as British American Tobacco and Japan Tobacco International. Widely used brands owned by these players are Marlboro, Camel, Winston, and Dunhill.

Prevalence

Studies conducted in Myanmar on tobacco use in 2001, 2004 and 2007 indicate that while the prevalence of smoking is gradually declining in the country, the usage of SLT is on the rise, amongst both genders, in rural as well as urban areas. Betel quid, also known as chewing kun yar, is integrated in the customs of the country. In Myanmar, it is a common practice for children to chew betel quid with tobacco. Betel quid without tobacco is often used as a means of digestion aid and mouth freshener; children later on learn to add tobacco to the product. According to the ASEAN Tobacco Control Atlas published in 2013, in the age group above 15 of all regular tobacco users, 51% of males and 16% of females consumed SLT products. (Kyaing, 2003) Overall, about 9.85 of children and 20.85 of adults use SLT products. The prevalence is much higher in men compared to women. (Kyaing, 2012)

Exports

Myanmar exports both raw and manufactured tobacco products primarily to Asian countries like China, India, Singapore, etc. Tobacco exports to Myanmar fall under the category of Beverages and Tobacco. In 2021, the total domestic exports of beverages and tobacco were measured at 29.580 USD, which marks a decrease from 2020 when the exports were valued at 47.990 USD. (“Tobacco Exports from Myanmar - Market Size and Demand based on Export Trade Data”)

Imports

According to the United Nations COMTRADE, Myanmar imported tobacco products worth USD 32.33 million in the year 2024. There is a considerable amount of import of SLT products through legal and illegal means. (“Myanmar Import of Tobacco and Manufactured Tobacco Products”)Many imported products are repacked under local brand names and are then sold at considerably lower prices. Most imported products, such as Indian products, have the mandatory health warning on their packaging, while re-packaged local products do not contain such health warnings. (Kyaing, 2012).

Tax Structure

The government of Myanmar does not tax all tobacco products uniformly. Hand-rolled products like cheroots and cigars, as well as smokeless tobacco products, are taxed less than cigarettes, which could potentially encourage consumers to shift to these cheaper alternatives in response to tax increases. (“Myanmar - tobacco tax program”)

Employment

There is no official data available on the estimated number of employment related to the tobacco industry. A majority of employees engaged in the sector are part of the cheroot industry.
According to a research paper, the lower bound of the number of employees engaged in the cheroot industry in the year 2000 was estimated to be 19,000. (Kyaing, 2003)

Production

Tobacco production in Myanmar involves local cheroot, thanaphet, manufactured cigarettes and other such tobacco products.

In 2022, there were 26,971 tons of tobacco produced in Myanmar on 13,526 hectares of agricultural land. ("Country Factsheets: Myanmar")

Tax rates on Cigarettes and other tobacco products according to union laws, 2018 to 2024:

Description of Specific Goods	Market Price Level	Specific Tax Rate (2018)	Specific Tax Rate (2020)	Specific Tax Rate (2021-24)
a) Cigarettes of all sorts	Sale price of packet containing 20 sticks 400 MMK (2016 & 2017) or 500 (2018), 600 (2020), or 700 (2021-24)	4 MMk per stick	9 MMk per stick	10 MMk per stick
b) Cigarettes of all sorts	Sale price of packet containing 20 sticks 401 to 600 MMK (2016 & 2017) or 500 (2018), 601 to 800 (2020), or 701-900 (2021-24)	9 MMk per stick	18 MMk per stick	19 MMk per stick
c) Cigarettes of all sorts	Sale price of packet containing 20 sticks 601 to 800 MMK (2016 & 2017) or 500 (2018), 801 to 1000 (2020), or 901-1100 (2021-24)	13 MMk per stick	23 MMk per stick	24 MMk per stick
d) Cigarettes of all sorts	Sale price of packet containing 20 sticks 801 to 900 MMK and above (2016, 2017 & 2018), 1001 MMK and above (2019), or 1101 MMK and above (2021-24)	16 MMk per stick	26 MMk per stick	27 MMk per stick
Cheroots	2018, 2020, 2021-24	25 pya per stick	0.80 MMk per stick	1 MMK per stick
Tobacco Raw	2018, 2020, 2021-24	60%	60%	60%
Virginia Tobacco	2018, 2020, 2021-24	60%	60%	60%
Cigars	2018, 2020, 2021-24	80%	80%	80%
Piped tobacco	2018, 2020, 2021-24	80%	80%	80%
Tobacco products for betel quid	2018, 2020, 2021-24	80%	80%	80%

NEPAL'S

TOBACCO INDUSTRY AT A GLANCE

PREVALENCE

29.3%

of the adult population consumes tobacco in one or other form.

<1.5% SMOKELESS TOBACCO

32.5% SMOKING TOBACCO

GDP LOSS

$14 BILLION USD

GDP loss due to tobacco in 2024.

GENDER DIVISION

WOMEN	MEN
N/A	N/A

SLT use is almost negligible amongst both the genders.

LEADING BRANDS

- PT HM Sampoerna Tbk
- PT Gudang Garam Tbk

Over 95% of cigarettes sold in Nepal are kretek, a blend of tobacco, cloves, and sauces.

EXPORTS

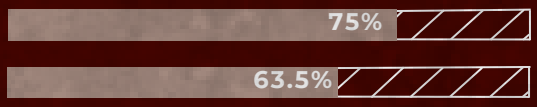
$1.02 BILLION

in exports in 2025.

16TH

ranking in terms of exports.

TAXATION



A complicated tiered specific tobacco excise tax system with 8 different tax rates applied on different tobacco products based on type of tobacco product

MAJOR POLICY GAPS

- Nepal uses a multi-layered excise system (up to 8 tiers), causing smokers to switch to cheaper cigarettes instead of quitting when taxes rise.
- Despite restrictions, advertising remains widespread, especially in the vicinity of schools and in youth-accessible areas.

Nepal

Market leaders

There are only 5 cigarette-producing factories in Nepal that are properly organised. Of these 5 factories, only one is in the public sector, that is Janakpur Cigarette Factory.

The four private sector companies are Surya Tobacco Company Pvt. Ltd., Perfect Blended Pvt. Ltd., Nepal Tobacco Pvt. Ltd. and Seti Cigarette Factory.

Seti Cigarette Factory is registered as a factory but functions as a dealer for foreign cigarettes, meaning it does not produce cigarettes locally.

Prevalence

According to the Nepal STEPS Survey 2019. 28.9% of adults in the age group of 15-69 years were users of tobacco products. Out of this percentage, 48.3% of males in this age range and 11.6% of females in this age range were tobacco consumers. This is equal to a total of 3.8 million adults.

18.3% of adults, which is approximately 3 million adults, people who consumed tobacco products. 33.3% of men in this age range consumed smokeless tobacco, while the percentage for women who consumed tobacco was 4.9% (Nepal STEPS Survey 2019).

Exports

In 2023, Nepal exported only USD 10 worth of raw tobacco, which gives it a rank of 135th out of 139 countries in terms of tobacco export rankings, and the main destination of Nepal's export was Serbia.

The tobacco industry of Nepal mainly focuses on domestic consumption, keeping local sales as a priority over exports. (“Raw Tobacco in Nepal”)

Imports

In 2023, Nepal imported raw tobacco valued at USD 24.4 million, giving it a rank of 59th out of 175 countries for the largest tobacco importer. Out of this, the primary destination from which imports come is India. (“Raw Tobacco in Nepal”)

Tax Structure

Nepal was the first Southeast Asian country to impose a dedicated levy on tobacco products as a health tax; however, Nepal has one of the lowest tax rates on tobacco products in the region. Tax applied on tobacco is done in 3 layers: Excise duty, health hazard tax and value added tax. In 2020, during the COVID pandemic, the government of Nepal raised the percentage of excise duty applied on tobacco products to raise revenue and reduce consumption by 25% of excise duties after 2020, which were directed towards the Health Hazard fund.

Khaini, Surti, Paan Masala, Gutkha	NPR 25 Rs/KG
Cigarette, Cigar, *Bidi*	NPR 25 Paisa/Stick *(Khilli)*

Since 2008, there has been a consistent and gradual increase in the Value Added Tax (VAT) and excise duties imposed on tobacco products, reflecting policy efforts to curb tobacco consumption and generate public revenue. Despite these incremental tax hikes, the overall tax burden on tobacco products remains below the level recommended by the World Health Organisation (WHO), which advocates for significantly higher taxation as an effective tool for reducing tobacco use and its associated health risks. (Tobacco in Nepal: The Current Context, 2019).

	2008	2010	2012	2014	2016	2018
Excise	12.77%	17.18%	18.36%	16.29%	14.84%	16.18%
VAT	11.50%	11.50%	11.50%	11.50%	11.50%	11.50%

Employment

The tobacco market is dominated by Surya Tobacco, especially for cigarette production. Surya Tobacco claims, without any substantial supporting evidence, that they "support the livelihoods" of more than 4 lakh farmers, farm workers and people engaged in tobacco cultivation and tobacco trade. There are no official numbers released by the government in terms of the number of people employed in the smokeless tobacco industry. The latest data available is that of 2011-12, published by the NDRI, containing the 30 tobacco-producing establishments. However, this is an underestimation of the whole picture since these establishments were relatively small in size and poorly organised (Tobacco in Nepal: The Current Context, 2019).

Production

Tobacco production in Nepal includes cigarettes, *Bidis, Hookah, Chillum/Kakkad* (smoking), *Khaini (Surti), Gutkha, Zarda,* and *Paan,* with major brands like Surya Nepal dominating the market in terms of production. In 2022, there were 1,383 tons of tobacco produced in Nepal on 1.173 hectares of agricultural land ("Country factsheets: Nepal").

Industry	Number of Establishments	No. of persons enganged	No. of employees
Tobacco Manufacturing	30	1637	1585
Other	4076	204360	194989
Total	4106	205997	196574

CONCLUSION

India's smokeless tobacco (SLT) industry exposes one of the most profound economic contradictions in modern public health policy: a field that, on the one hand, supports millions of people and, on the other hand, is a silent destroyer of a country's human resources, financial health, and environment. This paper has primarily sought to provide a comprehensive understanding of that contradiction, and the results are clear: the disadvantages of the SLT industry far outweigh its benefits.

The Economic Perspective

What the industry brings into the national income matters; it shows real weight. Back in 2018-19, tobacco's contribution through gross value added hit INR 287.96 billion - about one per cent of all manufacturing output. Taxes? Excise revenue reached INR 217.19 billion just two years earlier, forming nearly 1% of the entire GDP. Exports keep climbing too; during FY 2024, India shipped out 143,316 tonnes of FCV leaf valued at Rs. 5,932 crore. On top of that, overall tobacco export earnings crossed Rs. 12,005.8 crore - or $1.5 billion - in 2023-24, placing India second globally behind only Brazil.

Smoke from traditional tobacco fades into something quieter - a market now worth 1.48 billion dollars in 2024 could climb to 2.73 billion within six years, growing just under five per cent each year. People rely on it more than numbers show at first glance. Back when surveys counted jobs in 2004-05, close to seven million worked in some way connected to tobacco, whether packaging, selling, or managing supply lines. That stretch touched one point five out of every hundred formal jobs across the country. Follow the full journey of a leaf - planted in soil, dried, sorted, shipped, turned into products - then realise how many hands touch it along the way: roughly forty-five million lives shaped by its movement through villages, factories, and markets.

Productivity of informal units was very low at 0.192 only in 2010-11, reflecting a high level of inefficiency in operations. India exports mostly raw and unprocessed tobacco leaf, a place in the value chain where overseas processors and manufacturers are taking most of the profits. For example, while the export price of raw leaf is around 450 per kg, the price of finished snus-equivalent products can reach 2,500 per kg or more, revealing a missed opportunity structurally that India is yet to capture.

The Social Reckoning: Costs That Dwarf Revenue

The human cost of the tobacco industry leads this report's main finding. Tobacco use in India imposed an economic cost of INR 1,773.4 billion in 2017-18, equal to 1.04% of India's GDP. The SLT tobacco sector alone was responsible for 26% of this burden, about INR 461.08 billion. The biggest share (78%) of this cost is indirect, as premature death is the major cause. The Net Present Value of future income lost to early death is INR 1,38,395 crore, which is much higher than the direct medical costs of INR 28,189 crore. In addition, besides productivity losses in the workforce due to illness (morbidity), there is another INR 10,758 crore. The government figures are harsh.

The Indian economy suffers a loss of INR 816 for every INR 100 collected in excise taxes from tobacco products. Total economic losses are 1.87 times total fiscal and market gains. This cannot be seen as a net-positive contribution of the tobacco industry to the nation. This argument gains further strength from the public health perspective. India suffers around 1.35 million tobacco-related deaths that are premature each year. Tobacco-related malignancies make up 27% of the overall cancer load of the country, and more than 90% of oral cancer cases have been linked to tobacco use. 79215 people die of oral cancer in India every year, 27304 among men and 8827 among women, due to the consumption of smokeless tobacco (SLT). On one hand, 21.4% of Indian adults take SLT.

On the other hand, although SLT users are spread throughout the Indian population, it is primarily the economically vulnerable groups which are disproportionately affected by the burden, i.e. poorer households, rural populations, scheduled tribes, and agricultural workers. This leads to the further perpetuation of the poverty cycle over generations. Each year, some 18.4 million Indians are made destitute by tobacco, either through direct or indirect tobacco expenditure. Until now, the Household Consumption Expenditure Survey (2022-23) data were not available, but they now show that rural Indian households spend even more on tobacco and intoxicants as a proportion of their total expenditure (3.79%) than on their children's education (3.30%).

Structural Weaknesses: Governance, Enforcement, and Supply Chains

COTPA 2003 is still India's main tobacco control law, but sadly, its implementation has chronically weakened the tobacco control effectiveness and has been largely nonexistent. Compliance with its main provisions is only between 51% and 72%, and the tobacco manufacturers have continuously used the judicial system to delay enforcement.

Surrogate advertising through pan masala and mouth freshener brands, even though the authorities have imposed nominal bans, still manages to showcase the brand. Gutka - banned in 36 states and union territories - is still commonly found through twin packaging loopholes and street-level channels. The informal sector, which is responsible for almost all production of SLT products outside any regulatory environment, is effectively doing a double whammy by evading taxation and compromising product safety. The 40% GST rate for tobacco products, which is scheduled to come into effect in early 2026, is a move in the right direction. However, because the implementation has been delayed until the resolution of the GST compensation cess, it is not yet clear whether the policy will have the desired effect. India's total tax burden on smokeless tobacco, which is estimated at 64% of the retail price, is still less than the WHO-recommended level of 75%.

The farmer exploitation highlighted in this report deserves to be specially pointed out. In fact, even the Tobacco Board's auction-based mechanisms and price support programmes, which have effectively raised FCV tobacco farmer incomes to Rs. 279.54 per kg in 2023-24, a doubling of their income, only a few FCV tobacco farmers are covered by these protections. Most of the non-FCV tobacco farmers, who have no choice but to rely on commission agents and brokers, are trapped in the debt cycle. The e-auction system, launched in 2011, has

not been instrumental in reducing market concentration: the tobacco market in India continues to be an oligopsony, and the Board's structural impotence to raise prices leaves the small farmers vulnerable to exploitation almost all the time.

Environmental and Occupational Externalities: The Hidden Ledger

The environmental footprint of SLT is one of the cheapest costs in the report that people do not realise. The products of SLT are responsible for 68% of the total tobacco product waste by weight, paving the way for the production of the staggering 64,043 tonnes of plastic waste and 51,671 tonnes of paper waste every year. In Karnataka alone, around 300 hectares of forest area are being lost yearly to provide fuelwood for tobacco smoking. Tobacco farming is a highly water-intensive activity, with a water demand that is up to eight times higher than that of food crops. For every tonne of tobacco produced, 2,925 cubic metres of water are required, which are eventually used up. Soil potassium depletion by tobacco is six times more than that by other crops.

Besides, the cost of the crop to workers can be so high that it becomes a matter of life and death. Though the dermal nicotine absorption is the primary route for the green tobacco sickness (GTS), it is a very common illness among tobacco farmers. About 8.2%-50% of the agricultural labourers in the major tobacco-producing states are affected by GTS. 80-90% of tobacco farm workers are women. Here, the problem of the consequences of tobacco comes out as multiple stages, as the adverse effects of tobacco use during pregnancy are a reduction in the average gestational age by 6.2 days and a significantly lower birth weight of infants. Though figures of child labour are not available in the official records, it has been revealed through investigation that children are employed in tobacco-producing zones.

Global Benchmarking and Lessons

India's regulatory journey is less progressive when compared with the top international models by a large margin. Sweden's emphasis on harm reduction, promoting snus as a less risky alternative to smoking while gradually phasing out cigarette smoking, has resulted in a tobacco prevalence of approximately 5.6%, making it the country with the lowest smoking rate in Europe. Following the 2011 FCTC, Nepal witnessed the realisation of significant tobacco use reductions during the five years of implementation due to the strong role of civil society litigation combined with judicial support. Brazil's MPOWER-aligned measures have led to a 35% net decrease in tobacco use since 2010.

According to these references, India needs, on one hand, stronger enforcement and, on the other hand, a more refined conversion to the harm reduction paradigm. Indiscriminate bans, such as Bhutan's example, a complete prohibition for a decade, which eventually crumbled under the COVID situation, can lead to the illegal trade of tobacco products without having the desired health effect. The Indian market for smoked and smokeless tobacco (SLT) is big, varied, and very deeply ingrained and needs to go through calibrating and evidence-based policymaking.

Suggestions

The collection of evidence in this report leads us to a distinct set of policy priorities:

Regarding taxation, India should move swiftly to close the gap to the WHO recommended 75% of the retail price

threshold on all tobacco products. Recent 18% reduction in bidi taxes can be viewed as a move going against the progressive policy and therefore needs to be given special consideration.

In terms of regulation, the empowerment of COTPA is necessary through the accomplishment of Karnataka, which reported low violation rates (4% versus over 74% in other districts), and enforcement only proves that it is not impossible to have strict implementation.

With respect to the value chain, India should develop its local processing facilities to grab a bigger portion of the tobacco value chain. The shift from exporting raw tobacco leaves (~450/kg) to finished snus-equivalent products (~2,500/kg) - at least in a high value-addition scenario - might even double tobacco export earnings to around $3 billion by 2030, at the same time increasing farmer incomes for the highest quality tobacco leaf.

On rehabilitation, the tobacco workforce of nearly 45.7 million workers needs legitimate transition support. The beedi workers' welfare scheme of Kerala can serve as a model that can be replicated; similarly, crop diversification efforts for FCV farmers in Andhra Pradesh and Karnataka are examples of such initiatives. The economic modelling shared in this paper demonstrates that a small reduction in SLT-related deaths can lead to huge national productivity gains, which are way more than the financial costs of transition programmes.

Regarding awareness and demand reduction, it is very important to focus on youth-targeted interventions; 18% of students aged 13-15 have already used tobacco products, and in Arunachal Pradesh, the prevalence among students goes up to 65%. Besides, the M-Cessation programme needs to be enlarged, more Tobacco Cessation Centres should be set up, and tobacco literacy ought to be included in the school syllabus.

Closing Assessment

The smokeless tobacco sector's role in India's economy is evident, and for many farmers, workers, and traders, it is their main source of livelihood. This report does not ignore that fact. But, the evidence is so strong that the present situation, marked by poor law enforcement, unorganised production, farmers being exploited extensively, and a tobacco industry that has costs which exceed its revenues by a factor of nearly 1.87 times, is not only economically illogical but also socially unacceptable.

Continuation of the industry in the present mode will make India spend around INR 816 for every INR 100 it receives as tax revenue. Apart from that, it leads to about 1.35 million people dying prematurely every year, mostly the ones in their prime working age, economically. It causes 18.4 million people to fall below the poverty line every year. Also, it uses up the land, water, and forest resources that could have been used for producing food to feed a growing population.

The Nicotine Nexus is not only a narrative about trading and public health. At its essence, it's a governance issue a challenge to see if India's policymakers, judiciary, and civil society can take the well-indicated evidence and make it that they show political will continuously. The decision to solve that problem will not only determine the health situations of hundreds of millions of Indians but also the nation's long-term productivity, equity, and ability to withstand environmental changes.

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