



CHALLENGING LANDSCAPE OF ILLICIT TRADE:

HOW CHANGING FACTORS OF CONSUMPTION
AFFECT ILLICIT MARKETS IN 5 KEY INDUSTRIES IN INDIA





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About this Report

This report has been prepared by Thought Arbitrage Research Institute (TARI) for FICCI Committee Against Smuggling and Counterfeiting Activities Destroying the Economy (CASCADE).

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About Thought Arbitrage Research Institute (TARI)

TARI is a not-for-profit organisation set up under Section 25 of the Indian Companies Act, 1956, to bridge the gap between policy initiatives and common perception through evidence-based research and comprehensive data-based reasoning.

TARI is a privately-funded, independent, non-partisan Indian think-tank and works with government, industry, civil society and other stakeholders on:

- » Corporate Governance
- » Sustainability
- » Economics
- » Public Policy



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Note from the
Authors

Note from the authors

The Indian economy is growing at an exponential rate and the consumption landscape is undergoing a transformative shift, driven by urbanisation, rising incomes, and a growing middle class. As consumers' needs and preferences evolve, there is a corresponding rise in demand for a broader range of goods and services. This report is an attempt to understand how changing factors of consumption affect illicit markets in five key industries, viz., FMCG (packaged foods), FMCG (personal and household care), textiles and apparels; alcoholic beverages and tobacco products.

Through an analysis of the consumption behavior, this report attempts to understand the vulnerabilities of the Indian consumer to purchase illicit products. This assessment is important not just to understand the consumption behavior but also the factors which allow counterfeiters to play foul.

The study uses the fractiles (income segments) approach to segment households to assess the distribution of shifts in consumer behavior. The analysis of fractile data contained in the rest of the report-reveals that overall consumption patterns in the 5 industries included in the study are shifting away from the top fractiles toward the middle- and lower-income groups.

Our findings are based on credible data sources from the Government of India, Ministry of Statistics and Programme Implementation (MoSPI) such as Private

Final Consumption Expenditure (PFCE) and Monthly Per Capita Expenditure (MPCE) and data on Annual Survey of Industries, data published by the Directorate General of Commercial Intelligence and Statistics (DGCIS), under the Ministry of Commerce and Industry, GOI, and also has used credible industry reports.

The statistical analysis and consumption patterns presented in this report are crucial for creating policies that are grounded in evidence. By identifying trends in illicit markets, the report can help policymakers to ensure that future interventions are both effective and efficient.

We thank the members of the FICCI CASCADE think tank for their comments, observations, and direction during the course of this research and report.

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Foreword



India's rapidly expanding economy and shifting consumption landscape driven by urbanization, rising incomes, along with the proliferation of digital platforms and globalization are creating fertile ground for the growth of illicit trade. As consumer demand for diverse goods and services rises, so does the opportunity for counterfeiters, smugglers, and other illegal operators to exploit market vulnerabilities. The landscape of illicit trade is becoming increasingly complex with sophisticated networks operating across borders, making enforcement and regulation more challenging. Smuggling and counterfeiting not only distort market competition but also siphon off significant revenue from legitimate businesses and the government.

FICCI has been at the forefront of advocating policy framework on various aspects affecting industry. FICCI's dedicated Committee Against Smuggling and Counterfeiting

Activities Destroying the Economy (CASCADE) has been focusing on curbing the problem of growing illicit trade in counterfeits, pass offs and smuggled goods by creating awareness and disseminating information amongst the stakeholders on this menace. To further its mission, CASCADE has developed a study titled '**Challenging Landscape of Illicit Trade: How Changing Factors of Consumption Affect Illicit Markets in 5 Key Industries in India**'. This report explores how income growth across different segments is reshaping consumption patterns related to illicit trade in five key industries namely:

1. FMCG (Packaged goods)
2. FMGC (Personal and Household care goods)
3. Alcohol
4. Tobacco
5. Textiles and Apparel

Based on the statistical analysis and consumption patterns detailed in the report, this study identifies key trends in the illicit market to enhance the framework for developing effective and efficient policies. It is hoped that this study will serve as a valuable resource in addressing the rise of illicit markets, which is crucial for safeguarding India's economic growth and ensuring consumer safety.

I would like to thank and congratulate all stakeholders who have contributed significantly towards this study, particularly the Think Tank members of FICCI CASCAD E.

I wish FICCI CASCAD E success in its future initiatives.

A handwritten signature in blue ink, appearing to read 'Jyoti Vij'.

Jyoti Vij
Director General
FICCI



Chair's Message

The Indian economy stands at a critical juncture with exponential growth reshaping the nation's consumption landscape. As India continues to urbanize and more households experience rising incomes, the demand for a wider range of goods and services is evident. The shift in spending patterns, particularly among middle-income groups, marks an era of transformation in consumer behaviour. While this presents numerous opportunities for businesses, it also poses significant challenges in the form of illicit trade.

Illicit trade, which spans sectors from Fast-Moving Consumer Goods (FMCG) to Textiles and Apparels, Alcohol, and Tobacco, continues to undermine legitimate businesses, distort market competition, and significantly impact government revenues. It is alarming to note that illicit markets have grown across key sectors, with the most significant increase observed in alcoholic beverages (153.49%) and packaged foods (99%) between 2017-18

and 2022-23. This growth is concerning not only for businesses but also for consumer safety, especially as counterfeit products infiltrate these industries and directly impact a large percentage of population.

The rise in private final consumption expenditure (PFCE), which now accounts for over 50-60% of India's GDP, emphasizes the importance of understanding these changing consumption patterns. The shift in economic power of India's middle-income group is expanding rapidly due to rising education levels and disposable incomes, plays a pivotal role in fuelling consumer demand. However, this group remains vulnerable to illicit trade. While the middle-income population is willing to spend more on value-added products, they often become the target for counterfeit goods. A similar trend is observed in rural areas, where rising disposable incomes lead to greater consumption of low-quality and illicit products, further exacerbating the issue.

Over the years, FICCI CASCADE has been at the forefront on tackling the multifaceted challenge of illicit trade, continuously striving to understand its evolving nature. By actively monitoring, reviewing, and assessing the scope and scale of its negative impact, FICCI CASCADE has provided valuable insights into how illicit trade affects various industries. As we deepen our analysis of various sectors and enhance our understanding of illicit markets, I am delighted to present our study, "Challenging Landscape of Illicit Trade: How Changing Factors of Consumption Affect Illicit Markets in 5 Key Industries in India" which is another significant step in our ongoing efforts to provide updated estimates of this escalating threat.

The report offers a comprehensive analysis of how the demand for higher-quality goods among middle and lower-income groups is opening avenues for illicit players who

capitalize on price differentials created by heavy taxation, particularly in sectors like alcohol and tobacco.

As we continue to foster a deeper understanding of these issues through research and dialogue, I am of the strong view that the insights provided in this report will pave the way for informed policy interventions that can protect legitimate businesses and ensure consumer safety.

I would like to thank the Think-tank members of CASCADE for their invaluable guidance and insights which have consistently enhanced and sharpened our efforts leading to more effective and impactful outcomes. I would also like to commend TARI for their outstanding work in analysing data. I'm sure you will find this an interesting read.



Anil Rajput
Chairman
FICCI CASCADE





Executive
Summary

Executive Summary

Introduction

India's economic growth has undergone significant transformation with **Private Final Consumption Expenditure (PFCE), which reflects household spending on goods and services, steadily increasing its contribution to the GDP over the last 12 years from approximately 57% in 2011 to approximately 61% in 2022.** Rising household consumption leads to higher demand for goods and services, which stimulates production and investment, creating jobs and raising household incomes.

In this study, various indicators of expenditure (like PFCE and MPCE) have been analysed by comparing constant (adjusted for inflation) and current (inclusive of inflation) prices over a 12-year period (from 2011-12 to 2022-23) using 2011-12 as the base year. This analysis has provided significant insights into the evolution of consumption expenditure over this period and how the patterns of such expenditure have changed in real as well inflationary terms.

This study uses the Fractiles approach to segment households to assess the distribution of consumption to gain valuable insights into shifts in consumer behaviour. The analysis of fractile data-contained in the rest of the report-reveals that overall consumption patterns in the 5 industries included in the study are shifting away from the top fractiles toward the middle- and lower-income groups.

Consumption patterns & Illicit markets

The impact of consumption expenditure patterns on illicit markets is analysed using two key indicators - Private Final Consumption Expenditure (PFCE) and Monthly Per Capita Expenditure (MPCE)

Private Final Consumption Expenditure (PFCE)

- » PFCE is the expenditure that households incur on goods and services for direct consumption and is defined as the sum of all expenditures by households and nonprofit institutions that serve households on final consumption goods and services; it excludes government consumption¹.
- » Except for a decline in the Covid-19 pandemic year of 2020-21, PFCE at constant prices **nearly doubled from ₹4,936 trillion in 2011-12 to ₹9,321 trillion in 2022-23, reflecting an annual average increase of 6-8%.** It rebounded strongly in the following year (2021-22) growing at 11%, underscoring the resilience in consumption as India emerged from the pandemic.
- » At **current prices PFCE increased by 3.3 times from ₹4,936 trillion in 2011-12 to ₹16,418 trillion in 2022-23.** The yearly growth rates at current prices were generally higher than those at constant prices, ranging from 9-18%, with a notable 18% increase in 2021-22 as consumption surged post the pandemic.

Monthly Per Capita Expenditure Patterns (MPCE)

- » Monthly Per Capita Expenditure represents the average monthly consumer expenditure per person, which is provided in various fractile classes for both rural and urban areas and helps to understand the distribution of consumption from the poorest to richest households.
- » An analysis of MPCE at constant prices over various rounds of HCES surveys shows that both rural and urban consumption have doubled in 2022-23 compared to 1999-2000.
- » Urban MPCE growth is nearly double the rural MPCE growth, especially in the later periods (2011-12 to 2022-23) indicating that

¹ The Indian Ministry of Statistics and Programme Implementation (MoSPI)

urbanisation driven by factors like greater access to education, and better employment opportunities resulted in increased household expenditure in urban areas compared to rural regions.

» **Though MPCE in rural and urban areas increased, the gap between them has widened** from ₹845 in 1999-2000 to ₹1,502 in 2022-23, **reflecting growing inequality in consumption expenditure between rural and urban areas.**

» At current prices, both rural and urban consumption have increased by **7.6 times in 2022-23 compared to 1999-2000**, however, increase in MPCE at current prices compared to constant prices reveals inflation as a key factor for the overall increase in MPCE.

- **Rural MPCE on Key Items** - The rural MPCE has increased by 9.2% over the period under review. Essential and discretionary services grew by 10.3% and 11.4% respectively, indicating a shift from conventional consumption patterns in rural areas.

- **Urban MPCE on Key Items** - The total urban MPCE grew by 2.46 times from ₹2,630 in 2011-12 to ₹6,459 in 2022-23, at a compounded annual growth rate (CAGR) of 8.5%. Items like intoxicants (12.7% CAGR) and durable goods (11.0% CAGR) have seen substantial growth, indicating a shift in spending patterns towards more discretionary items.

Share of Fractile Classes in Overall Consumption: Rise of The Middle Class

MPCE of both rural and urban areas has been further analysed by deflating 2022-23 current prices to constant prices using the PFCE deflator for 2022-23.

Key insights from the data:

- The 70%-100 % rural fractile class in 2011-12 had a 50.1% share which fell to 48.7 % in 2022-23, while the share of the middle-income group (30%-70%) increased from 40.2% to 41.5 %.
- The 70%-100 % urban fractile class in

2011-12 had a 56.1% share which dropped to 52.4 % in 2022-23 while the share of middle-income group (30%-70%) increased from 31.1 % to 33.3%.

- The urban lower-income fractile class (0%-30%) saw a greater increase of share in consumption from 2011-12 to 2022-23 compared to the rural lower-income fractile class.

This growing middle class with aspirations but without commensurate income contributes to the growing demand for higher-value, taxed products, creating opportunities for counterfeit and illegal alternatives. Several of such products are discretionary and luxury spends, or branded goods which are usually taxed at higher rates and are a source of revenue for government.

As consumers shift to spending on untaxed goods and services, i.e. illicit products, governments' tax revenues decline, limiting their ability to spend on critical public services, affecting overall economic growth and social welfare.

The fractiles approach, which breaks down the population into 10 equal parts starting based on income/ consumption, helps illustrate how different segments of the population, based on income and consumption levels, behave in the market. Such segregation is done by MOSPI in the NSSO Reports. We have segregated them for this report- 70-100% fractile as those representing higher-income consumers, who primarily drives demand for high-end and value-added goods. Meanwhile, the 30-60% fractile represents the aspirational middle-income group, which is moving from goods of basic consumption to those of more discretionary spends but are constrained by price sensitivity, and 0-30% fractile, faces significant challenges in affording high-value, taxed products due to their limited financial capacity but this group too is slowly moving towards aspirational goods but at lower price points.

The aspirations of all the classes drive them toward high-value, taxed products. However, for some groups, this pursuit is constrained

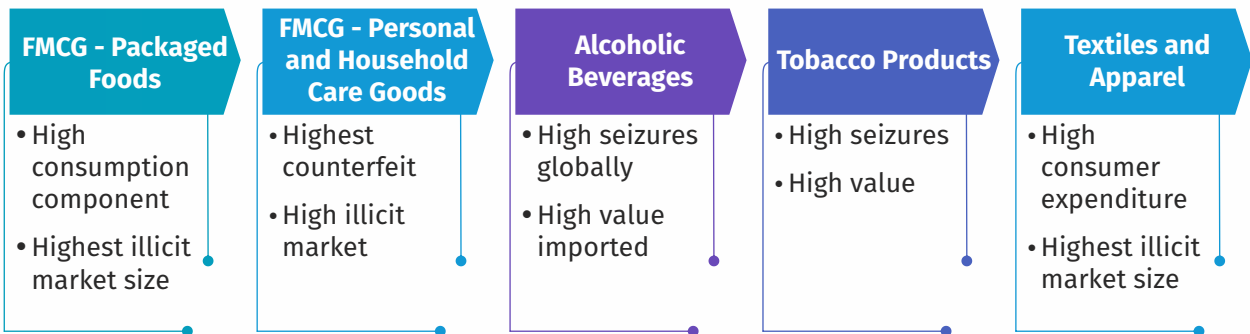
by their price sensitivity, especially in sectors like alcohol, tobacco, and some segments of personal and household care, where high taxes make legitimate products expensive. The median consumption of the 0-30% and 30-60% fractiles is often above and beyond their potential spending or financial capacity, making them particularly vulnerable and susceptible to low-quality or illicit alternatives as they seek more affordable options without compromising their aspirations.

The rising demand for better and higher value products create opportunities for dubious players to introduce illicit goods e.g. counterfeit, smuggled goods and untaxed goods into the market, posing risks to consumer safety, loss of jobs and taxes and brand trust. Due to this vulnerability, both

the 0-30 % and 30-60 % class fractiles increasingly turn to illicit markets where counterfeit and smuggled goods are more made more affordable and accessible, due to value and tax arbitrage - thereby driving the consumption of illicit products.

Industries covered in the study:

We have identified five key industries through our assessment and consultation with FICCI-CASCADE members and industry representatives. These products are more susceptible to illicit trade, counterfeiting, and tax evasion, and analysed in the earlier studies done on the topic. The key products/ industries selected for this study include:



The analysis and key takeaways of each of these sectors are described below:

FMCG - Packaged Foods: Decoding consumption and illicit markets

The Fast-moving consumer goods (FMCG) market can be broadly categorized as Household and Personal care, Food & Beverages, and Others.

The market size of food processing sector in India is estimated to reach US\$ 1,274 billion in 2027 from US\$ 866 billion in 2022, growing at rate of 47%.² Based on private final consumption expenditure data from NAS

consumption,³ dairy products (41%) are the largest segment, followed by vegetable oils and fats (28%) and confectionery items from packaged food consumption perspectives.

Several factors are driving the rise of packaged food consumption - evolving consumer preferences, a young demographic, changing household dynamics, diverse food habits, and increasing spending power, all playing significant roles.

The MPCE on consumption of packaged foods by the overall rural population increased from ₹256.5 to ₹690.5 in the study period (169%). For the urban population, it has increased from ₹407.4 to ₹1,022.9 (151%).

² Indextb. (2024). Setting up of industrial enzymes production unit. https://indextb.com/files/2024/6/cac2faac-a550-4d8e-96b1-2c1983283442_6.%20Setting%20up%20of%20Industrial%20Enzymes%20Production%20Unit.pdf

³ Excluded non-classified foods products including snacks, ready to cooks and bakery etc. for this study

Consumption trends

Rural

- » Across all rural classes, MPCE on packaged foods rose from ₹256.45 to ₹379.3 in constant prices. A 47.9% growth was observed in constant prices and 169% in current prices-both outpacing urban growth rates of 37.9% and 151%.
- » For the 0-30% rural fractile class, MPCE saw a significant increase, with constant price growth between 71.6% and 89.4% and current price growth from 212% to 245%, highlighting their growing role in driving packaged foods consumption and rising real disposable incomes of the rural population.
- » A significant change in food preferences of rural population, i.e., higher consumption of processed foods in their diet. These products have tax implications at varying rates leading to the profusion of counterfeit, smuggled and other illicit products into the markets.

Urban

- » The constant price growth is 37.9%, indicating a moderate increase in processed food consumption in urban areas from 2011-12 to 2022-23.
- » For the 0-30% urban fractile class, constant price growth ranges from 52.8% to 82.6%, while current price growth range from 178% to 232%, indicating a substantial rise in expenditure fuelled by rising food prices, change in consumption basket and growing income levels.
- » The consumption shift to higher value processed food especially in non-alcoholic beverages, milk products, other packaged foods by the urban population has over taken the effects of inflation for the period and the shift is also towards

higher volume of per capita consumption. This shift brings in players who use the tax arbitrage in such foods into play and others who supply low value illicit alternatives, smuggled or counterfeit products to the consumers, thereby fuelling the illicit markets.

Decoding Illicit Markets: FMCG - Packaged Foods

- » The estimates for the illicit market for FMCG - Packaged Food have grown from ₹1,12,474 crores in 2017-18 to ₹2,23,875 crores in 2022-23, marking an 99% increase. The share of the illicit market has risen moderately, peaking at 26.4% in 2018-19 and reaching 25.4% in 2022-23.
- » In the urban segment, the 30-60% fractile saw a 158% median increase, representing the aspiring urban middle class driving consumption of higher-value/quality packaged foods. This group is more exposed to smuggled or counterfeit high-value products as they seek aspirational goods in line with their rising incomes.
- » In the rural segment, the 0-30% fractile group, with a 221% median consumption increase over 2011-12 to 2022-23 period, is most vulnerable to low-quality or illicit products due to price sensitivity and rising consumption.

FMCG - Personal and Household Care Goods: Decoding Consumption and Illicit Markets

The Indian FMCG market, the fourth-largest sector of the economy, reached US\$ 121.8 billion as of 2023 and is expected to grow at a CAGR of 27.9% from 2021 to 2027, reaching total revenue of nearly US\$ 615.87 billion.⁴

⁴ Indian Brand Equity Foundation. (2024, May). Fast moving consumer goods (FMCG). https://www.ibef.org/download/1720425283_FMCG_May_2024.pdf

Four segments-fabric care, deodorant & perfumes, personal wash and household care-together account for nearly 75% of by value for FMCG personal and household care goods.

The growth of this market is influenced by increased awareness of hygiene and self-care, rising rural consumption, higher disposable incomes, evolving beauty standards, and the growth of both online and brick-and-mortar stores.

As per NSSO 2022-23 data, the rural population contributes 59.7% of the total consumption in this category, while urban areas account for 40.3%. The rural population is driving FMCG personal and household care growth, outpacing urban areas.

Consumption trends

Rural

- » Across all rural classes, MPCE on personal and household care goods jumped 199% in current prices terms, against 60.8% growth in constant prices.
- » For the rural 50-90% fractile, MPCE on P&H care goods also increased significantly, with current prices rising by 192% to 208%, and constant prices growing by 57.2% to 65.8% showing stable consumption growth among middle-income households.
- » These insights reflect a significant change in lifestyle of the rural population, which is moving towards higher proportion of lifestyle FMCG products in their monthly budgets. These products have a tax implication at varying rates and such demand also see the profusion of counterfeit, smuggled and other illicit products into the markets.

Urban

- » Across all urban classes, MPCE on personal and household care goods increased in current prices from ₹94.92 to ₹267.97. The expenditure on P&H care goods increased by 182% at current prices and 52% at constant prices indicating a significant rise in spending, with current prices showing a larger increase due to inflation.
- » The 90-100% fractile shows slower growth, with the 90-95% group increasing by 39.8% in constant prices and 160% in current prices, and the 95-100% group growing by 33.8% and 149%, respectively suggesting that higher-income households are spending on luxury or premium segment.

Decoding Illicit Markets: FMCG - Personal and Household Care Goods

- » The estimates for the illicit market of P&H care goods in India have grown from ₹43,010 crores in 2017-18 to ₹73,813 crores in 2022-23 (71.6%). The market share in percentage terms peaked at 38.2% in 2018-19, with a value of ₹56,133 crores.
- » Consumers of P&H care products are particularly vulnerable to counterfeit goods because they often rely on familiar logos and packaging, making it easy for illicit manufacturers to deceive them. This vulnerability is compounded by unregulated markets or online platforms.⁵
- » The growth of the segment is fuelled by the skincare and beauty segment, which has risen by 634% in rural and 435% in urban households. These products are heavily taxed (28% on perfumes and other beauty products) therefore, prone to counterfeiting, smuggling and knock offs, which not only impact revenue loses and jobs but also poses a huge health risk to consumers.

⁵ World Intellectual Property Organization (WIPO). (2021). Counterfeiting and piracy: Impact on businesses and consumers. https://www.wipo.int/edocs/mdocs/enforcement/en/wipo_ace_16/wipo_ace_16_8_presentation.pdf

- » In both the rural and urban segment, the 0-30% fractile group (with a 229% and 231% MPCE increase) is most vulnerable to low-quality or illicit household and personal care due to price sensitivity and rising consumption. On the other hand, 30-60% fractile (with a 215% and 196% median increase) represents the aspiring middle class which is susceptible to smuggled or counterfeit high-value products.

Textiles and Apparel: Decoding Consumption and Illicit markets

Textiles and apparel industry is one of the mainstays of the Indian economy. India is the world's second largest producer of textiles and garments. The textiles and apparels industry contributes 2.3% to the country's GDP, 13% to industrial production and 12% to exports.⁶

The domestic market is broadly divided by price into super premium, premium, medium, economy, and value segments. The medium price segment holds majority of the share among apparel segment followed by economy segment.

Consumption trends

Rural

- » The MPCE Textiles and apparel in rural population increased from ₹84.23 in 2011-12 to ₹197.77 in 2022-23 (135% increase) in 11 years, and for the urban population has increased from ₹135.98 in 2011-12 to ₹299.95 in 2022-23 (121% increase) in the same time period.
- » Over the period 2011-12 to 2022-23, the rural MPCE on clothing increased from

₹38.75 to ₹51.51 marking a 33% rise. Rural MPCE on men's Readymade Garments has increased significantly from ₹19.34 to ₹82 (324% increase). Similarly, the rural MPCE on Female Readymade Garments has also increased significantly from ₹11.48 to ₹28.67 (150%).

- » Across all rural classes, the MPCE on textiles and apparel increased from ₹84.29 to ₹100.4 (19%) in constant prices and ₹197.8 in current prices (135%).
- » The top income classes (90-100% fractile) show a distinct trend, with a significant decline of -41.8% in constant prices for the 95-100% fractile, while current price growth remains low at 15%. This suggests that the wealthiest rural households are consuming less of standard textiles and apparel and are likely consuming more high-end or luxury products.
- » The above reflects a significant change in the consumption behaviour of textiles and apparel of the rural population, which is moving towards higher value readymade garments. The tax implication and demand lead to profusion of counterfeit, smuggled and other illicit products into the markets.

Urban

- » The urban MPCE on men's readymade garments has increased from ₹42.89 to ₹134.04 (213%). Similarly, the urban MPCE on female readymade garments increased from ₹16.99 to ₹49.18 (189%).
- » MPCE increased from ₹136.02 to ₹152.2 in constant prices (11.9%) and ₹300 in current prices (121%).
- » The top income classes (90-95 & 95- 100% fractiles) show a relatively slower nominal growth (95% and 74%) and a decline in constant prices (-1.0% and -11.5%). This

⁶ Textiles and Apparel (May 2024), Indian Brand Equity Foundation (IBEF)

indicates reduced spending on standard textiles and shift toward luxury goods and decline in consumption of mass-produced apparel.

Decoding Illicit Markets: Textiles and Apparel

- » The estimates for illicit market in textiles and apparel have fluctuated over the years, starting at 57.4% in 2017-18 and decreasing to 54.9% in 2022-23. In terms of current prices, the illicit market grew from ₹3,11,494 crores in 2017-18 to ₹4,03,915 crores in 2022-23.
- » In both rural and urban segments, the 0-30% fractile group (with a 147% and 170% increase) is most vulnerable to low-quality or illicit textiles and apparel due to price sensitivity and rising consumption. On the other hand, the 30-60% fractile (with a 139% and 130% median increase) represents the aspiring middle class which is susceptible to smuggled or counterfeit high-value products.
- » Vulnerability of the Indian consumer to buy illicit apparel is driven by reasons such as (1) the propensity to buy luxury brands, but not pay for it; (2) consumer ignorance about legitimacy of brands, points of sale drives demand for counterfeits; (3) purchase of counterfeits more prevalent among the younger population and those belonging to lower economic status. Aspirational young population with low disposable income are particularly vulnerable to purchasing counterfeit apparels and poor enforcement of intellectual property rights by design houses across all segments leaves room for counterfeiters to exploit.

Alcoholic beverages: Decoding Consumption and Illicit markets

Alcoholic beverage in India is one of the fastest-growing markets and is the third-largest globally and is valued at US\$ 52.4 billion in 2021, it is projected to reach US\$ 64 billion by 2026.⁷ The alcoholic beverages market in India is segmented into IMFL (Indian Made Foreign Liquor), Country Liquor, Wine, and Beer.

India is the 9th largest market of alcohol and the 2nd largest in the case of spirits by volume consideration. According to industry estimates, the number of people consuming alcohol in India has risen from approximately 219 million in 2005 to 293 million in 2018, with projections indicating a rise to 386 million by 2030.⁸

Consumption trends

The younger population is silently changing the face of the alcohol market, demanding authenticity, quality, and innovation. The trend of premiumisation, driven by a desire for quality and brand recognition, is particularly strong in urban areas, where there is a greater receptiveness to super-premium quality spirits.⁹

Rural

- » The rural population account for 66.1% of total alcohol consumption in value terms in comparison to the urban population which consumes the remaining portion.¹⁰
- » Across all rural classes, MPCE on alcohol increased from ₹16.5 to ₹35.1 in constant prices, which is lower than the urban per capita spend of 2022-23 at ₹66.5.

⁷ Indian Spirits and Wines Association of India (ISWAI). (2024, January). Annual report 2024. <https://www.iswai.in/wp-content/uploads/2024/06/jan-2024.pdf>

⁸ Indian Council for Research on International Economic Relations (ICRIER). (n.d.). Alcoholic beverages: Strategic policy measures and market opportunities. ICRIER. https://icrier.org/pdf/ES/ES_Alcoholic_Beverages.pdf

⁹ Indian Retailer. (n.d.). Why demand for super-premium and luxury drinks is expected to rise. Indian Retailer. <https://www.indianretailer.com/article/whats-hot/retail-trends/why-demand-for-super-premium-and-luxury-drinks-is-expected-to-rise.a7573>

¹⁰ Based NSSO 2022-23 consumption value calculations

- » The rural lower income class in fractile class 0%-30%, on average had MPCE of ₹4.75 in 2011 which increased to ₹15.5 in constant prices and ₹29.3 in current prices in 2022-23 is driving alcohol consumption. Both constant prices and current price increases are higher for this segment compared to the overall rural consumption increase.

Urban

- » Constant price MPCE increase in urban India is much higher at 179.3% compared to rural India at 113.4% which highlights rising income of the urban population allowing people to spend more on discretionary items like alcohol. It also indicates shifting cultural attitudes toward alcohol consumption.
- » Similarly, across all urban classes, MPCE on alcohol increased from ₹16.3 to ₹45.5 in constant prices and ₹86.2 in current prices. Constant price MPCE increase in urban India is much higher at 179.3% compared to rural India at 113.4%.

Decoding Illicit Markets: Alcoholic Beverages

- » The illicit alcohol trade is a worldwide phenomenon. According to a 2018 Euromonitor study, illicit alcohol represents 25.8% of global consumption, i.e., 1 out of 4 alcohol bottles are illicit.¹¹
- » India's illicit alcoholic beverage market rose from 23.7% in 2017-18 to 32.2% in 2021-22. In current price terms, the illicit market reached ₹48,134 crores in 2021-22, after peaking at ₹48,817 crores (37.5%) in 2020-21. As per a survey by the National Non-Communicable Disease Monitoring Survey (NNMS-2017-18) by the Ministry of Health & Family Welfare, 20.1% of adults consumed alcohol from unauthorized sources in the past 7 days, with a higher

proportion from rural areas (23.7%) and women (23.4%). Home-brewed alcohol was the most common source, with 48.1% of respondents using it.

- » The high tax rate is a key contributing factor to alcoholic beverages' illicit markets. On an average, the tax component of the illicit alcohol market has accounted for 46% of total illicit alcohol consumption over the past six years, rising from 39.7% in 2017-18 to 42% in 2023, peaking at 55.3% in 2020-21, significantly driving the growth of the illicit market.
- » The average illicit alcohol consumption due to taxes is ₹20,741 crores for the period from 2017-18 to 2022-23 and it moves in line with tax rates on alcoholic beverages.

Tobacco Products: Decoding Consumption and Illicit Markets

Tobacco is a high-value commercial crop in India, known for its low production costs, high farm yields, and competitive export prices, making it a strong "value for money" product.¹² India is the second-largest producer of tobacco globally, after China, with 4.5 lakh hectares cultivated across 15 states.¹³

According to NSSO 2022-23, the rural population, consumes about 71.8% of total tobacco in terms of value and also consumes significantly more tobacco than the urban population in terms of quantity due to the price difference.

Consumption trends

Rural

- » Across all rural classes, MPCE on tobacco products increased from ₹20.66 in 2011-12 to ₹21.56 in constant prices and ₹49.04 in current prices in 2022-23.

¹¹ Euromonitor International. (2018). Size and Shape of the Global Illicit Alcohol Market. London: Euromonitor

¹² https://ctri.icar.gov.in/for_tobaccoEconomy.php

¹³ ICAR- Central Tobacco Research Institute; Tobacco in Indian Economy; https://ctri.icar.gov.in/for_tobaccoEconomy.php

- » The rise in current prices is significantly higher than in constant prices, with an overall increase of 137% across all rural classes. While the rural population spends more due to rising tobacco products cost, this increase is still lower than the 150% seen in urban areas, likely due to lower disposable income in rural regions.
- » Among lower-income rural groups (0-30% fractile), there has been a 22-29% increase in constant price MPCE, suggesting that these groups may still be consuming more tobacco over time. However, their current prices growth is significant, with increases of 178-193%.

Urban

- » Across all urban classes, MPCE on tobacco products modestly increased from ₹19.4 in 2011-12 to ₹21.36 in 2022-23 in constant prices but rises by about 150 % to ₹48.58 in terms of current prices for the same period.
- » Among the wealthiest urban classes (95-100% fractile) , constant price MPCE rose by 35 % and current prices by 207 % , showing that this segment is less price sensitive and continues to spend on tobacco despite rising cost.
- » Between 2011-12 and 2022-23, MPCE on tobacco products increased from ₹19.4 to ₹21.36 in constant prices but rose 150% to ₹48.58 in terms of current prices, reflecting a declining prevalence. The increase in urban consumption in value terms is driven by taxes and inflation.

Decoding Illicit Markets: Tobacco Products

- » Between 2018-19 and 2022-23, the illicit tobacco products market grew by 17.7%, from ₹25,495 crore to ₹30,012 crore reaching 25.3%. It is estimated that 26 % of the cigarettes market is illicit.

- » At constant prices (which exclude inflationary effects), the illicit market grew from ₹7,699 crores in 2011-12 to ₹13,198 crores in 2022-23, indicating a significant growth in the actual volume of illicit markets.
- » In terms of growth in current prices, the markets grew for the same period by 120% to ₹16,819 crores, reflecting the effects of inflation, rising costs of inputs and taxes.
- » In terms of the illicit markets of tobacco, over 50% of its growth is attributed to tax increases, with the remainder driven by inflation, rising input costs, and other factors. The tax component rose from 15% to 54% by 2022-23.
- » In the lowest-income groups (0-30%), rural consumers see a gap between marketed products (15.20%) and actual consumption (21.29%) of total tobacco products. Urban counterparts have similar gaps, indicating their vulnerability to illicit tobacco products due to limited financial capacity.
- » Government of India mandates that pictorial warnings cover 85% of the front and back of tobacco product packs. However, this has led to the growth of the illegal cigarette trade, which sell products without any such warning and hence consumption of such products (usually smuggled) weans away consumers from legal markets. Similarly, vapes and e-cigarettes which are banned in India are prolific in Indian markets.

Conclusion

The India economic story is driven by its consuming class, who apart from being young are increasingly better educated, skilled, urbanised and have more disposable income. The consumption story is important not just for India's continued economic success and also drives government policies and reforms. With a growing population and

increasing demand for consumables, markets become vulnerable to illicit players.

The study examines the evolving factors influencing consumption across five key industries and their impact on the socio-economic landscape, leading us to the following points:

1. Consumption is on the rise; the shift is to value added and lifestyle goods

- » In most cases the rural segment is driving the consumption, however the per capita value is higher in urban areas.
- » There is a shift from consumption of essential commodities towards discretionary consumption. For example, a shift in consumption from a higher proportion of basic food to more processed food, oils etc. has been observed across India.
- » In the case of textiles and apparel, it is the rural population which is driving the consumption, and there is a shift towards higher value readymade garments.
- » The same trend is seen in FMCG - Personal and Household Care Goods where the consumption is fuelled by the skincare and beauty segment, which has risen by 634% in rural and 435% in urban spends.

2. Value added consumption fuelling the illicit market economy

- » **Consumption drivers act differently for each industry;** however, we find that higher taxation is clearly a factor which drives the illicit economy, as there is an incentive for illicit players to provide low-value alternatives.
- » **FMCG - Packaged foods:** This tendency is validated in the growth of the illicit markets packaged foods, where we find that between 2017-18 and 2022-23, the illicit market grew by 99%. Both in cases of urban and rural, lower-and-middle-income households are vulnerable to

illicit packaged foods, is attracted to aspiration-driven consumption, but also sensitive to price shocks.

- » **Textiles and apparel:** This is not a highly taxed industry; however, in the rural population which contributes 62.5% of the consumption in value with there is a clear movement of people to higher value readymade garments, which is taxed and also aspirational. There is a clear gap between the consumption and market size of the lowest-income groups (0-30%), in both rural and urban settings increasing vulnerability of these groups.
- » **FMCG - Personal and Household Care Goods** A rise in consumption of skincare and beauty segments which is taxed as high as 28% is prone to counterfeiting, smuggling and knock offs.
- » Therefore, counterfeiters use aspirational consumption to bring illicit products in the market and the consumer, especially in the lower and middle fractile, are vulnerable due to their price sensitivity

3. We find a relationship between higher taxes and the proliferation of the illicit market economy

- » As consumers are gravitating to aspirational goods, driven by a different factors, this segment is highly susceptible to counterfeits. Through the study of these industries, we found that non-deceptive factors drive illicit economy, with price being the biggest motivator of getting people to buy. Our analysis clearly points towards the lower and the middle fractile being more vulnerable group to illicit consumption.
- » The impact is far more profound in the case of industries that have historically been exposed to higher tax regime, i.e. tobacco and alcohol. Our study shows that at constant prices, the illicit market for tobacco grew from ₹7,699 crores in

2011-12 to ₹13,198 crores in 2022-23, indicating a significant growth in the actual volume of illicit markets.

- » High taxation creates an arbitrage and is a significant factor in the growth of the illicit tobacco products market, as it diverts trade to the illicit products due to tax-related lower consumer prices. Rapid or sudden tax increases exacerbate this shift, pushing consumers towards untaxed products when legal products become too expensive. There is an increase of 11.4% in NCCD+ Specific cess cigarettes from the 2017-20 period to the 2020-22 period with an additional increase of excise from 5-10%.
- » Our analysis at constant prices reflects that the cost of a pack of cigarettes which was ₹70 in 2011, should cost ₹104 in 2020 after adjusting for the deflector factor issued by NSSO. However, in terms of current prices the pack cost ₹190 in 2020. The current prices have increased by 271% in comparison to 148% in constant prices terms. The difference is the arbitrage of taxes, inflation and rise in costs of inputs.
- » The consumption of tobacco products shows distinct patterns across income

fractiles in both rural and urban areas. In the lowest-income groups (0-30%), rural consumers contribute 21.29% to total rural consumption but account for 15.20% of the total tobacco products market. Urban counterparts in the same income group contribute 22.45% to urban consumption, but account for just 6.30% of tobacco products consumption. These groups, constrained by limited financial capacity, are the most vulnerable to illicit tobacco products. Their price sensitivity often drives them toward cheaper, unregulated alternatives, increasing their exposure to health risks and unverified products.

- » A similar situation is seen in the case of alcoholic beverages, where high taxation taxation is again seen as the factor causing growth of the illicit alcohol market, driving trade to unregulated products as legal products are not as affordable.
- » In the coming years, it is expected that with enhanced government oversight and use of technology in surveillance in order to tackle tax losses and illicit markets, it is likely that due to the size of the illicit market will increase at much lower rates than at which the industry will grow.





1

Introduction

1

Introduction

How India spends

India's economic growth has undergone significant transformation with private consumption emerging as a key driver of GDP expansion. Private Final Consumption Expenditure (PFCE) reflects household spending on goods and services and has consistently contributed over 55% to 60% of the country's GDP over the past decade. This substantial role highlights the importance of consumption as a catalyst for sustained economic growth, generating demand for goods and services, stimulating production, and driving investment.

In recent years, India has shifted from an investment-driven growth model to one increasingly reliant on consumption which has been a crucial factor in sustaining high GDP growth rates. Rising household consumption leads to higher demand for goods and services, which stimulates production and investment, creating jobs and raising household incomes. The study of consumption patterns will provide insights into how Indians spend and which industries are

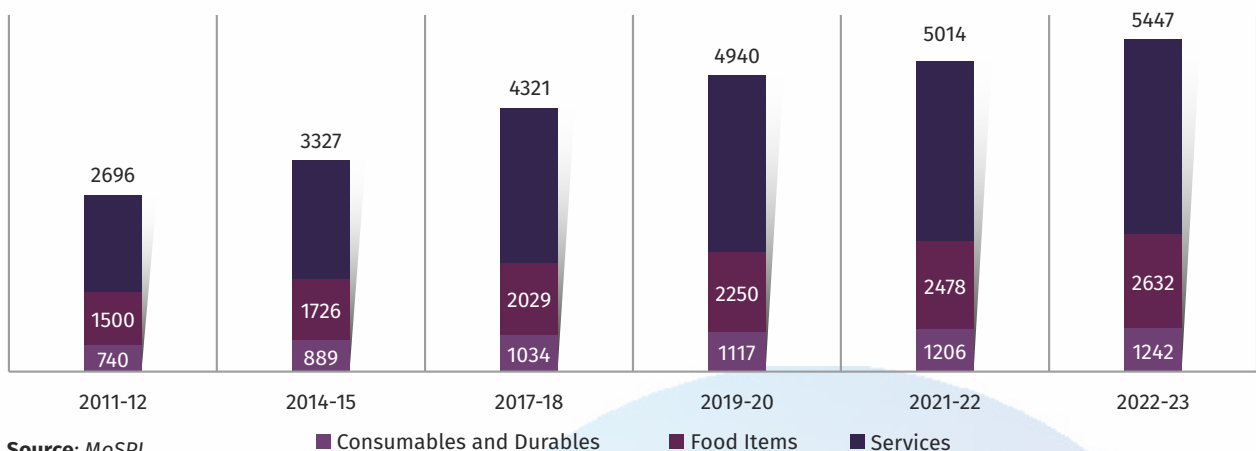
flourishing due to the increased reliance on consumption.

Constant vs Current prices

Among the multiple factors used to analyse consumption, changing expenditure patterns at constant and current prices is an important one. Current prices refer to the price at which items are sold at a current point in time and are already affected by inflation. For example, current prices in 2022-23 represent the actual prices prevailing in 2022-23.

Constant prices on the other hand are used to measure the true value of growth. They refer to costs that are corrected for changes in prices relative to a base year. For example, using year 1 as the base year, if the current price of product x rises from ₹100 to ₹110, and inflation is about 4%; measured at constant prices, the price of the product in year 2 would be approximately ₹106 reflecting volume growth of 6%. That is 6% represents the real growth from one year to the other without the effect of inflation.

Key Components of PFCE : Constant prices at 2011-12



Source: MoSPI

There has been a steady growth in India's PFCE at constant prices from 2011-12 to 2022-23 across consumables and durables, food items, and services. Services at constant prices have grown by 102%, driven by sectors like education, healthcare, and communication. Meanwhile, food increased by 75% and other consumables and durables grew by 68% showcasing our transition to a more robust and valuable economy.

For the purpose of this study, various indicators of expenditure (like PFCE and MPCE) have been analysed by comparing constant and current prices over a 12-year period (from 2011-12 to 2022-23) using 2011-12 as the base year. This analysis has provided significant insights into the evolution of consumption expenditure over this period and how the patterns of such expenditure have changed in real as well inflationary terms

Consumption Patterns

Between 2011 and 2023, India's Private Final Consumption Expenditure (PFCE) underwent significant transformations, driven by structural changes in demography, income, urbanisation, education, and shifting spending habits. These changes are reflected both in constant prices (adjusted for inflation) and nominal prices (value) and provide key insights into how consumption patterns have evolved in response to broader socio-economic trends. These are:

a. Income Growth & Consumption

Rising household incomes, supplemented by higher per capita earnings, have led to greater purchasing power in the hands of Indian consumers. This rise in income has spurred consumption of not just essential goods but also non-essential, higher-value

products such as electronics, luxury goods, and branded consumer goods. As consumers climb the income ladder, their spending patterns shift from necessities (like food and basic clothing) to discretionary items like appliances, entertainment, and personal care products. Over the last decade, India's per capita PFCE at constant prices has increased substantially, indicating a strong surge in consumer demand.

b. Urbanisation: Shaping Modern Consumption

India's rapid urbanisation has played a major role in transforming consumption patterns. As more people migrate from rural to urban areas in search of better economic opportunities, their consumption habits also evolve.

High disposable income

They tend to have higher disposable incomes, which leads to increased spending on a wide array of goods and services beyond traditional necessities like housing and food. Urban households often invest more in discretionary items such as electronics, clothing, and entertainment. Furthermore, urbanisation fosters a growing demand for modern digital services and retail, reflecting a shift toward a consumption-oriented society.

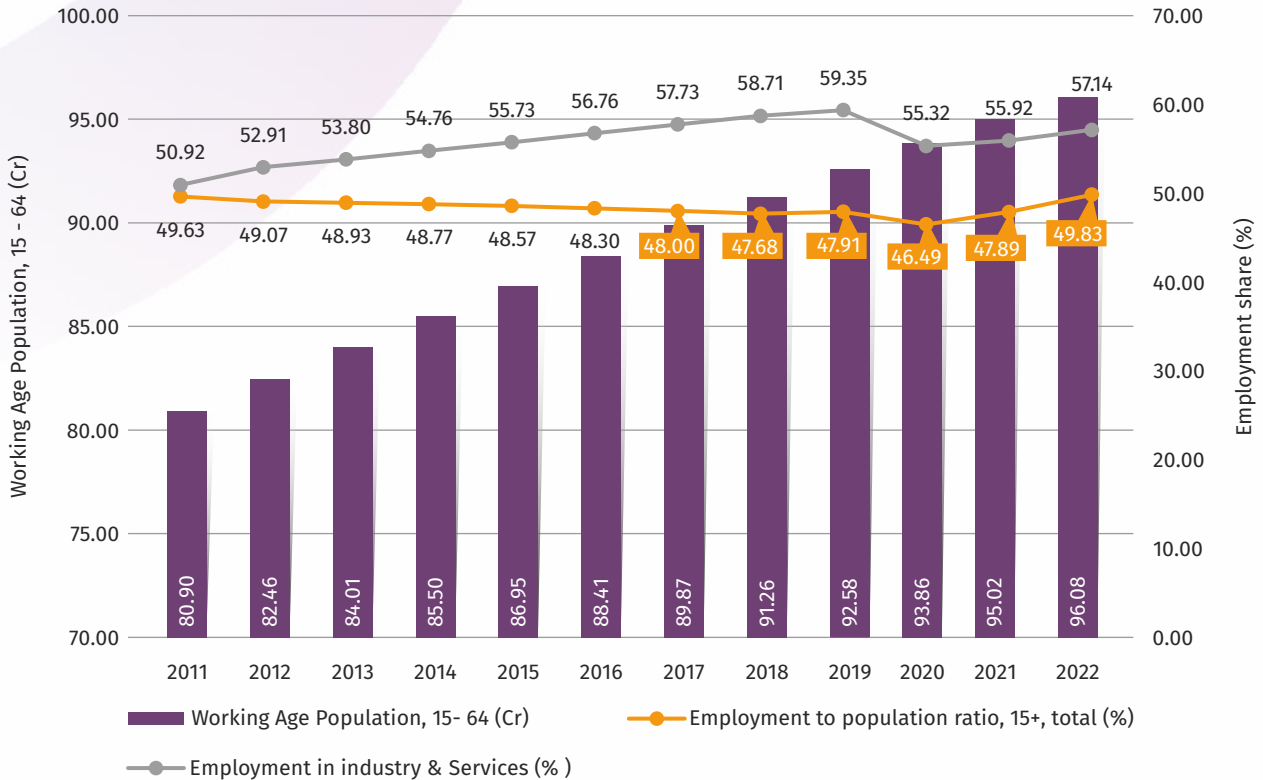
Age demographics

Millennials in India, particularly those aged 25-44, are driving consumption trends with a focus on lifestyle services such as dining, travel, and technology, fuelled by higher earning potential and aspirations for a better standard of living. Their spending patterns reflect a strong inclination toward discretionary products, personal development, and digital influences. India's working-age population, a significant portion of the population, has significantly influenced PFCE growth. As more people enter the

workforce, incomes increase, leading to greater consumption. This shift is evident in both urban and rural areas, with urban

centres experiencing a more pronounced rise in PFCE.

Working Population Dynamics - India



Source: World Bank Database

c. Rising Education Levels: Increasing Awareness and Preferences

The increase in educational attainment, particularly at secondary and higher levels, has been a key driver in shaping consumption patterns across India. From 2011 to 2022, there was a 50% rise in the education attainment (bachelor's degree or equivalent), which significantly improved their earning potential. Higher education levels often result in access to better-paying jobs, especially in sectors like technology, healthcare, and finance, where individuals with advanced education are in demand. With better-paying jobs, people are more likely to allocate their disposable income toward non-essential items, reflecting a shift in consumption from necessities such as food, to discretionary spending, such as

technology, entertainment, healthcare, and education.

The influence of education is particularly evident in the significant increase in the consumption of services, including education, healthcare, and communication. Between 2011 and 2023, services grew by 102% in constant prices, making it the fastest-growing segment in India's consumption basket.

In this context, over the decade there has been a shift in the consumption patterns. In 2022-23, food made up less than one-fourth of household consumption compared to one-third in 2011-12. Services, including healthcare, education, and communication, saw a significant growth, increasing by 102% in constant prices from 2011 to 2023, under-

lining a move towards higher-value consumption as households prioritise experiences and products that enhance their quality of life. Therefore, Indian households have increased discretionary expenses that are indicative of disposable income and upwards mobility.

Understanding Expenditure through Fractiles

Understanding household expenditure patterns facilitates the understanding of socio-economic dynamics and consumption behaviour in India. The National Sample Survey Office (NSSO) conducts Household Consumption Expenditure Surveys (HCES) to gather data on how households allocate their finances across various categories, including food, clothing, fuel, and services. Recent rounds of these surveys, culminating in the 2022-23 edition, reveal significant changes in consumption patterns, particularly between rural and urban populations.

Fractiles are statistical measures used to divide a distribution into equal parts, such as quartiles, deciles or percentiles. In terms of studying household expenditure or consumption these fractiles are statistical divisions that categorise the population into distinct groups based on income or expenditure levels. By segmenting households into fractile classes, researchers can assess the distribution of consumption and identify trends among different income brackets.

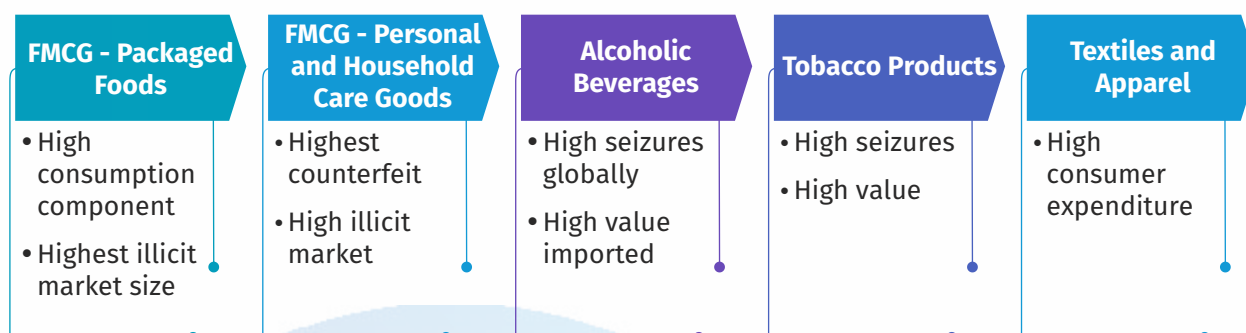
This report has adopted this approach as it provides valuable insights into shifts in consumer behaviour.

The consumption value is skewed when grouped fractiles drive different products and services. Hence, a sub-group has huge influence on the consumption of product/group of products which in turn impacts illicit markets if that group has lower income outlays and high aspirations.

The analysis of fractile data-contained in the rest of the report-reveals that overall consumption patterns in the 5 industries included in the study are shifting away from the top fractiles toward the middle- and lower-income groups. This trend suggests a gradual rise of the middle class, contributing to changes in consumption habits and preferences, which can further be tied to the trends observed in illicit markets.

Consumption and Illicit Markets

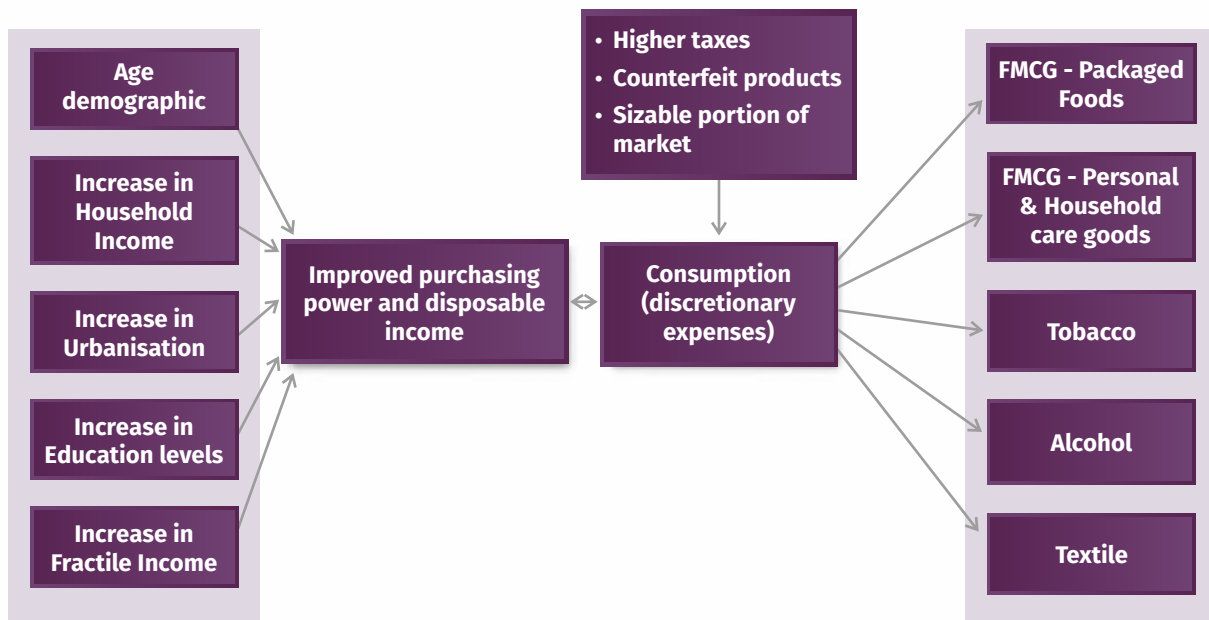
To ascertain the illicit market, we have to determine the different kinds of products that have to be considered under each industry category. We have identified **five key industries** through our assessment and consultation with FICCI-CASCADE members and industry representatives. These products are more susceptible to illicit trade, counterfeiting, and tax evasion, and also analysed in the earlier studies done on the topic. The key products/ industries selected for this study include:



The changing factors of consumption, such as rising incomes, urbanisation, and evolving spending patterns, have significantly influenced the growth of illicit markets in key industries mentioned above. As consumption moves across all fractiles toward higher value, processed and higher taxed goods that reflect aspirational behaviour, illicit markets are likely to grow. As consumers shift toward higher value, branded, and taxed products, illicit markets find opportunities to exploit demand for cheaper alter-

natives. In industries like tobacco and alcohol, heavy taxation has driven some consumers to purchase counterfeit or smuggled goods, impacting health and government revenues. The demand for branded FMCG and personal care products has led to the proliferation of counterfeit items that jeopardise consumer safety and undermine legitimate businesses. Ultimately, these illicit activities not only harm industries but also pose risks to consumers and erode trust in genuine brands.

Factors affecting consumption



Our analysis shows that patterns of expenditure move from more essential and basic items to discretionary / luxury items as improvements in levels of education, income and urbanisation occur.

Taxes & High Prices as Drivers of Illicit Consumption & Trade

Discretionary and luxury spends, or branded products imply high-cost purchases which are usually taxed at higher rates. Higher

taxes raise the prices of products thus making legal products less affordable; it drives consumers to counterfeit or untaxed products, thereby contributing to growth in illicit markets. Consumers turn to counterfeited products as these products can be produced at lower costs while still providing illicit marketeers the profits, they need to sustain their illicit trade.

In addition, consumption of aspirational goods due to higher standards of living and increased exposure to global consumption trends also drive consumers towards illicit

products. Fashion, and technology products are among the many lifestyle products that young professionals, particularly in urban areas, are more inclined to purchase. Analysis of consumption patterns across income fractiles further explains this tendency.

Taxes are a major component of government revenue. The direct effects of illicit markets on the economy thus become significant. It shifts demand from regulated markets to illicit markets, which reduces tax revenues. As consumers shift to spending on untaxed goods and services, governments' tax revenues decline, limiting their ability to spend on critical public services, affecting overall economic growth and social welfare.

Each sector study examines the impact of high/rising taxes on the growing illicit markets.

This study sheds light on the complex relationship between evolving consumption patterns and the rise of illicit markets across key industries such as personal and household care goods, packaged foods, textiles and apparel, alcoholic beverages and tobacco products and works on the following objectives:

- » Consumption expenditure pattern in India - Understanding structural shifts and underlying factors.
- » Consumption in key industries - level of consumption, who is spending and underlying socio-economic factors driving consumption.
- » Illicit markets in key industries - level and percentage.
- » Key Components of Illicit Markets in the Industry - Growth in illicit consumption, rise in illicit activity due to tax increases and other contributing factors that drive the expansion of illicit markets.
- » Perceptive Assessment of key vulnerable factors that drive the illicit market in key industries.

The study highlights how factors like rising incomes, urbanisation, education, and shifting spending behaviours have contributed to the growing demand for higher-value, taxed products, creating opportunities for counterfeit and illegal alternatives. It lays emphasis on the need for comprehensive policy measures to mitigate the impact of illicit trade, safeguard consumer welfare, and protect legitimate businesses.







2

Consumption Patterns & Illicit Markets

2 Consumption Patterns & Illicit Markets

This section analyses the impact of consumption expenditure patterns on illicit markets through two key indicators:

- » Private Final Consumption Expenditure (PFCE); and
- » Monthly Per Capita Expenditure (MPCE).

Private Final Consumption Expenditure Patterns

The Indian economy has experienced substantial changes over the years, influenced by a variety of factors, including government spending, private consumption, investment and exports.

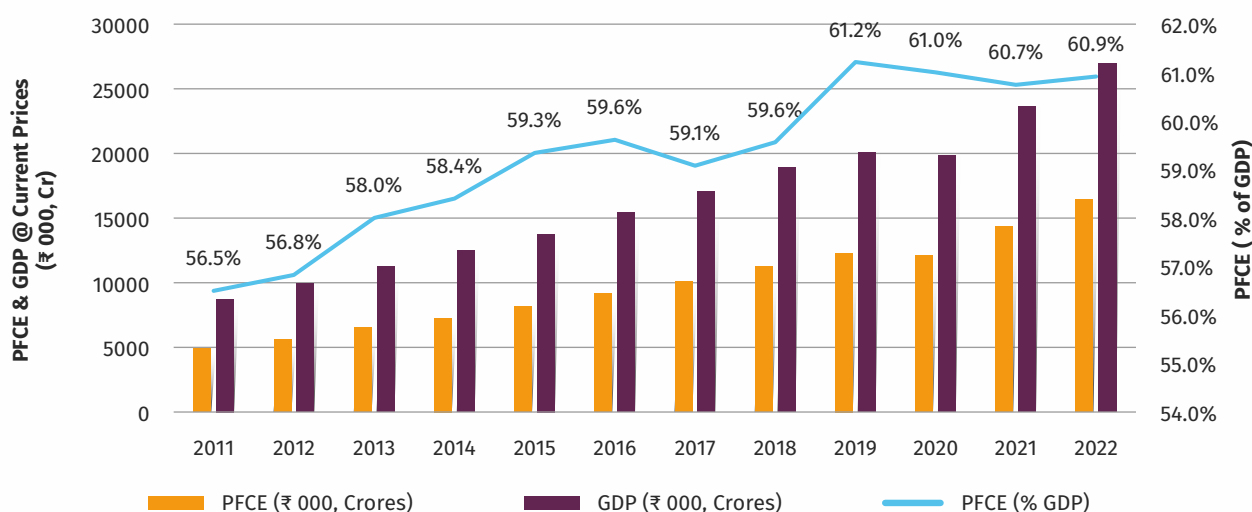
According to the 2024 Economic Survey:

On the demand side, private consumption has been a crucial and steadfast cog in the

GDP growth. Private final consumption expenditure (PFCE) grew by 4.0% in real terms in FY24. Urban demand conditions remain strong, as reflected in various urban consumption indicators such as domestic passenger vehicle sales and air passenger traffic. It is also reported that rural consumption growth has gradually picked up pace during the quarter ending March 2024.

Household consumer expenditure on goods and services, which is captured by PFCE, is a critical element of Gross Domestic Product (GDP) and aggregate demand. PFCE is the expenditure that households incur on goods and services for direct consumption and is defined as the sum of all expenditures by households and nonprofit institutions that serve households on final consumption goods and services; it excludes government consumption.¹⁴

PFCE - Contribution to GDP



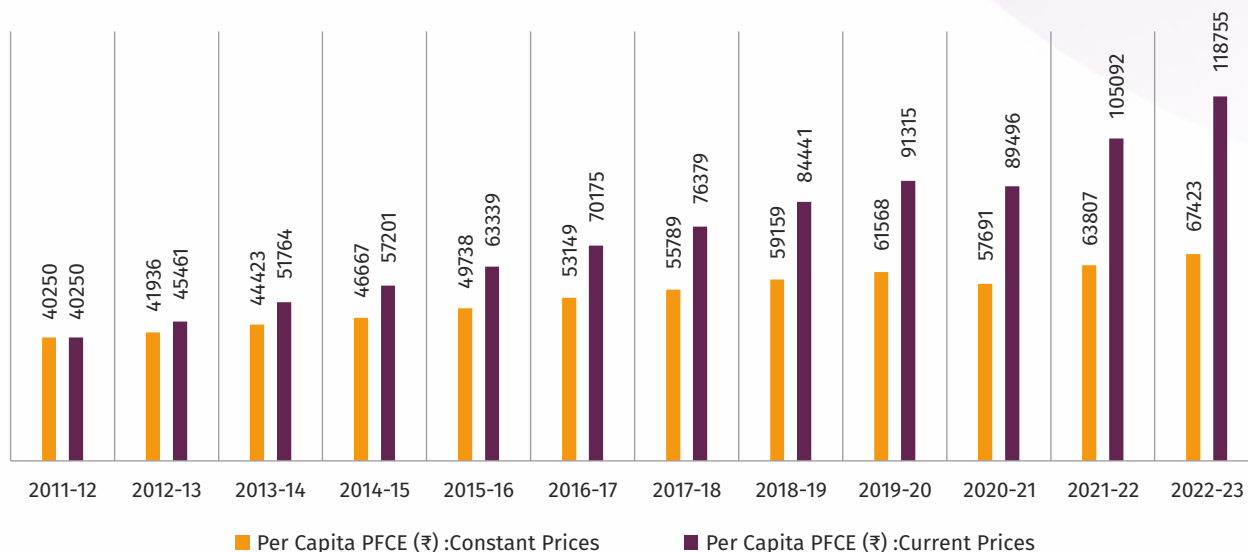
Source: TARI Calculations, RBI Database

¹⁴ The Indian Ministry of Statistics and Programme Implementation (MoSPI)

Rising household consumption leads to higher demand for goods and services, which stimulates production and investment, creating jobs and further raising household incomes. Increasing reliance on consumption has been a crucial factor in sustaining high GDP growth rates.

India witnessed a surge in per capita income between 2011-12 and 2022-23, which translated into higher consumption demand, particularly for consumer durables, services, and non-essential goods (NCAER, 2021).¹⁵ **PFCE per capita at constant prices increased by nearly 1.7 times from ₹40,250 in 2011-12 to ₹67,423 in 2022-23.**¹⁶

Per capita PFCE change: 2011-12 to 2022-23



Source: TARI Calculations, RBI Database

Understanding Structural Shifts and Driving Factors

This section focuses on understanding consumption expenditure patterns and structural shifts. PFCE data¹⁷ and Household Consumption Expenditure Surveys (HCES)¹⁸ are used for this analysis, which help to understand the key factors driving changing consumption patterns, for both rural and urban households and the population across different income groups.

By examining PFCE data over the 12-year period from 2011-12 to 2022-23, at both

constant and current prices (with 2011-12 as the base year), we can derive significant insights into the evolution of household consumption.

Except for a decline in the Covid-19 pandemic year of 2020-21, PFCE at constant prices nearly doubled from ₹4,936 trillion in 2011-12 to ₹9,321 trillion in 2022-23, reflecting an annual average increase of 6-8%. It rebounded strongly in the following year (2021-22) growing at 11%, underscoring the resilience in consumption as India emerged from the pandemic.

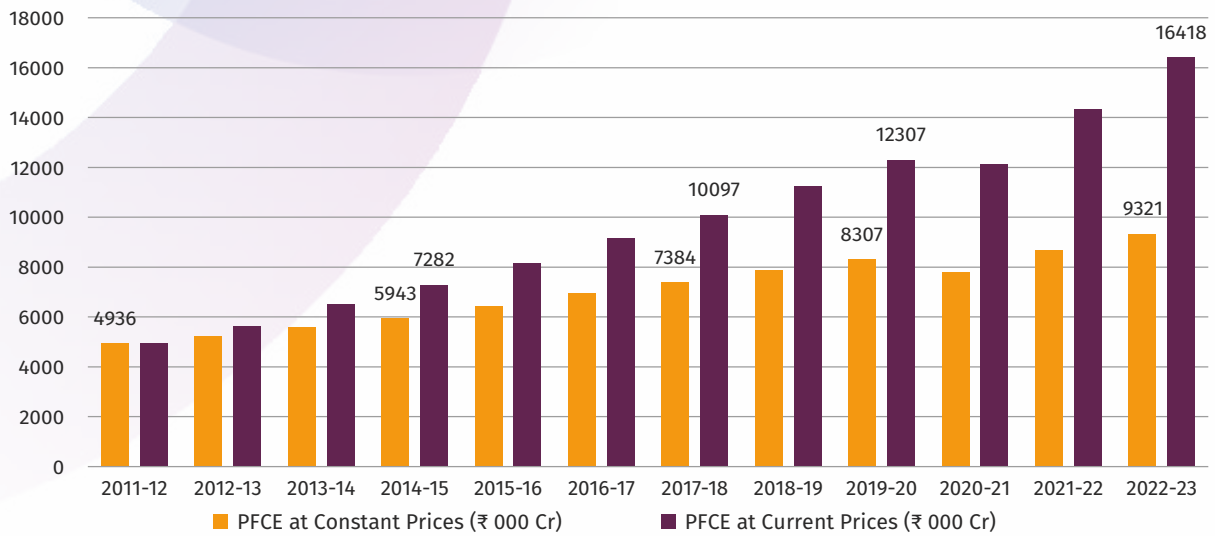
¹⁵ NCAER. (2021). Middle-class consumption in India: Drivers and trends. National Council of Applied Economic Research.

¹⁶ Based on RBI database statistics

¹⁷ collated by the Central Statistical Office (CSO)

¹⁸ HCES are conducted in India by the National Sample Survey Office (NSSO), Ministry of Statistics & Program Implementation (MoSPI)

Private Final Consumption Expenditure Change from 2011-12 to 2022-23



Source: Central Statistical Office (CSO), Ministry of Statistics & Program Implementation (MoSPI), 2020-2021 relates to the Covid-19 pandemic year

PFCE increased by 3.3 times from ₹4,936 trillion in 2011-12 to ₹16,418 trillion in 2022-23. The yearly growth rates at current prices were generally higher than those at constant prices, ranging from 9-18%, with a notable 18% increase in 2021-22 as consumption surged post the pandemic.

Analysis of different items in the basket of consumption, shows a steady growth in PFCE at constant prices across consumables and durables, food items and services. Services at constant prices saw the largest increase, rising from ₹26.960 trillion to ₹54.470 trillion, reflecting a 102% growth, driven by sectors like education, healthcare, and communication while food increased by 75% and other

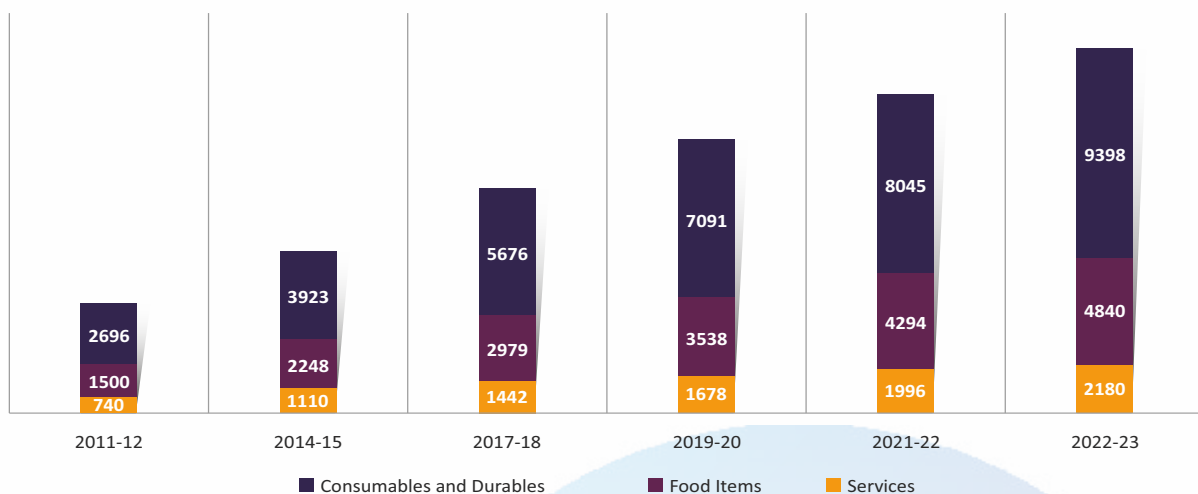
consumables and durables grew by 68%. These changes reflect our transition to a more robust and valuable economy.

At current prices, the services sector grew by 2.5 times from ₹26.960 trillion in 2011-12 to ₹93.980 trillion in 2022-23 underscoring the economic transformation during the period.

Expenditure on food vis-a-vis total household spend was less than one fourth of the spend in 2022-23, compared to one third of the spend in 2011-12, reflecting the growing maturity of households and the national economy.

Discretionary spends too (such as entertainment, lifestyle products, travel and leisure) increased significantly during this period.

Key Components of PFCE: Current Prices (₹ trillion)



Source: Central Statistical Office (CSO), Ministry of Statistics & Program Implementation (MoSPI)

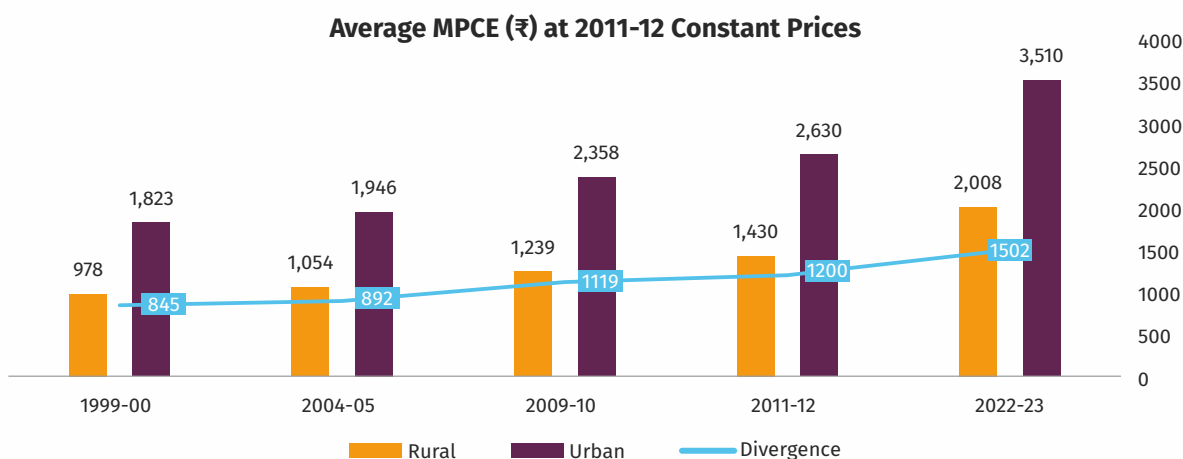
Monthly Per Capita Expenditure Patterns

Each round of NSSO's Household Consumption Expenditure Surveys (HCES) includes a large, representative sample of households from India's rural and urban areas, as well as comprehensive expenditure on food, non-food items (such as clothing, fuel and light durable goods, services, and more). A core indicator of these surveys is Monthly Per Capita Expenditure (MPCE), which represents the average monthly consumer expenditure per person, which is provided in various fractile classes for both rural and urban areas and helps to understand the distribution of consumption from the poorest to richest households.

MPCE at Constant Prices

An analysis of MPCE at constant prices over various rounds of HCES surveys shows that both rural and urban consumption have doubled in 2022-23 compared to 1999-2000. Urban MPCE growth is nearly double the rural MPCE growth, especially in the later periods (2011-12 to 2022-23) indicating that urbanisation driven by factors like greater access to education, and better employment opportunities resulted in increased household expenditure in urban areas compared to rural regions.

Though MPCE in rural and urban areas increased, the gap between them has widened from ₹845 in 1999-2000 to ₹1,502 in 2022-23, reflecting growing inequality in consumption expenditure between rural and urban areas.



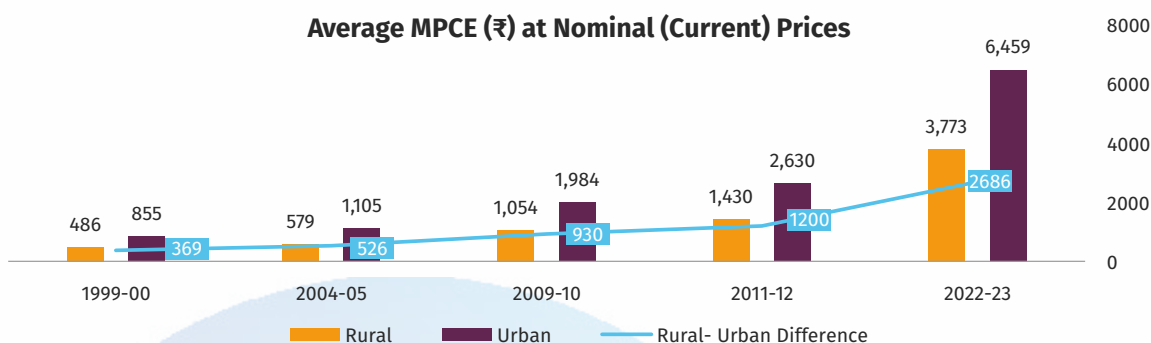
Source: NSSO Household Consumption Expenditure Survey 2022-23, Fact Sheet

MPCE at Current Prices

At current prices, both rural and urban consumption have increased by 7.6 times in 2022-23 compared to 1999-2000. The significant increase in MPCE at current prices compared to constant prices highlights that inflation is a key factor for the overall

increase in MPCE. From 1999-2000 to 2022-23, rural MPCE increased from ₹486 to ₹3,773, while urban MPCE rose from ₹855 to ₹6,459.

The gap between rural and urban MPCE at current prices has also widened from ₹369 to ₹2,686 during the same period.



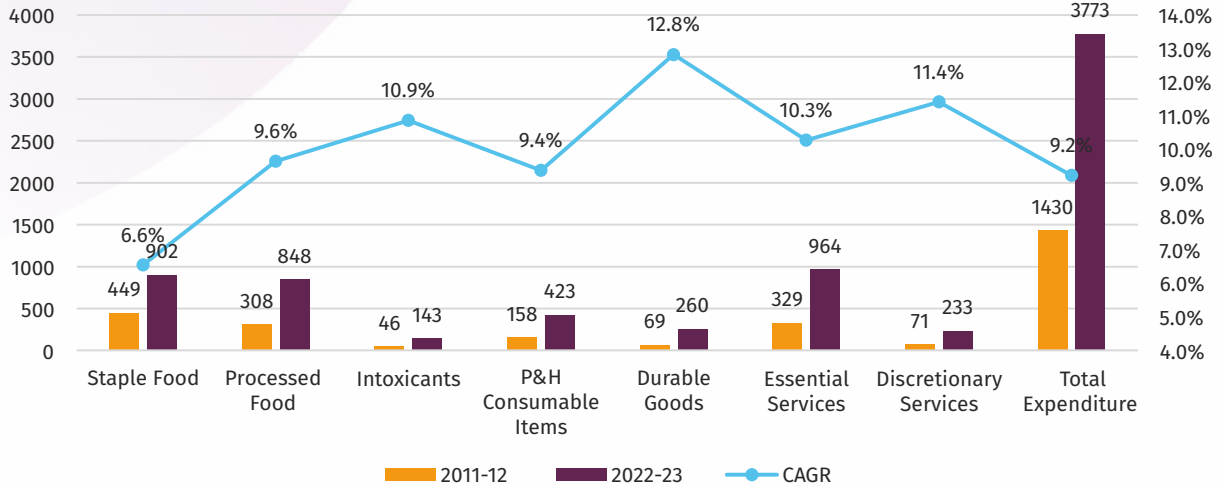
Source: NSSO Household Consumption Expenditure Survey 2022-23, Fact Sheet

Rural & Urban Household Expenditure Patterns: What Has Changed

We analysed the monthly per capita expenditure on key items: Consumables & Durables (intoxicants, personal and household (P&H)

consumable items, durable goods), Food Items (staple food, processed food) and Services (essential services, discretionary services) to see how household expenditure patterns have changed from 2011-12 to 2022-23 on these items.

Rural Household Expenditure: 2011-12 to 2022-23



Source: NSSO 2011-12 (68th Round) and NSSO 2022-23 reports

The rural MPCE has increased by 9.2% over the period under review.

Essential and discretionary services experienced growth of 10.3% and 11.4% respectively, indicating a shift from conventional consumption patterns in rural areas. Durables and consumables expanded at a higher rate than food items; durables show-

ing the highest CAGR at 12.8%. Processed foods and staple foods increased by 9.6% and 6.6% respectively, suggesting a shift in rural dietary patterns.

The share of total food expenditure decreased from 52.9 % to 46.4 %, (though expenditure on processed food increased).

Rural Household Expenditure Share - Key Items			
Expenditure Items		2011-12	2022-23
Food Items	Staple Food	31.4%	23.9%
	Processed Food	21.5%	22.5%
Consumables & Durables	Intoxicants	3.2%	3.8%
	P&H Consumable Items	11.0%	11.2%
	Durable Goods	4.9%	6.9%
Services	Essential Services	23.0%	25.6%
	Discretionary Services	5.0%	6.2%

Source: NSSO 2011-12 (68th Round) and NSSO 2022-23 reports

These patterns highlight a growing demand for both basic and non-essential services in rural areas.

Urban MPCE on Key Items

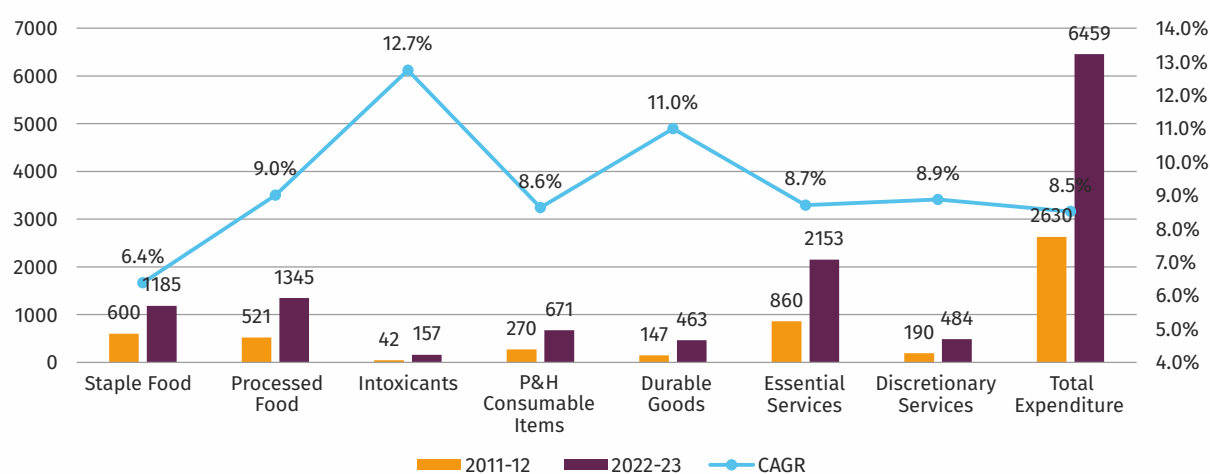
The total urban MPCE grew by 2.46 times from ₹2,630 in 2011-12 to ₹6,459 in 2022-23, at a CAGR of 8.5%.

Processed food grew at a significant rate of 9.0% CAGR, indicating a shift from traditional staple food (6.4% CAGR) to more convenience-based and value-added food items.

Essential services (8.7% CAGR) and discretionary services (8.9% CAGR) also showed robust growth, highlighting a rising demand for a broad range of services, from healthcare and education to entertainment and luxury services.

Items like intoxicants (12.7% CAGR) and durable goods (11.0% CAGR) have seen substantial growth, indicating a shift in spending patterns towards more discretionary items.

Key Item Expenditure- Urban: Change from 2011-12 to 2022-23



Source: NSSO 2011-12 (68th Round) and NSSO 2022-23 reports

The share of total food expenditure (processed food increased) decreased from 42.6% to 39.2%. The share of household

expenditure on staple food has declined significantly, from 22.8% in 2011-12 to 18.3% in 2022-23.

Urban Household Expenditure Share – Key Items		
Expenditure Items	2011-12	2022-23
Staple Food	22.8%	18.3%
Processed Food	19.8%	20.8%
Intoxicants	1.6%	2.4%
P&H Consumable Items	10.3%	10.4%
Durable Goods	5.6%	7.2%
Essential Services	32.7%	33.3%
Discretionary Services	7.2%	7.5%

Source: NSSO 2011-12 (68th Round) and NSSO 2022-23 reports

Share of Fractile Classes in Overall Consumption: Rise of The Middle Class

The analysis of the consumption across fractiles in rural and urban areas suggests that overall consumption is gradually shifting from the top fractile of the population, (70%-100%), to the middle-income group (30%-70%) and lower income fractile (0%-30%).

Some key insights from the data:

- » The 70%-100 % rural fractile class in 2011-12 had a 50.1% share which fell to 48.7 % in 2022-23, while the share of the middle-

income group (30%-70%) increased from 40.2% to 41.5 %.

- » The 70%-100 % urban fractile class in 2011-12 had a 56.1% share dropped to 52.4 % in 2022-23 while the share middle-income group (30%-70%) increased from 31.1 % to 33.3%.
- » The urban lower-income fractile class (0%-30%) saw a greater increase of share in consumption from 2011-12 to 2022-23 compared to the rural lower-income fractile class.

Share of Consumption among Fractile Classes in Rural and Urban Areas					
Rural Fractile classes MPCE share (%)			Urban Fractile classes MPCE share (%)		
Fractile classes	2011-12	2022-23	Fractile classes	2011-12	2022-23
0-5%	1.8	1.8	0-5%	1.3	1.5
5-10%	2.3	2.4	5-10%	1.7	2
10-20%	5.5	5.6	10-20%	4.3	4.9
20-30%	6.3	6.5	20-30%	5.2	5.8
30-40%	7.1	7.3	30-40%	6.2	6.7
40-50%	7.9	8.2	40-50%	7.2	7.7
50-60%	8.9	9.2	50-60%	8.3	8.8
60-70%	10	10.3	60-70%	9.7	10.1
70-80%	11.5	11.8	70-80%	11.6	11.9
80-90%	14	14.2	80-90%	14.8	14.8
90-95%	8.9	8.8	90-95%	10.2	9.6
95-100%	15.7	13.9	95-100%	19.5	16.1

Source: NSSO 2011-12 (68th Round) and NSSO 2022-23 reports

MPCE of both rural and urban areas has been further analysed by deflating 2022-23 current prices to constant prices using the PFCE deflator for 2022-23.

The key insights on **changes in rural MPCE from 2011-12 to 2022-23** are:

- » The growth in rural MPCE is relatively consistent across most fractile classes when measured at constant prices, with

increases ranging from 49.5% to 54.9%, indicating a rise in rural spending power.

- » **The difference between growth rates at constant prices and current prices reveals that inflation has substantially impacted real purchasing power, 0-5% fractile class saw a 163% increase in current prices versus a 49.5% increase at constant prices.**

The growth in per capita expenditure is lower at the extreme ends of the income distribution (95-100% and 0-5%), both at constant and current prices. This could indicate that

the very high-income households are reaching a saturation point in their consumption, while the very low-income households are catching up at a greater pace, but from a lower base.

Rural (₹) Monthly Per Capita Expenditure Change: 2011-12 to 2022-23					
Rural Fractile Class	2011-12	2022-23: Est Constant Prices	2022-23: Current Prices	Growth: Constant Price	Growth: Current Price
0-5%	521	779	1373	49.5%	163%
5-10%	666	1012	1782	51.9%	168%
10-20%	783	1199	2112	53.1%	170%
20-30%	905	1392	2452	53.9%	171%
30-40%	1018	1571	2768	54.4%	172%
40-50%	1136	1757	3094	54.6%	172%
50-60%	1266	1961	3455	54.9%	173%
60-70%	1427	1980	3487	38.8%	144%
70-80%	1645	2531	4458	53.8%	171%
80-90%	2007	3041	5356	51.5%	167%
90-95%	2556	3769	6638	47.4%	160%
95-100%	4481	5962	10501	33.0%	134%
All classes	1430	2142	3773	49.8%	164%

Source: NSSO 2011-12 (68th Round) and NSSO 2022-23 reports

The key insights from changes in urban MPCE from 2011-12 to 2022-23:

- » The lowest fractile classes (0-5% and 5-10%) among urban households have experienced the highest increase in expenditure at constant prices, with growth rates around 62%.
- » The urban middle-class fractile classes (20-30% to 70-80%) exhibit relatively stable and moderate growth rates at

constant prices (between 42.2% to 56.7%), indicating a balanced increase in purchasing power across the middle class.

- » The growth rate sees a substantial decline at the extreme upper end of the income distribution. The lowest-income class, experienced a 62% increase at constant prices, while the 95-100% fractile class experienced only a 15% increase indicating that highest-income groups are approaching a growth plateau in expenditure.

Urban (₹) Monthly Per Capita Expenditure Change: 2011-12 to 2022-23					
Urban Fractile Class	2011-12	2022-23: Est Constant Prices	2022-23: Current Prices	Growth: Constant Price	Growth: Current Price
0-5%	701	1,136	2,001	62.2%	186%
5-10%	909	1,480	2,607	62.8%	187%
10-20%	1,118	1,792	3,157	60.3%	182%
20-30%	1,363	2,136	3,762	56.7%	176%
30-40%	1,625	2,468	4,348	51.9%	168%
40-50%	1,888	2,818	4,963	49.3%	163%
50-60%	2,181	3,214	5,662	47.4%	160%
60-70%	2,548	3,704	6,524	45.4%	156%
70-80%	3,063	4,356	7,673	42.2%	151%
80-90%	3,893	5,440	9,582	39.7%	146%
90-95%	5,350	7,039	1,2399	31.6%	132%
95-100%	10,282	11,822	20,824	15.0%	103%
All classes	2,630	3,667	6,459	39.4%	146%

Source: NSSO 2011-12 (68th Round) and NSSO 2022-23 reports

Changes in Consumption & Illicit Markets

Illicit consumption is defined as the demand for and use of illegal or unregulated goods and services, that takes place through clandestine markets of varying sizes. Illicit markets are also described as underground, informal, or parallel economies.

The shadow economy includes not only illegal activities but also unreported income from the production of legal goods and services, either from monetary or barter transactions. Hence, the shadow economy comprises all economic activities that would generally be taxable were they reported to the tax authorities.

Estimates of the value of the global illicit market vary, ranging from \$200 billion to as high as \$1 trillion, depending on the source and methodology used as per UNODC.¹⁹ The difficulty in quantifying illicit trade arises from its clandestine nature, the inconsistent definitions of what constitutes illicit trade, and the challenges in measuring illegal activities across different jurisdictions.

Illicit markets/ trade continues to grow notwithstanding the endeavours of governments worldwide, international organisations including law enforcement and multi-lateral agencies, and private sector businesses, to curb its growth. The World Economic Forum (WEF) estimates that illicit trade results in an annual drain of \$2.2 trillion, or 3% of the world's GDP, on the global economy.²⁰

¹⁹ United Nations Office on Drugs and Crime. (2023). Illicit Trade: Global Economy and Criminal Networks. Retrieved from <https://unodc.org>

²⁰ World Economic Forum. (2023). The Illicit Economy: Combating Global Risks. Retrieved from <https://weforum.org>

The direct effects of illicit markets on the economy are significant. One major issue is the shift of demand from regulated to illicit markets, which reduces tax revenues. As consumers shift their spending to untaxed goods and services, tax revenues decline, limiting the government's funds and their ability to provide critical public services which in turn also affect overall economic growth and social welfare.

Illicit consumption creates demand for and

use of illegal or unregulated goods and services and illicit markets tend to emerge spontaneously when governments impose stiff price ceilings or stringent tariff barriers, or the regulatory environment creates insurmountable hurdles to conduct commerce legitimately.

TARI in their previous report on the Illicit Market in 2022²¹ estimated the size of illicit markets in the year 2019-20, in five key industries at ₹2,60,094 crores.

Illicit Market Size and Estimated Loss: 2019-20					
Indicators	Mobile Phones	FMCG - Household & Personal Goods	FMCG - Packaged Foods	Tobacco Products	Alcoholic Beverages
Illicit Market (₹ Cr)	15,884	55,530	1,42,284	22,930	23,466
Illicit Market (%)	7.56%	34.25%	25.09%	20.04%	19.87%
Employment Loss (Lakh)	0.35	2.989	7.94	3.7	0.979
Tax Loss (₹ Cr)	2,859	9,995	17,074	13,331	15,262

Source: *Illicit Markets: A Threat to Our National Interest (2022)*

This study endeavours to understand the factors that drive overall consumption. It also tries to understand how illicit markets vary in a particular industry on account of factors

like tariff increase, and which vulnerable population segment moves from legal to illicit consumption because of changes in underlying factors.

²¹ Illicit Markets: A Threat to Our National Interest (2022)





3

FMCG - Packaged Foods: Decoding Consumption and Illicit Markets

3

FMCG - Packaged Foods: Decoding Consumption and Illicit Markets

Industry Overview

The Fast-moving consumer goods (FMCG) market can be broadly categorized as Household and Personal care, Food & Beverages, and Others. This section focuses on the **packaged food segment**.

The market size of food processing sector in India is estimated to reach US\$ 1,274 billion in 2027 from US\$ 866 billion in 2022, growing at rate of 47 %.²²

The food processing industry in the registered factory sector accounts for 12.38% of total employment, providing jobs to around 1.93 million people. In the unregistered sector, approximately 5.1 million individuals are employed.²³

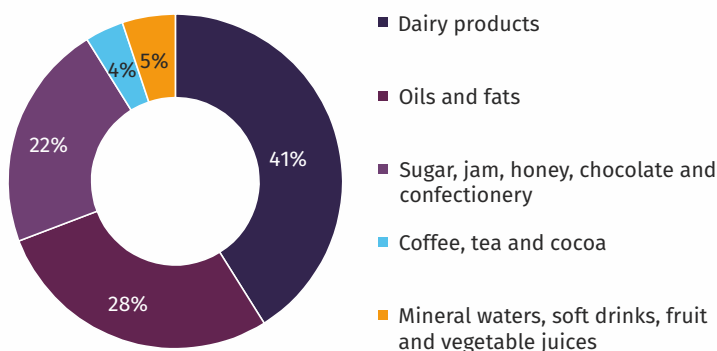
As of FY22, India's packaged convenience

food industry is valued at approximately ₹3,194 billion and is set for significant growth with a projected 11% compounded annual growth rate (CAGR). By FY26, the market is expected to expand to a substantial ₹4,883 billion.

Based on private final consumption expenditure data from NAS consumption,²⁴ dairy products (41%) are the largest segment, followed by vegetable oils and fats (28 percent) and confectionery items from packaged food consumption perspectives.

India is the largest producer and consumer of dairy products, accounting for 22% of global production. Valued at ₹10,257 billion in 2019, the market was projected to grow at 16% annually, reaching ₹21,971 billion by 2024.²⁵

FMCG - Packaged Foods



Source: TARI Research; NAS-2020

²² ASSOCHAM. (n.d.). Opportunities in food processing sector in Uttar Pradesh. Retrieved September 16, 2024, from <https://www.assocham.org/uploads/files/Opportunities%20in%20Food%20processing%20Sector%20in%20Uttar%20Pradesh.pdf>

²³ Startup India. (n.d.). Food processing sector in India: Growth and opportunities. Retrieved September 16, 2024, from <https://www.startupindia.gov.in/content/sih/en/bloglist/blogs/food-processing-sector.html>

²⁴ Excluded non-classified foods products including snacks, ready to cooks and bakery etc. for this study

²⁵ EBG Report 2020

India was the second-largest vegetable oil market globally in 2018, with US\$ 9.7 billion worth of retail value sales.

India is the world's second-largest vegetable oil market, consuming over 10% of the global supply. Per capita consumption has risen to 19.7 kg/year, with imports meeting 55-60% of the demand as domestic production only covers 40-45%. In 2022-23, India imported 16.5 million tonnes of edible oil.

The tea and coffee industry are a key segment of FMCG packaged foods, being one of the highest exported products. India accounts for 25% of global tea production and 3.14% of global coffee production.²⁶

India's non-alcoholic beverages market is projected to grow at a CAGR of 8.7%, reaching ₹1.47 trillion by 2030, according to an ICRIER report. In 2019, the market, including carbonated soft drinks, juices, bottled water, and fruit-based beverages, was valued at ₹67,100 crore.²⁷ Globally, carbonated soft drinks, RTDs, energy drinks, and sports drinks dominate the market. In India, carbonated soft drinks are the most popular, followed by bottled water, fruit beverages, and juice.

India's confectionery market was valued at ₹338 billion in 2020 and is projected to reach ₹485 billion by 2026-27. Confectionery sales grew at an annual rate of 10.3% between 2019 and 2023, driven primarily by chocolate confectioneries.

India's food retail sector is divided into modern channels (hypermarkets, supermarkets, cash and carry stores, and e-retail) and

traditional channels (Kirana stores, mobile pushcarts, kiosks, and independent vendors) with traditional channels making up 81% of all offline retail.

FMCG - Packaged Foods consumption in India

As per NSSO 2022-23, rural population contribute 63.1% to total packaged food consumption, playing a key role in driving demand. In comparison, urban areas account for the remaining 36.9% of total packaged food consumption, highlighting the growing influence of rural market, driven by expanding access, rising incomes, and increasing demand for packaged foods.

Several key factors are driving the rise of packaged food consumption. Evolving consumer preferences, a young demographic, changing household dynamics, diverse food habits, and increasing spending power play significant roles. As consumers direct more of their income towards value-added and higher-quality food products, the packaged food industry is set to grow. In particular, the "Better-For-You" (BFY) category, which includes packaged food and beverages with reduced unhealthy ingredients, has gained traction as health-conscious consumers seek healthier alternatives.²⁸ With a growing focus on wellness and increasing e-commerce penetration, India's favourable demographics will continue to be the catalyst of growing demand for packaged convenience foods across urban and rural.²⁹

²⁶ <https://www.ngeninvest.com/tea#:~:text=India%2C%20contributing%20about%2030%25%20to,of%20coffee%20%E2%80%93%20Arabica%20and%20Robusta.>

²⁷ ICRIER & Indian Beverage Association. (2022, May 27). Report on the non-alcoholic beverages market in India. https://icrier.org/pdf/ICRIER-IBA_Report_Release_May_27_2022.pdf

²⁸ Ali, T., & Ali, J. (2020). Factors affecting the consumers' willingness to pay for health and wellness food products. *Journal of Agriculture and Food Research*, 2, 100076. <https://doi.org/10.1016/j.jafr.2020.100076>

²⁹ Indian Retailer. (n.d.). India's packaged food industry on track to \$34 billion by 2027. Indian Retailer. <https://www.indianretailer.com/article/retail-business/food-grocery/indias-packaged-food-industry-track-34-billion-2027>

Changing familial dynamics: Effect of urbanisation, rising income

Indian families are transitioning from traditional joint families to urban nuclear families due to rapid urbanization, economic development, educational advancements, and increased global connectivity.³⁰ This shift has led to changes in family sizes, with over 60% of Indian households now being nuclear,³¹ and there has been a marked rise in one- and two-member households over the past decade which is driving the demand for packaged foods.

This trend is further gaining momentum due to a more progressive outlook among younger generations and increasing female workforce participation. As a result, consumers are increasingly prioritising convenience. In both small and large cities, nuclear families and working couples are becoming the norm. Time and convenience have become crucial factors in the new urban lifestyle, with nuclear families demanding quick and easy food options for daily meals. As this demographic transition continues, the growing number of nuclear families is driving the demand for snacks and other packaged foods, as convenience is essential for their career-oriented lifestyles.³²

India's growth trajectory is supported by its expanding population and rising affluence, with **1.41 billion people** as of 2024, making it the world's most populous country. As **net**

national disposable income is expected to increase from ₹203 trillion in FY22 to ₹319 trillion by FY26, the share of the middle class with household incomes above **US\$ 6,000** is projected to rise from **34% today to 87% by 2047.**³³

Consequently, transforming consumption patterns, particularly in discretionary categories like packaged food and beverages. As India crossed the **US\$ 2,000 GDP per capita** mark in 2023, **F&B categories** such as **breakfast cereals, snacks, soft drinks, confectionaries** and **coffee** are reaching an inflection point,³⁴ heading toward accelerated growth. **The aspirational middle class** is increasingly gravitating towards **branded products** and higher-quality goods, reflecting a broader desire for premium, lifestyle-oriented purchases. This surge in affluence, paired with evolving consumer preferences, is setting the stage for rapid growth in India's packaged food sector.

Consumption of FMCG packaged foods: By segment

- » Consumption of packaged foods by the overall rural population increased from ₹256.5 in 2011-12 to ₹690.5 in 2022-23 showing an increase of 169%.
- » Consumption of packaged foods by the overall urban population increased from ₹407.4 in 2011-12 to ₹1,022.9 in 2022-23 showing a 151% increase.

³⁰ Chandra, V. (2024). Changing landscape of Indian family. In Indian Families: Contemporary Family Structures and Dynamics. Emerald Publishing. <https://doi.org/10.1108/97818397975962>

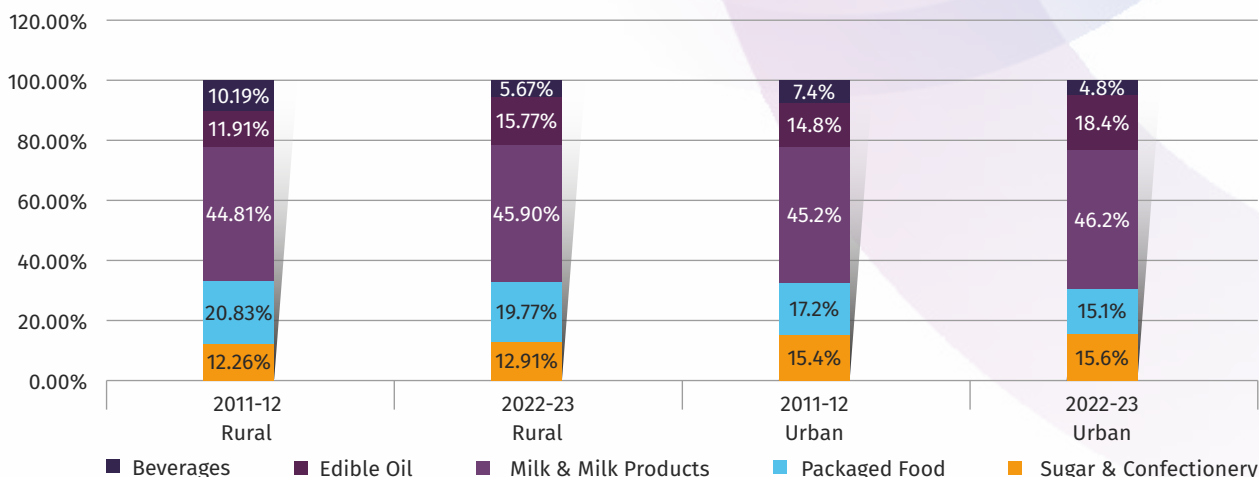
³¹ Industry research report: Snacks, savouries, papad, spices & flour market https://www.gopalnamkeen.com/storage/policy_images/1700380451.pdf

³² BDO India. (n.d.). Packaging India's evolving food consumption. Retrieved September 16, 2024, from [https://www.bdo.in/getmedia/9159e0b0-4438-4da7-ba1b-16fcec8ceb1e/Packaging-India%E2%80%99s-Evolving-Food-Consumption_BDO-India-\(1\).pdf](https://www.bdo.in/getmedia/9159e0b0-4438-4da7-ba1b-16fcec8ceb1e/Packaging-India%E2%80%99s-Evolving-Food-Consumption_BDO-India-(1).pdf)

³³ Business of Food. (n.d.). A golden period for growth in food and beverages in India. <https://www.businessoffood.in/a-golden-period-for-growth-in-food-and-beverages-in-india/>

³⁴ Business of Food. (n.d.). 4 key factors driving the packaged food industry. <https://www.businessoffood.in/4-key-factors-driving-the-packaged-food-industry/>

Share of FMCG - Packaged Foods Segments (%)



Source: TARI calculations, NSSO 2011-12 and 2022-23

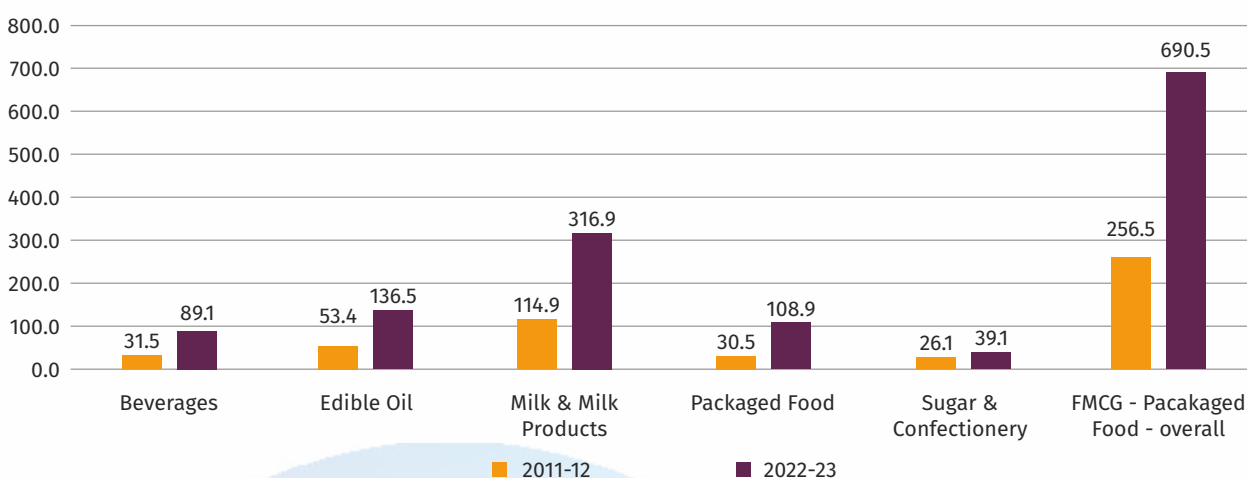
Rural Consumption: By segments of FMCG- Packaged Foods

- » Over the period 2011-12 to 2022-23, consumption of non-alcoholic beverages increased from ₹31.5 to ₹89.1, marking a 183% growth, signifying the penetration of the product across the country. The consumer price index (CPI) for the product was 77% for this period, suggesting that the segment witnessed significant volume increase and reflecting a shift in food preferences.
- » Similarly, edible oil consumption nearly tripled from ₹53.4 to ₹136.5 (155% growth),

despite an 83.3% rise in the CPI for oils and fats.

- » Milk and milk products consumption increased by ₹114.9 to ₹316.9 a rise of 176%, with the CPI for this category was 77.0%. Hence the volume increase in consumption for the decade is very significant.
- » Consumption of packaged food more than tripled growing from ₹30.5 to ₹108.9, a 256 % increase, surpassing the effect of a rise of 89.9% rise in the CPI for processed meals, snacks, and sweets

Rural MPCE (₹) : FMCG - Packaged Foods



Source: NSSO 2011-12 (68th round) and NSSO 2022-23 reports

- » Sugar and confectionery consumption grew by 50%, while the CPI for this category rose by 19.1%.

The above reflects a significant change in food preferences of rural population, which is moving towards higher proportion of processed foods in their diet. These products, being manufactured have a tax implication at varying rates and such demand also see the profusion of counterfeit, smuggled and other illicit products into the markets.

Rural Consumption: The Trends

Rural consumption is increasingly driving the growth of the FMCG - Packaged food market in India. Factors such as improved infrastructure, increased disposable incomes, and changing dietary preferences are driving the demand, the rural market for packaged foods is expanding rapidly, outpacing urban growth. According to NSSO 2022-23, rural Indian households are now spending more on beverages and processed foods than on cereals for the first time, with their share in total spending rising from 7.90% to 9.62% of the MPCE.³⁵

- » Across all rural classes, monthly per capita expenditure (MPCE) on food rose from ₹256.45 in 2011-12 to ₹379.3 in constant prices and ₹690.5 in current prices in 2022-23, with a 47.9% growth in constant prices and 169% in current prices-both outpacing urban growth rates of 37.9% and 151%.

- » This suggests that rural households, as key aspiration drivers, are increasingly consuming more and driving the FMCG sector, particularly packaged foods, as they experience greater access and purchasing power due to rising disposable incomes.

- » For the 0-30% rural fractile class, MPCE saw a significant increase, with constant price growth between 71.6% and 89.4% and current price growth from 212% to 245%, highlighting their growing role in driving the packaged foods and rising real disposable incomes of the rural population.

- » The 50-90% rural fractile class, MPCE increased gradually, with constant price growth ranging from 36.3% to 57.1% and current price growth between 148% and 186%, showing moderate real consumption growth with inflation driving much of the expenditure increase.

- » For the 90-100% rural fractile class, monthly per capita expenditure on food increased modestly, with constant price growth of 17.9% and current price growth of 115%, indicating a small real increase in consumption, with most of the rise in expenditure driven by inflation.

Inflation is having a more pronounced impact on rural spending, but their role as key drivers of FMCG growth, particularly in packaged foods, highlights their increasing economic importance.

Rural Fractile Class	2011-12	2022-23: Est Constant Prices	2022-23 - Current Prices	Growth: Constant Price	Growth: Current Price
0-5%	73.43	139.1	253.15	89.4%	245%
5-10%	104.81	190.7	347.13	81.9%	231%
10-20%	133.46	229.0	416.89	71.6%	212%
20-30%	155.66	271.9	494.95	74.7%	218%

³⁵ Ministry of Statistics and Programme Implementation. (2023). Household consumer expenditure survey 2022-23: Factsheet. Government of India. https://www.mospi.gov.in/sites/default/files/publication_reports/Factsheet_HCES_2022-23.pdf

Rural Fractile Class	2011-12	2022-23: Est Constant Prices	2022-23 - Current Prices	Growth: Constant Price	Growth: Current Price
30-40%	185.02	306.6	558.03	65.7%	202%
40-50%	215.48	341.3	621.32	58.4%	188%
50-60%	238.83	375.2	683.01	57.1%	186%
60-70%	275.06	416.5	758.16	51.4%	176%
70-80%	317.89	463.0	842.88	45.7%	165%
80-90%	390.27	531.8	968.08	36.3%	148%
90-95%	473.73	614.8	1119.11	29.8%	136%
95-100%	654.01	771.0	1403.41	17.9%	115%
All classes	256.45	379.3	690.5	47.9%	169%

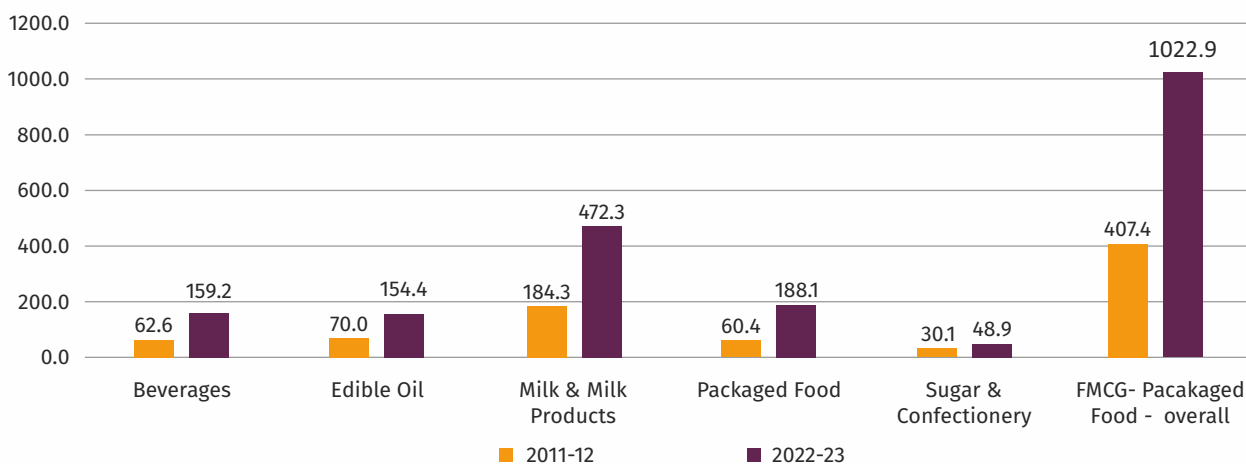
Source: NSSO 2011-12 (68th Round) and NSSO 2022-23 reports

The above reflects a significant change in food preferences of rural population, which is moving towards higher proportion of processed foods in their diet. These products, being manufactured have a tax implication at varying rates and such demand also see the profusion of counterfeit, smuggled and other illicit products into the markets.

Urban Consumption: By Segments of Packaged Foods

» Over the period 2011-12 to 2022-23, consumption of non-alcoholic beverages increased from ₹62.6 to ₹159.2, marking a 154% growth, while the CPI increased by 64.9%.

Urban MPCE (₹) : FMCG - Packaged Foods



Source: NSSO 2011-12 (68th round) and NSSO 2022-23 reports

» Similarly, edible oil consumption more than doubled from ₹70.0 to ₹154.4 (121% growth), despite a 68.5% rise in the CPI for oils and fats over this period.

» Milk and milk products consumption increased from ₹184.3 to ₹472.3, a rise of 156%, with the CPI for this category rising by 77.9%.

» Packaged food consumption more than tripled, growing from ₹60.4 to ₹188.1, a 212% increase, even as prices increased, with a 96.6% rise in the CPI for prepared meals, snacks, and sweets.

» Sugar and confectionery consumption grew from ₹30.1 to ₹48.9, an increase of 62%, while the CPI for this category rose by 21.9%.

The consumption shift to higher value processed food especially in non-alcoholic beverages, milk products, other packaged foods by the urban population has overtaken the effects of inflation for the period and the shift is also towards higher volume of per capita consumption. This shift brings in players who use the tax arbitrage in such foods into play and others who supply low value illicit alternatives, smuggled or counterfeit products to the consumers, thereby fuelling the illicit markets.

Urban Consumption: The Trends

Across all urban classes, MPCE on processed food increased from ₹407.41 in 2011-12 to ₹561.9 in constant prices, and ₹1,022.94 in current prices in 2022-23.

- » The constant price growth is 37.9%, indicating a moderate increase in processed food consumption in urban areas from 2011-12 to 2022-23.
- » Growth in current prices is 151%, showing a sharp rise in expenditure, largely driven by rising food prices with increasing consumption level.

- » For the 0-30% urban fractile class, constant price growth ranges from 52.8% to 82.6%, while current price growth range from 178% to 232%, indicating a substantial rise in expenditure despite rising food prices and static income levels.
- » For the 50-90% urban fractile class, constant price growth ranges from 30.9% to 39.5%, while current price growth ranges from 138% to 154%.
- » For the 90-100% fractile class constant price growth ranges from 25.1% to 27.3%, indicating a modest increase in processed food consumption from 2011-12 to 2022-23, while current price growth ranges from 128% to 132%, showing a significant rise in expenditure, primarily driven by inflation rather than a substantial increase in consumption.

While urban households have greater purchasing power, their real consumption growth is slowing as they reach higher levels of food security, with inflation being the primary factor affecting their spending patterns.

Urban Fractile Class	2011-12	2022-23: Est Constant Prices	2022-23 - Current Prices	Growth: Constant Price	Growth: Current Price
0-5%	116.88	213.4	388.48	82.6%	232%
5-10%	169.26	279.1	508	64.9%	200%
10-20%	210.38	338.6	616.37	60.9%	193%
20-30%	260.39	397.9	724.37	52.8%	178%
30-40%	309.71	448.6	816.56	44.8%	164%
40-50%	351.9	499.5	909.27	41.9%	158%
50-60%	397.25	554.4	1009.13	39.5%	154%
60-70%	450.55	604.7	1100.74	34.2%	144%
70-80%	517.7	677.7	1233.71	30.9%	138%
80-90%	591.4	787.8	1434.1	33.2%	142%
90-95%	734.55	918.7	1672.38	25.1%	128%
95-100%	949.65	1209.4	2201.47	27.3%	132%
All classes	407.41	561.9	1022.94	37.9%	151%

Source: NSSO 2011-12 (68th Round) and NSSO 2022-23 reports

Decoding Illicit Markets: FMCG - Packaged Foods

Illicit market estimation for packaged foods in India is based on our research approach to assess the gap between demand and supply to find the illicit market value and illicit market per cent for a given year.

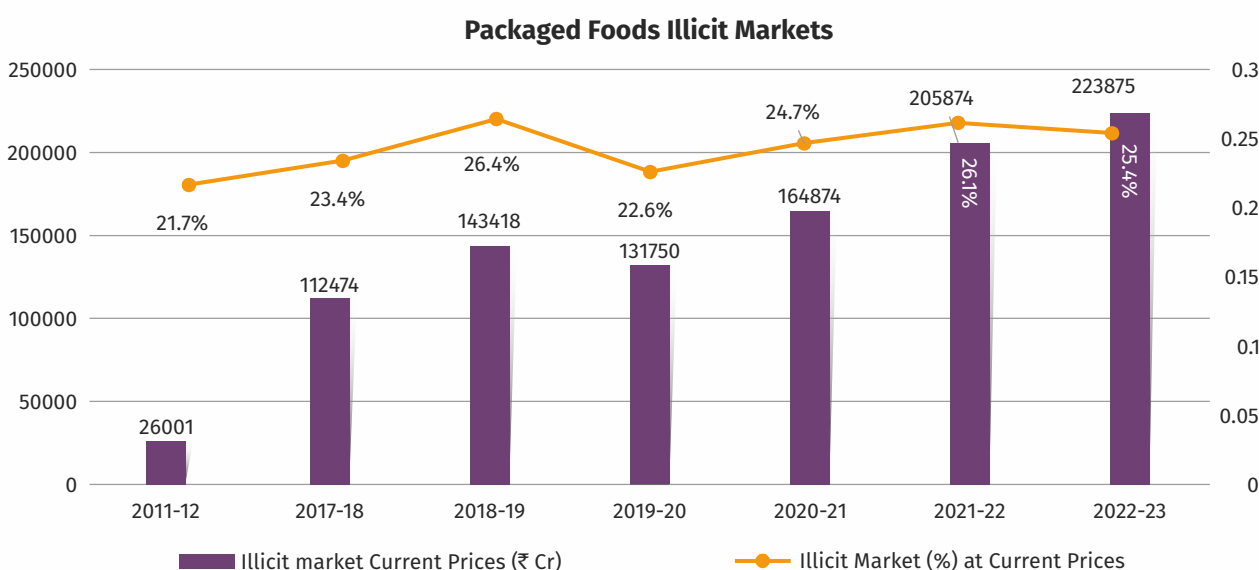
The supply and consumption estimates are below.

Year	2017-18	2018-19	2019-20	2020-21	2021-22
Supply (₹ Cr)	3,68,016	3,99,316	4,51,452	5,03,484	5,81,826
Consumption (₹ Cr)	4,80,490	5,42,734	5,83,201	6,68,359	7,87,701

The following supply-side estimates have been calculated using data from the Annual Survey of Industries (ASI) for the years 2017-18 to 2021-22. The consumption-side estimates have been sourced from the Private Final Consumption Expenditure (PFCE) data provided by MoSPI. Please refer to Annexure I and II for Methodology and further details respectively.

Based on our methodology, the estimates for the illicit market for FMCG - Packaged Food have grown from ₹1,12,474 crores in 2017-18 to ₹2,23,875 crores in 2022-23, marking an 99% increase. However, the share of the illicit market has risen moderately, peaking at

26.4% in 2018-19 and reaching 25.4% in 2022-23, indicating that while the overall market value surged, the illicit market's proportion witnesses a gradual increase. The illicit market for 2022-23 is based on the last two years' average illicit market values.

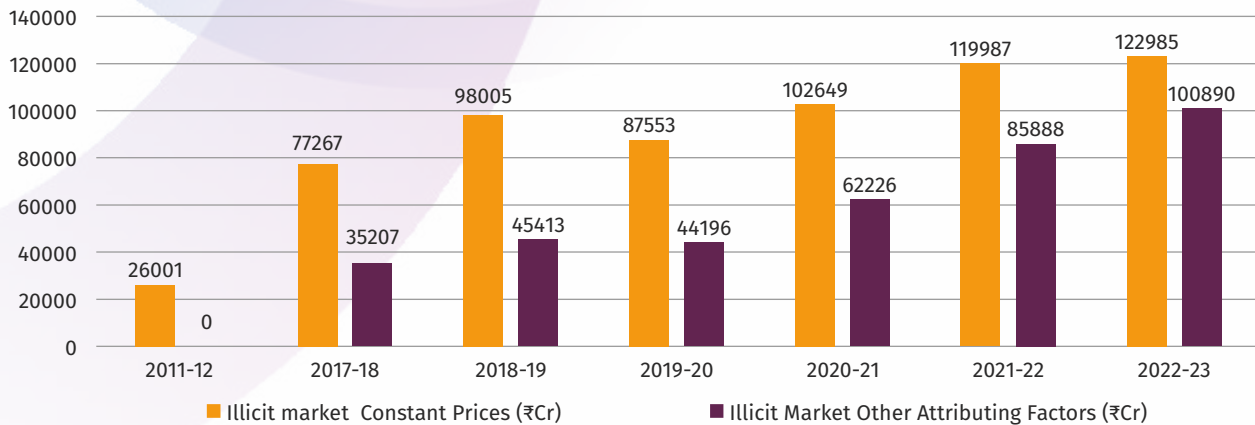


Source: TARI estimates

The analysis of illicit FMCG- packaged food can be divided into two aspects. The first component is the analysis of illicit FMCG - Packaged food at constant prices in 2011 highlighting volume growth in packaged food consumption. Illicit market in constant prices arrived using packaged food PFCE deflator with the 2011-12 base year.

The illicit market at constant prices highlights the actual increase in illicit packaged food consumption as people knowingly and unknowingly purchase these products. **FMCG - Packaged food at constant prices is an average value of ₹1,01,408 crores between 2017-18 to 2022-23, depicting the increase in volume.**

Illicit Market Components: Constant Prices and Other Attributing Factors



Source: TARI Calculations

The second component is the difference in illicit packaged food consumption at current prices and constant prices and includes various attributing factors such as the increase in input cost of materials and taxes. This component increased 2.87 times since 2017-18 with value increasing from ₹35,207 crores to ₹1,00,890 crores in 2022-23. The share of this component in the total illicit market also increased significantly from 33.3% in 2017-18 to 45.1% in 2022-23.

The significant change in food preferences of the population, which is moving towards higher proportion of processed foods in their diet. These products, being manufactured have a tax implication at varying rates and such demand also see the profusion of counterfeit, smuggled and other illicit products into the markets.

In the urban segment, the 0-30% fractile group, with a 196% median consumption increase over 2011-12 to 2022-23 period, is most vulnerable to low-quality or illicit products due to price sensitivity and rising consumption.

In contrast, the 30-60% fractile (with a 158% median increase) represents the aspiring urban middle class driving consumption of higher-value/quality packaged foods. This group is more exposed to smuggled or

counterfeit high-value products as they seek better quality in line with their rising incomes and aspirations.

Similarly, in the rural segment, the 0-30% fractile group, with a 221% median consumption increase over 2011-12 to 2022-23 period, is most vulnerable to low-quality or illicit products due to price sensitivity and rising consumption.

In contrast, the 30-60% fractile (with a 188% median increase) represents the aspiring middle class driving consumption of higher-value/quality packaged foods. This group is more exposed to smuggled or counterfeit high-value packaged products, while seeking better quality.

The taxes at higher end of the consumption basket being at 18%, where the consumption is moving creates incentives for illicit players to exploit.

Packaged Foods: Key Takeaways

The markets and consumption pattern

- » The overall food consumption during this period remained at 30% of the monthly expenditure but the per capita spend on

food in rural India, which was 67% of urban India in 2011 became 50% in 2023. The consumption moved from staples to more processed and packaged food and urban India having a higher proportion of spent than rural counterparts.

- » Across all rural classes, monthly per capita expenditure (MPCE) on food rose from ₹256.45 in 2011-12 to ₹379.3 in constant prices and ₹690.5 in current prices in 2022-23, with a 47.9% growth in constant prices and 169% in current prices-both outpacing urban growth rates of 37.9% and 151%.
- » The trend and transition in consumption suggests that rural households, as key aspiration drivers, are increasingly consuming more and driving the FMCG sector, particularly packaged foods, as they experience greater access and purchasing power due to rising disposable income.

Rural and Urban narrative

- » MPCE on processed food increased from ₹407.41 in 2011-12 to ₹561.9 in constant prices, and ₹1,022.94 in current prices in 2022-23 in urban India while in rural spend on packaged foods rose from ₹256.45 in 2011-12 to ₹379.3 in constant prices and ₹690.5 in current prices in 2022-23.
- » As per NSSO 2022-23, Rural population contribute 63.1% to total FMCG - packaged food consumption, playing a key role in driving demand. In comparison, urban areas account for the remaining 36.9% of total packaged consumption.
- » For the 0-30% urban fractile class, constant price growth ranges from 52.8% to 82.6%, while current price growth range from 178% to 232%, indicating a substan-

tial rise in expenditure fuelled by rising food prices, change in consumption basket and growing income levels while the same rural fractile class, also saw a significant increase, with constant price growth between 71.6% and 89.4% and current price growth from 212% to 245%, highlighting their growing role in driving market for packaged foods due to rising of disposable income.

- » For the 50-90% urban fractile class saw a modest growth ranging from 30.9% to 39.5% at constant prices, while current price growth ranges from 138% to 154% and the corresponding rural fractile class, also saw a more modest growth between 36.3% to 57.1% at constant prices and current price growth between 148% and 186%.

Illicit markets and its drivers

- » The illicit market for FMCG-Packaged Food grew by 99%, from ₹1,12,474 crores in 2017-18 to ₹2,23,875 crores in 2022-23.
- » The top 30% fractile of rural earners contribute 44.49% to rural consumption while urban top earners contribute 45.01% to urban consumption and hence lower and middle-income households are more vulnerable to illicit packaged food due to price sensitivity and aspiration consumption pattern.
- » The above discussion of shift towards higher processed food in the consumption basket, which are taxed at higher rates and is value added, reflecting a significant change in food preferences of rural and urban population. These products, being manufactured have a tax implication at varying rates and such demand sees the profusion of counterfeit, smuggled and other illicit products into the markets.





4

FMCG - Personal and Household Care Goods: Decoding Consumption and Illicit Markets

4 FMCG - Personal and Household Care Goods: Decoding Consumption and Illicit Markets

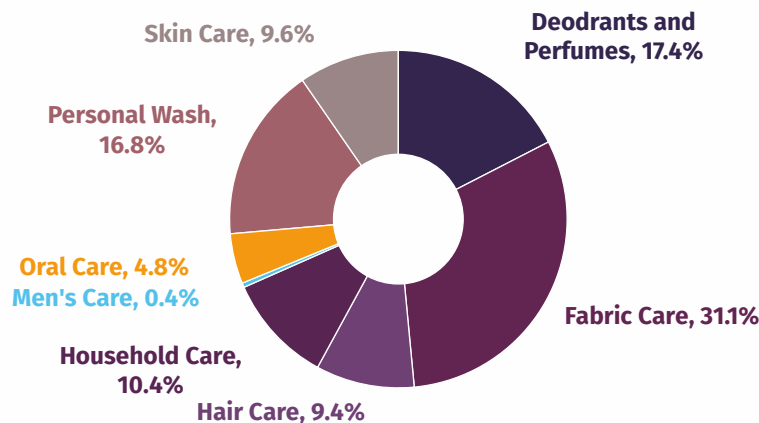
Industry Overview

The Indian FMCG market, the fourth-largest sector of the economy, reached US\$ 121.8 billion as of 2023 and is expected to grow at a CAGR of 27.9% from 2021 to 2027, reaching total revenue of nearly US\$ 615.87 billion.³⁶ The FMCG sector in India is driven by rising incomes across both rural and urban areas, the expansion of organised and modern retail, and evolving consumer preferences and lifestyles.

The FMCG market can be broadly categorised as Personal Care, Household Care, Food & Beverages, and Others. Households and personal care form a significant segment of the FMCG industry and now account for 50% of FMCG sales in India.³⁷

» **Four segments-fabric care, deodorant & perfumes, personal wash and household care-together account for nearly 75% of these goods by value**

FMCG-Personal and Household Care Goods Segmentation



Source: TARI Research based on Annual Survey of Industries- 2021-22

Factors Driving Consumption of FMCG - Personal and Household Care Goods

India's personal and household care market is rapidly evolving, influenced by increased awareness of hygiene and self-care, rising

rural consumption, higher disposable incomes, evolving beauty standards, and the growth of both online and brick-and-mortar stores. Additionally, the growing influence of global brands has significantly shifted consumption patterns. The rise of e-commerce and ongoing product innovations

³⁶ Indian Brand Equity Foundation. (2024, May). Fast moving consumer goods (FMCG). https://www.ibef.org/download/1720425283_FMCG_May_2024.pdf

³⁷ Rashtriya Aparishad. (n.d.). Home. <https://www.rashtriyaaparishad.org/9>

to cater to customised needs further reshaped consumer preferences across urban and rural regions.

As per NSSO 2022-23 data, the rural population contributes 59.7% of the total consumption of personal and household care goods, while urban areas account for 40.3%.

The rural population is driving FMCG personal and household care growth, outpacing urban areas. Rising aspirations and significant untapped potential create key opportunities for expanding FMCG reach in rural markets.

Rural India: Factors that define consumption

The market reach of the FMCG sector has been growing significantly in both urban and rural India. A pivotal shift in consumer trends shows that rural areas now lead FMCG demand, primarily driven by personal and household care products.³⁸ Semi-urban and rural segments are experiencing rapid growth, with FMCG products now accounting for 50% of total rural spending.³⁹

Rural India, comprising 65% of the population, has aspirations with increased spending capacity, and increased brand awareness and increased demand for branded products. Smartphone penetration, owned by over three-quarters of rural inhabitants in 2021, has made rural consumers more informed about brands and product options. As they aim to bring urban lifestyles to their rural areas, they are increasingly inclining towards higher-quality, branded products.⁴⁰

Despite urbanization, over half of India's population-53.6%, or 835 million people-will still live in rural areas by 2040. Targeting this population presents a chance to tap into more than half of India's total consumer expenditure, creating long-term growth opportunities in the world's largest rural market.⁴¹

This consumption behaviour analysis and insights are based on the monthly per capita expenditure (MPCE) of the rural population and its fractile class from NSSO 2011-12 and 2022-23 survey data. The MPCE constant price of 2022-23 is estimated using a price deflator of 0.539.

Consumption Of FMCG - Personal and Household Care: By Segment

- » Personal and Household goods comprises of Personal care goods like hair care, skin care and beauty, oral hygiene products, etc. and household goods like cleaners, disinfectant, laundry, detergents etc.
- » FMCG - Personal and Household Care Goods MPCE of overall rural population increased from ₹51.69 in 2011-12 to ₹157.13 in 2022-23 showing an 204% increase in 11 years.
- » FMCG - Personal and Household Care Goods MPCE of overall urban population increased from ₹91.25 in 2011-12 to ₹267.97 in 2022-23 showing an 194% increase in 11 years.

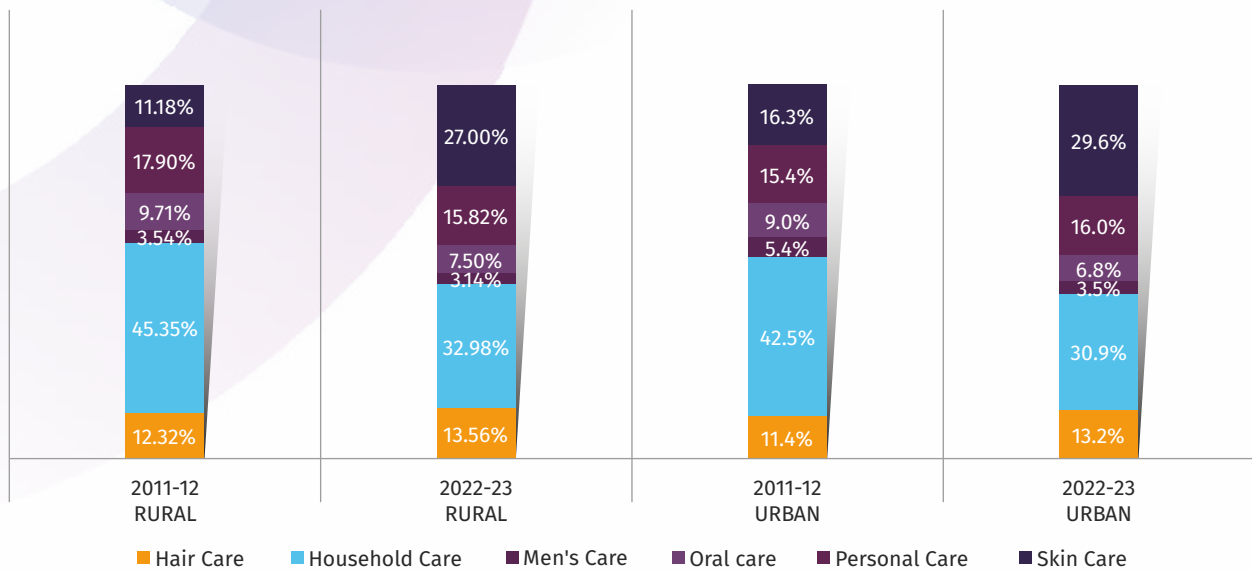
³⁸ Angel One. (n.d.). Rural India's demand for FMCG outpaces urban parts. Angel One. <https://www.angelone.in/blog/rural-indias-demand-for-fmcg-outpaces-urban-parts>

³⁹ India Brand Equity Foundation. (n.d.). FMCG industry in India. <https://www.ibef.org/industry/fmcg>

⁴⁰ KPMG. (2020). India's rural economy: Navigating through COVID-19. <https://assets.kpmg.com/content/dam/kpmg/in/pdf/2020/12/india-s-rural-economy.pdf>

⁴¹ Hodgson, A. (2021). Indian rural consumers: Why it makes sense to target the world's largest rural market. Euromonitor International. <https://www.euromonitor.com/article/indian-rural-consumers-why-it-makes-sense-to-target-the-worlds-largest-rural-market>

Share of FMCG - Personal and Household Care Goods Segments (%)



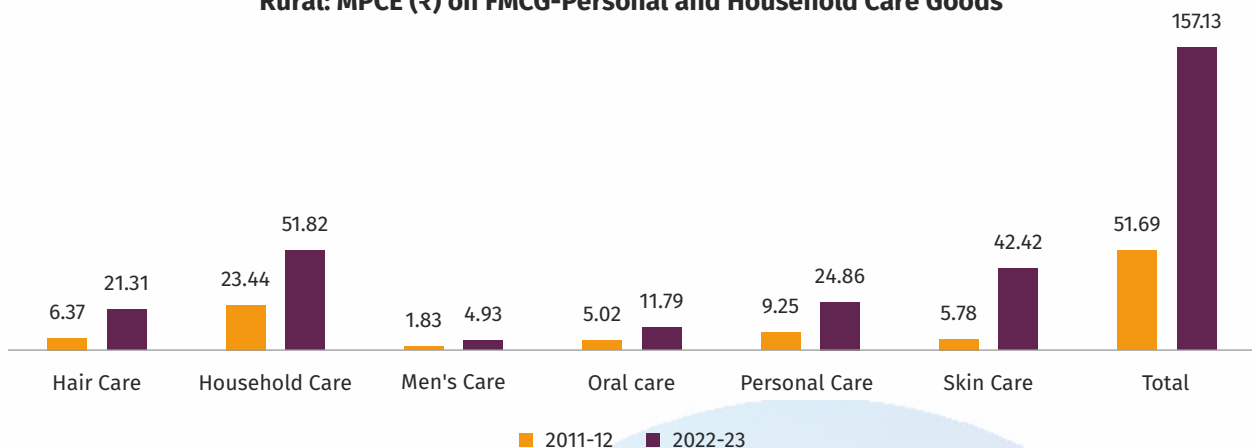
Source: NSSO 2011-12 (68th round) and NSSO 2022-23 reports

Rural Consumption: By Segment of Personal and Household Care Goods

» The overall household care goods are a key segment FMCG - Personal and Household Care Goods and their MPCE increased from ₹23.44 in 2011-12 to ₹51.82 in 2022-23, showing 121% increase. The CPI for the period for this segment is 80%, therefore the growth has been higher than the CPI change. The share of total rural personal and household care goods MPCE decreased from 45.35% to 32.98% from 2011-12 to 2022-23.

- » The hair care goods MPCE increased from ₹6.37 in 2011-12 to ₹21.31 in 2022-23, showing 235% increase.
- » Skincare (including deodorants and perfumes) is a key segment FMCG - Personal and Household Care Goods and their MPCE has increased significantly from ₹5.78 in 2011-12 to ₹42.42 in 2022-23, showing a tremendous increase of 634% as compared only increase of 204% shown by overall personal and household care goods.
- » Personal care goods are also a key segment of the FMCG- Personal and

Rural: MPCE (₹) on FMCG-Personal and Household Care Goods



Source: NSSO 2011-12 (68th round) and NSSO 2022-23 reports

Household Care Goods, and their MPCE increased from ₹9.25 to ₹24.86, showing an increase of 169%.

The above reflects a significant change in changes of preferences of rural population in personal care and household segment, which is moving towards higher proportion of products that are considered lifestyle and hence has tax arbitrage and such demand also see the profusion of counterfeit, smuggled and other illicit products into the markets to meet the demand.

Rural Consumption: The Trends

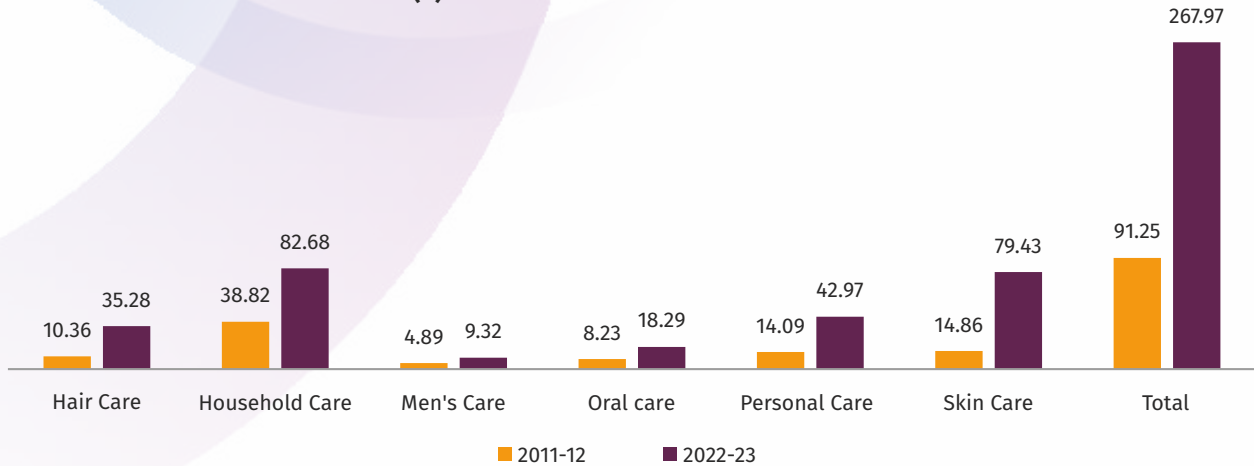
- » Across all rural classes, monthly per capita expenditure increased from ₹52.62 in 2011-12 to ₹157.13 in 2022-23, showing a 199% increase in current prices. The rise in constant prices is from ₹52.62 to ₹84.6, reflecting a 60.8% growth.
- » Growth in both constant and current prices for personal and household care goods is higher in rural areas than in urban areas.

- » For the rural 50-90% fractile, monthly per capita expenditure on personal and household care goods also increased significantly, with current prices rising by 192% to 208%, and constant prices growing by 57.2% to 65.8% from 2011-12 to 2022-23 showing stable consumption growth among middle-income households, alongside inflation-driven increases in spending.
- » For the rural 90-100% fractile, expenditure on personal and household care goods increased by 160 % to 178% at current prices, with constant prices rising by 39.9% to 49.6%.
- » The rise of consumption 60% reflects the increase in volume of consumption, while in actual prices it is nearly double, reflecting the effect of price and other costs that have driven consumption for the relative volume of consumption. Despite lower disposable incomes in rural areas, the relative increase in rural expenditure has outpaced urban areas.

Rural Personal & Household Care Goods Monthly Per Capita Expenditure Change: 2011-12 to 2022-23					
Rural Fractile Class	2011-12	2022-23: Est Constant Prices	2022-23 - Current Prices	Growth: Constant Price	Growth: Current Price
0-5%	22.15	37.9	70.3	70.9%	217%
5-10%	26.91	47.8	88.68	77.5%	230%
10-20%	30.90	54.3	100.86	75.8%	226%
20-30%	35.9	61.3	113.86	70.8%	217%
30-40%	39.27	68.1	126.43	73.4%	222%
40-50%	44.41	74.4	138.2	67.6%	211%
50-60%	49.91	82.7	153.66	65.8%	208%
60-70%	56.39	91.0	168.91	61.3%	200%
70-80%	64.27	101.2	187.94	57.5%	192%
80-90%	74.74	117.5	218.13	57.2%	192%
90-95%	90.95	136.0	252.6	49.6%	178%
95-100%	121.05	169.4	314.5	39.9%	160%
All classes	52.62	84.6	157.13	60.8%	199%

Source: NSSO 2011-12 (68th round) and NSSO 2022-23 reports

Urban: MPCE (₹) on FMCG-Personal and Household Care Goods



Source: NSSO 2011-12 (68th round) and NSSO 2022-23 reports

Urban Consumption: By Segments of Personal and Household

- » The household care goods are a key segment FMCG- Personal and Household Care Goods and their MPCE increased from ₹38.82 in 2011-12 to ₹82.68 in 2022-23, showing a modest increase of 121%. The CPI for this segment is estimated at 181.5%, suggesting the growth is higher than the inflation levels.
- » The hair care goods MPCE increased from ₹10.36 in 2011-12 to ₹35.28 in 2022-23, showing 241 % increase.
- » Skincare (including deodorants and perfumes) is a segment and their MPCE has increased significantly from ₹14.86 in 2011-12 to ₹79.43 in 2022-23, showing a significant increase of 435 %, suggesting that the spends are for higher value discretionary products, which are taxed at higher rates and have a value arbitrage for illicit players.
- » Personal care goods are also a key segment of the FMCG- Personal and Household Care Goods, and their MPCE increased from ₹14.09 to ₹42.9, showing an increase of 205%.

The above reflects a significant change in lifestyle of the population, which is moving towards higher proportion of lifestyle FMCG products in their monthly budgets. These

products, being manufactured have a tax implication at varying rates and such demand also see the profusion of counterfeit, smuggled and other illicit products into the markets.

Urban Consumption: The Trends

Urbanisation is a major driver of growth in the personal and household care segment in India. As more people migrate to urban areas, there is a shift towards modern lifestyles, increased disposable income, and greater awareness of hygiene and personal care products. Urban consumers, especially in metropolitan cities, have access to a wider variety of branded goods and are more inclined to spend on quality personal care products, further driving the demand in this sector. The rapid expansion of organised retail and e-commerce has also made these products more accessible to urban populations, driving overall market growth.

- » Across all urban classes, monthly per capita expenditure on personal and household care goods increased in current prices from ₹94.92 in 2011-12 to ₹267.97 in 2022-23.
- » The 0-30% fractile on constant prices, show a growth ranging from 65.8% to 79.8%, while in current prices, the increase was significantly higher, between 208% and 234%

- » The 90-100% fractile shows slower growth, with the 90-95% group increasing by 39.8% in constant prices and 160% in current prices, and the 95-100% group growing by 33.8% and 149%, respectively suggesting that higher-income households are spending on luxury or premium segment.
- » Across all urban classes, expenditure on personal and household care goods increased by 182% at current prices and 52% at constant prices from 2011-12 to 2022-23 indicating a significant rise in spending, with current prices showing a larger increase due to inflation, and potentially higher volume of consumption.

Urban Personal & Household Care Goods Monthly Per Capita Expenditure Change: 2011-12 to 2022-23					
Urban Fractile Class	2011-12	2022-23: Est Constant Prices	2022-23 - Current Prices	Growth: Constant Price	Growth: Current Price
0-5%	31.83	54.9	101.87	72.3%	220%
5-10%	39.1	70.3	130.52	79.8%	234%
10-20%	48.22	82.3	152.89	70.7%	217%
20-30%	58.12	96.4	178.99	65.8%	208%
30-40%	69.33	108.6	201.63	56.6%	191%
40-50%	79.66	122.9	228.18	54.3%	186%
50-60%	87.31	136.1	252.68	55.8%	189%
60-70%	100.26	154.6	287.05	54.2%	186%
70-80%	115.85	176.9	328.57	52.7%	184%
80-90%	137.05	205.9	382.43	50.3%	179%
90-95%	175.01	244.7	454.38	39.8%	160%
95-100%	260.66	348.9	647.85	33.8%	149%
All classes	94.92	144.3	267.97	52.0%	182%

Source: TARI calculation, NSSO 2011-12 (68th round) and NSSO 2022-23 reports

Decoding Illicit Markets: FMCG - Personal and Household Care Goods

Illicit market estimation for personal and household care goods in India is based on our research approach to assess the gap between demand and supply to find the illicit market value and illicit market per cent for a given year.

The supply and consumption side estimates are given below.

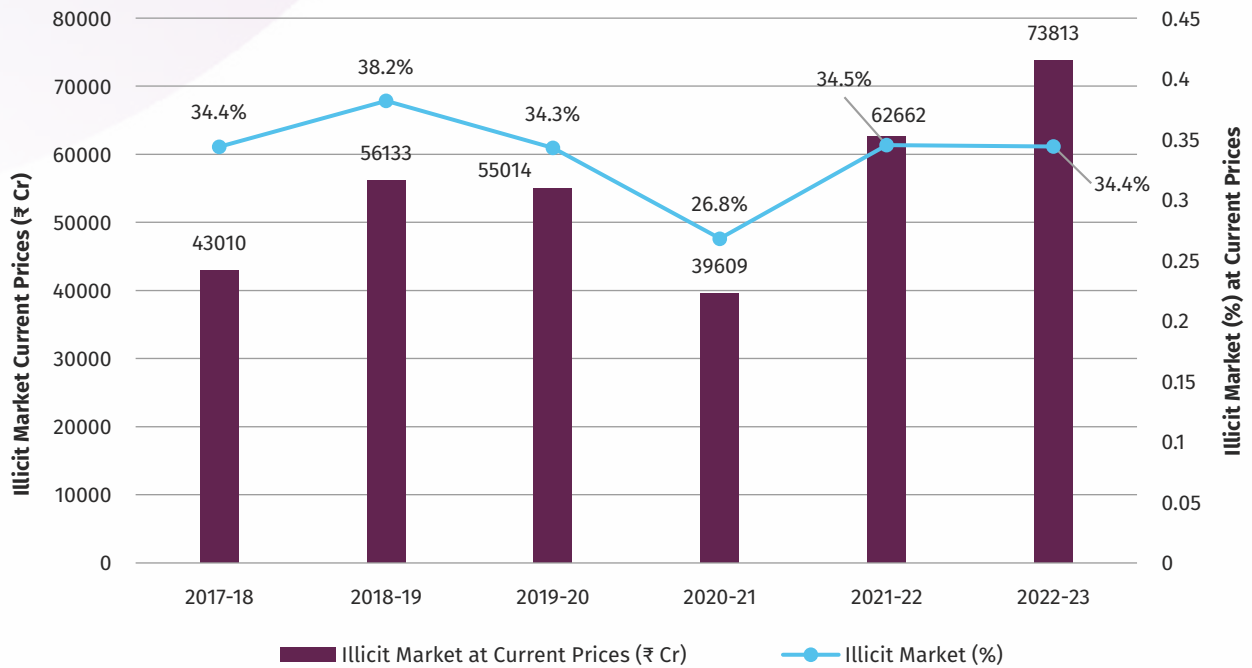
The following supply-side estimates have been calculated using data from the Annual Survey of Industries (ASI) for the years 2017-18 to 2021-22. The consumption-side estimates have been sourced from the Private Final Consumption Expenditure (PFCE) data provided by MoSPI. Please refer to Annexure I and II for Methodology and further details respectively.

Year	2017-18	2018-19	2019-20	2020-21	2021-22
Supply (₹ Cr)	82,160	90,975	1,05,483	1,08,294	1,18,908
Consumption (₹ Cr)	1,25,169	1,47,108	1,60,498	1,47,903	1,81,570

Based on our methodology, the estimates for the illicit market of personal and household care goods in India have grown from ₹43,010 crores in 2017-18 to ₹73,813 crores in 2022-23, an increase of 71.6%. The market share in percentage terms peaked at 38.2% in 2018-19, with a value of ₹56,133 crores. The

illicit market for 2022-23 is based on the average illicit market percentage of 2019-20 and 2021-22 with 2020-21 being an outlier year. In 2020-21, the illicit market dropped to ₹39,609 crores (26.8%), primarily due to the impact of the COVID-19 pandemic on consumption dynamics.

Illicit Market: FMCG-Personal & Household Care Goods



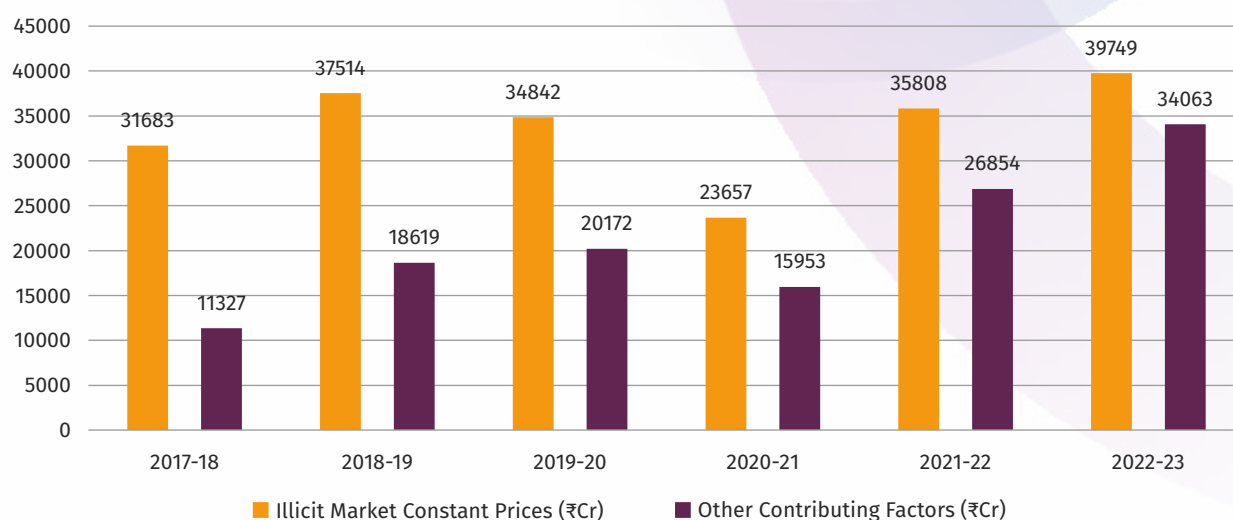
Source: TARI Estimates

Poor law enforcement and Intellectual Property Rights (IPR) mechanisms are exploited by counterfeiters who, by having similar-sounding names, designs, and sophisticated packaging techniques, fake well-renowned brands to deceive consumers. Besides that, the absence of strict IPR regulations and poor monitoring helps to increase the growth in illicit markets. Further, the rise of online sales opens new avenues for counterfeiters to obtain profits, complicating the job of regulators. These combine with price disparities between counterfeit and original goods to fuel

demand for fake products at much lower prices.

Increase in illicit market at constant prices between 2017 to 2023 by ₹8,000 crores highlights the increase in the volume of illicit personal and household care goods as people may knowingly and unknowingly purchase these products. However, the other contributing factors linked to the value like increase in price, taxes, input costs have gone up by over 3 times, moving from ₹11,327 in 2017-18 to ₹34,063 in 2022-23, fuelled by price and tax related factors.

Illicit Market Components: Constant Prices and Other Attributing Factors



Source: TARI Calculations/ 2021-22 saw Covid 19, hence the consumption and related data is not indicative

Various factors have contributed to illicit markets of personal and household care goods, that are discussed here:

- » Within the rural segment, 0-30% fractile group, with a 229 % median consumption increase over 2011-12 to 2022-23 period, is most vulnerable to low-quality or illicit personal and household care due to price sensitivity and rising consumption.
- » In contrast, the 30-60% fractile (with a 215 % median increase) represents the aspiring middle class driving consumption of higher quality personal care products etc. This group is more susceptible to smuggled or counterfeit high-value personal and household care products, while seeking better quality
- » Similarly, across the urban segment, the 0-30% fractile group, with a 231 % median consumption increase over 2011-12 to 2022-23 period, is most vulnerable to low-quality or illicit personal and household care due to price sensitivity and rising consumption.
- » In contrast, the 30-60% fractile (with a 196 % median increase) represents the

aspiring middle class driving consumption of higher quality personal care products etc. This group is more susceptible to smuggled or counterfeit high-value household and personal care products, while seeking better quality

Illicit Consumption Due to Consumer Unawareness

Consumers of household and personal care products are particularly vulnerable to counterfeit goods because they often rely on familiar logos and packaging, making it easy for illicit manufacturers to deceive them. This vulnerability is compounded by the fact that many consumers, particularly in unregulated markets or online platforms, are not well-educated or informed enough to distinguish between authentic and fake products.⁴² As a result, they unknowingly purchase substandard or harmful counterfeit items, believing them to be legitimate and safe.

The proliferation of counterfeit goods is facilitated by the ease with which they can be produced in small, unregulated setups. Technological advancements have made it

⁴² World Intellectual Property Organization (WIPO). (2021). Counterfeiting and piracy: Impact on businesses and consumers. https://www.wipo.int/edocs/mdocs/enforcement/en/wipo_ace_16/wipo_ace_16_8_presentation.pdf

easier for counterfeiters to create convincing replicas of genuine products, further complicating the ability of consumers to identify fakes, especially in online or less-regulated retail spaces. This convergence of factors has allowed the illicit market for personal care products to thrive.⁴³

Vulnerability Across Fractile Class

The rural and urban fractile classes from 0-30%, 30-60% and 60-100% were analysed, taking the median of the MPCE for these from NSSO 2011-12 and NSSO-2022-23 data.

Based on this analysis, key insights are provided here:

The growth of the segment is fueled by the skincare and beauty segment, which has risen by 634% in rural Indian and 435% in urban. This rise in consumption of goods, that has taxes as high as 28 % in case of perfumes and other beauty products, is prone to counterfeiting, smuggling and knock offs. This not only impacts government's revenue loses and jobs, but also poses a significant health risk to the consumers.

FMCG- Personal and Household Care Goods: Key Takeaways

The markets and consumption pattern

» Personal and Household goods comprises of Personal care goods like hair care, skin care and beauty, oral hygiene products, etc. and household goods like cleaners, disinfectant, laundry, detergents etc.

Rural and Urban narrative

» Between 2011 and 2023, rural consumption (contributing 59.7%) of personal and household (P&H) goods has surpassed urban consumption (40.3%), backed by rising income, increased discretionary spending and better access to goods at rural locations.

» Across all rural classes, monthly per capita expenditure (MPCE) on P&H goods jumped 199% in current prices terms (adjusted for inflation), against 60.8% growth in constant prices, showing increase in volume and value. Among urban classes, expenditure on P&H goods increased 182% at current prices against 52% increase at constant prices, showing lesser increase in volume as well as value terms, as compared to rural.

Illicit Markets and its drivers

» Between 2017-18 and 2022-23, the illicit market estimates grew by 71.6%, from ₹43,010 crores to ₹73,813 crores. The illicit market for P&H goods grew by ₹8,000 crores in volume between 2017 and 2023, while the total value tripled from ₹11,327 crores to ₹34,063 crores, driven by rising prices, shift in type of consumption, taxes, and input costs.

» The growth of the segment is fueled by the skincare and beauty segment, which has risen by 634% in rural Indian and 435% in urban. This huge rise in consumption of goods, that has taxes as high as 28 % in case of perfumes and other beauty products, is prone to counterfeiting, smuggling and knock offs, which not only impact revenue loses and jobs but also has poise a huge health risk.

⁴³ Ennoventure. (n.d.). FMCG product authentication: Avoid counterfeit threats, protect brand reputation. Ennoventure Blog. <https://ennoventure.com/blogs/fmcg-product-authentication-avoid-counterfeit-threats-protect-brand-reputation/>

- » In terms of vulnerability of a population group based on income to illicit markets, the 0-30% fractile group in rural India with a 229% median consumption increase over 2011-12 to 2022-23 period, is most vulnerable to low-quality or illicit household and personal care due to price sensitivity and rising consumption. In contrast, the 30-60% fractile (with a 215% median increase) represents the aspiring middle class driving consumption of higher quality personal care products etc. This group is more exposed to smuggled or counterfeit high-value household and personal care products, while seeking better quality.
- » In Urban India, the 0-30% urban fractile

group, with a 231% median consumption increase over 2011-12 to 2022-23 period, is more vulnerable to low-quality or illicit household and personal care due to price sensitivity and rising consumption. In contrast, the 30-60% fractile (with a 196% median increase) represents the aspiring middle class driving consumption of higher quality personal care products etc.

The growing awareness of hygiene and evolving lifestyles have led consumers to increasingly prefer personal care products, driving demand in the market. However, this surge in demand has also created opportunities for dubious players to introduce counterfeit cosmetics and personal care items, posing risks to consumer safety and brand trust.







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Textiles and Apparel: Decoding Consumption and Illicit Markets

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Textiles and Apparel: Decoding Consumption and Illicit Markets

Industry Overview

Textiles and apparel industry is one of the mainstays of the Indian economy. India is the world's second largest producer of textiles and garments. The textiles and apparels industry contributes 2.3% to the country's GDP, 13% to industrial production and 12% to exports.⁴⁴

The share of textiles and apparels (T&A) including handicrafts in India's total mer-

chandise exports stood at a significant 10.5% in 2021-22.⁴⁵

The domestic apparel & textile industry in India contributes approx. 2.3 % to the country's GDP, 13% to industrial production and 12% to exports. India has a 4% share of the global trade in textiles and apparel. The textiles and apparel industry in India is the 2nd largest employer in the country providing direct employment to 45 million people and 100 million people in allied industries.⁴⁶

India's Domestic Textile and Apparel Market



Source: Annual Report, Indian Textile & Apparel Industry, 2023. Wazir Advisors

India's Domestic Textiles and Apparel Market

Indian domestic textiles and apparels (T&A) market has grown from USD 50 billion in 2010-11 to USD 110 billion in 2021-22, registering a growth of 7%. The T&A market is

expected to grow at 10% CAGR reaching USD 250 billion by 2030-31.⁴⁷ The sector is highly unorganised⁴⁸ and fragmented comprising mostly small scale, standalone textile units which utilise traditional practices and outdated technology. The textile and garment industry in India is concentrated in the

⁴⁴ Textiles and Apparel (May 2024), Indian Brand Equity Foundation (IBEF)

⁴⁵ Ministry of Textiles, GOI, Annual Report 2022-23

⁴⁶ Invest India

⁴⁷ Annual Report, Indian Textile & Apparel Industry, 2023. Wazir Advisors

⁴⁸ Impact of COVID-19 pandemic on textile industry, Ministry of Textiles, GOI (Sept 22, 2020)

form of clusters across the country.⁴⁹ In FY 2020, the unorganized apparel market was valued at Rs 3,04,236 crore (US\$ 40.56 Bn) and is expected to grow to Rs 3,78,219 crore (US\$ 50.8 Bn) by FY 2025.⁵⁰

Apparel and Lifestyle sector has been one of the hardest hit sectors during the COVID induced lockdown since March of 2020 that impacted whole of FY 2021 in form of nationwide or regional lockdowns. The Government has taken a number of initiatives since 2019 to boost exports, production and employment generation in textiles sector. In line with the vision of an 'Aatmanirbhar Bharat', the Government of India approved the Production Linked Incentives (PLI) Scheme for Textiles for Man-Made Fibres (MMF) Apparel, MMF Fabrics and 10 segments/ products of Technical Textiles with a budgetary outlay of Rs. 10,683 crores. PLI for Textiles, among other measures, that is aimed at providing raw material at competitive prices, skill development etc will herald a new age in textiles manufacturing.

June 2021 onwards there was recovery in business and revival of consumer sentiment. Consumers started moving out of home for leisure and work, which led to an increase in merchandise shopping. The pandemic resulted in two important changes: the rise of value shopping and rise in online commerce.

The domestic Indian apparel market can be broadly classified into men's wear, women's wear and kids wear. Currently, men's wear holds the largest share in the apparel market. It accounts for 41% of the market. Women's wear contributes almost 38%, while kids wear contributes the balance 21% of the market.⁵¹

The domestic apparel market can also be broadly divided by price into super premium, premium, medium, economy, and value segments. The medium price segment holds majority of the share among apparel segment followed by economy segment. The price sensitive rural population forms a major part of the value and economy price segments of apparel market. Further, driven by the twin trends of premiumisation and value consciousness, the mid-market segment is being squeezed on both sides by the value and the premium segments.

Factors Driving Consumption of Textiles and Apparel

As per the NSSO 2022-23, the rural population contributes to 62.5% of the total textiles and apparel consumption in value terms, while the urban population, accounts for the remaining 37.5%.

The rural and urban middle to upper-middle classes (60-95% fractiles), contribute significantly to textiles and apparel consumption. This group accounts for 43.3% of rural consumption and 45.58% of urban consumption. Together, they contribute approximately 44.2% of the total textiles and apparel market, this segment plays a critical role in driving demand for clothing in both rural and urban areas.

Indian consumers' apparel preferences are evolving, reshaping the apparel business. Previously tied closely to traditional Indian culture, apparel is now more aligned with global fashion trends. The contemporary Indian wardrobe has expanded significantly, offering diverse categories such as formal,

⁴⁹ Textiles and Garments – Industry Structure. https://www.dsir.gov.in/sites/default/files/2019-11/2_3.pdf

⁵⁰ IMAGES Business of Fashion Bureau. (2022, May 31). An overview of the Indian fashion industry. Images Business of Fashion. <https://www.imagesbof.in/an-overview-of-the-indian-fashion-indust>

⁵¹ Indian Readymade Garments (Apparel) Industry Overview, Care Ratings (April 17, 2019). Available at [https://www.careratings.com/upload/NewsFiles/Studies/Indian%20Ready%20Made%20Garments%20\(Apparel\)%20Industry.pdf](https://www.careratings.com/upload/NewsFiles/Studies/Indian%20Ready%20Made%20Garments%20(Apparel)%20Industry.pdf)

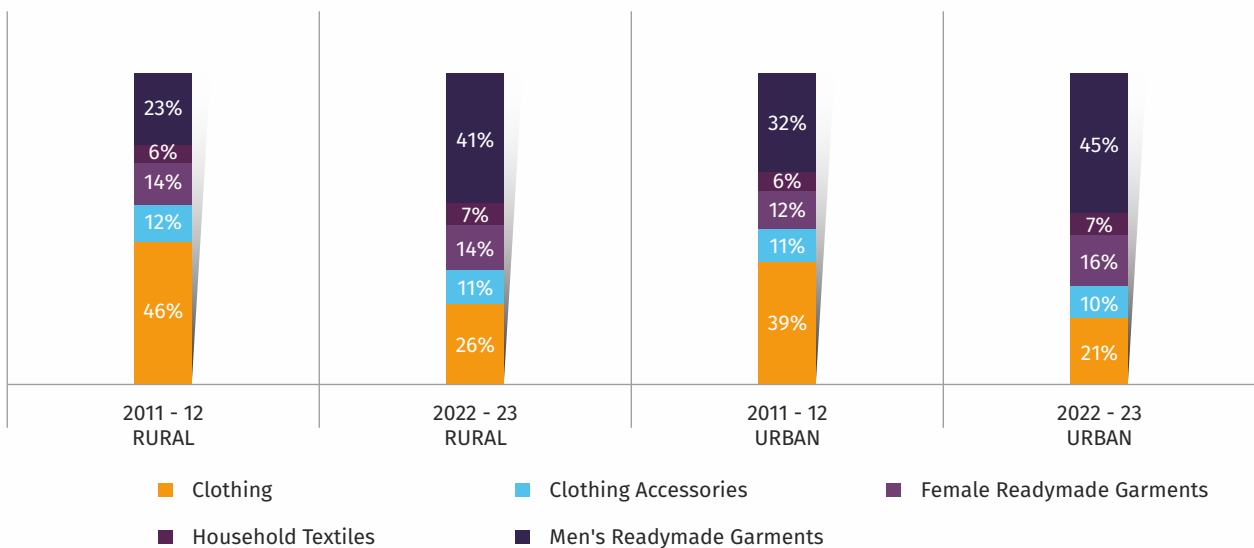
casual, sports, ethnic, and party wear, reflecting increased segmentation. This shift is driven by changing demographics and psychographics, as consumers seek more variety, blending global influences with traditional roots. The result is a dynamic apparel industry catering to diverse preferences and lifestyles.

India's diverse socio-economic landscape uniquely shapes consumer behaviours, making it a distinct market. The expanding middle class, urbanization, and growing influence of the rural have driven growth in functional and varied fashion choices. Evolving lifestyles, the rise of organized retail, and the increasing influence of global trends have significantly shifted and diversified textile and apparel consumption patterns, reflecting a blend of tradition and modernity in the Indian market.

Consumption of Textile and Apparel: By Segment

- » Textiles and apparels which comprises of clothing, clothing accessories, household textiles care, readymade garments etc.
- » The MPCE on Textiles and apparel by the overall rural population increased from ₹84.23 in 2011-12 to ₹197.77 in 2022-23 showing a 135% increase in 11 years, at a lower rate than the CPI of 190 for the period.
- » The MPCE on Textiles and apparel by the overall urban population increased from ₹135.98 in 2011-12 to ₹299.95 in 2022-23 showing a 121% increase in 11 years but lower than the urban CPI of 80.2% for the period.

Share of Textiles and Apparels Segments (%)



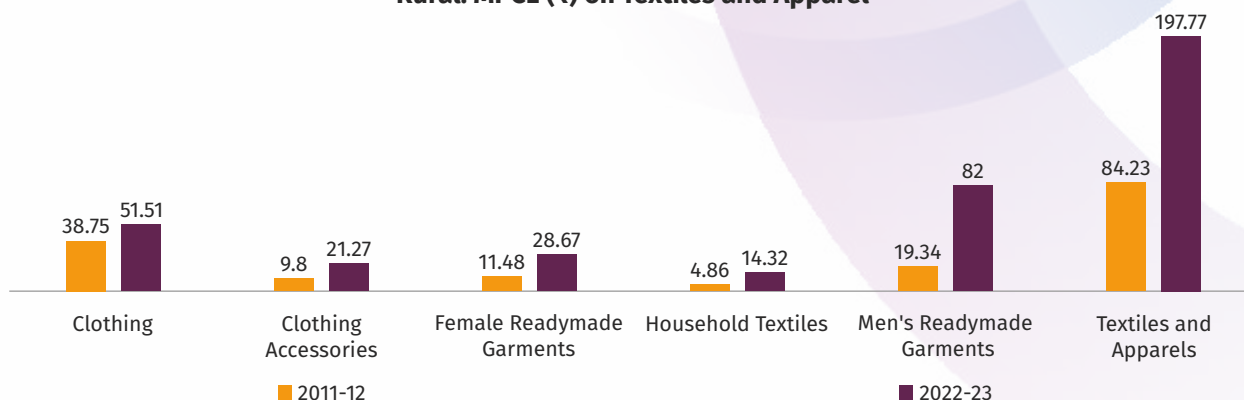
Source: NSSO 2011-12 (68th round) and NSSO 2022-23 reports

Rural Consumption: By Segmentation Of Textile and Apparel

- » Over the period 2011-12 to 2022-23, the rural MPCE on clothing increased from ₹38.75 to ₹51.51 marking only a 33% rise but the rural MPCE on men's Readymade Garments has increased significantly

from ₹19.34 in 2011-12 to ₹82 in 2022-23, showing a growth of 324% in 11 years. Similarly, the rural MPCE on Female Readymade Garments has also increased significantly from ₹11.48 in 2011-12 to ₹28.67 in 2022-23, marking a increase of 150% in 11 years.

Rural: MPCE (₹) on Textiles and Apparel



Source: NSSO 2011-12 (68th round) and NSSO 2022-23 reports

- » This signifies a big shift to lifestyle products coupled with greater access brought out by better distribution by retail and e-commerce players.
- » Clothing accessories (11%) and household textiles (7%) have only a small share of rural MPCE on textiles and apparel in 2022-23 and their change has been overshadowed by the shift to ready-made garments.
- » The 0-30% fractile rural group, with a 147% median consumption increase over 2011-12 to 2022-23 period, is most vulnerable to low-quality or illicit textile and apparel due to price sensitivity and rising consumption. In contrast, the 30-60% fractile (with a 139 % median increase) represents the aspiring urban middle class driving consumption of better quality of clothing accessories, garments etc. This group is more exposed to smuggled or counterfeit high-value products as they seek better quality in line with their rising incomes and aspirations.

The above reflects a significant change in the consumption behaviour of textiles and apparel of the rural population, which is moving towards higher value readymade garments. These products, being manufactured have a tax implication and such demand also sees the profusion of counterfeit, smuggled and other illicit products into the markets.

Rural Consumption: The Trends

- » Across all rural classes, the monthly per capita expenditure (MPCE) on textiles and apparel increased from ₹84.29 in 2011-12 to ₹100.4 in constant prices and ₹197.8 in current prices in 2022-23. This represents a 19.1% growth in constant prices and a 135% growth in real prices.
- » The growth in rural consumption in constant prices across all fractile class outpaced urban growth (11.9% and 121%), driven by rising incomes and aspirations.
- » The lower-income rural households (0-30% fractiles) saw steady increases in textiles and apparel spending. Constant price growth ranged from 20.5% to 26.1%, while current price growth was higher, between 137% and 148%. These households are likely focusing more of their limited disposable income on essential clothing needs, which explains their higher proportional increase in spending.
- » The rural middle-income class rural households (50-90% fractiles) show growth in textiles and apparel expenditure. Constant price growth ranges from 17.1% to 21.9%, while current price growth is between 131% and 140%. These households are maintaining and driving stable consumption levels.
- » The top income classes (90-100% fractile) show a distinct trend, with a significant decline of -41.8% in constant prices for

the 95-100% fractile, while current price growth remains low at 15%.

- » This sharp drop in constant price expenditure suggests that the wealthiest rural households are consuming less of

standard textiles and apparel and are likely consuming more high-end or luxury products. Their reduced spending in constant terms indicates saturation in demand for basic clothing.

Rural Textiles and Apparel Monthly Per Capita Expenditure Change: 2011-12 to 2022-23					
Rural Fractile Class	2011-12	2022-23: Est Constant Prices	2022-23 - Real Prices	Growth: Constant Price	Growth: Current Price
0-5%	38.44	46.3	91.3	20.5%	137%
5-10%	47.25	58.9	116.1	24.7%	146%
10-20%	53.26	67.1	132.3	26.1%	148%
20-30%	60.17	75.5	148.8	25.5%	147%
30-40%	65.78	82.2	162.0	24.9%	146%
40-50%	74.61	90.4	178.2	21.2%	139%
50-60%	81.66	96.9	191.0	18.7%	134%
60-70%	87.44	106.6	210.1	21.9%	140%
70-80%	97.74	117.4	231.3	20.1%	137%
80-90%	114.48	134.0	264.1	17.1%	131%
90-95%	138.48	155.6	306.7	12.4%	121%
95-100%	353.78	205.8	405.5	-41.8%	15%
All classes	84.29	100.4	197.8	19.1%	135%

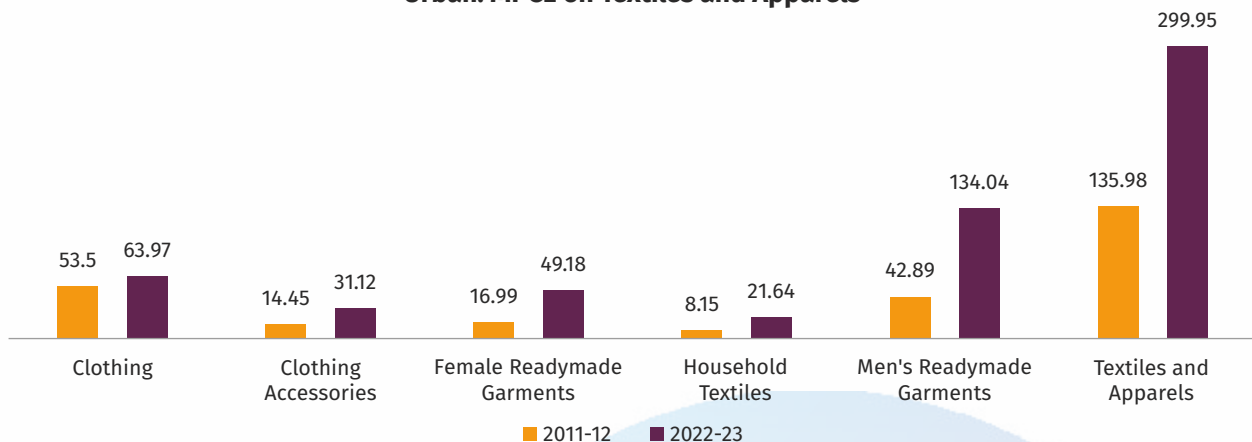
Source: TARI calculation, NSSO 2011-12 (68th round) and NSSO 2022-23 reports

Urban Consumption: By Segmentation of Textiles and Apparel

- » Over the period 2011-12 to 2022-23, the

urban MPCE on clothing increased from ₹53.5 to ₹63.97 marking only a 20% rise. This is very much less than the growth rate of the overall urban MPCE expendi-

Urban: MPCE on Textiles and Apparels



Source: NSSO 2011-12 (68th round) and NSSO 2022-23 reports

ture on textiles and apparel - 121% resulting in a decline in the share of expenditure from 39% in 2011-12 to 21% in 2022-23.

- » **The urban MPCE on men's readymade garments has increased significantly from ₹42.89 in 2011-12 to ₹134.04 in 2022-23, showing a tremendous growth of 213% in 11 years. Similarly, the urban MPCE on female readymade garments has also increased significantly from ₹16.99 in 2011-12 to ₹49.18 in 2022-23, marking a significant increase of 189%.**
- » **This signifies greater acceptance of readymade garments by urban men and women as well as a greater outreach of modern retail and e-commerce in areas.**
- » Clothing accessories (10%) and household textiles (7%) have only a small share of urban MPCE on textiles and apparel in 2022-23.

The above reflects a significant change in the consumption behaviour of textiles and apparel of the urban population, which is moving towards readymade garments which creates opportunities to dubious players to exploit the economic incentives that higher tax and higher value in this market provides.

Urban Consumption: The Trends

- » **Overall Consumption:** Across all urban classes, monthly per capita expenditure (MPCE) increased from ₹136.02 in 2011-12 to ₹152.2 in constant prices and ₹300 in current prices by 2022-23. This represents a modest growth of 11.9% at constant prices but a larger increase of 121% in current prices over the same period.
- » E-commerce allows companies to reach to wider audience and offer variety of products at lesser cost, which has led to

an increase in demand for apparel from Tier II and Tier III cities in India, besides facilitating the demand in tier I and metropolitan cities.

- » Urbanisation in India has resulted in changing lifestyles and fashion preferences, including increasing preference of western casual wear. Urban areas are witnessing a higher demand for trendy, western-style clothing, while also incorporating traditional and ethnic wear for special occasions, thereby increasing the overall demand of apparels.
- » The lower-income classes (0-30% fractiles) have shown steady growth in expenditure on textiles and apparel, which ranged from 25.5% to 40.8%, showing improved affordability and access to clothing. Current price increases were more pronounced, with rises between 147% and 177% and was more in household and lower value apparels.
- » Middle-income groups (50-90% fractiles) show moderate growth in textiles and apparel expenditure, with constant price increases ranging from 11.2% to 16.1%. current prices growth, between 119% and 129%.
- » The top income classes (90-95 & 95-100% fractiles) show a relatively slower nominal growth (95% and 74%) and a decline in constant prices (-1.0% and -11.5%). This indicates reduced spending on standard textiles as these households likely shift toward luxury goods or discretionary categories. With essential clothing needs saturated, their focus is moving to premium or niche segments, leading to stable or decline in mass-market textile consumption.

Urban Textiles and Apparel Monthly Per Capita Expenditure Change: 2011-12 to 2022-23					
Urban Fractile Class	2011-12	2022-23: Est Constant Prices	2022-23 - Real Prices	Growth: Constant Price	Growth: Real Price
0-5%	45.98	61.8	121.9	34.5%	165%
5-10%	54.51	76.7	151.2	40.8%	177%
10-20%	66.48	88.8	175.0	33.6%	163%
20-30%	81.3	102.0	201.1	25.5%	147%
30-40%	93.14	114.7	226.0	23.1%	143%
40-50%	108.51	126.9	250.0	16.9%	130%
50-60%	121.31	140.9	277.6	16.1%	129%
60-70%	138.61	160.0	315.4	15.5%	128%
70-80%	160.03	182.2	359.1	13.9%	124%
80-90%	195.11	216.9	427.5	11.2%	119%
90-95%	272.01	269.2	530.5	-1.0%	95%
95-100%	419.24	371.0	731.1	-11.5%	74%
All classes	136.02	152.2	300.0	11.9%	121%

Source: TARI calculation, NSSO 2011-12 (68th round) and NSSO 2022-23 reports

Decoding Illicit Markets: Textiles and Apparel

Illicit market estimation for textiles and apparel in India is based on our research approach to assess the gap between demand and supply in textile and apparel to find the illicit market value and illicit market per cent for a given year.

The supply and consumption estimates are below. The following supply-side estimates have been calculated using data from the Annual Survey of Industries (ASI) for the years 2017-18 to 2021-22. The consumption-side estimates have been sourced from the Private Final Consumption Expenditure (PFCE) data provided by MoSPI. Please refer to Annexure I and II for Methodology and further details respectively.

Year	2017-18	2018-19	2019-20	2020-21	2021-22
Supply (₹ Cr)	2,31,035	2,66,594	2,59,217	2,29,930	3,44,143
Consumption (₹ Cr)	5,42,529	5,86,714	5,80,304	5,26,255	7,39,300

Based on our methodology, **the estimates for illicit market in textiles and apparel have fluctuated over the years, starting at 57.4% in 2017-18 and decreasing to 54.9% in 2022-23. In terms of current prices, the illicit market grew from ₹3,11,494 crores in 2017-18 to ₹4,03,915 crores in 2022-23.** The lowest

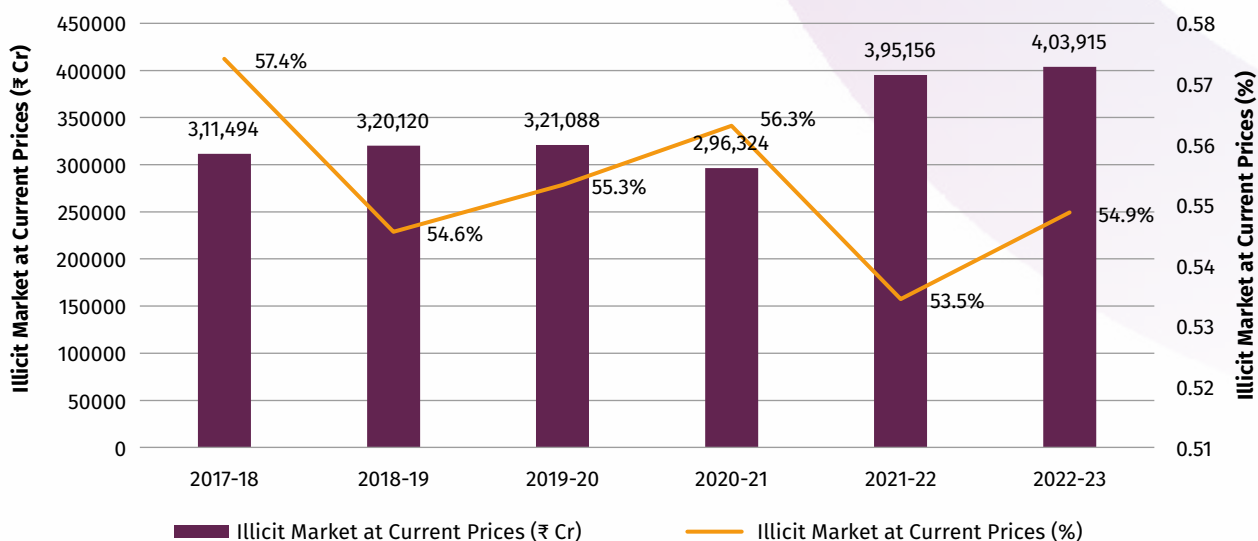
percentage of the illicit market was seen in 2021-22 at 53.5%, despite the market reaching ₹3,95,156 crores in value terms. The illicit market for 2022-23 is based on the last two years' average illicit market values, reflecting a slight increase in the share.

These trends in the illicit market share

could be attributed to a combination of regulatory measures, shifting consumer preferences, impact of COVID-19 on overall

consumption and the overall market dynamics in the textiles and apparel sector.

Illicit Market: Textiles and Apparel

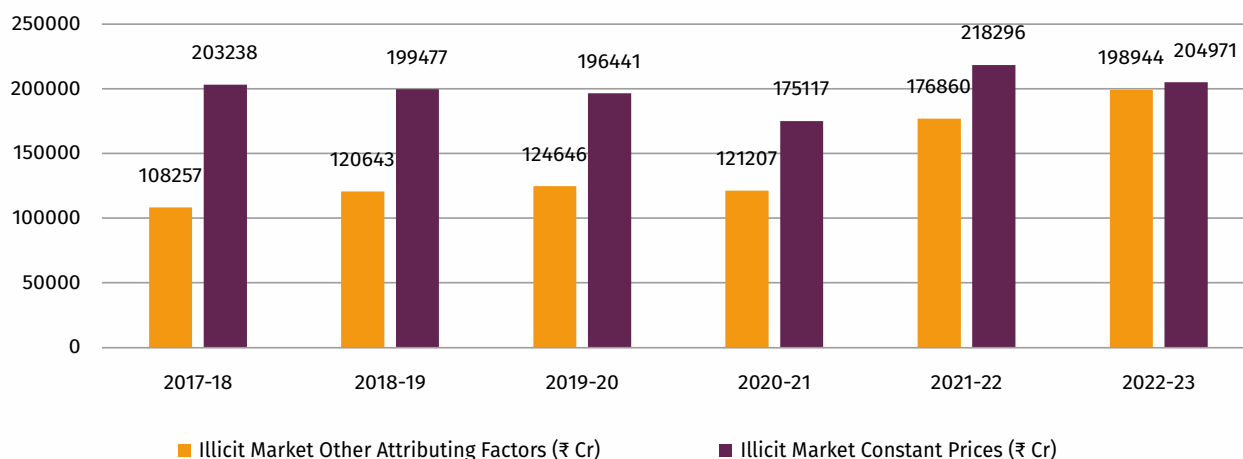


Source: TARI estimates

The analysis of illicit textiles and apparel consumption can be examined through two main aspects. The first component is the illicit market in constant prices of 2017-18, which highlights volume growth in the illicit textiles market, driven by factors such as rise in the vulnerable population consuming such illicit textile and apparel. The second

factor is the difference between current prices and constant prices, which accounts for various attributing factors like rising input costs, taxes, and changes in market dynamics. The constant price values are derived using the textiles and apparel PFCE deflator with 2017-18 as the base year.

Illicit Market Components: Constant Price and Other Attributing Factors



Source: TARI estimates

The illicit market consumption at constant prices increased from ₹2,03,238 crores in 2017-18 to ₹2,04,971 crores in 2022-23. The other attributing factors, which include input costs and other market factors, increased by 83.8%, rising from ₹1,08,257 crores in 2017-18 to ₹1,98,944 crores in 2022-23.

The analysis of illicit textiles and apparel consumption can be examined through two main aspects. The first component is the illicit market in constant prices of 2017-18, which highlights volume growth in the illicit textiles market, driven by factors such as rise in the vulnerable population consuming such illicit textile and apparel. The constant price values are derived using the textiles and apparel PCE deflator with 2017-18 as the base year.

The illicit market consumption at **constant prices increased from ₹2,03,238 crores in 2017-18 to ₹2,04,971 crores in 2022-23.**

The second factor is the difference between current prices and constant prices, which accounts for various attributing factors like rising input costs, taxes, and changes in market dynamics, which increased by **83.8%, rising from ₹1,08,257 crores in 2017-18 to ₹1,98,944 crores in 2022-23. Various factors at play drive the illicit markets for textile and apparel.**

Across the rural segments, the 0-30% fractile rural group, with a 147% median consumption increase over 2011-12 to 2022-23 period, is most vulnerable to low-quality or illicit textile and apparel due to price sensitivity and rising consumption.

In contrast, the 30-60% fractile (with a 139 % median increase) represents the aspiring

urban middle class driving consumption of better quality of clothing accessories, garments etc. This group is more exposed to smuggled or counterfeit high-value products as they seek better quality in line with their rising incomes and aspirations.

Similarly, across the 0-30% fractile urban group, with a 170 % median consumption increase over 2011-12 to 2022-23 period, is most vulnerable to low-quality or illicit textile and apparel due to price sensitivity and rising consumption.

In contrast, the 30-60% fractile (with a 130 % median increase) represents the aspiring urban middle class driving consumption of better quality of clothing accessories, garments etc. This group is more exposed to smuggled or counterfeit high-value products as they seek better quality in line with their rising incomes and aspirations.

Social Consideration Driving Illicit Consumption of Textiles and Apparel

Verma et al (2019) did an empirical study on consumers' buying intentions of counterfeit products in India found price consciousness, novelty seeking, status consumption and peer pressure are the key determinants affecting consumers' buying intention of purchasing counterfeit products.⁵²

Purchase of luxury brands is often driven by social considerations. Shukla et al., (2015) infer that the dominance of other-directed symbolism for luxury consumption is affected significantly by others' opinions and as a result the consumer chooses to consume for societal acceptance.⁵³ This is typically true for youngsters who opt for luxury brands as they endow them with high social and symbolic value- Sharda & Bhat, 2018).⁵⁴ Industry data supports this hypoth-

⁵² Verma et al, 'An empirical study on consumers' buying intentions of counterfeit products in India', Journal of Intellectual Property Rights, Vol. 23 (November 2018)

⁵³ Raghav Manocha. Effect of consumption-context and product attributes on social value perception of luxury clothes for Indian female consumers. 2020.

⁵⁴ Raghav Manocha. Effect of consumption-context and product attributes on social value perception of luxury clothes for Indian female consumers. 2020

esis as youngsters are found to be spending more on luxury fashion labels and designer wear. This creates an opportunity for the counterfeiters to target consumers across various segments.

Counterfeiting in the Apparel Section, Deceptive Vs Non-Deceptive Practices

The proliferation of counterfeit apparel is driven by a burgeoning middle class looking to buy trending branded clothes at low cost. According to State of Counterfeiting in India 2022 report, by CRISIL - ASPA, the level of counterfeiting in the apparel segment is expected to be between 30-40%. The report, based on retailer survey finds wedding apparel segment has a higher level of fake products followed by luxury brands and sportswear, with premium brands seeing higher counterfeiting.

As this report highlights, counterfeiting in the apparel sector results from both deceptive and non-deceptive practices. This report identifies both deceptive and non-deceptive tactics being used by counterfeiters to lure customers to buy illicit products. Deceptive counterfeiting results from a customer's lack of awareness making them to believe they are buying an original. Upper middle class and high-income groups often are the targets of deceptive counterfeiting.⁵⁵

This typically stems from the lack of awareness on consumers' part. Non-deceptive counterfeiting is when consumers knowingly purchase counterfeit products. Affordability is the trigger for such purchases as young consumers and middle-income groups have turned to fakes. The demand for less expensive alternatives, customer ignorance, and

occasionally lax enforcement of intellectual property rights all contribute to the sizeable market for counterfeit apparel in India.⁵⁶

Symbolic vs Functional Value

Indian consumers have been observed to be more inclined towards the symbolic value of the brands compared to functional value. The primary motive is to impress others (Shukla & Purani, 2012). Jain et al. (2017) in a study conducted in Indian context observed that Indian's consume luxury brands mainly to gain social approval. Kim, Cho, & Johnson (2009) observed the role of price consciousness and consumers' willingness to pay for luxury brands on intention to buy counterfeit luxury brands. Marketers of counterfeit brands justify their actions by linking their illegal trade practices with consumer demand for status goods combined with inability to afford the genuine brands (Wilke & Zaichkowsky, 1999). Cordell, Wongtada, & Kieschnick, (1996); Grossman & Shapiro, (1988) observe that consumers buy Counterfeit Luxury Brands as it helps them to obtain the prestige associated with the brand without spending for the genuine brand.⁵⁷

Reduced pricing plays an important role in a consumer's choice for counterfeit products. This is true in the case of apparel, not just in the premium and luxury segment, but also value segment (such as ready to wear). Munisha et al,⁵⁸ in a qualitative study on the demographic influence on consumer attitudes regarding counterfeit apparel purchase in the state of Punjab, found that customers between the ages of 18 and 25 years were more accepting of fake clothes than those between the ages of 41 and 50

⁵⁵ CRISIL - ASPA report on the state of counterfeiting in India, 2022

⁵⁶ CRISIL - ASPA report on the state of counterfeiting in India, 2022

⁵⁷ Khan, Fazili / Journal of Business and Management, 25 (2), September 2019, 43-70. 'Does the need for social status among price conscious consumers induces consumption of counterfeit luxury brands?'

⁵⁸ Munisha et al/Demographic influence on consumer Attitudes regarding counterfeit apparel purchase: A study of Punjab state in India, Neuroquantology, December 2022, Vol 20, Issue 22

and those older than 50 years. When compared to consumers with yearly incomes between 10-20 lakhs and above, those depending on family members and having modest incomes were positively inclined to purchasing counterfeit clothes.⁵⁹ It found that younger consumers with lesser incomes are more likely to purchase counterfeit clothes.

Vulnerability of the Indian consumer to buy illicit apparel is driven by reasons such as (1) the propensity to buy luxury brands, but not pay for it; (2) consumer ignorance about brands, points of sale drives demand for counterfeits; (3) purchase of counterfeits more prevalent among the younger population and those belonging to lower economic status.

Lack of adequate enforcement actions and pursuance of rights

As discussed in a previous section, counterfeiting in the apparel industry is rampant. The market for illicit market for apparels is driven by a few factors, such as the demand for less expensive alternatives and customer ignorance, occasionally lax enforcement of intellectual property rights.

One of the reasons why counterfeiting thrives is poor enforcement of IPR. Under the Copyright Act, 1957, original artistic works - including designs used on clothing - are protected by copyright. This includes unique prints, patterns, and artistic elements that make an item of apparel stand out. For designs to qualify for copyright protection, they must be sufficiently unique, that is, the result of the author's own independent creative activity. It can't just be a regular component arrangement. A design that is copyrighted cannot be used or

copied by anyone else without the owner's consent.

Yet, it is seen that infringement of IPR is not aggressively pursued pan-industry.

ICRIER in a 2014 paper, titled, 'Using IPRs to Protect Niches? Evidence from the Indian Textile and Apparel Industry', identified reasons why the textile industry is not active enough to pursue their rights. Drawing on fifty qualitative interviews with firms and design institutions across the Indian textile and apparels sector, Karmakar et al (2014)⁶⁰, found that while there is a rise in awareness about brand protection, the use of formal IP right was limited. It found that a significant majority of T&A stakeholders in our sample (almost 90% of interviewees) are aware of IP rights and the potential economic benefits that can be gained from operationalizing IPRs in their sector; what they are not so sure about is how effective (vis-à-vis economic viability) these measures are likely to be in terms of increasing sales and revenue.

Aspirational young population with low disposable income are particularly vulnerable to purchasing counterfeit apparels and poor enforcement of intellectual property rights by design houses across all segments leaves room for counterfeiters to exploit.

Textiles and Apparel: Key Takeaways

The markets and consumption pattern

» Textiles and apparels comprises of clothing, clothing accessories, household textiles care, readymade garments etc. There is a growing preference for better

⁵⁹ Munisha et al/Demographic influence on consumer Attitudes regarding counterfeit apparel purchase: A study of Punjab state in India, Neuroquantology, December 2022, Vol 20, Issue 22

⁶⁰ Karmakar, S and Tewari, M, 'Using IPRs to Protect Niches? Evidence from the Indian Textile and Apparel Industry', WP 270, ICRIER (Jan-2014)

quality, branded, and aspirational clothing driven by rising disposable incomes, changing lifestyles and other socio demographics.

Rural and Urban narrative

- » Between 2011 and 2023, rural consumption (contributing 62.5%) of textiles and apparels (T&A) has surpassed urban consumption (37.5%), backed by rising income, increased discretionary spending and better access to goods at rural locations.
- » Across all rural classes, monthly per capita expenditure (MPCE) on T&A goods jumped 135% in current prices terms (adjusted for inflation), against 19.1% growth in constant prices, showing increase in volume and value.
- » The rural middle-income class rural households (50-90% fractiles) show growth in textiles and apparel expenditure. Constant price growth ranges from 17.1% to 21.9%, while current price growth is between 131% and 140%. These households are maintaining and driving stable consumption levels.
- » Across all urban classes, monthly per capita expenditure (MPCE) increased from ₹136.02 in 2011-12 to ₹152.2 in constant prices and ₹300 in current prices by 2022-23. This represents a growth of 11.9% at constant prices but a larger increase of 121% in current prices over the same period.

Illicit market and its drivers

- » Between 2017-18 and 2022-23 the illicit market grew from ₹3,11,494 crores in 2017-18 to ₹4,03,915. The illicit market consumption increased from ₹2,03,238 crores in 2017-18 to ₹2,04,971 crores in volume terms (constant prices) between

the same period, while the total value increased by 83.8%, rising from ₹1,08,257 crores in 2017-18 to ₹1,98,944 crores in 2022-23.

- » Across the rural segments, the 0-30% fractile rural group, with a 147% median consumption increase over 2011-12 to 2022-23 period, is most vulnerable to low-quality or illicit textile and apparel due to price sensitivity and rising consumption.
- » In contrast, the 30-60% fractile (with a 139% median increase) represents the aspiring rural middle class driving consumption of better quality of clothing accessories, garments etc. This group is more exposed to smuggled or counterfeit high-value products as they seek better quality in line with their rising incomes and aspirations.
- » Similarly, across the 0-30% fractile urban group, with a 170% median consumption increase over 2011-12 to 2022-23 period, is most vulnerable to low-quality or illicit textile and apparel due to price sensitivity and rising consumption.
- » In contrast, the 30-60% fractile (with a 130% median increase) represents the aspiring urban middle class driving consumption of better quality of clothing accessories, garments etc. This group is more exposed to smuggled or counterfeit high-value products as they seek better quality in line with their rising incomes and aspirations.
- » The significant change in the consumption behaviour of textiles and apparel of the population, which is moving towards readymade garments which creates opportunities to dubious players to exploit the economic incentives that higher tax and higher value in this market provides.





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Alcoholic Beverages: Decoding Consumption and Illicit Markets

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Alcoholic Beverages: Decoding Consumption and Illicit Markets

Industry Overview

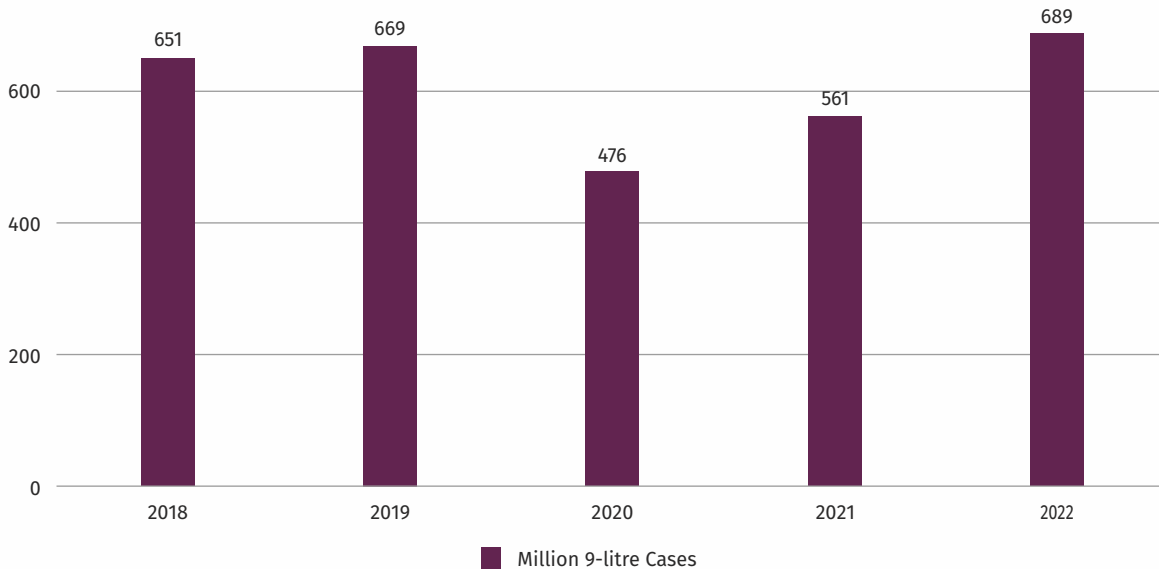
Alcoholic beverages is one of the fastest-growing markets in India and is the third-largest globally, valued at US\$ 52.4 billion in 2021, it is projected to reach US\$ 64 billion by 2026.⁶¹

Alcohol consumption, despite taking a significant hit during the pandemic years, has come back sharply. The alcoholic

beverages segment witnessed a transition in the last few years, especially since we were hit by the pandemic.

It is segmented into IMFL (Indian Made Foreign Liquor), Country Liquor, Wine, and Beer. In 2022, the global alcohol market saw a modest 1% volume growth. However, India experienced significant increases in spirits (+12%), beer (+38%), wine (+19%), and RTDs (ready-to-drink beverages) (+40%).⁶²

Alcohol Consumption in India: Million cases



Source: *The International Spirits & Wines Association of India (ISWAI), TARI Representation*

India is the 9th largest market of alcohol and the 2nd largest in the case of spirits by volume consideration. The Indian Made Foreign Liquor (IMFL) recorded 385 million cases and accounted for over 70% of the market's value in FY 2023.⁶³

Country liquor, often referred to as the liquor of the masses, is primarily consumed by the lower-income strata, examples being Toddy and Feni that are widely consumed in southern India.⁶⁴ While country liquor accounts for over 30 % of sales by volume, it

⁶¹ Indian Spirits and Wines Association of India (ISWAI). (2024, January). Annual report 2024. <https://www.iswai.in/wp-content/uploads/2024/06/jan-2024.pdf>

⁶² IWSR. (2024). India's growth potential in 2024 and beyond. <https://www.theiwsr.com/indias-growth-potential-in-2024-and-beyond/>

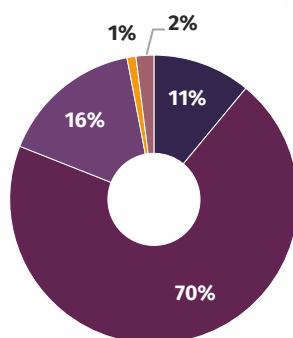
⁶³ ABD India. (n.d.). Industry report on Indian alco-beverage market. https://www.abdindia.com/media/g5ajfyse/industry_report_on_indian_alco-beverage_market.pdf

⁶⁴ Global Spirits, Annual Report 2019-20

represents only around 11% by value in 2023. Wine and Imported alcohol hold a very

low market share with just 1% and 2% of the total alcoholic beverages market.

Market Share of Alcoholic Beverage Categories: 2023



■ Country Liquor ■ IMFL ■ Beer ■ Wine ■ Imported Spirits

Source: Allied Blenders and Distillers, Industry Report, 2024, TARI Representation

Factors Driving Consumption of Alcoholic Beverages

India's diverse socioeconomic fabric significantly impacts alcohol-drinking behaviours, making it a unique market. The expanding middle class, growing acceptance of social drinking among urban youth, higher rural consumption, rising levels of disposable income, evolving lifestyles, product innovations and the growing influence of global trends have led to a significant shift and diversification of alcohol consumption patterns.⁶⁵

Key insights from NSSO 2022-23 data, on alcoholic beverages consumption include:

- » Both urban and rural upper middle class between fractiles 60-95% (representing one-third of the population) have 50.43% of rural consumption, 47.78% of urban consumption and 50% of total consumption.
- » Urban and Rural fractile group 95-100% representing 5% of population in their respective segment consume nearly 16 to 17% of the total value terms.

Rise in Alcoholic Beverage Drinking Population

The increase in the value of alcohol consumption at constant prices can be attributed to an increase in the alcohol-drinking population.

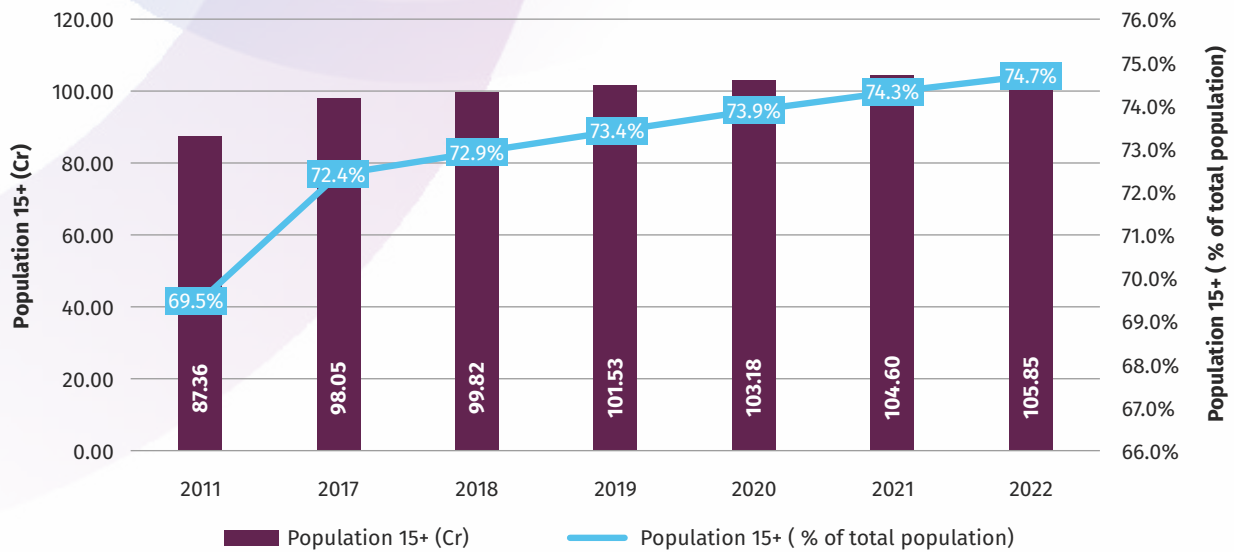
- » The Indian population aged 15+ years has increased by 21.2% from ₹87.36 crores in 2011-12 to ₹105.85 crores in 2022-23.
- » According to industry estimates, the number of people consuming alcohol in India has risen from approximately 219 million in 2005 to 293 million in 2018, with projections indicating a rise to 386 million by 2030.⁶⁶
- » The estimated per-capita consumption of alcohol among individuals (aged 15 years and above) in India is gradually increasing over the years. As per WHO data, alcohol consumption (per capita) has increased from levels of 2.2 litres in 2000 to 4.9 litres in 2019 and is expected to increase to levels of 5 litres by 2025 and 6.7 litres by 2030.⁶⁷

⁶⁵ Deutsche Welle. (2022, September 30). Why alcohol consumption is on the rise in India. DW. <https://www.dw.com/en/why-alcohol-consumption-is-on-the-rise-in-india/a-63296901>

⁶⁶ Indian Council for Research on International Economic Relations (ICRIER). (n.d.). Alcoholic beverages: Strategic policy measures and market opportunities. ICRIER. https://icrier.org/pdf/ES/ES_Alcoholic_Beverages.pdf

⁶⁷ WHO Database

Rise of Population 15+ yrs



Source: World Bank database

Urban Population and Consumption

Urbanisation and Increased the Value of Per Capita Consumption

Urbanisation has always been an essential driver of economic growth in India. While approximately only 36% of India's population resides in urban areas currently, it contributes to over 60% of the country's GDP.⁶⁸ This urban growth has not only fuelled economic growth but has also led to a significant shift in consumption patterns.⁶⁹

Over the past years, major metropolitan cities and towns across India have experienced accelerated growth due to increased economic activity and better employment opportunities.⁷⁰ The urban population increased from ₹39.43 crores (31.3 %) in 2011-12 to ₹45.5 crores (33.6 %) in 2017-18 to ₹50.8 (35.9%) crores in 2022-23.⁷¹

A shift in employment from agriculture to

services and industry has resulted in increased urban dwellers and their disposable income. There has been a commensurate boost in discretionary expenditure, allowing for more lavish spending on premium products, including but not limited to alcoholic beverages.

Urbanised environments have always marked a shift in the aspirational culture where alcohol and other premium goods are not only more accessible but also embraced as a crucial part of the modern, cosmopolitan lifestyle. This has led to alcohol becoming a regular part of socialising, dining out and nightlife.

The National Family Health Survey (NFHS - 5), 2019-21 is a large-scale survey study under the aegis of the Ministry of Health and Family Welfare, Government of India and provides information on population, health, and nutrition for India and each state and union territory. We provide key insights from the survey of alcoholic beverages.

⁶⁸ NITI Aayog, & Asian Development Bank. (2022, May). Cities as engines of growth: TA-9508 - Strengthening the states for broad-based urban development (Executive Summary). https://www.niti.gov.in/sites/default/files/2022-05/Mod_CEOG_Executive_Summary_18052022.pdf

⁶⁹ Price360. (2023, March). Mapping the new economic geography of India: A comprehensive report. world bank data

⁷⁰ Price360. (2023, March). Mapping the new economic geography of India: A comprehensive report. world bank data

⁷¹ World Bank database

age consumption in India during the 2019-21 period.

This consumption behaviour analysis and insights are based on the monthly per capita expenditure (MPCE) of the urban population and its fractile class from NSSO 2011-12 and 2022-23 survey data. The MPCE constant price of 2022-23 is estimated using price deflator from PFCE data.

- » Across all urban classes, monthly per capita expenditure on alcohol increased from 16.3 in 2011-12 to ₹45.5 in constant prices and ₹86.2 in current prices in 2022-23.
- » Increase in constant price MPCE highlights that on average, people in urban India are consuming more alcohol per capita than they did in 2011-12. This increase indicates urban population lifestyle changes, greater social acceptance of alcohol consumption, or increased availability and accessibility of alcoholic products.
- » Constant price MPCE increase in urban India is much higher at 179.3% compared to rural India at 113.4% highlights that reflect the rising income of the urban population allowing people to spend more on discretionary items like alcohol. It also indicates shifting cultural attitudes toward alcohol consumption, it is becoming more normalized and integrated into social life.
- » The urban middle class in fractile class 50%-90% is driving alcohol consumption where both constant prices and real prices increase are higher for this segment compared to overall urban consumption increase. The average MPCE for this segment is ₹53.2 in constant prices and ₹100.8 in current prices in 2022-23.
- » Across all urban classes, expenditure on alcohol increased by 179.3% at constant prices and by 429% at current prices from 2011-12 to 2022-23 even after a significant rise in alcohol prices.

Urban Alcohol Consumption Monthly Per Capita Expenditure (₹) Change: 2011-12 to 2022-23					
Urban Fractile Class	2011-12	2022-23: Est Constant Prices	2022-23 - Current Prices	Growth: Constant Price	Growth: Current Prices
0-5%	3.8	12.1	22.9	217.6%	502%
5-10%	6.3	15.5	29.3	144.9%	364%
10-20%	7.1	18.5	35.0	161.5%	396%
20-30%	10.7	22.5	42.6	109.6%	297%
30-40%	12.4	28.6	54.3	131.0%	338%
40-50%	11.3	32.7	61.9	188.0%	446%
50-60%	11.7	40.5	76.8	245.6%	555%
60-70%	19.5	46.8	88.8	140.5%	356%
70-80%	18.6	54.0	102.3	189.4%	449%
80-90%	22.3	71.4	135.3	220.0%	507%
90-95%	31.5	90.4	171.3	187.1%	444%
95-100%	56.6	162.1	307.1	186.2%	442%
All classes	16.3	45.5	86.2	179.3%	429%

Source: NSSO 2011-12 (68th round) and NSSO 2022-23 reports

Rural Population and Consumption

Rural India which comprises 65% of the population has a very large population base which drives a significant value of total alcohol consumption. **The rural population have 66.1% of total alcohol consumption in value terms in comparison to the urban population which consumes the remaining portion.**⁷² Despite urbanization, over half of India's population-53.6%, or 835 million people-will still live in rural areas by 2040 which will continue to drive alcohol consumption.⁷³

The NFHS survey says that the rural male in the age bracket of 35-64 years consumes more than their urban counterparts and rural women too consume about 3 times more than the urban ones. However, in terms of value, consumption is more in urban centres.

This consumption behaviour analysis and insights are based on the monthly per capita expenditure (MPCE) of the rural population and its fractile class from NSSO 2011-12 and 2022-23 survey data. The MPCE constant price of 2022-23 is estimated using a price deflator from PFCE data.

» Across all rural classes, monthly per capita expenditure on alcohol increased from ₹16.5 in 2011-12 to ₹35.1 in constant

prices and ₹66.5 in current prices in 2022-23, which is lower than the urban per capita spend of 2022-23 at ₹86.2

- » Overall growth in constant prices across all rural classes is 113.4%, indicating a substantial increase in alcohol consumption in real terms.
- » The rural lower income class in fractile class 0%-30%, on average had MPCE of ₹4.75 in 2011 which increased to ₹15.5 in constant prices and ₹29.3 in current prices in 2022-23 is driving alcohol consumption. Both constant prices and current price increases are higher for this segment compared to the overall rural consumption increase.
- » The sharp increase in current prices for lower-income groups (0-30%) indicates that these households are spending a larger share of their income on alcohol. This low-income group has on average large household size of 5.6 persons with an average 3.8 adults.
- » The rate of alcohol consumption in the rural population has decreased both in constant prices and current prices in 2022-23 as we move up in fractile class (absolute MPCE has increased). This can be attributed to a decrease in household size and the number of adults per household as people drink more alcohol than family members at home in rural settings.

Rural Alcohol Consumption Monthly Per Capita Expenditure Change: 2011-12 to 2022-23					
Rural Fractile Class	2011-12	2022-23: Est Constant Prices	2022-23 – Current Prices	Growth: Constant Price	Growth: Current Price
0-5%	3.2	14.0	26.4	333.3%	721%
5-10%	4.5	14.7	27.8	224.0%	514%
10-20%	5.3	16.0	30.3	202.0%	472%
20-30%	6.0	17.3	32.8	189.7%	449%

⁷² Based NSSO 2022-23 consumption value calculations

⁷³ Hodgson, A. (2021). Indian rural consumers: Why it makes sense to target the world's largest rural market. Euromonitor International. <https://www.euromonitor.com/article/indian-rural-consumers-why-it-makes-sense-to-target-the-worlds-largest-rural-market>

Rural Fractile Class	2011-12	2022-23: Est Constant Prices	2022-23 – Current Prices	Growth: Constant Price	Growth: Current Price
30-40%	9.1	20.0	37.9	120.4%	318%
40-50%	10.3	23.7	44.9	129.8%	335%
50-60%	10.7	27.3	51.7	155.9%	385%
60-70%	16.2	34.0	64.5	110.8%	299%
70-80%	19.8	43.1	81.7	118.1%	313%
80-90%	27.8	60.2	114.0	116.3%	310%
90-95%	36.9	79.4	150.5	115.1%	308%
95-100%	74.1	110.8	210.0	49.6%	184%
All classes	16.5	35.1	66.5	113.4%	304%

Source: NSSO 2011-12 (68th round) and NSSO 2022-23 reports

Younger Population - Charting a New Growth Path

As of 2023, India boasts a sizable and youthful population accounting for nearly 49% of total population, comprising 327 million millennials and 377 million Generation Z (GenZ) individuals. This demographic composition has resulted in a substantial annual increase in the legal drinking age population over the past five years. In tandem with its demographic strength, India is experiencing rapid economic growth, demonstrating resilience compared to many other regions.

- » Per capita alcohol consumption in India remains approximately one-seventh of the global average. Gen Z would be inclined to spend less on the quantum of alcohol they consume, given their elevated health consciousness, but shall move to quality brands.
- » The younger population is silently changing the face of the alcohol market,

demanding authenticity, quality, and innovation. A preference for premium, craft, and artisanal spirits has shifted the market to flavoured and craft spirits that line shelves and bars.⁷⁴

Premiumisation of Alcoholic Beverage Consumption

The growing availability of a wide range of premium and imported alcoholic beverages caters to the aspirations of urban consumers who seek to align their consumption habits with their lifestyle goals. **The trend of premiumisation, driven by a desire for quality and brand recognition, is particularly strong in urban areas, where there is a greater receptiveness to super-premium quality spirits.**⁷⁵

- » Between 2019 and 2024, India was 7th among the top 10 countries which saw a demand for quality alcoholic drinks reflected in the wider availability of premium products with higher prices, according to Euromonitor (2020).⁷⁶

⁷⁴ Hotel Dealers. (n.d.). How Indian millennials are reshaping the alco-bev industry in India. Hotel Dealers. <https://hoteldealers.in/how-indian-millennials-are-reshaping-the-alco-bev-industry-in-india-hoteldealers-in-www-hoteldealers-in/>

⁷⁵ Indian Retailer. (n.d.). Why demand for super-premium and luxury drinks is expected to rise. Indian Retailer. <https://www.indianretailer.com/article/whats-hot/retail-trends/why-demand-for-super-premium-and-luxury-drinks-is-expected-to-rise.a7573>

⁷⁶ Passport Alcoholic Drinks, 2020 Edition, cross ref. Euromonitor, 'Premiumisation: A look into the current and future state of Premiumisation-based products' (November 2020).

- » Middle- and upper-class consumers in India pay more for versions of local products that are homemade or produced with modern quality and sanitation standards.⁷⁷
- » The share of alcohol consumption among the upper-middle-income group has grown from 7% to 21% and is expected to reach 44% by 2030, highlighting the growing influence of the middle class in shaping the alcoholic beverages market.⁷⁸
- » **The 80-100% fractile class accounts for 44.24% of rural alcohol consumption and 43.44% of urban consumption, suggesting that the wealthier segments of the population, especially in the top 20%, are driving a considerable portion of the alcohol market.**⁷⁹

Decoding Illicit Markets: Alcoholic Beverages

Illicit market estimation for alcoholic beverages in India is based on our research approach to assess the gap between demand and supply in alcoholic beverages to find the illicit market value and illicit market per cent for a given year.

The supply and consumption estimates are below.

The following supply-side estimates have been calculated using data from the Annual Survey of Industries (ASI) for the years 2017-18 to 2021-22. The consumption-side estimates have been sourced from the Private Final Consumption Expenditure (PFCE) data provided by MoSPI. Please refer to Annexure I and II for Methodology and further details respectively.

Year	2017-18	2018-19	2019-20	2020-21	2021-22
Supply (₹ Cr)	83,962	93,364	95,921	81,236	1,01,337
Consumption (₹ Cr)	1,10,041	1,25,287	1,41,971	1,30,054	1,49,471

The illicit alcohol trade is a worldwide phenomenon. According to a 2018 Euromonitor study, illicit alcohol represents 25.8% of global consumption, i.e., 1 out of 4 alcohol bottles are illicit.⁸⁰ Illicit alcohol taxonomy is complex and includes varied products such as contraband/ legitimate alcohol illegally smuggled into the country, counterfeit alcohol (fraudulent imitation of a legitimate brand) produced in illicit factories, homemade artisanal alcoholic beverages produced commercially without having a commercial license, legally produced alcohol however sold outside tax channels and non-conforming alcohol that are not produced as per regulatory norms.⁸¹

Illicit alcohol is driven by both supply-side (business practices) and demand-side (consumers) factors with the interplay of the regulatory landscape. Based on our methodology, the estimates for the illicit market of alcoholic beverages in India have risen from 23.7% in 2017-18 to 32.2% in 2021-22. In current price value terms, the illicit market reached ₹48,134 crores in 2021-22, after peaking at ₹48,817 crores (37.5%) in 2020-21, largely driven by the impact of the COVID-19 pandemic on overall consumption and market dynamics. The illicit market for 2022-23 is based on the last two years' average illicit market values.

⁷⁷ Premiumisation-based products, by Euromonitor International (2020)

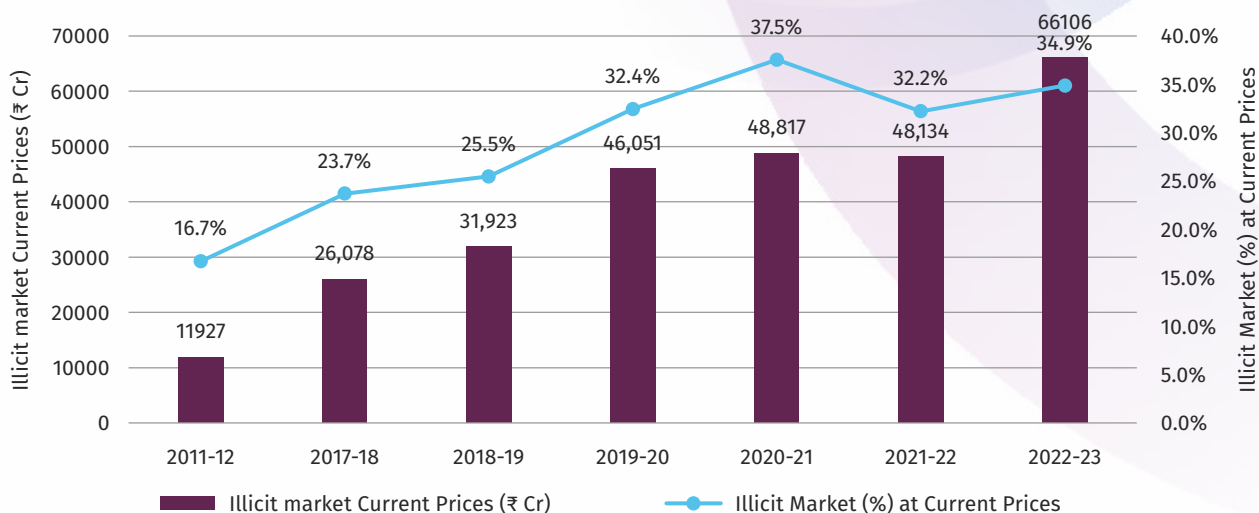
⁷⁸ Indian Council for Research on International Economic Relations (ICRIER). (n.d.). Alcoholic beverages: Strategic policy measures and market opportunities. ICRIER. https://icrier.org/pdf/ES/ES_Alcoholic_Beverages.pdf

⁷⁹ NSSO 2022-23

⁸⁰ Euromonitor International. (2018). Size and Shape of the Global Illicit Alcohol Market. London: Euromonitor

⁸¹ TRACIT (2019). Mapping the Impact of Illicit Trade on the Sustainable Development Goals, Chapter 3- SDG and Illicit Trade in Alcohol

Illicit Market: Alcoholic Beverages



Source: TARI Estimates

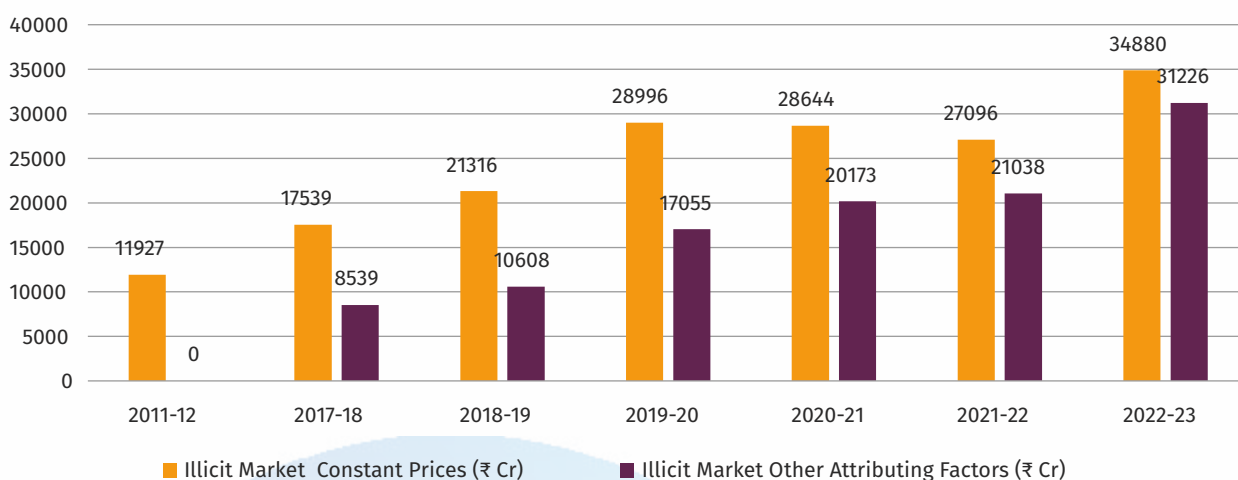
Note: This study excludes illicit market estimates from alcohol-prohibited regions, as national consumption datasets, such as Private Final Consumption Expenditure (PFCE), inherently exclude consumption data from these jurisdictions. Since national estimates such as PFCE and NSSO do not account for consumption in states with alcohol bans, any illicit activity in these areas remains outside the analytical framework of this study and is not modelled within the scope of these estimates.

The analysis of illicit alcoholic beverage consumption can be analysed in two aspects. The first component is the analysis of illicit alcohol consumption at constant

prices of 2011-12 highlighting volume growth in illicit alcohol consumption. Illicit market constant prices are arrived at using alcoholic beverages PFCE deflator with 2011-12 as a base year.

Illicit market at constant prices highlights the actual increase in illicit alcoholic beverages consumption. Illicit alcohol consumption in 2022-23 has increased by 3 times 2011-12 levels and 2 times from 2017-18 levels. The average illicit market at constant prices from 2017-18 to 2022-23 is ₹26,412 crores. This has been the largest component of illicit markets with an average contribution of 62% to the total alcoholic beverages illicit markets in the last 6 years.

Illicit Market Components: Constant Prices and Other Attributing Factors



Source: TARI Calculations

The second component is the difference in illicit alcoholic beverages consumption at current prices and constant prices and includes various attributing factors such as the rise in input cost of materials and taxes. This component increased nearly 4 times since 2017-18 with value increasing from ₹ 8539 crores to ₹ 31226 crores in 2022-23. The share of this component in the total illicit market also increased significantly from 26 % in 2017-18 to 46 % in 2022-23.

Various factors have contributed to illicit markets of alcoholic beverages which are discussed here.

1. Increase in Illicit Alcohol Consumption

Illicit alcohol consumption in constant prices has increased from levels of ₹11927 crores in 2011 to ₹17539 crores in 2017-18 and ₹ 34880 in 2022-23. Studies have highlighted the vulnerable population who resort to illicit alcohol consumption. A survey by the National Non-Communicable Disease Monitoring Survey (NNMS-2017-18) by the Ministry of Health & Family Welfare,⁸² India, revealed that:

- » 20.1% of adults consumed alcohol from unauthorized sources in the past 7 days, with a higher proportion from rural areas (23.7%) and women (23.4%).
- » Home-brewed alcohol was the most common source, with 48.1% of respondents using it.

2. Taxes on Alcoholic Beverages

High taxation is a significant factor in the growth of the illicit alcohol market, as it diverts trade to the illicit market due to tax-related consumer prices, making legal alcohol less affordable. Rapid or sudden tax increases exacerbate this shift, pushing consumers towards untaxed and illicit sources when legal products become too expensive.⁸³ The IARD Policy Review on Taxation of Beverage Alcohol emphasizes that price rise due to regulated products is a major driver of illicit alcohol consumption.⁸⁴

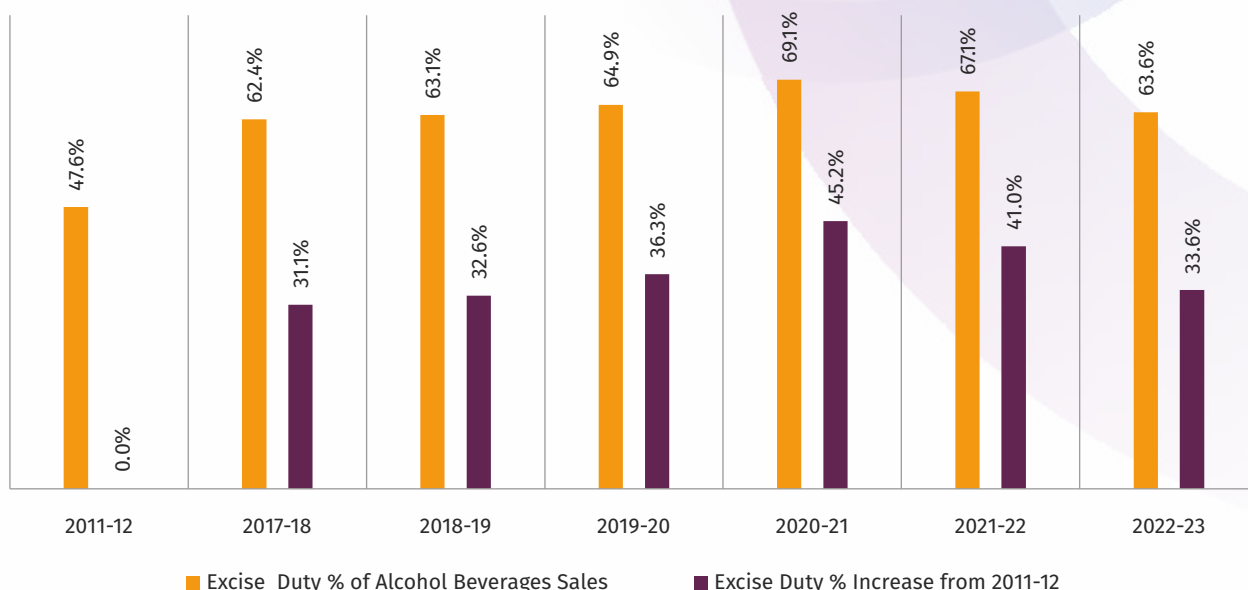
Alcoholic beverages are a State topic for which States levy State excise taxes in addition to State sales taxes or VAT. Apart from State excise tax, most Indian States—except from Himachal Pradesh and Karnataka—also levy State sales tax / VAT on alcoholic beverages. We analysed how much is excise duty component in alcoholic beverages sales value for 11 alcoholic beverages companies from 2011-12 to 2022-23 and found that it has increased from 47.6 % in 2011-12 to 69.1 % in 2020-21 and moderately declined thereafter. Share of tax component on the alcoholic beverages product value would increase if we add the State sales tax/ VAT added to excise duty component. However, this component is difficult to assess in paucity of data.

⁸² National Non-Communicable Disease Monitoring Survey (NNMS-2017-18) of the Ministry of Health & Family Welfare, GOI

⁸³ Witt, D., & Nagy, J. (2022). Understanding the drivers of illicit alcohol: An analysis of selected country case studies. *World Customs Journal*, 16(2), 81-98.

⁸⁴ International Alliance for Responsible Drinking. (n.d.). IARD policy review: Taxation of beverage alcohol.

Excise Duty % of Alcohol Beverages Sales

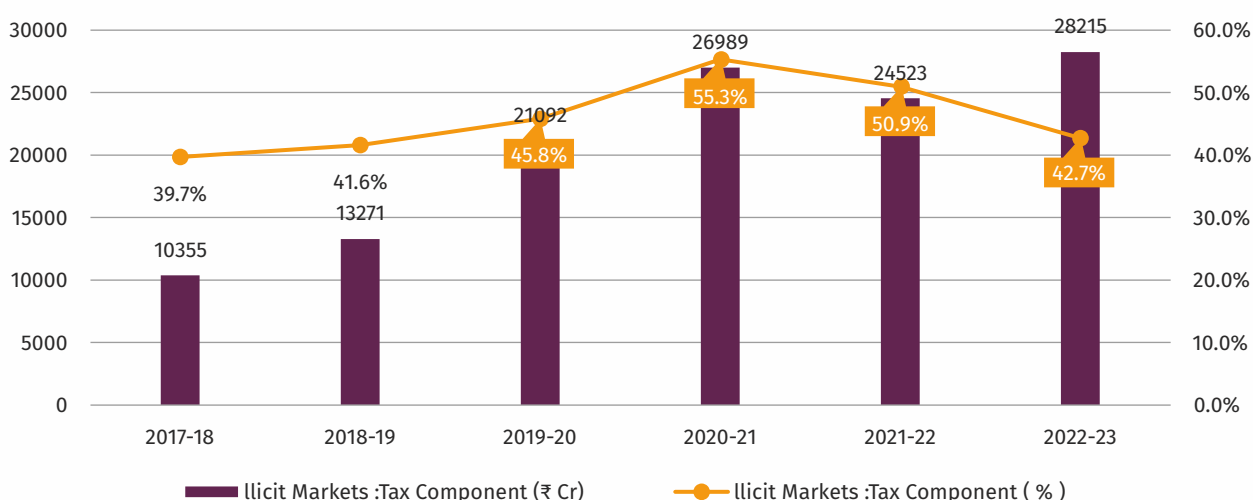


Source: Prowess, CMIE, TARI Calculation

The high tax rate is a key contributing factor to alcoholic beverages' illicit markets. We deflated the excise duty tax component (taxes/ product value) on current prices of alcoholic beverages to calculate the tax component of alcoholic beverages' illicit markets. The insights based on this analysis highlight tax is a key driver of illicit alcoholic beverage consumption.

On average illicit market tax component for the last six years for alcoholic beverages is 46% of total illicit alcoholic beverages consumption. The average illicit alcohol consumption due to taxes is ₹ 20741 crores for the period from 2017-18 to 2022-23 and it moves in line with tax rates on alcoholic beverages.

Alcoholic Beverages Illicit Markets-Tax Component



Source: TARI Calculation

3. Recorded and Unrecorded Alcohol Consumption

Illicit alcohol falls under the broader category of unrecorded alcohol, which is difficult

to estimate. According to the WHO, unrecorded alcohol includes consumption of homemade or informally produced alcohol (legal or illegal), smuggled alcohol, alcohol

intended for industrial or medical alcohol, obtained through cross-border purchases (recorded in a different jurisdiction), and

alcohol consumed by tourists. Unrecorded alcohol, therefore includes illicit alcohol and licit homemade or informally produced alcohol.

Alcohol per Capita (15+ years) consumption (in liters, pure Alcohol)			
Year	Avg: 2009-11	Avg: 2015-17	2019
Recorded	2.7	3	3
Unrecorded	1.5	2.6	1.9
Total	4.2	5.6	4.9

Source: WHO database

As per WHO data, unrecorded alcohol consumption in India (per capita consumption of pure alcohol by individuals aged 15 and above) increased from 1.5 litres in 2010 to 2.6 litres in 2015, but declined to 1.9 litres in 2019. Despite this decline in volume, unrecorded alcohol rose as a percentage of total consumption, with WHO estimating that it could account for up to 46% during the same period.⁸⁵

A study by the International Alliance for Responsible Drinking estimated unrecorded alcohol to range between 40% and 77% in five surveyed states. The Journal of Global Health identifies homemade alcohol and illegal production as the main contributors of unrecorded alcohol.⁸⁶

4. State Regulations and Policies

Alcoholic beverage prohibition under Article 47 of Part IV Directive Principles of State Policy of the Constitution of India directs the States to undertake duties for improving the public health of citizens. Under this directive, the State Governments have promulgated laws that govern the sale, possession, and consumption of alcohol and

made amendments to these laws from time to time.

Various states have different laws for the consumption of alcohol, with some states strictly prohibiting the sale and purchase of alcohol. Other states allow alcohol consumption, however, with age restrictions (either 18 years or 21 years) for the consumption and purchasing of alcohol.⁸⁷ Differing tax structures between neighbouring states incentivize unauthorized inter-state movement of alcoholic beverages and drive illicit alcohol consumption.

Alcohol Beverages: Key Takeaways

The markets and consumption pattern

- » Alcoholic beverages consist of IMFL, country liquor, beer, wine, and imported spirits.

Rural and Urban narrative

- » Across all urban classes, monthly per capita alcohol expenditure increased by

⁸⁵ TRACIT. (2023). Illicit trade in alcohol in India: Challenges and solutions (2023 update). https://www.tracit.org/uploads/1/0/2/2/102238034/illicit_trade_in_alcohol_in_india-challenges_and_solutions-2023_update.pdf

⁸⁶ International Alliance for Responsible Drinking. (n.d.). Unrecorded alcohol in India. <https://www.iard.org/getattachment/fdd90791-41cb-4bd3-98f0-555fbf9818f8/unrecorded-alcohol-in->

⁸⁷ Alcohol Laws in India, Available at : <https://www.saathee.org/docs/laws.pdf>

429% in current prices and 179.3% in constant prices from 2011-12 to 2022-23, surpassing the 103.5% rise in CPI for pan, tobacco, and intoxicants, highlighting that alcohol consumption grew significantly more in both value and volume terms than inflation during this period suggesting the growing preference for higher quality premium alcohol brands driven by rising income, societal change etc.

- » The urban middle class in fractile class 50%-90% is driving alcohol consumption where both in volume terms and current prices, increase is higher for this segment compared to overall urban consumption increase. The average MPCE for this segment is 53.2 in constant prices and 100.8 in current prices in 2022-23.
- » Between 2011 and 2023, the rural population contributed 66.1% of total alcohol consumption. Across all classes, monthly per capita alcohol expenditure in rural areas increased by 304% in current prices and 113% in constant prices, surpassing the 98.4% rise in CPI for pan, tobacco, and intoxicants. This highlights that alcohol consumption grew significantly, especially in value terms, with a shift towards IMFL. However, the majority of consumption still leans towards country liquor, locally brewed, and unrecorded alcohol.
- » The rural population in the 0%-30% fractile class had an average MPCE of ₹4.75 in 2011, which increased to ₹15.5 in constant prices and ₹29.3 in current prices by 2022-23, reflecting a 226% increase in constant prices and a 516% increase in current prices.

- » The upper-middle class (fractiles 60-95%) accounts for 50.43% of rural consumption, 47.78% of urban consumption, and 50% of total consumption. The top 5% (fractiles 95-100%) in both urban and rural areas contribute approximately 16-17% of total consumption in value terms.

Illicit market and its drivers

- » Estimates for India's illicit alcoholic beverage market rose from 23.7% in 2017-18 to 32.2% in 2021-22. In current price terms, the illicit market reached ₹48,134 crores in 2021-22, after peaking at ₹48,817 crores (37.5%) in 2020-21
- » Illicit alcohol consumption in volume terms (constant prices) nearly doubled from ₹17,539 crores in 2017-18 to ₹34,880 crores in 2022-23. The illicit market's rise, driven by factors like rising input costs and taxes, increased nearly fourfold from ₹8,539 crores to ₹31,226 crores over the same period.
- » On an average, the tax component of the illicit alcohol market has accounted for 46% of total illicit alcohol consumption over the past six years, rising from 39.7% in 2017-18 to 42% in 2023, peaking at 55.3% in 2020-21, significantly driving the growth of the illicit market.

The increasing availability of premium and imported alcoholic beverages appeals to consumers aiming to align their consumption with lifestyle aspirations. However, this also exposes them to the risk of counterfeit or smuggled versions of these high-end alcohol brands.





7

Tobacco Products: Decoding Consumption and Illicit Markets

7

Tobacco Products: Decoding Consumption and Illicit Markets

Industry Overview

Tobacco is a high-value commercial crop in India, known for its low production costs, high farm yields, and competitive export prices, making it a strong "value for money" product.⁸⁸ India is the second-largest producer of tobacco globally, after China, with 4.5 lakh hectares cultivated across 15 states.⁸⁹

The tobacco industry supports the livelihoods of over 4.57 crore people⁹⁰ and generated over ₹72,000 crores of tax revenue in FY 2022-23, accounting for 2.39% of the Gross Tax Revenue. Additionally, tobacco exports contribute around ₹13,000 crores annually in foreign exchange.⁹¹

The Indian tobacco industry is divided into three distinct segments: bidis, smokeless tobacco (SLT), and cigarettes.⁹² Cigarettes, typically favoured by urban consumers, come in various types, including filtered, unfiltered, and length-based varieties. In contrast, bidis, a traditional form of hand-rolled tobacco wrapped in tendu leaves, are predominantly consumed by lower socio-economic groups due to their affordability. Smokeless tobacco is primarily used orally, and its consumption varies by region, with

different forms tailored to local preferences.⁹³

Tobacco Products Consumption Pattern: Key Insights

The analysis of consumption pattern on the fractile class population of rural and urban areas is based on the reports from NSSO 2011-12 and 2022-23 surveys to provide insights. The data of the intervening period between 2011 and 2023 is evaluated at constant prices of 2011-22 for making them comparable in terms of volume of consumption at a constant price. This is achieved by using the deflator factor used by NSSO/MOSPI for the period and used on the PFCE of tobacco products. We also analyse the data from the National Health Survey of 2015 and 2022 to corroborate the trends of consumption that come from other data sources.

According to NSSO 2022-23, the rural population, consumes about 71.8% of total tobacco consumption in terms of value terms and also consumes significantly more tobacco products than the urban population

⁸⁸ https://ctri.icar.gov.in/for_tobaccoEconomy.php

⁸⁹ ICAR- Central Tobacco Research Institute; Tobacco in Indian Economy; https://ctri.icar.gov.in/for_tobaccoEconomy.php

⁹⁰ ICAR- Central Tobacco Research Institute; Tobacco in Indian Economy; https://ctri.icar.gov.in/for_tobaccoEconomy.php

⁹¹ The Hindu. (2023, October 28). World Tobacco Growers Day: Ryots urge govt. to cut taxes on domestic products, curb smuggling. https://www.protectourlivelihood.in/wp-content/uploads/2023/10/World-Tobacco-Growers-Day-Ryots-urge-govt.-to-cut-taxes-on-domestic-products-curb-smuggling-The-Hindu_28102023.pdf

⁹² Tobacco Industry Profile - India, available at, http://global.tobaccofreekids.org/files/pdfs/en/TI_Profile_%20India_Final.pdf

⁹³ Mohan, P, Lando, HA. (2016). Oral tobacco and mortality in India. *Ind J Clin Med*, 7:5-12. doi:10.4137/IJCM.S25889

in terms of quantity, as the unit price of the product normally consumed at the rural geographies are lower compared to the urban centres.

Both in urban and rural upper-middle-class groups (60-95% fractile), representing one-third of the population, account for 41.4% of rural, 39.3% of urban resulting in 41% of total tobacco products consumption in value terms, mainly in form of higher priced tobacco products- both smokeless and smoking.

Consumption Insights: Urban Population

Across all urban classes, monthly per capita expenditure (MPCE) on tobacco products modestly increased from ₹19.4 in 2011-12 to ₹21.36 in 2022-23 in constant prices but rises by about 150 % to ₹48.58 in terms of current prices for the same period.

- » The modest increase in MPCE of 10% at constant prices reflects a declining prevalence, which is supported by the National Family Health Survey (NFHS-5) (2019-2021), tobacco use was reported at 39% among men and 4% among women, a notable decrease from NFHS-4 (2015-2016), where 45% of men and 7% of women used tobacco across the population. Moreover, among male and female youths, the decline has been even more pronounced across the National Family Health Surveys.
- » In NFHS-4, tobacco use among males dropped to 27.31%, with female usage at 2.38%. By NFHS-5, these figures further decreased to 22.51% for males and 1.33% for females. 38% of men and 9% of women age 15 and over currently use any tobacco products.
- » Among men as well as women, the use of tobacco is higher in rural areas (43% for

men and 11% for women) than in urban areas (29% for men and 6% for women).

GATS estimates that consumption of tobacco in India is dominated by smokeless tobacco products, which is one-third more than smoking products. Among smoking products, according to GATS, cigarettes are less than half of beedis in terms of prevalence.⁹⁴

However, the actual consumption in value has increased as stated above, driven by taxes and inflation, which may also indicate that illicit tobacco products are being increasingly consumed as the tax arbitrage between legal and illicit products has huge economic incentives.

- » Among the lower-income urban groups (0-30% fractile), the constant price MPCE for tobacco has increased by 13-27%, but, growth in current prices has surged by 157-189%, which corroborates the findings of NFHS, in India, indicating that the consumption of tobacco products falls with a rise in income, both in rural and urban India.
 - o Nearly 20% of men in the highest wealth quintile use tobacco, in comparison with 58% of men in the lowest wealth quintile.
 - o 17% of women in the lowest wealth quintile use tobacco
- » Urban middle class (50-90% fractile) shows a mixed trend, with a 1% and 4% decrease in constant prices for the 50-60% and 60-70% groups, while the 70-80% and 80-90% groups saw modest increases of 5% and 6%.
- » Among the wealthiest urban classes (95-100% fractile), constant price MPCE rose by 35% and current prices by 207%, showing that this segment is less price-sensitive and continues to spend on tobacco despite rising costs.

⁹⁴ GATS 2010 and GATS 2017

Urban Tobacco Products Consumption Monthly Per Capita Expenditure (₹) Change: 2011-12 to 2022-23

Urban Fractile Class	2011-12	2022-23: Est Constant Prices	2022-23 – current Prices	Growth: Constant Price	Growth: Real Price
0-5%	10.74	12.34	28.07	15%	161%
5-10%	12.09	15.34	34.9	27%	189%
10-20%	14.78	16.72	38.02	13%	157%
20-30%	15.17	17.38	39.53	15%	161%
30-40%	17.66	18.47	42	5%	138%
40-50%	15.67	18.54	42.17	18%	169%
50-60%	21.35	21.17	48.15	-1%	126%
60-70%	22.18	21.27	48.38	-4%	118%
70-80%	21.85	22.99	52.3	5%	139%
80-90%	23.42	24.80	56.4	6%	141%
90-95%	27.41	29.92	68.04	9%	148%
95-100%	34.77	46.89	106.64	35%	207%
All classes	19.4	21.36	48.58	10%	150%

Source: NSSO 2011-12 (68th round) and NSSO 2022-23 reports

Consumption Insights: Rural Population

- » Across all rural classes, monthly per capita expenditure on tobacco increased from ₹20.66 in 2011-12 to ₹21.56 in constant prices and ₹49.04 in current prices in 2022-23.
- » The rise in current prices is significantly higher than in constant prices, with an overall increase of 137% across all rural classes. While the rural population spends more due to rising tobacco costs, this increase is still lower than the 150% seen in urban areas, likely due to lower disposable income in rural regions.

- » Among lower-income rural groups (0-30% fractile), there has been a 22-29% increase in constant price MPCE, suggesting that these groups may still be consuming more tobacco over time. However, their current prices growth is significant, with increases of 178-193%.
- » For the middle rural classes (50-90% fractile), MPCE growth at constant prices is flat or negative, with decreases ranging from 1-7%, indicating declining consumption in real terms. However, current price expenditure shows growth, with increases between 111-148%, driven by inflation and higher taxes.

Rural Tobacco Products Consumption Monthly Per Capita Expenditure (₹) Change: 2011-12 to 2022-23

Rural Fractile Class	2011-12	2022-23: Est Constant Prices	2022-23 – Current Prices	Growth: Constant Price	Growth: Current Prices
5-10%	11.2	14.02	31.88	25%	185%
10-20%	12.98	15.88	36.12	22%	178%
20-30%	14.32	17.55	39.91	23%	179%
30-40%	17.45	19.61	44.59	12%	156%
40-50%	18.49	20.48	46.58	11%	152%

Rural Fractile Class	2011-12	2022-23: Est Constant Prices	2022-23 – Current Prices	Growth: Constant Price	Growth: Current Prices
50-60%	20.38	22.27	50.64	9%	148%
60-70%	23.36	23.02	52.35	-1%	124%
70-80%	25.63	25.12	57.14	-2%	123%
80-90%	28.48	26.46	60.19	-7%	111%
90-95%	32.72	29.63	67.39	-9%	106%
95-100%	38.51	35.89	81.63	-7%	112%
All classes	20.66	21.56	49.04	4%	137%

Source: NSSO 2011-12 (68th round) and NSSO 2022-23 reports

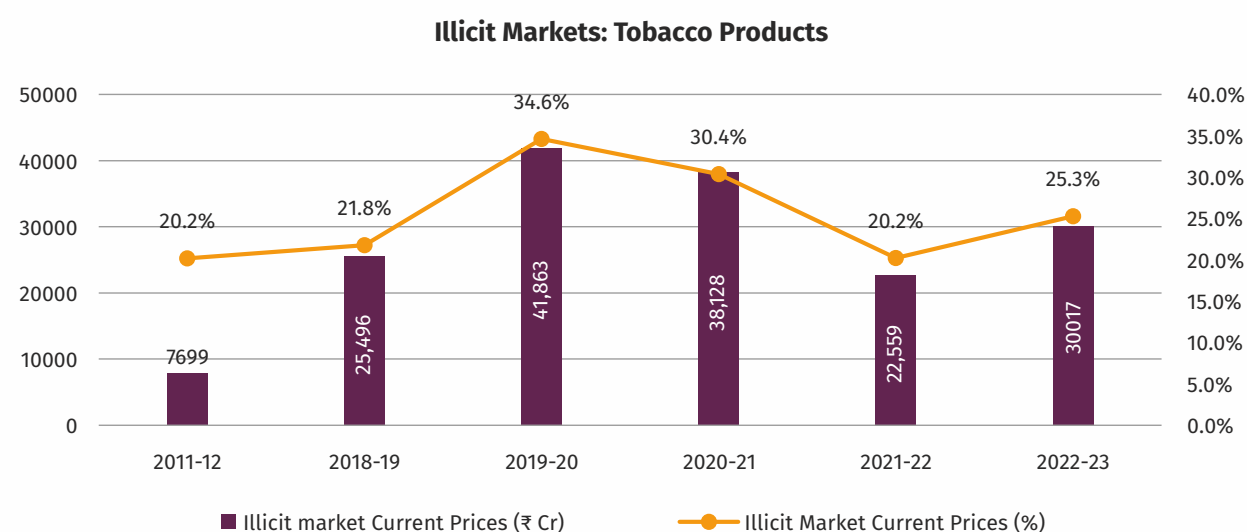
Decoding Illicit Markets: Tobacco Products

Illicit market estimation for tobacco products in India is based on our research approach to assess the gap between demand and supply in tobacco products to find the illicit market value and illicit market per cent for a given year.

The supply and consumption estimates are below.

Year	2018-19	2019-20	2020-21	2021-22
Supply (₹ Cr)	91,616	78,980	87,413	89,094
Consumption (₹ Cr)	1,17,113	1,20,842	1,25,541	1,11,653

Between 2018-19 and 2022-23, the illicit market grew by 17.7%, from ₹25,495 to ₹30,012, reaching 25.3%.



Source: TARI Estimates

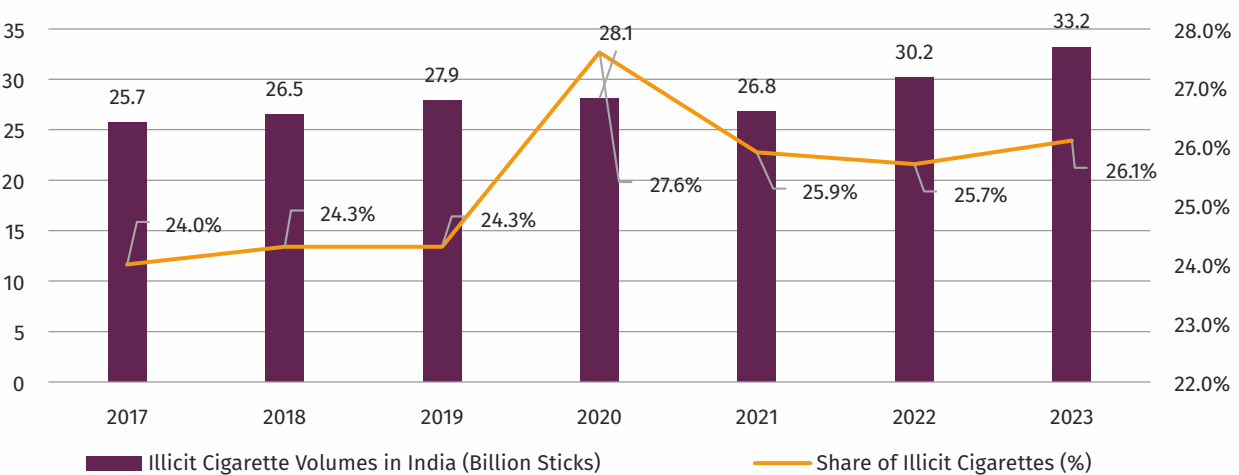
A series of regulatory interventions, including bans on the production, storage, and sale of chewing tobacco (e.g., Zara, pan masala), gained momentum from 2016. In 2017-18, the Food Safety and Standards Authority of India (FSSAI) directed states to enforce the Supreme Court's ban on gutka and pan masala,⁹⁵ consequently leading to significant disruptions in legal production in FY 2019-20. 2020-21 is the year of COVID and consumption patterns are not indicative.

Global estimates suggest that illicit cigarette consumption is around 600 billion sticks, or 10% of total consumption.⁹⁶ Illicit trade in cigarettes is considered to be a low-risk, high-reward activity, allowing traffickers to profit significantly while evading detection. A recent study of 2017 done under urban retail settings of 14 low and middle-income countries (LMICs) finds that 23.8 percent of cigarette packs purchased out of a total of 3240 cigarette packs were illicit. For India, the percentage of illicit cigarette packs is

30.4 percent, higher than the average of surveyed countries.⁹⁷

According to Euromonitor International, **India is now the 4th largest illegal cigarette market globally, comprising over a quarter of the total market.⁹⁸ While the legal cigarettes industry in India has been bearing the brunt of the flourishing illicit market, with consumption of legal cigarettes witnessing a drop in volumes, the illicit market has continued to grow, reaching 33.2 billion sticks and accounting for 26.1% of the Indian cigarette market in 2023.⁹⁹**

Trends in trade of Illicit Cigarette (2015-2023)



Source: Euromonitor International, 2024

⁹⁵ S Dutta (2019), Confronting Illicit Tobacco Trade: A Global Review of Country Experiences, Technical Report of the World Bank Group Global Tobacco Control Program

⁹⁶ Cherukupalli, R., Washington, C., Ferguson, J., & Clegg Smith, K. (2017). An analysis of purchase price of legal and illicit cigarettes in urban retail environments in 14 low- and middle-income countries. *Addiction* (Abingdon, England), 112(10), 1854-1860. <https://doi.org/10.1111/add.13881>

⁹⁷ Refer to Tobacco Institute of India, Tobacco Fact Sheet India: January 2109

⁹⁸ Euromonitor International

⁹⁹ Businessworld. (n.d.). On a high: Cigarette smuggling in India. Businessworld. Retrieved September 9, 2024, from <https://businessworld.in/article/on-a-high-cigarette-smuggling-in-india-520497>

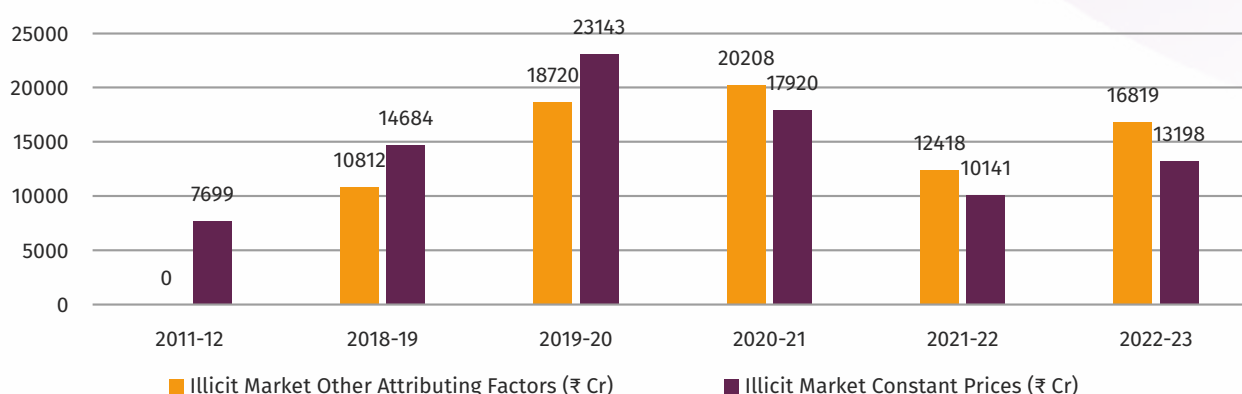
The illicit markets of tobacco in India shows a pattern when viewed through the lens of both constant and current prices. The analysis of the consumption of illicit tobacco products can be viewed in two aspects.

The first component is the analysis of consumption of illicit tobacco products at constant prices of 2011 highlights the

volume growth in illicit tobacco products. **At constant prices (which exclude inflationary effects), the illicit market grew from ₹7,699 crores in 2011-12 to ₹13,198 crores in 2022-23, indicating a significant growth in the actual volume of illicit markets.**

In terms of growth in actual prices, the markets grew for the same period by 120 % to ₹ 16819 crores, reflecting the effects of inflation, rising costs of inputs and taxes.

Illicit Market Components: Constant Price and Other Attributing Factors



Source: TARI Calculations

1. Rising Taxation and Illicit Markets

High taxation creates an arbitrage and is a significant factor in the growth of the illicit tobacco products market, as it diverts trade to the illicit market due to tax-related consumer prices, Rapid or sudden tax increases exacerbate this shift, pushing consumers towards untaxed and illicit

sources when legal products become too expensive.

The table below shows a significant increase in tobacco products both smokeless tobacco and smoking tobacco. **There is an increase of 11.4 % in NCCD+ Specific cess cigarettes from the 2017-20 period to the 2020-22 period with an additional increase of excise from 5 to 10 per cent.**

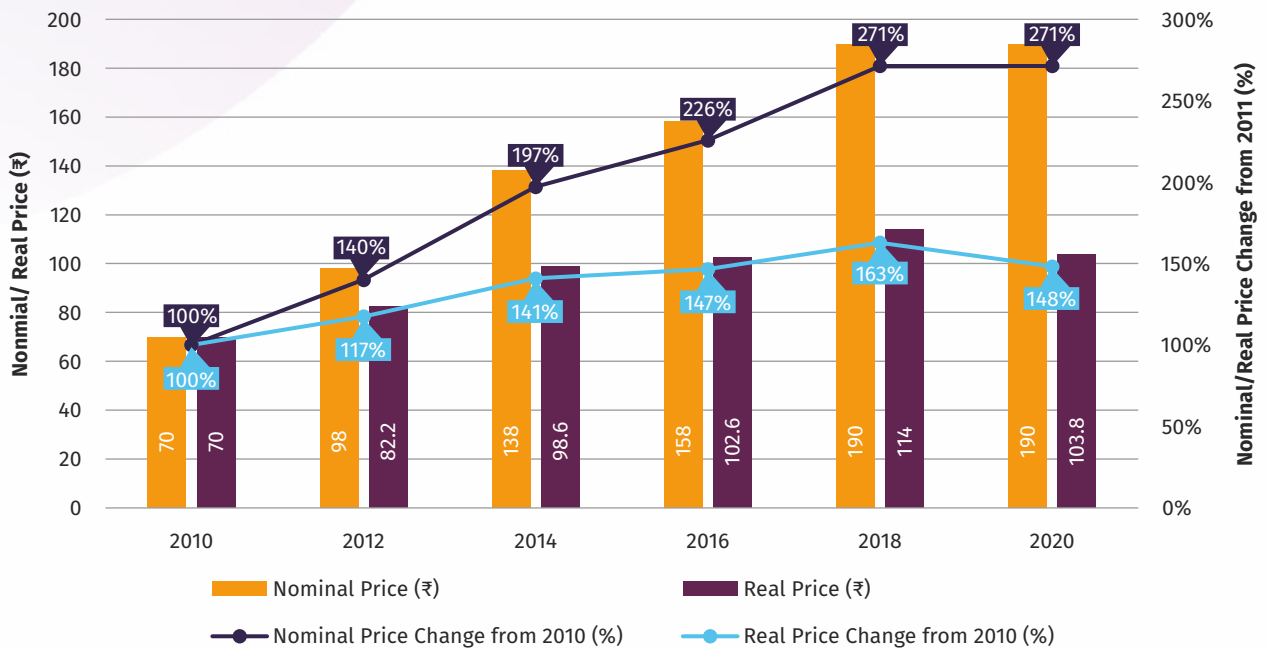
Tax Structure on Selected Tobacco Products in India											
Tobacco Products	2016-2017 (Pre-GST)		2017-2018 to 2019-2020				2020-2021 to 2021-2022				
	Excise+ NCCD	VAT	GST	NCCD	Specific Cess	Ad Valorem Cess	GST	NCCD	Specific Cess	Ad Valorem Cess	Excise
Cigarettes (/ 1,000 sticks)											
Filter 65-70 mm	2,216	31.54%	28%	90	2,747	5%	28%	440	2,747	5%	5%
Filter 70-75 mm	3,021	31.54%	28%	145	3,668	5%	28%	545	3,668	5%	5%
Filter Above 75 mm	4,421	31.54%	28%	235	4,170	36%	28%	735	4,170	36%	10%
Smokeless Tobacco (%)	103%	30.94%	28%	10%	0	104%	28%	25%	0	104%	0.50%

Source: ADB, The Governance Brief 2023

Using the principles of constant prices, the price of cigarette in 2011 of Rs 70 should cost Rs 104 in 2020 after adjusting for the deflector factor sued by NSSO. However, in terms of real prices the pack costs Rs 190 in

2020. The prices in actual or real prices has increased by 271% in comparison to 148% in constant prices terms. The difference is the arbitrage of taxes, inflation and rise in costs of inputs.

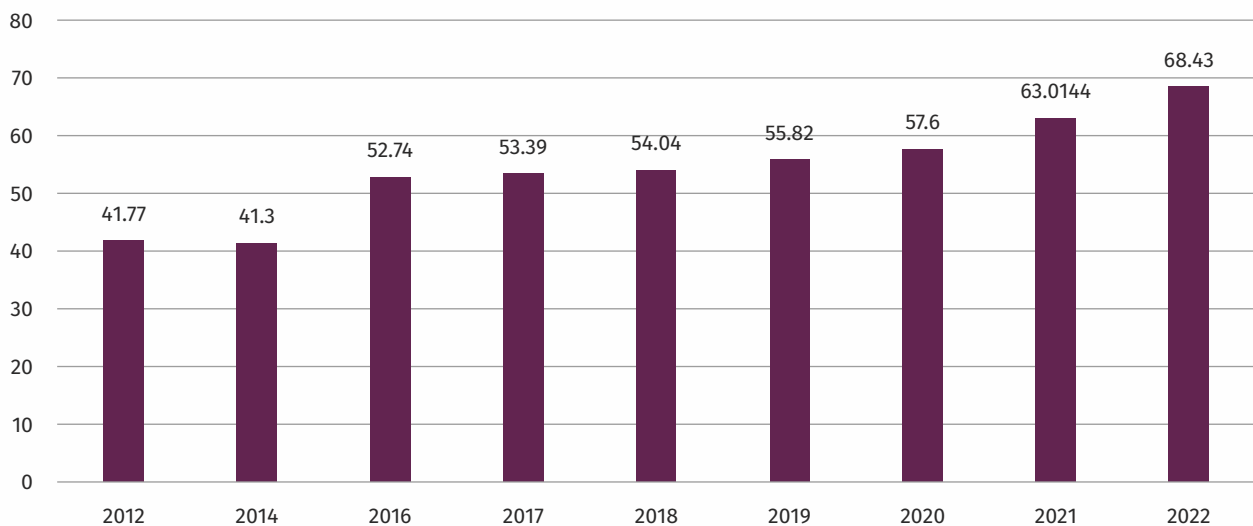
Nominal (Current) and Real (Constant) of Popular Cigarette (Pack 20) Brand



Source: ADB The Governance Brief 2023 TARI calculation

This rate of increase of taxes on cigarettes has increased from 41.7% in 2011-12 to 68.3 % in 2022-23.

Taxes on Cigarette Value (%)

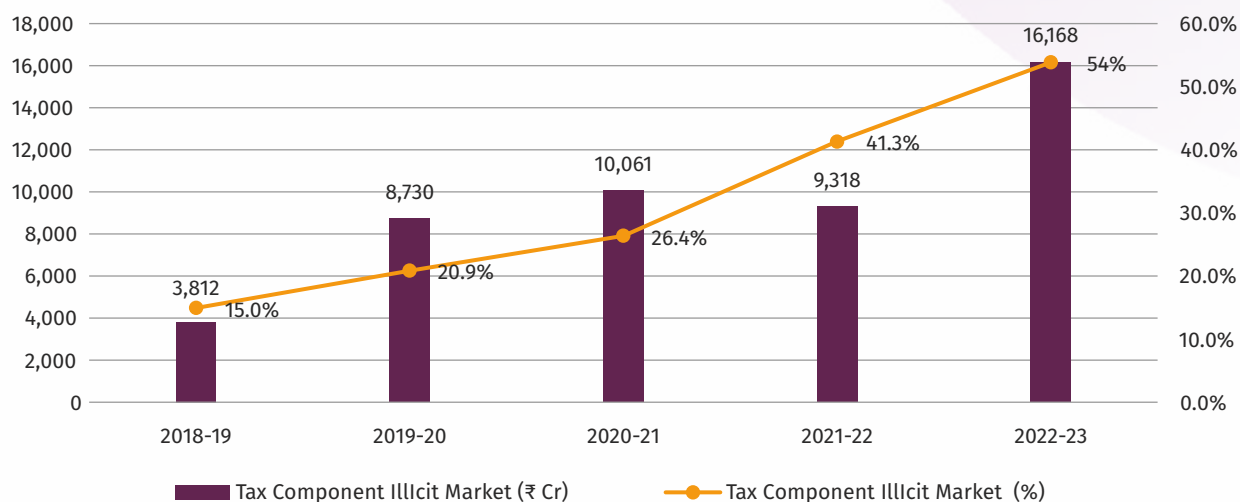


Source: ADB, The Governance Brief 2023

High taxes on cigarettes, particularly after the introduction of GST and the Compensation Cess, have made legal cigarettes unaffordable for many, driving consumers toward cheaper, untaxed alternatives. This widening price gap has fuelled the illicit cigarette market, with smuggling

and illegal production increasing. As a result, government revenues have been significantly impacted, while low-cost, tax-evading cigarettes continue to thrive across India, from urban markets to small paan stalls.¹⁰⁰

Tax Component Illicit Market



Source: TARI calculation

Excessive taxation has made legal cigarettes in India among the least affordable in the world, as noted in the WHO 2021 Report. This has, in turn, fuelled the growth of the illicit cigarette trade in the country.¹⁰¹

In terms of the illicit markets of tobacco, increase in taxes contribute 54% of the composition of the illicit markets in 2022-23 and the balance is due to inflation, increase in cost of inputs and other cost factors.

Other contributing factors include inflationary factors, wage and input cost increases, changes in profit margin etc.

2. Population Vulnerable to Illicit Tobacco Consumption

The illicit tobacco trade increases the accessibility and affordability of tobacco products, especially among youth with limited disposable income.¹⁰² Lower prices make young people more likely to experiment with and regularly use these products, often initiating tobacco use during adolescence—a critical period for developing long-term habits. A Research shows that many users begin their consumption between the ages of 15 and 24, intensifying the risk of early and sustained use. These products

¹⁰⁰ Tobacco Institute of India. (n.d.). TII Booklets. <https://www.tiionline.org/publications/tii-booklets/>

¹⁰¹ World Health Organization. (2023, September 25). Five years on: Value of Protocol to Eliminate Illicit Trade in Tobacco Products. WHO Framework Convention on Tobacco Control. <https://fctc.who.int/newsroom/news/item/25-09-2023-five-years-on-value-of-protocol-to-eliminate-illicit-trade-in-tobacco-products>

¹⁰² [2] Ghose, et al, Perception of tobacco use in young adults in urban India: a qualitative exploration with relevant health policy analysis, *ecancer* 2019, 13:915 <https://doi.org/10.3332/ecancer.2019.915>

bypass regulatory controls, further endangering young consumers and complicating efforts to reduce tobacco initiation rates.¹⁰³

Illegal Alternative Tobacco Products

Despite a comprehensive e-cigarette ban in India, young, educated adults continue to be at risk of consumption. As per a study, 23% have experimented with e-cigarettes, and 8% are dual users of both tobacco and e-cigarettes. These products remain easily accessible through social networks and retail outlets, while peer influence and the belief that e-cigarettes are less harmful increase their vulnerability.¹⁰⁴ The sharp rise in e-cigarette seizures—from 11,000 units in 2021-22 to 369,612 in 2022-23— reflects the despite demand despite the ban.

The illegal trade of smokeless tobacco (SLT) in India significantly increases the accessibility and affordability of these products, particularly among vulnerable rural and semi-urban populations. Despite a nationwide ban on gutka in 2013, the widespread availability of twin packets—sold separately but used to recreate illegal gutka—allows consumers to circumvent the ban. This practice exposes economically vulnerable groups to more significant risks, as these products are often sold without legally mandated health warning labels (HWLs) and at inflated and reduced prices, aggravating health and financial vulnerabilities.¹⁰⁵

Illicit tobacco consumption in India disproportionately affects vulnerable populations, including low-income households, rural communities, and youth, who are drawn to

these products due to affordability and accessibility. The persistence of the illicit tobacco market, despite regulatory efforts, exacerbates health risks and undermines public health control strategies.

Vulnerability of Certain Fractile Class of NSSO and NFHS Survey

NFHS survey says that consumption of tobacco is the highest among the age group of 20-49 and with the increasing consumption of alternative products like e cigarettes and vapes, which are banned in India, especially among the younger population, who have better education, income and mobility, illicit tobacco markets will continue to thrive.

The consumption of tobacco shows distinct patterns across income fractiles in both rural and urban areas. In the lowest-income groups (0-30%), rural consumers contribute 21.29% to total rural consumption but account for 15.20% of the total tobacco products market. Urban counterparts in the same income group contribute 22.45% to urban consumption, but accounting for just 6.30% of total tobacco consumption. These groups, constrained by limited financial capacity, are the most vulnerable to illicit tobacco products. Their price sensitivity often drives them toward cheaper, unregulated alternatives, increasing their exposure to health risks and unverified products. For instance, the illegal trade of smokeless tobacco (SLT) in India significantly increases the accessibility and affordability of these products, particularly among vulnerable rural and semi-urban populations.¹⁰⁶

¹⁰³ Pettigrew, S., Santos, J. A., Miller, M., Raj, T. S., Jun, M., & Morelli, G. (2023). E-cigarettes: A continuing public health challenge in India despite comprehensive bans. *Preventive Medicine Reports*, 31, 102108. <https://doi.org/10.1016/j.pmedr.2022.102108>

¹⁰⁴ Welding, K., Saraf, S., Iacobelli, M., Smith, K. C., Puntambekar, N., Gupta, P. C., & Cohen, J. E. (n.d.). Beyond Gutka: Evidence of illegal smokeless tobacco in rural and semi-urban areas in India. *Journal of Global Health Reports*

¹⁰⁵ Welding, K., Saraf, S., Iacobelli, M., Smith, K. C., Puntambekar, N., Gupta, P. C., & Cohen, J. E. (n.d.). Beyond Gutka: Evidence of illegal smokeless tobacco in rural and semi-urban areas in India. *Journal of Global Health Reports*.

¹⁰⁶ Welding, K., Saraf, S., Iacobelli, M., Smith, K. C., Puntambekar, N., Gupta, P. C., & Cohen, J. E. (n.d.). Beyond Gutka: Evidence of illegal smokeless tobacco in rural and semi-urban areas in India. *Journal of Global Health Reports*.

Tobacco Products: Key Takeaways

The markets and consumption pattern

Tobacco products consist of cigarettes, bidi, SLTs and other forms etc. Rural population drives tobacco consumption as 71.8% in value terms is consumed by rural population. Rural consumption significantly surpasses urban in terms of quantity, as unit price of the prevalent tobacco types is lower compared to urban.

Rural and Urban narrative

- » Across all rural classes, MPCE on tobacco increased from ₹20.66 in 2011-12 to ₹21.56 in constant prices and ₹49.04 in current prices in 2022-23, reflecting a 4% rise in constant prices and a 137% rise in current prices, against a CPI increase of 98.4% in pan, tobacco and intoxicants. This suggests that rising prices are driving the consumption of tobacco products.
- » For the middle rural classes (50-90% fractile), MPCE growth at constant prices is flat or negative, with decreases ranging from 1-7%, indicating declining consumption in real terms. Current price expenditure shows growth, with increases between 111-148%, driven by inflation and higher taxes.
- » Between 2011-12 and 2022-23, across all urban classes, MPCE on tobacco products increased from ₹19.4 in 2011-12 to ₹21.36 in 2022-23 in constant prices, but rose by 150% to ₹48.58 in current prices, with the CPI for pan, tobacco, and intoxicants at 103.5% for the same period, reflecting a

trend of declining prevalence. The increase in urban consumption in value terms is driven by taxes and inflation, which may also indicate that illicit tobacco products are being increasingly consumed as the tax arbitrage between legal and illicit products has huge economic incentives.

- » Urban and rural upper-middle-class groups (60-95% fractile), together representing one-third of the population, account for 41% of total tobacco consumption in value terms, mainly in form of higher priced tobacco products- both smokeless and smoke.

Illicit market and its drivers

- » Between 2018-19 and 2022-23, the illicit tobacco market grew by 17.7%, from ₹25,495 crore to ₹30,012 crore.
- » At constant prices, the illicit market grew from ₹7,699 crores in 2011-12 to ₹13,198 crores in 2022-23, indicating a significant growth (nearly a two-fold increase) in the actual volume of illicit tobacco. In terms of growth in actual prices, the illicit markets grew for the same period by 120% to ₹16,819 crores, reflecting the effects of inflation, rising costs of inputs and taxes.
- » In the illicit tobacco market, over 50% of its growth is attributed to tax increases, with the remainder driven by inflation, rising input costs, and other factors. The tax component rose from 15% to 54% by 2022-23.
- » Government of India mandates that pictorial warnings cover 85% of the front and back of tobacco product packs.

However, this has led to the growth of the illegal cigarette trade, which sell products without any such warning and hence consumption of such products (usually smuggled) weans away consumers from legal markets.

- » Despite a comprehensive e-cigarette ban in India, young, educated adults continue

to be at risk of consumption. These products remain easily accessible through social networks and retail outlets, while peer influence and the belief that e-cigarettes are less harmful increase their vulnerability. The steep rise in e-cigarette seizures - from 11,000 units in 2021-22 to 369,612 in 2022-23—reflects the growing illicit demand despite the ban.



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Conclusion

8

Conclusion

The India economic story is driven by its consuming class, who apart from being young are increasingly better educated, skilled, urbanised and have more disposable income. The consumption story is important not just for India's continued economic success and also drives government policies and reforms.

According to World Economic Forum (WEF), India's consumer market in 2030 is projected to grow to about USD 6 trillion,¹⁰⁷ with a rising middle class that is driving domestic consumption. With aspirations of population on the rise, the demand for consumables is set to soar, but the markets are particularly vulnerable to illicit players who have an economic incentive to maximise their returns at the cost of the consumer, producer, government and society.

The current study, which looked at the changing factors of consumption across key five industries, and their impact on the social and economic landscape, brings us to the following thoughts for discussions and future research:

Consumption is on the rise; the shift is to value added and lifestyle goods

Across the five industries chosen for this study, we find consumption increasing significantly between 2011 and 2023: in most cases rural leading the way but the per capita value is understandably higher in urban areas.

What is this consumption driven by, i.e. what kind of products are people buying more?

At a broad level, we find that there is a shift from essential consumption to consumption of products that are discretionary in nature. For instance, when it comes of packaged foods, there is a shift to higher value processed goods such as non-alcoholic beverages, milk products, that fall in a higher tax bracket. There has been a distinct shift in consumption from a higher proportion of staples and basic food to more processed food, oils etc in the diet across India.

In the case of textiles and apparel, it is the rural consumption which is driving overall consumption, and it is moving towards higher value readymade garments. These products being manufactured have a higher tax implication and increased demand also sees the profusion of counterfeit, smuggled and other illicit products into the markets.

The same trend is seen in personal and household goods where the consumption is fuelled by the skincare and beauty segment, which has risen by 634% in rural and 435% in urban spends.

Value added consumption fuelling the illicit market economy

Consumption drivers act differently for each industry. As in the case of packaged foods, which is a higher taxed group especially among processed food categories (which our analysis show is consumed more), we

¹⁰⁷ World Economic Forum, Future of Consumption in Fast-Growth Consumer Markets: INDIA, Insight Report, 2019, p. 10.

find that higher taxation is clearly a factor which drives the illicit economy.

For instance, in the packaged food segments, the taxes at higher end of the consumption basket on packaged foods being at 18%, therefore there is an incentive for illicit players to get active. Such a shift brings into play forces that use tax arbitrage and those who supply low-value illicit alternatives. This tendency is validated by the observed growth of the illicit market segment, which in the case of packaged foods, grew by 761.1% between 2011-12 and 2022-23.

The top 30% fractile, both in cases of urban and rural, are the primary consumers, but it is the lower and-middle-income households that are more vulnerable to illicit packaged foods. This is the same group which at one hand is attracted to aspiration-driven consumption, but is also sensitive to price shocks.

Considering the textiles and apparel market, which is not a highly taxed industry, the rural population contributes 62.5% of the consumption in value terms and a clear shift is seen with people moving to higher value readymade garments, which is taxed and also aspirational. This brings in players who bridge the demand through illicit products, knock offs counterfeit. At the higher income fractile, smuggling of branded and fake goods are a real risk. The industry also sees a huge illegal imports of used, mis-classified and other types of products, that are otherwise meant for land fill in developed countries. This fuels illicit markets in this segment.

Consumption of textiles and apparel shows clear disparity across income fractiles in both rural and urban areas. In the lowest-income groups (0-30%), rural consumers contribute 19.46% to total rural consump-

tion but account for only 12.16% of total textiles and apparel in the market, while their urban counterparts contribute 17%, representing just 6.4% of total consumption. These lower-income groups prioritise essential clothing needs, making them more vulnerable to counterfeit products due to price sensitivity.

Similarly, the huge rise in consumption of skincare and beauty segments, that is taxed as high as 28% in case of perfumes and other beauty products, is prone to counterfeiting, smuggling and knock offs. Between 2017-18 and 2022-23, the illicit market estimates grew by 71.6% in this segment.

The message that emerges from our study is that counterfeiters use aspirational consumption to bring counterfeit products in the market. And the consumer, especially in the lower and middle fractile, are vulnerable due to their price sensitivity.

We find a relationship between higher taxes and the proliferation of the illicit market economy

As consumers are gravitating towards consumption of aspirational goods, driven by a myriad of factors (such as rising urbanisation, increase in per capita income and increase in education levels), they are spending more on products that are aspirational. This segment is easily targeted by the counterfeiters by deploying deceptive tactics. The study of these industries finds that non-deceptive factors drive illicit economy with price being the biggest motivator of getting people to buy. The analysis of the five industries clearly points towards the lower and the middle fractile being the more vulnerable group when it comes to illicit consumption.

The impact is far more profound in the case of industries that have historically been

exposed to higher tax regime, i.e. tobacco products and alcoholic beverages. The study shows that at constant prices, the illicit market for tobacco products grew from ₹7,699 crores in 2011-12 to ₹13,198 crores in 2022-23, indicating a significant growth in the actual volume of illicit markets.

High taxation creates an arbitrage and is a significant factor in the growth of the illicit tobacco products market, as it diverts trade to the illicit market due to tax-related consumer prices. Rapid or sudden tax increases exacerbate this shift, pushing consumers towards untaxed and illicit sources when legal products become too expensive. There is an increase of 11.4 % in NCCD+ Specific cess cigarettes from the 2017-20 period to the 2020-22 period with an additional increase of excise from 5-10%.

The analysis, using the principles of constant prices reflects that the price of a pack of cigarettes in 2011 of ₹70 should cost ₹104 in 2020 after adjusting for the deflector factor issued by NSSO. However, in terms of real prices the pack costs ₹190 in 2020. The prices in actual or real prices have increased by 271% in comparison to 148% in constant prices terms. The difference is the arbitrage of taxes, inflation and rise in costs of inputs.

The consumption of tobacco products shows distinct patterns across income fractiles in both rural and urban areas. In the lowest-income groups (0-30%), rural consumers contribute 21.29% to total rural consumption but account for 15.20% of the total tobacco products market. Urban counterparts in the same income group contribute 22.45% to urban consumption, but accounting for just 6.30% of total tobacco products consumption. These groups, constrained by limited financial capacity, are the most vulnerable to illicit tobacco products. Their price sensitivity often drives them toward cheaper, unregulated alternatives, increasing their exposure to health risks and unverified products.

A similar situation is seen in the case of alcoholic beverages, High taxation is a significant factor in the growth of the illicit alcohol market, as it diverts trade to the illicit market due to tax-related consumer prices, making legal alcohol less affordable.

In the coming years, it is expected that with enhanced government oversight and use of technology in surveillance in order to tackle tax losses and illicit markets, it is likely that illicit size will increase due to the size of the illicit market will increase at much lower rates than at which the industry will grow.



Annexure-I:

Illicit Market Estimation -Research Approach and Methodology

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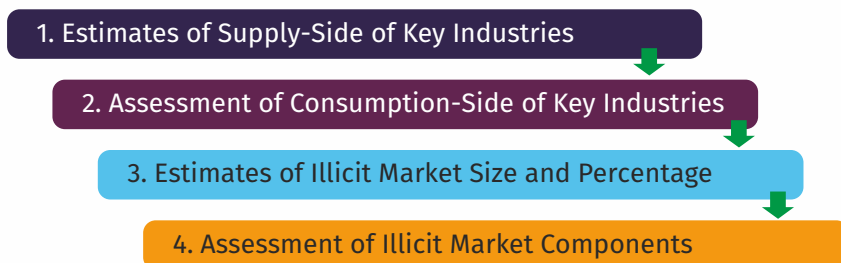
Research Approach

Quantifying any illicit market with absolute precision is quite difficult due to its secretive nature and lack of verifiable data.¹⁰⁸ This renders the assignment of making any estimates about the illicit market quite perplexing and intricate.

Our research uses credible data sources from the Government of India, Ministry of Statistics and Programme Implementation (MoSPI) such as the Annual Survey of Industries and NSSO survey, Private Final

Consumption Expenditure (PFCE) provided by Central Statistical Office (CSO), and Directorate General of Commercial Intelligence (DGCIS) under the Ministry of Commerce and Industries. Our methodology estimates illicit markets through demand and supply gaps.

This research, as each research has to, makes certain assumptions and works with limitations in the absence of reliable data, resources, and time. These assumptions are highlighted at appropriate places in the report. The study adopts a four-staged research approach to achieve the objectives:



Source: TARI Representation

Research Methodology

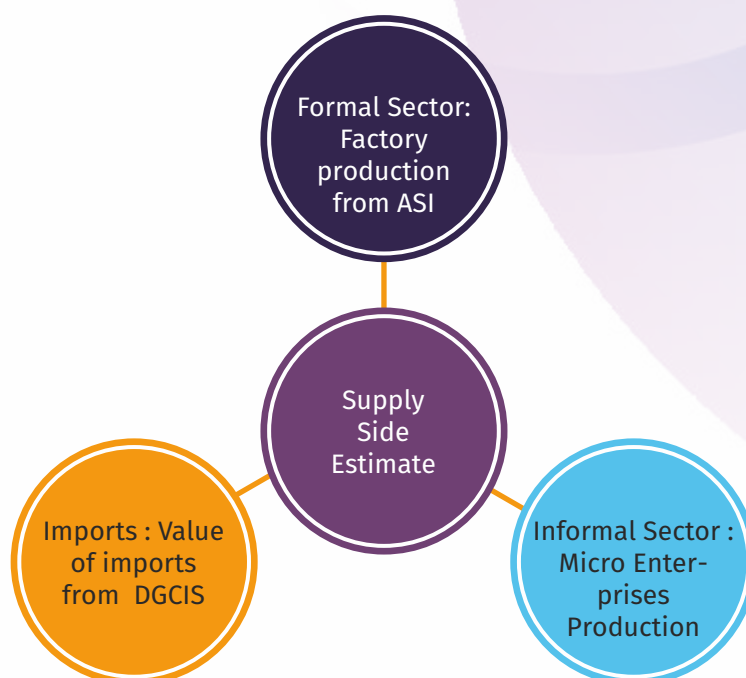
All research stages and steps involved in the assessment of the illicit market in the key industries are discussed in detail in the following sub sections.

1. Estimates of Supply-Side of Key Industries

The first stage of research focuses on the estimation of the supply side of key

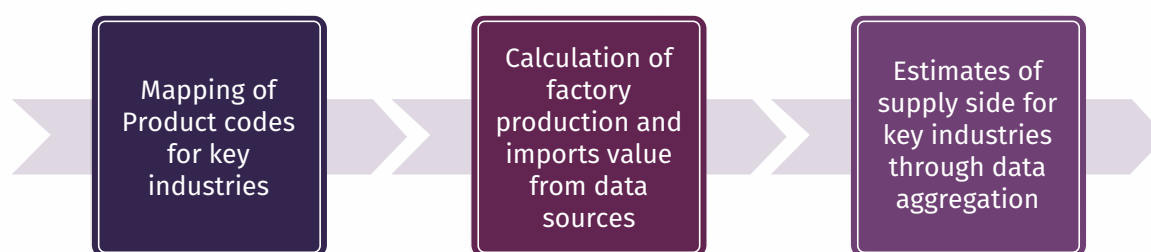
Industries. We arrive at holistic estimates of the supply-side including formal sector (incorporated) and informal sector (unincorporated enterprises) of the industry with publicly available national-level data from the Annual Survey of Industries (ASI), MoSPI, and 73rd round NSSO survey of the unincorporated enterprises of India and imports from foreign countries through DGCIS data.

¹⁰⁸ OECD (2016), Illicit Trade: Converging Criminal Networks, OECD Reviews of Risk Management Policies, OECD Publishing, Paris. Available at : <http://dx.doi.org/10.1787/9789264251847-en>



Source: TARI Representation

Three critical steps of this research stage to arrive at the supply-side estimates of key industries are:



Source: TARI Representation

Mapping of Product Codes of Key Industries

The first step for analysis of the supply side of products is mapping product codes for each of the key manufacturing industries as production data is sourced from three different data sources: Annual Survey of Industries – Incorporated Enterprises, NSSO – 73rd Round for incorporated enterprises, and DGCIS for Imports data.

Formal Sector Production ASI - Gross Sales Value: The Central Statistical Organisation (CSO) of MoSPI collects national data on manufacturing activity for each district (rural and urban) to compile the Annual Survey of Industries (ASI) statistics. Gross

Sales Value (GSV) in ASI data includes product cost, excise duty, sales tax, Goods and Service Tax (GST), and other distribution expenses.

ASI 2017-2018 has changed its coding structure and now uses the NPCMS code structure for product classification and industry grouping which is a 7-digit classification. The previous FICCI-TARI study used ASICC code classification (5 digits). To maintain consistency and comparability, NPCMS codes were mapped with ASICC codes and then allocated to 5 industry sectors. Additional NPCMS codes identified post mapping with ASICC codes further deciphered to allocate to concerned industry sectors.

Key Industry	Key Products	NPCMS Codes
Alcoholic Beverages	Country liquor	2413101
	Foreign/refined liquor	2413102, 2413103, 2413104, 2413105, 2413106, 2413199, 2413900, 2421201
	Wine	2421102, 2421199, 2421202, 2421204, 2421299, 2422001, 2422099
	Beer	2431000
Textiles and Apparel	Clothing and Apparels	2651002, 2651003, 2651006, 2651008, 2651099, 2652099, 2653099, 2654002, 2654003, 2654099, 2656000, 2661002, 2661003, 2661004, 2661005, 2661007, 2661099, 2662003, 2662004, 2662006, 2662099, 2663001, 2663002, 2663003, 2663004, 2663006, 2663007, 2663008, 2663099, 2669002, 2669003, 2669005, 2669007, 2669008, 2669009, 2669010, 2669011, 2669099, 2671099, 2672001, 2672002, 2672003, 2672004, 2672006, 2672099, 2673001, 2673002, 2673003, 2673099, 2674001, 2674002, 2674004, 2674005, 2674099, 2675002, 2676001, 2676002, 2676003, 2676004, 2676099, 2677002, 2677003, 2684002, 2684099, 2685000, 2791199, 2791201, 2791299, 2799700, 2811099, 2819001, 2819002, 2819003, 2819099, 2821003, 2821099, 2822101, 2822103, 2822105, 2822106, 2822199, 2822201, 2822202, 2822204, 2822301, 2822304, 2822307, 2822399, 2822401, 2822402, 2822404, 2822499, 2822502, 2822599, 2822701, 2822702, 2822799, 2822803, 2822899, 2822901, 2822902, 2822903, 2822904, 2822999, 2823101, 2823103, 2823105, 2823199, 2823202, 2823203, 2823205, 2823301, 2823304, 2823306, 2823401, 2823403, 2823404, 2823501, 2823502, 2823599, 2823603, 2823699, 2823702, 2823799, 2823802, 2823803, 2823804, 2823805, 2823806, 2823899, 2824103, 2824199, 2824201, 2824202, 2824203, 2824204, 2824301, 2824302, 2824399, 2825001, 2825002, 2825003, 2825099, 2831009, 2831010, 2833003, 3626014, 3626099, 2823499, 2821001
	Household Textiles	2711001, 2711002, 2711099, 2712001, 2712099, 2713001, 2713002, 2713099, 2718003, 2718099, 2722003, 3626044, 4481300
Tobacco Products	Tobacco Products	325003, 2367008, 2501002, 2501004, 2501005, 2501006, 2501007, 2501008, 2501011, 2501099, 2502002, 2502099, 2509002, 2509003, 2509004, 2509099
FMCG- Personal and Household Care Goods	Personal Care Goods	3532305, 3532328, 3529046, 3532103, 3532199, 3532201, 3532209, 3532212, 3532306, 3532307, 3532342, 3532343, 3532344, 3532351, 3532352, 3694009, 3899306, 3899310, 3532326, 3532327, 3532335, 3532336, 3532337, 3532338, 3532339, 3532353, 3532313, 3532318, 3532320, 3541002, 3541007, 3532301, 3532302, 3532303, 3532308, 3532314, 3532321, 3532322, 3532325, 3532340, 3541001, 3541003, 3541010, 3541013, 3541015, 3541018, 3541099, 3532347, 3532348, 3532329, 3532330, 3532331, 3532332, 3532333, 3532346
	Household Care Goods	3532345, 3533101, 3532341, 3532399, 3423134, 3532202, 3532203, 3532204, 3532205, 3532206, 3532207, 3532299, 3532350, 3532354, 3533102, 3533103, 3533105, 3533199, 4481609

Key Industry	Key Products	NPCMS Codes
FMCG-Packaged Food	Oils and fats	2152500, 2154100, 2154200, 2154300, 2154400, 2154500, 2154600, 2154700, 2154800, 2154901, 2154902, 2154903, 2154999, 2155000, 2159001, 2159002, 2159003, 2159004, 2159099, 3455099, 3527022
	Milk and Milk Products	2221100, 2221200, 2222100, 2222200, 2222901, 2222902, 2225100, 2225200, 2225900, 2224900, 2223001, 2223002, 2223099, 2224101, 2224102, 2224201, 2224202, 2211001, 2211002, 2211003
	Sugar, Chocolate and Confectionery	2353002, 2353099, 2365000, 2366000, 2367003, 2367004, 2367099, 2351101, 2352002, 2351102, 291000
	Tea and Coffee	2391201, 2391206, 2391301, 2391302, 2391303, 2391305, 2391401, 2391403, 2391404
	Non-Alcoholic Beverages	2441001, 2441002, 2441003, , 2449002, 2449099, 2143101, 2143301, 2143401, 2143501, 2143901, 2143902, 2143903, 2143904

Source: Annual Survey of Industries, MOSPI

Informal Sector- Unincorporated Enterprise (MSME: Informal sector comprising of unincorporated enterprises is important for the Indian economy because of the large number of enterprises and the magnitude of employment.

The Annual Survey Of Unincorporated Sector, Enterprises (ASUSE), 2021-2022 gives an estimate of 5.97 crore establishments belonging to unincorporated 'manufacturing', 'trade' and 'other services sector' for financial year 2021-22. The share of 'manufacturing', 'trade' and 'other services' in the total estimated establishments stands at 28.90%, 37.69% and 33.42% respectively. Out

of these estimated 5.97 crore establishments, about 3.31 crore belong to rural areas and about 2.65 crore pertain to urban areas. 5.13 crore establishments have been observed to be Own Account Establishments (OAE) and the remaining i.e. 84 lakh are Hired Worker Establishments (HWE).

This study covers the informal sector (Unincorporated Enterprises) involved in diverse domains of non-agricultural production activities through Annual Survey Of Unincorporated Sector, Enterprises (ASUSE), 2021-2022 and matches them data from NSS 73rd round survey (2015-2016) data, which used in our previous study.

Key Industry	Activity Category	Description of activity category
FMCG-Packaged Food	M2	Manufacture of food products
Alcoholic Beverages and Non-Alcoholic Beverages	M3	Manufacture of beverages
Tobacco Products	M4	Manufacture of tobacco products
Textiles and Apparel	M5	Manufacture of textiles
Textiles and Apparel	M6	Manufacture of wearing apparel
FMCG-Personal and Household Care Goods	M12	Manufacture of chemicals and chemical products

Source: Annual Survey Of Unincorporated Sector, Enterprises (ASUSE), 2021-2022

Imports: The value of goods imported into the country has been taken from the data published by the Directorate General of Commercial Intelligence and Statistics (DGCIS) under the Ministry of Commerce and

Industry. ASI 2017-18 uses NPCMS code classification whereas import data uses ITC Harmonic System (HS) codes. It is not possible to accurately map NPCMS and ITC HS codes.

Key Industry	HS Codes
Alcoholic Beverages	220300, 220410, 220421, 220429, 220430, 220510, 220590, 220600, 220710, 220720, 220820, 220830, 220840, 220850, 220860, 220870, 220890
Textiles and Apparel	401511, 401519, 401590, 420310, 420321, 420329, 420330, 420340, 430310, 430390, 511111, 511119, 511211, 511219, 511220, 511230, 511290, 511300, 521112, 521212, 521213, 521214, 521215, 521221, 521222, 521223, 521224, 521225, 540710, 540741, 540751, 540769, 540782, 540783, 540784, 551312, 551323, 551349, 551412, 551419, 551511, 551512, 551513, 551521, 551522, 551529, 551611, 551612, 551613, 551614, 551621, 551622, 551624, 551631, 551632, 551633, 551634, 551641, 551642, 551643, 551644, 551692, 551693, 560210, 580136, 580211, 580219, 580220, 580230, 580610, 580632, 580639, 580640, 580900, 590190, 590310, 590320, 590390, 590700, 591110, 591131, 591132, 600122, 600240, 600290, 600320, 600330, 600340, 600390, 600410, 600490, 600521, 600522, 600523, 600524, 600541, 600542, 600543, 600544, 600590, 600610, 600621, 600622, 600623, 600624, 600631, 600632, 600633, 600634, 600641, 600642, 600643, 600644, 600690, 610120, 610130, 610190, 610210, 610220, 610230, 610290, 610310, 610322, 610323, 610329, 610331, 610332, 610333, 610339, 610341, 610342, 610343, 610349, 610413, 610419, 610422, 610423, 610429, 610431, 610432, 610433, 610439, 610441, 610442, 610443, 610444, 610449, 610451, 610452, 610453, 610459, 610461, 610462, 610463, 610469, 610510, 610520, 610590, 610610, 610620, 610690, 610711, 610712, 610719, 610721, 610722, 610729, 610791, 610799, 610811, 610819, 610821, 610822, 610829, 610831, 610832, 610839, 610891, 610892, 610899, 611120, 611130, 611190, 611211, 611212, 611219, 611220, 611231, 611239, 611241, 611249, 611510, 611521, 611522, 611529, 611530, 611594, 611595, 611596, 611599, 611610, 611691, 611692, 611693, 611699, 611710, 611780, 611790, 620111, 620112, 620113, 620119, 620191, 620192, 620193, 620199, 620211, 620212, 620213, 620219, 620291, 620292, 620293, 620299, 620311, 620312, 620319, 20322, 620323, 620329, 20331, 620332, 620333, 620339, 620341, 620342, 620343, 620349, 620411, 620412, 620413, 620419, 620421, 620422, 620423, 620429, 20431, 620432, 620433, 620439, 620441, 620442, 620443, 620444, 620449, 620451, 620452, 620453, 620459, 20461, 620462, 620463, 620469, 620520, 620530, 620590, 620610, 620620, 620630, 620640, 620690, 620711, 620719, 620721, 620722, 620729, 620791, 620799, , 20811, 620819, 620821, 620822, 620829, 620891, 620892, 620899, 620920, 620930, 620990, 621020, 621030, 621320, 621390, 621410, 621420, 621430, 621440, 621490, 621510, 621520, 621590, 621600, 621710, 630800, 701951, 701952, 621790, 630110, , 630120, 630130, 630140, 630190, 630210, 630221, 630222, 630229, 630231, 630232, 630239, 630240, 630251, 630253, 630259, 630260, 630291, 630293, 630299, 630312, 630319, 630391, 630392, 630399, 630419
Tobacco Products	240110, 240120, 240130, 240210, 240220, 240290, 240311, 240319, 240391, 240399

Key Industry	HS Codes
FMCG-Personal and Household Care Goods	330300, 330410, 330420, 330430, 330491, 330499, 330510, 330520, 330530, 330590, 330610, 330620, 330690, 330710, 330720, 330730, 330741, 330749, 330790, 340111, 340119, 340120, 340130
FMCG-Packaged Food	15079010, 15089091, 15099010, 15099090, 15100091, 15119010, 15119020, 15119090, 15121910, 15121930, 15122910, 15131900, 15141920, 15149920, 15149930, 15151910, 15152910, 15155091, 15162011, 15162021, 5162091, 15180031, 40110, 40120, 40221, 40229, 40390, 40520, 40590, 40610, 40140, 40150, 40210, 40291, 40299, 40410, 40510, 40620, 40630, 40690, 40310, 4090000, 17011200, 17011310, 17011320, 17011390, 17011410, 17011490, 17019100, 7019910, 17019990, 18069010, 18069020, 18069030, 18069040, 18069090, 17041000, 17049010, 17049020, 17049030, 17049090, 9021010, 9021020, 9021030, 9021090, 9022010, 9022090, 9023010, 9023020, 9023090, 9024010, 9024020, 024030, 9024040, 9024090, 20091900, 20092100, 20092900, 20093100, 20093900, 20094100, 20094900, 20096900, 20097100, 20097900, 20098910, 20098990, 20099000, 21069011, 21069019, 22011010, 22011020, 22021010, 22029920, 20091100, 20091200, 22021020, 22021090, 22029100, 2029990

Source: DGCIS, Ministry of Commerce and Trade

Calculation of Factory Production and Imports Value

Formal Sector Factory Production: The data covered the ASI survey for the financial year

2017-18, 2018-19, 2019-20, 2020-21 and 2021-22. It is extracted from Block A and Block J. Gross Sales Value (GSV) data of selected products calculated after taking the multiplier effect as suggested by CSO.

Particulars	Description of data series	Data Points evaluated
Annual Survey of Industries 2017-18, 2018-19, 2019-20, 2020-21 and 2021-22	Factory-wise details of manufacturing activities pan India.	Block A and Block J, gross sales value, multiplier, NPCMS Code, etc.

Informal Sector (Unincorporated Enterprises) Production: Annual Survey of Unincorporated Sector, Enterprises (ASUSE), 2021-2022 covers all unincorporated enterprises involved in non-agricultural activities. The output per establishment for both Own Account Establishments (OAE) and Hired Worker Establishments (HWE) in both rural and urban is provided in the report. We calculated the total output for each of key of the industry data using this information after making some industry levels appropriations. We also made adjustments using estimates using NSS 73rd round (2015-16) enterprise survey data to arrive final informal enterprises output for each of the

key industry for different year under our consideration.

Imports: Imports data for the years of our analysis is taken from data published by the Directorate General of Commercial Intelligence and Statistics (DGCIS) at 8-digit code classification for identified industries.

Estimate of Supply-Side of Key Industries through Data Aggregation

The total supply side of a key industry is estimated by aggregation of production data of Incorporated Enterprises (Annual Survey of Industries) and unincorporated enterprises (NSSO – 73rd Round) and Imports data from DGCIS.



2. Assessment of Consumption-Side of Key Industries

The estimates of Private Final Consumption Expenditure (PFCE) are compiled annually as a part of the National Account Statistics (NAS) by CSO using the commodity flow approach. This approach makes use of the estimates of quantum and value of different commodities produced and available, flowing finally into the consumption process of houses and the private Non-Profit Institution Serving Household (NPISH) during the accounting year, which is generally the financial year. The sum of the commodity-wise estimates gives the aggregate estimates of the PFCE. On the other hand, NSSO estimates are based on Household Consumption Expenditure Surveys (HCES), which are conducted every five years with a much larger sample and annually with a relatively thin sample. In this sample survey, the consumption expenditure of a random sample of households is ascertained directly by canvassing a well-designed schedule of inquiry.

In our study, we also compared NSSO 2011-12 data with CSO 2011-12 PFCE data to compare consumption expenditure data for two sources. Data for all sectors are comparable except for alcohol where NSSO consumption data is almost double as compared to PFCE data.

For this study, PFCE data were analyzed for 2017-18, 2018-19, and 2019-20 provided by CSO of Ministry of Statistical and Programme Implementation (MoSPI). The report provides private final consumption expenditure (PFCE) data at current prices levels of expenditure items of the products. As data is not available at disaggregate level, certain approximations are done.

3. Estimates of Illicit Market Size and Percentage

Using the data obtained from both supply and demand sides in the previous section, for each of the five sectors covered in this study, the illicit market and illicit market percentage for each year are estimated based on calculations given below:

Illicit Market = Total Consumption – Total Supply

Illicit Market Percentage = $\frac{\text{(Total Consumption - Total Supply)}^*}{100 / \text{Total Consumption}}$

The difference between total consumption and total supply can primarily be attributed to the following:

- » Goods produced or imported and sold in the country by evading taxes
- » Sale of domestically produced counterfeited (either deceptive or non-deceptive) goods

The estimate of the Illicit market for key sectors is based on the gap between demand and legitimate supply of products. Illicit Market percentage is the estimated demand-supply gap as a percentage of total consumption. The illicit market percentage for key sectors for the years 2011-12 and 2017-18 (and following years) may not directly be comparable due to the following reasons:

- » CSO estimates in National Account Statistics (NAS) are obtained using the commodity flow approach, while NSSO estimates are based on Household Consumption Expenditure Surveys (HCES). Factors attributed to the differences include coverage, reference time frames and concepts, and methods of

estimation in the very approaches employed by the two agencies.

- » Changing international trade dynamics, where import and exports of commodities have changed significantly
- » National policies such as Make in India and Ease of doing business in recent years have promoted greater local manufacturing
- » Implementation of GST and demonetization may have a certain impact on illicit financial flow and consumption expenses.

4. Assessment of Illicit Market Components

We used current and constant prices of private final consumption expenditure (PFCE) provided by the Central Statistical Office (CSO), Ministry of Statistics & Program Implementation for each of the key industries to prepare a deflator for each year with 2011-12 as a base year. This deflator is used to estimate the constant prices of illicit markets for years under consideration for a key industry.

Constant Price Deflator for Key Industries (Base Year:2011-12)					
Year	Personal and Household Care Goods	FMCG-Packaged Food	Apparels and Textiles	Tobacco Products	Alcoholic Beverages
2011-12	1.000	1.000	1.000	1.000	1.000
2012-13	0.921	0.897	0.892	0.900	0.900
2013-14	0.869	0.843	0.815	0.825	0.804
2014-15	0.832	0.784	0.759	0.764	0.755
2015-16	0.801	0.755	0.718	0.699	0.718
2016-17	0.757	0.715	0.683	0.654	0.687
2017-18	0.737	0.687	0.652	0.612	0.673
2018-19	0.668	0.683	0.623	0.576	0.668
2019-20	0.633	0.665	0.612	0.553	0.630
2020-21	0.597	0.623	0.591	0.470	0.587
2021-22	0.571	0.583	0.552	0.450	0.563
2022-23	0.539	0.549	0.507	0.440	0.528

Source: Central Statistical Office (CSO), MOSPI, TARI Calculations





Annexure-II

Key Industries: Supply
and Consumption Side

Annexure-II: Key Industries: Supply and Consumption Side

Illicit market estimation for each of the key industries is based on our research approach to assess the gap between demand and supply to provide an illicit market value size estimate and illicit market percentage, which is provided in the main report. We here provide the supply and consumption side of each of the key industries.

FMCG - Packaged Foods: Supply Side

The processed food industry is a critical driver of India's economy due to its potential for large-scale employment generation and export growth. India ranks as the sixth-largest food and grocery market in the world, with the food processing sector contributing 32% to the market, 13% to total exports, and 6% to industrial investment.¹⁰⁹

The Government of India has introduced several policies to modernize and expand the food processing sector. The Pradhan Mantri Kisan Sampada Yojana (PMKSY) has significantly strengthened infrastructure by adding 86.06 LMT processing and 22.63 LMT preservation capacities between 2020 and

2023.¹¹⁰ Similarly, the PM Formalization of Micro Food Processing Enterprises (PMFME) Scheme supports 2 lakh micro-enterprises with financial, technical, and business aid through a budget of US\$ 1.3 billion (Rs. 10,000 crore).¹¹¹

Special emphasis on millet-based products is being implemented under PLISMBP, with US\$ 96 million earmarked for millet-based production. Additionally, the Production Linked Incentive (PLI) Scheme worth 10,900 crores, running from 2021 to 2027, aims to create global food champions and elevate Indian food brands on the global stage.¹¹²

The Government's policies further incentivize investment by exempting processed foods from licensing, allowing 100% FDI through automatic routes, and offering lower GST rates for over 71% of food products. Combined with US\$ 12.58 billion in FDI inflows (April 2000 - March 2024),¹¹³ the sector has seen significant growth, supported by initiatives like US\$ 1 trillion in infrastructure spending and US\$ 300 billion for rural development.¹¹⁴

The 2024-25 budget further supports this growth, allocating Rs. 3,290 crore (US\$ 396 million) to the Ministry of Food Processing

¹⁰⁹ Government of Uttar Pradesh. Food processing policy. https://invest.up.gov.in/wp-content/uploads/2023/04/English_Final-Food-processing-policy_160423.pdf

¹¹⁰ Press Information Bureau. (2024). Government of India launches initiatives to boost food processing sector. Retrieved September 16, 2024, from <https://pib.gov.in/PressReleasePage.aspx?PRID=2004394>

¹¹¹ Government of India. (n.d.). PM formalisation of micro food processing enterprises (PMFME) scheme. Retrieved September 16, 2024, from <https://www.india.gov.in/pm-formalisation-micro-food-processing-enterprises-pmfme-scheme>

¹¹² Press Information Bureau. (2023). India's food processing sector witnesses robust growth under PMFME scheme. Retrieved September 16, 2024, from <https://pib.gov.in/PressReleasePage.aspx?PRID=1946647>

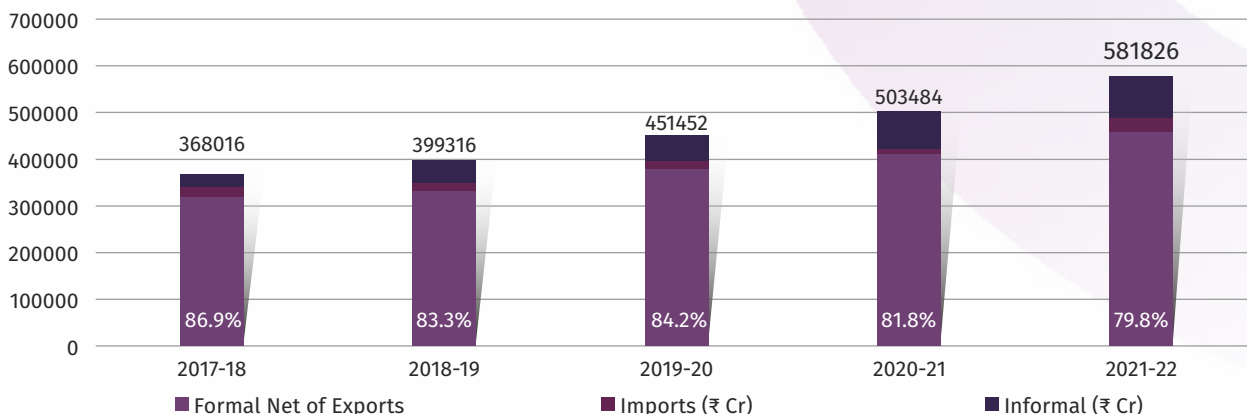
¹¹³ India Brand Equity Foundation. (n.d.). Manufacturing sector in India. Retrieved September 16, 2024, from <https://www.ibef.org/industry/manufacturing-sector-india>

¹¹⁴ India Brand Equity Foundation. (n.d.). Food processing industry in India. Retrieved September 16, 2024, from <https://www.ibef.org/industry/food-processing-presentation>

Industries, with a focus on expanding food parks and mega projects.¹¹⁵ Together, these initiatives and investments are transforming

India's food processing sector into a global player by reducing wastage, creating jobs, and boosting exports.

FMCG: Packaged Food : Supply Estimates



Source: TARI estimates

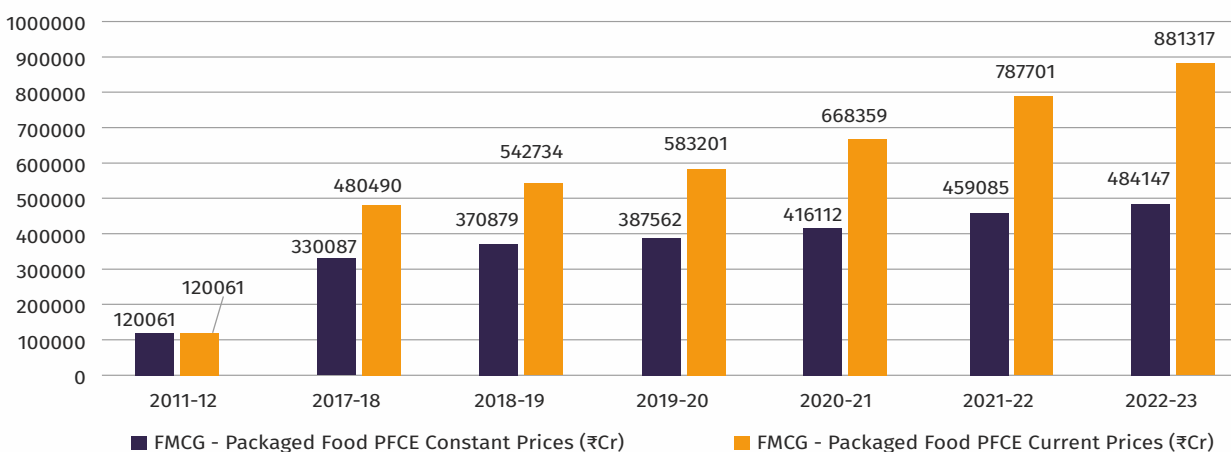
The packaged food supply side was ₹3,68,016 crores in 2017-18 and grew to ₹5,81,826 crores in 2021-22. The formal sector, valued at ₹3,19,791 crores in 2017-18, increased to ₹4,64,115 crores by 2021-22, representing 79.8% of the total supply. Imports accounted for ₹28,407 crores (4.9%) in 2021-22, while the informal sector contributed ₹89,305 crores (15.3%) during the same period, reflecting a growing demand for processed packaged foods across both formal and informal markets. India's strong agriculture base and locally operating multinationals have reduced the import

dependency, with imports primarily in edible vegetable oils.

FMCG - Packaged Foods Consumption Side

Packaged Foods consumption is derived from private final consumption expenditure (PFCE) from National Accounts Statistics provided by CSO, MOSPI. Packaged food consumption increased from ₹120061 crores in 2011-12 to ₹ 8,81,317 crores in 2022-23 in nominal terms, reflecting a 633% increase over the 11-year period. In real terms (constant prices), consumption rose to ₹ 4,84,147 crores, marking an 303.3% increase.

Packaged Foods Consumption (Cr)



Source: TARI Estimates

¹¹⁵ Government of India. (n.d.). Union budget: Expenditure budget - all SBE. Retrieved September 16, 2024, from <https://www.indiabudget.gov.in/doc/eb/allsbef.pdf>

FMCG - Personal and Household Care Goods: Supply And Consumption Side

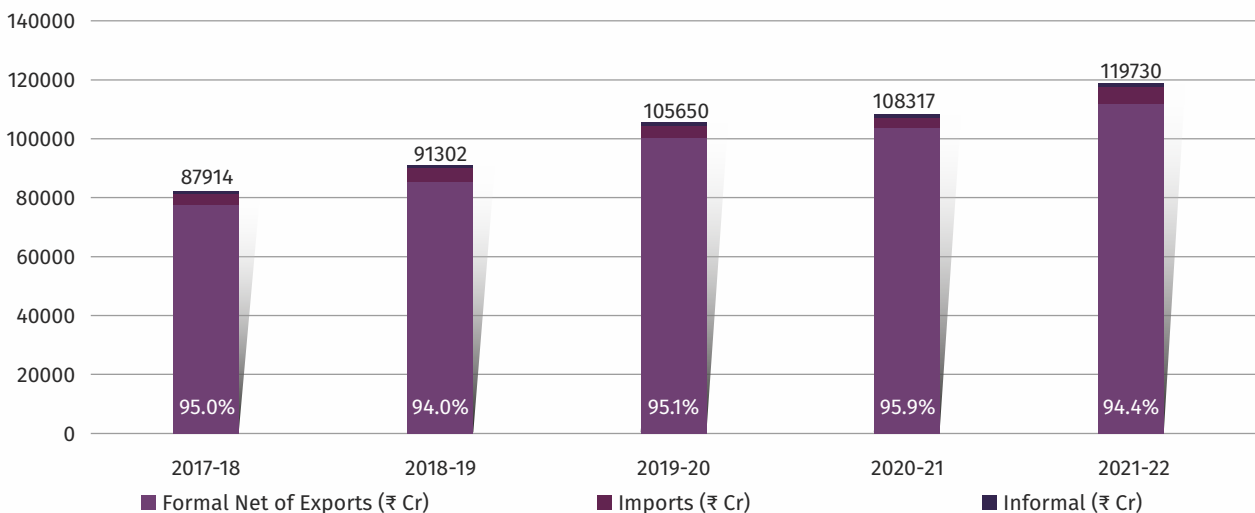
FMCG - Personal and Household Care Goods: Supply Side

The FMCG- personal and household care goods segment within India's FMCG market continues to expand, driven by strong government policies and foreign investments. The Indian government has maintained 100% Foreign Direct Investment (FDI) in single-brand retail and 51% in multi-brand retail. FDI inflows into the FMCG sector have shown sustained interest from

global investors, boosting domestic manufacturing capabilities. This growth has been further supported by the government's Production-Linked Incentive (PLI) schemes, aimed at increasing domestic production and export potential.

The beauty and personal care market in India covers various sub-segments, including Skincare, Oral Care, Hair Care, Men's Grooming, Makeup & Cosmetics, Fragrance, and Bath & Shower products. Manufacturing of beauty and personal care products is widespread, with major clusters in Himachal Pradesh, Gujarat, and Maharashtra. Approximately 90% of the manufacturing is localized within India across the value chain.¹¹⁶

FMCG - Personal & Household Care Goods : Supply Side (₹ Cr)



Source: TARI Estimates

The supply side for personal and household care goods was estimated at ₹82,160 crores in 2017-18 and increased to ₹1,18,908 crores in 2021-22. The formal sector is the main contributor, contributing ₹77,778 crores in 2017-18, which increased to ₹1,11,719 crores in 2021-22, accounting for over 94% of the total supply. Imports made up 5.1% of the market, amounting to ₹6,037 crores in 2021-

22, while the informal sector contributed 1% (₹1,151 crores) showing a stable and predominantly formal market, with minimal informal sector presence.

FMCG - Personal and Household Care Goods Consumption Side

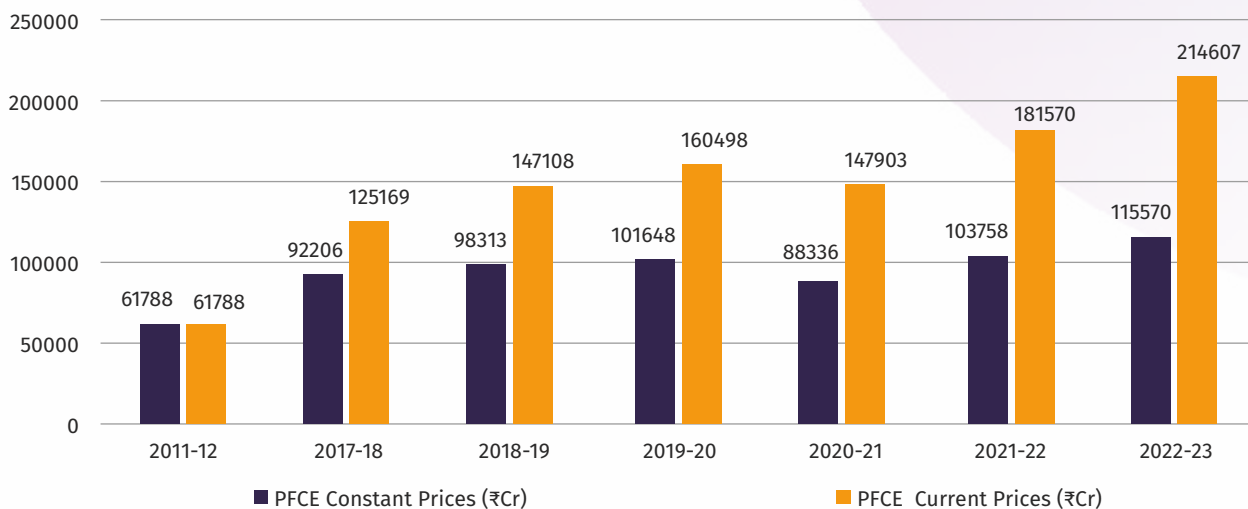
FMCG- Personal and household care goods consumption is derived from private final

¹¹⁶ Invest India. (n.d.). Personal care & hygiene sector in India. <https://www.investindia.gov.in/sector/consumer-goods/personal-care-hygiene>

consumption expenditure (PFCE) from National Accounts Statistics provided by CSO, MOSPI. The consumption of these goods increased from ₹ 61,788 crores in

2011-12 to ₹ 2,14,607 crores in 2022-23 in nominal terms, reflecting a 247% increase over the 11 years. In real terms (constant prices), consumption rose to ₹ 1,15,570 crores, marking an 87% increase.

FMCG- Personal & Household Care Goods Consumption (₹ Cr)



Source: Central Statistical Office (CSO), Ministry of Statistics & Program Implementation

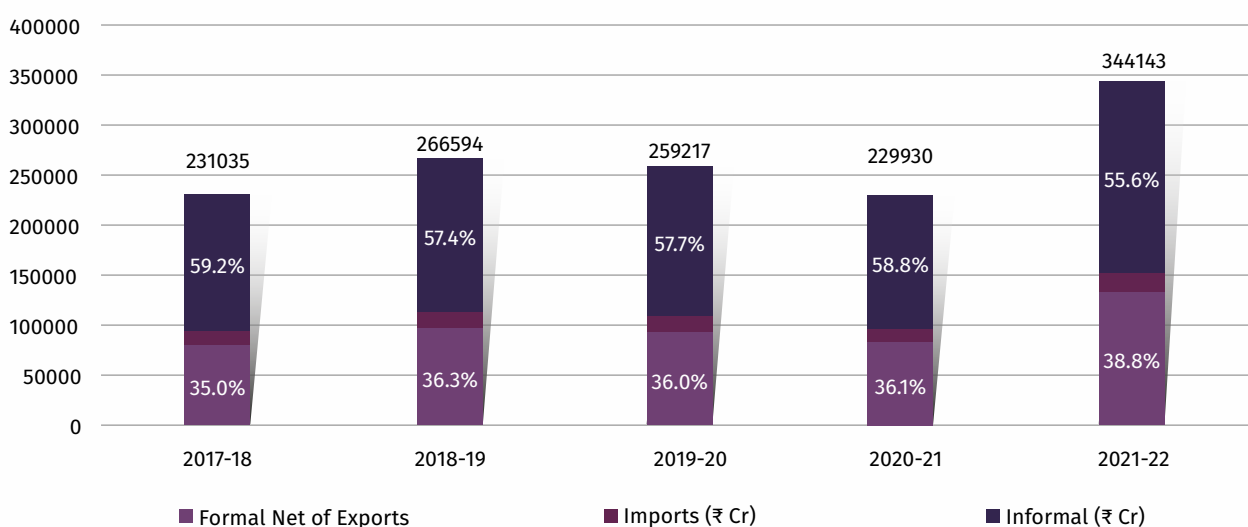
Textiles and Apparel: Supply and Consumption Side

Textile and Apparel: Supply Side

India's textiles and apparel industry has strengths across the entire value chain, from fiber, yarn, and fabric to apparel. It is highly

diversified, ranging from traditional handlooms, handicrafts, wool, and silk products to a more organized sector. The organized textile industry utilizes capital-intensive technology for mass production and includes activities like spinning, weaving, processing, and apparel manufacturing.¹¹⁷

Textiles and Apparel - Supply Side Estimation (₹ Cr)



Source: TARI Estimates

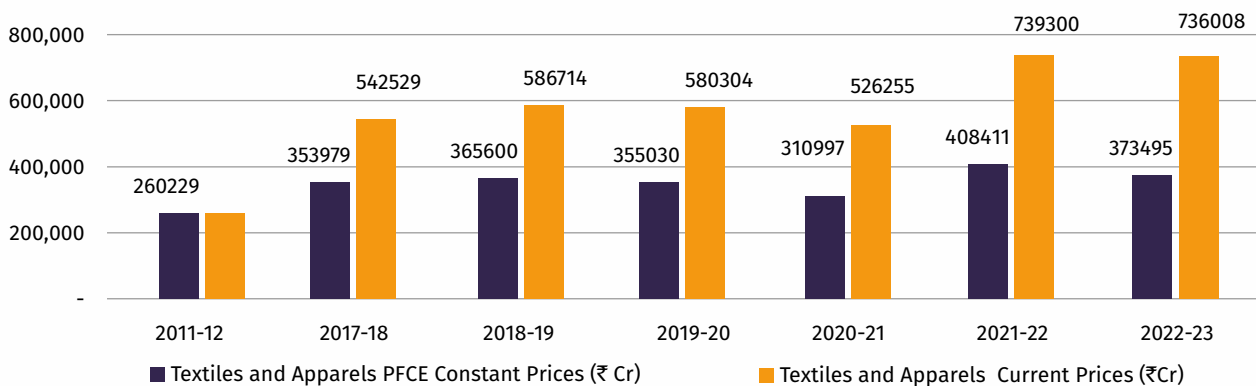
¹¹⁷ Invest India. (n.d.). Textile and apparel sector in India. Invest India. <https://www.investindia.gov.in/sector/textiles-apparel>

The textiles and apparel supply-side estimates were ₹2,31,035 crores in 2017-18 and grew to ₹3,44,143 crores in 2021-22. The formal sector, net of exports, contributed ₹80,806 crores in 2017-18, rising to ₹1,33,589 crores in 2021-22, accounting for 38.8% of the total supply. Imports contributed ₹19,157 crores in 2021-22, making up 5.6% of the total. The informal sector, which remains significant, accounted for ₹1,91,398 crores in 2021-22, representing 55.6% of the total supply.

Textile and Apparel: Consumption Side

Textile and apparel consumption is derived from private final consumption expenditure (PFCE) from National Accounts Statistics provided by CSO, MOSPI. India's textiles and apparel consumption increased from ₹2,60,229 crores in 2011-12 to ₹7,36,008 crores in 2022-23 in nominal terms, reflecting a 182.8% increase over the 11 years. In real terms (constant prices), consumption rose to ₹3,73,495 crores, marking a 43.5% increase. The growth in both constant and current (nominal) prices can be attributed to various factors, which are discussed in the following section.¹¹⁸

Textiles and Apparel Consumption: Constant (at 2011) and Current Prices



Source: Central Statistical Office (CSO), Ministry of Statistics & Program Implementation

Alcoholic Beverages: Supply and Consumption Side

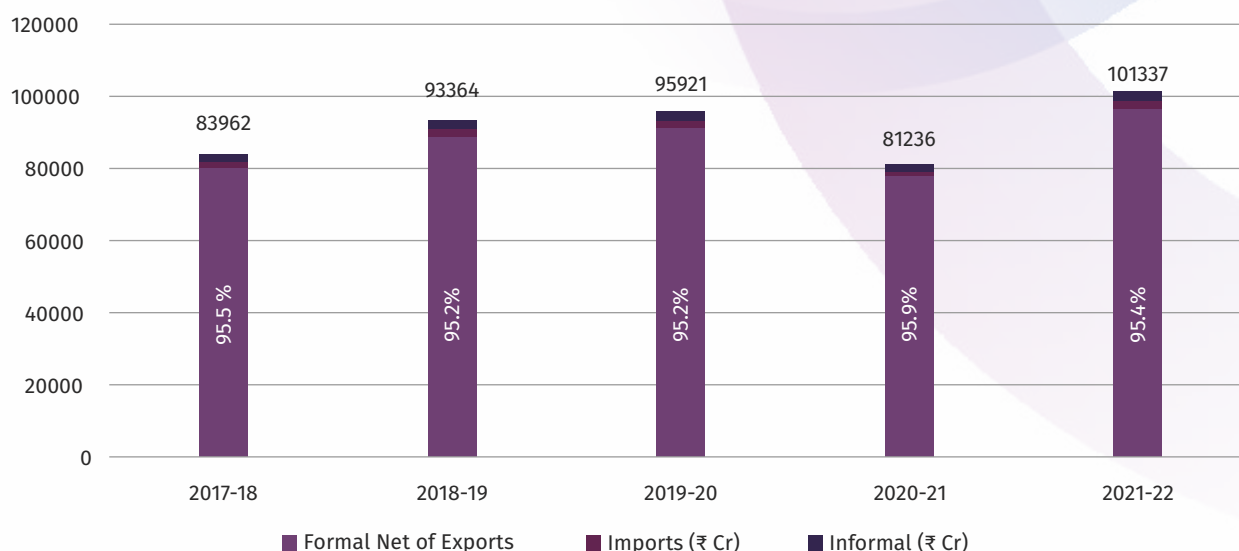
Alcoholic Beverages: Supply Side

The alcoholic beverages production and supply in India is highly regulated and differs significantly from other large countries. Alcohol is a state subject and market structures vary from one state to another state in terms of taxation, regula-

tion, production, and promotion. The government through a licensing system regulates alcohol production. However, its entire distillation and production process is owned and controlled by the private sector. Wholesale distribution involves both the state and private sectors, except in Andhra Pradesh, Chhattisgarh, Orissa, and Delhi, where it is managed solely by the state. Similarly, in states like Kerala, Tamil Nadu, and Rajasthan, government agencies control both wholesale and retail distribution.

¹¹⁸ Indian Alcohol Consumption - The Changing Behavior
<https://www.researchandmarkets.com/reports/4424894/indian-alcohol-consumption-the-changing-behavior>

Alcoholic Beverages - Supply Side Estimation (₹ Cr)



Source: TARI Estimates

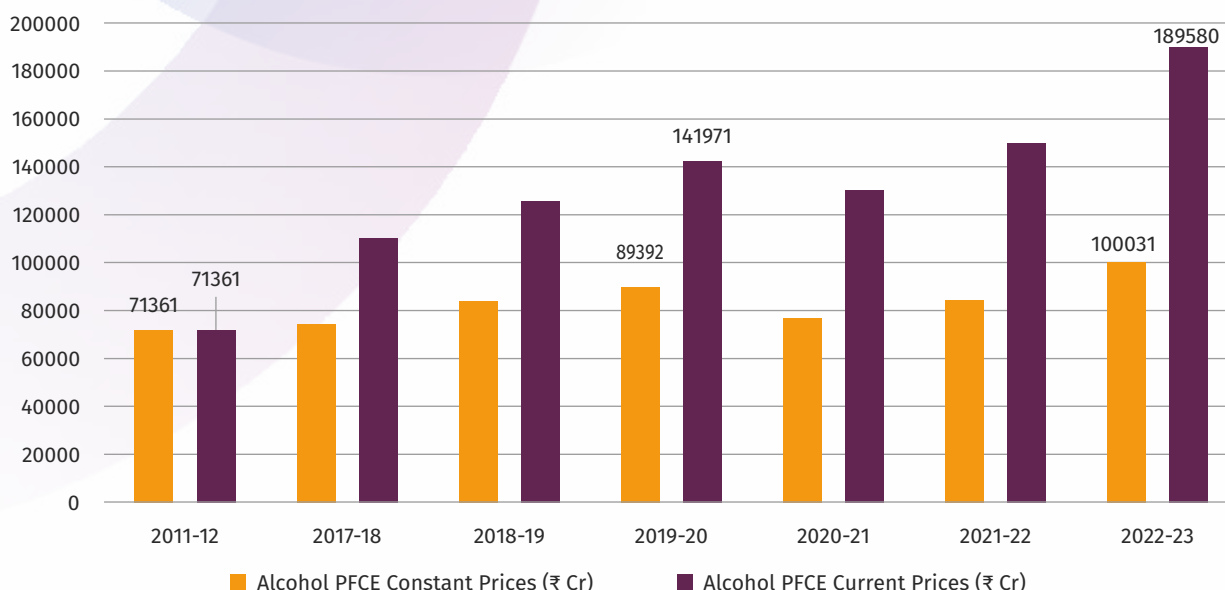
The alcoholic beverages industry continues to have a large, organized sector dominated by a few big companies at the top. The alcoholic beverages supply side is ₹83,962 crores in 2017-18 and is estimated to increase to the levels of ₹ 1,01,337 crores in 2021-22. The formal sector is estimated at ₹80,180 crores in 2017-18 and increases to ₹96,687 crores in 2021-22, making up 95.4% of the total supply side. Imports account for 2 % (₹2,038 crores), while the informal sector which primarily supplies country liquor, contributes 2.6% (₹2,612 crores) in 2021-22. Imported alcohol has only a fraction of the share as substantial import duty and other levied taxes exceeding 150% make them three to five times pricier than elsewhere in the world.

Alcoholic Beverages: Consumption Side

Alcoholic beverage consumption is derived from private final consumption expenditure (PFCE) from National Accounts Statistics provided by CSO, MOSPI. However, owing to a significant difference in consumption data of alcoholic beverages between the NSSO 68th round survey and NAS 2011-12 data, we have mapped PFCE alcohol consumption data for our period of study with NSSO alcoholic beverages consumption for 2011-12.¹¹⁹ Further, as per the WHO database unrecorded alcohol consumption (per capita pure alcohol consumption by 15 years and above) varies between 35 to 46% of total alcohol consumption by volume. To account for unrecorded alcohol consumption, an adjustment of one-fourth in the value of alcohol was added to the final alcohol consumption value.

¹¹⁹ FICCI- CASCADE and TARI (2015), Illicit Markets- A Threat to Our National Interests the Alcoholic Beverages Industry

Alcoholic Beverages Private Final Consumption Expenditure (₹ Cr)



Source: Central Statistical Office (CSO), Ministry of Statistics & Program Implementation

Alcoholic beverage consumption in real (constant) prices has increased from ₹71361 crores in 2011-12 to ₹100031 crores in 2022-23, a 40.32% increase in 11 years. Over the same time, alcoholic beverage consumption in current prices (nominal) terms increases to ₹189581 crores, an 89.5% increase. The increase in consumption in both constant and current (nominal) prices can be attributed to various factors that were discussed before.

Tobacco Products: Supply and Consumption Side

We present here supply and demand side estimates for tobacco products that are used for the calculation of illicit market size and percentage. This study, for the purpose of illicit markets, solely on manufactured tobacco products, including cigarettes, cigars, chewing tobacco, and other processed tobacco items.¹²⁰ Bidis and other indigenous products are excluded as they are consumed

in traditional forms, with lower incentives for illicit trade. Herein, our discussion focuses on tobacco products excluding bidis. The supply and demand estimates of tobacco products exclude bidis from all analyses to arrive at illicit market estimates of tobacco products.

Tobacco Products: Supply Side

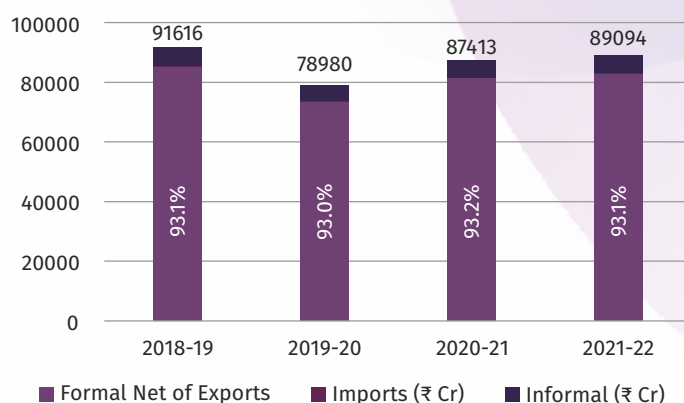
The Indian Tobacco Industry operates across both organized and unorganized sectors. A few dominant firms control the organized sector, which includes the legal cigarette industry, adhering to statutory regulations and compliance. Meanwhile, the unorganized sector, consisting of small and micro-enterprises at the base of the pyramid, caters primarily to local demands. This sector is responsible for much of the beedi and smokeless tobacco (SLT) production.¹²¹ The majority of smokeless tobacco products used in India are produced in India and sold at traditional markets and through informal markets, such as street vendors.¹²²

¹²⁰ Please refer to Annexure -1 for NPCMS codes of tobacco products considered for this study

¹²¹ Mohan, P., Lando, H. A., & Panneer, S. (2018). Assessment of Tobacco Consumption and Control in India. *Indian Journal of Clinical Medicine*. <https://doi.org/10.1177/1179916118759289>

¹²² "India Country Report," The Foundation of a Smoke-Free World, July 2020. <https://www.smokefreeworld.org/wp-content/uploads/2020/07/India-Country-Report-1.pdf>.

Tobacco Products- Supply Side Estimation (₹Cr)



Source: TARI Estimates

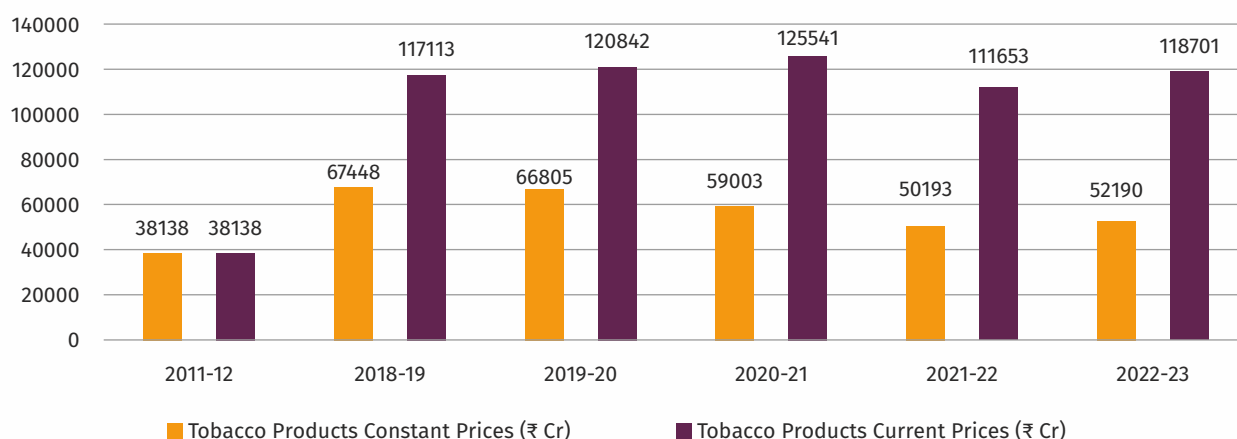
In 2018-19, the total supply side of the tobacco industry was valued at ₹91,616 crores, fluctuating slightly to ₹89,094 crores by 2021-22. The formal sector accounted for 93.1% of the total supply in 2021-22, amounting to ₹82,969 crores. Import dependency in the tobacco industry is minimal, with imports contributing just 0.3% of the total supply. The informal sector contributed 6.6% (₹5,875 crores) in 2021-22.

ing bidis shows a steady rise in nominal consumption, increasing from ₹38,138 crores in 2011-12 to ₹1,18,700 crores in 2022-23. However, when adjusted for inflation (constant prices), the increase is more moderate, growing from ₹38,138 crores to ₹52,189 crores over the same period. This indicates that the rise in nominal values is largely driven by inflation and price increases, while the real consumption of these tobacco products has seen slower growth.

Tobacco Products: Consumption Side

The PFCE data for tobacco products exclud-

Tobacco Products Consumption



Source: Central Statistical Office (CSO), Ministry of Statistics & Program Implementation (MoSPI)

GLOSSARY

ADB	Asian Development Bank
ASI	Annual Survey of Industries
ASUSE	Annual Survey of Unincorporated Sector, Enterprises
BFY	"Better-For-You"
CAGR	Compounded Annual Growth Rate
CASCADE	Committee Against Smuggling and Counterfeiting Activities Destroying Economy
CMIE	Centre for Monitoring Indian Economy
Constant Price	Prices adjusted for inflation, allowing for comparison of the real value of goods or services over time
CPI	Consumer Price Index
CSO	Central Statistical Office
Current Price	Prices not adjusted for inflation, reflecting the actual market value of goods or services at a specific point in time
COVID Year	2020-21 has been considered the pandemic year
Deflator	A measure used to adjust nominal values for inflation, converting them into real values for accurate comparison over time
DGCIS	Directorate General of Commercial Intelligence and Statistics
FDI	foreign direct investment
FICCI	Federation of Indian Chambers of Commerce & Industry
FMCG	Fast-moving Consumer Goods
Fractile	Fractile is a value that divides a population distribution into equal parts, such as quartiles, deciles, or percentiles, to analyse income or consumption patterns.
FSSAI	Food Safety and Standards Authority of India
FY	Financial Year
GATS	Global Adult Tobacco Survey
GDP	Gross Domestic Product
GST	Goods and Services Tax
GSV	Gross Sales Value
HCES	Household Consumption Expenditure Surveys
ITC HS	ITC Harmonic System

HWE	Hired Worker Establishments
IARD	International Alliance for Responsible Drinking
ICRIER	Indian Council for Research on International Economic Relations
IMFL	Indian Made Foreign Liquor
IP	Intellectual Property
IPR	Intellectual Property Rights
ITC	India Tobacco Company Limited
LMT	Lakh Metric Tonnes
MMF	Man Made Fibers
MoSPI	Ministry of Statistics and Programme Implementation
MPCE	Monthly Per Capita Consumption Expenditure
MSME	Micro, Small & Medium Enterprises
NAS	National Account Statistics
NCAER	National Council of Applied Economic Research
NCCD	National Calamity Contingent Duty
NFHS	National Family Health Survey
NNMS	National Non-Communicable Disease Monitoring Survey
NPCMS	National Product Classification for Manufacturing Sector
NPISH	Non-Profit Institution Serving Household
NSS	National Sample Survey
NSSO	National Sample Survey Office
OAE	Own Account Establishments
PFCE	Private Final Consumption Expenditure
PLI	Production Linked Incentives
PLISMBP	Production Linked Incentive Scheme for Food Processing Industry for Millet-based products
PMFME	PM Formalization of Micro Food Processing Enterprises
PMKSY	Pradhan Mantri Kisan Sampada Yojana
RBI	Reserve Bank of India
SLT	Smokeless Tobacco

T&A	Textiles & Apparels
TARI	Thought Arbitrage Research Institute
UNODC	United Nations Office on Drugs and Crime
USD	United States Dollar
VAT	Value Added Tax
WEF	World Economic Forum
WHO	World Health Organisation

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Established in 1927, FICCI is the largest and oldest apex business organisation in India. Its history is closely interwoven with India's struggle for independence, its industrialization, and its emergence as one of the most rapidly growing global economies.

A non-government, not-for-profit organisation, FICCI is the voice of India's business and industry. From influencing policy to encouraging debate, engaging with policy makers and civil society, FICCI articulates the views and concerns of industry. It serves its members from the Indian private and public corporate sectors and multinational companies, drawing its strength from diverse regional chambers of commerce and industry across states, reaching out to over 2,50,000 companies.

FICCI provides a platform for networking and consensus building within and across sectors and is the first port of call for Indian industry, policy makers and the international business community.

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In the recent past India's economic growth story has attracted world's attention bringing new challenges for the domestic economy. One of the challenges currently faced is the growing illicit trade in counterfeits, pass offs and smuggled goods. These activities are also threatening brands not only in every region of the country but across the globe.

Contraband and counterfeit products hurt the integrity of the brand, further diluting the brand owner's reputation. This not only results in erosion of sales of the legitimate product but further [CASCADE]s onto affect the consumers in the form of health and safety hazards.

With the above insight the Federation of Indian Chambers of Commerce and Industry (FICCI) took the initiative to dedicate a forum by establishing the Committee Against Smuggling and Counterfeiting Activities Destroying the Economy - CASCADE on 18th January, 2011 at FICCI Federation House, New Delhi.

FICCI Committee Against Smuggling and Counterfeiting Activities Destroying the Economy (CASCADE)

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