

# Infomerics Analytics & Research

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**Sugar & Beverage  
Industry**

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## 1. Global Macroeconomic Scenario

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The global economy is projected to experience a deceleration in growth, with global GDP expanding by 2.8% in CY 2025, down from 3.3% in CY 2024. This slowdown is attributed to escalating trade tensions, particularly due to new U.S. tariffs, and heightened policy uncertainties. Global headline inflation is expected to decline to 4.3% in CY 2025 and further to 3.6% in CY 2026, as inflationary pressures ease across advanced economies, aided by tighter monetary policy, improved labour market conditions, and the resolution of supply disruptions. However, global trade growth is forecasted to slow significantly to 1.7% in CY 2025, reflecting the effects of escalating trade barriers and geopolitical instability.

In China, economic prospects remain constrained as the IMF downgraded its CY 2025 GDP growth forecast to 4.0%, due to persistent challenges in the real estate sector, weak consumer demand, and trade-related pressures. In Europe, growth is expected to stagnate, with Germany's GDP forecast at 0.0% in CY 2025, amidst trade disruptions and domestic weaknesses. The EU is actively seeking to address these challenges through renewed trade dialogue with the U.S.

Meanwhile, India continues to show resilience, with the IMF projecting stable real GDP growth of 6.2% in CY 2025, followed by a slight uptick to 6.3% in CY 2026. This is supported by robust rural consumption and sustained infrastructure investment. The IMF notes that India remains one of the fastest-growing major economies, driven by favourable demographics, expanding digital infrastructure, and rising investment activity. Consumer price inflation in India is projected to moderate to 4.2% in CY 2025, staying within the Reserve Bank of India's (RBI) target range of 2–6%, which helps maintain purchasing power and economic stability. The IMF also highlights the importance of continued structural reforms in India, particularly in labour markets, logistics, and capital formation, to sustain medium-term growth momentum.

Overall, while inflation is declining globally, the economic outlook remains clouded by geopolitical uncertainty, trade fragmentation, and region-specific structural challenges. However, India's relative macroeconomic stability, demographic advantage, and ongoing investment cycle place it in a strong position amid global headwinds.

### **1.1 Global GDP Growth Scenario**

The global economy began to recover from its lowest levels following the lifting of lockdowns in 2020 and 2021. The pandemic-induced lockdown was a key factor that severely disrupted economic activities, leading to a recession in CY 2020, where global GDP contracted by -2.7%.

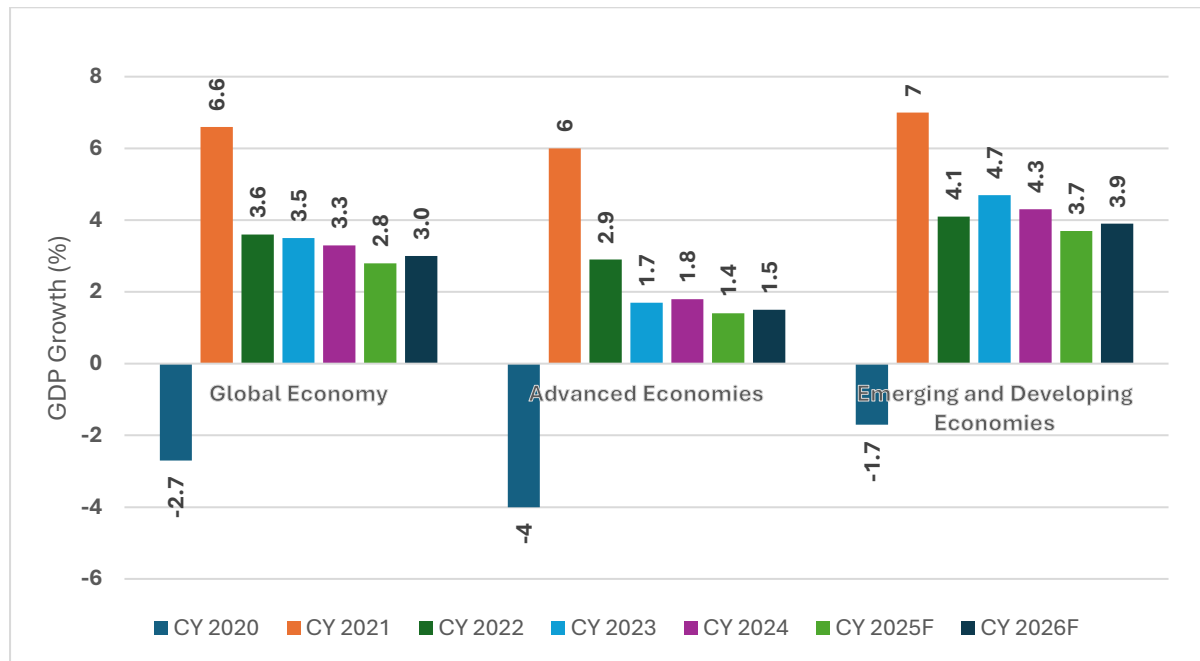
In CY 2021, supply chain disruptions significantly impacted both advanced economies and low-income developing economies. The rapid spread of the Delta variant and the threat of new variants in mid-2021 further heightened uncertainty in the global economic environment.

Global economic activity saw a sharper-than-expected slowdown in CY 2022. The highest inflation in decades, observed in 2022, forced most central banks to tighten their monetary & fiscal policies. Russia's invasion of Ukraine exacerbated global food supply issues, further increasing the cost of living.

Despite initial resilience in early CY 2023, marked by a rebound from the pandemic and progress in curbing inflation from the previous year's highs, the situation remained precarious. Economic activity continued to lag its pre-pandemic trajectory, especially in emerging markets and developing economies, leading to widening regional disparities. Several factors impeded recovery, including the lasting impacts of the pandemic, geopolitical tensions, tightening monetary policies to combat inflation, reductions in fiscal support amid high debt levels, and extreme weather conditions. As a result, global growth slowed from 3.6% in CY 2022 to 3.5% in CY 2023.

The global economy maintained moderate momentum in CY 2024, with real GDP growth estimated at 3.3%, supported by easing inflationary pressures, recovering supply chains, and resilient consumer demand in some major economies. Advanced economies, particularly the U.S., benefitted from strong labour markets and improved private consumption. However, growth remained uneven across regions, with emerging markets facing tighter financial conditions and subdued export demand. Inflation declined faster than anticipated in many regions, enabling some central banks to consider gradual monetary easing by the end of the year.

## 1.2 Historical GDP Growth Trends



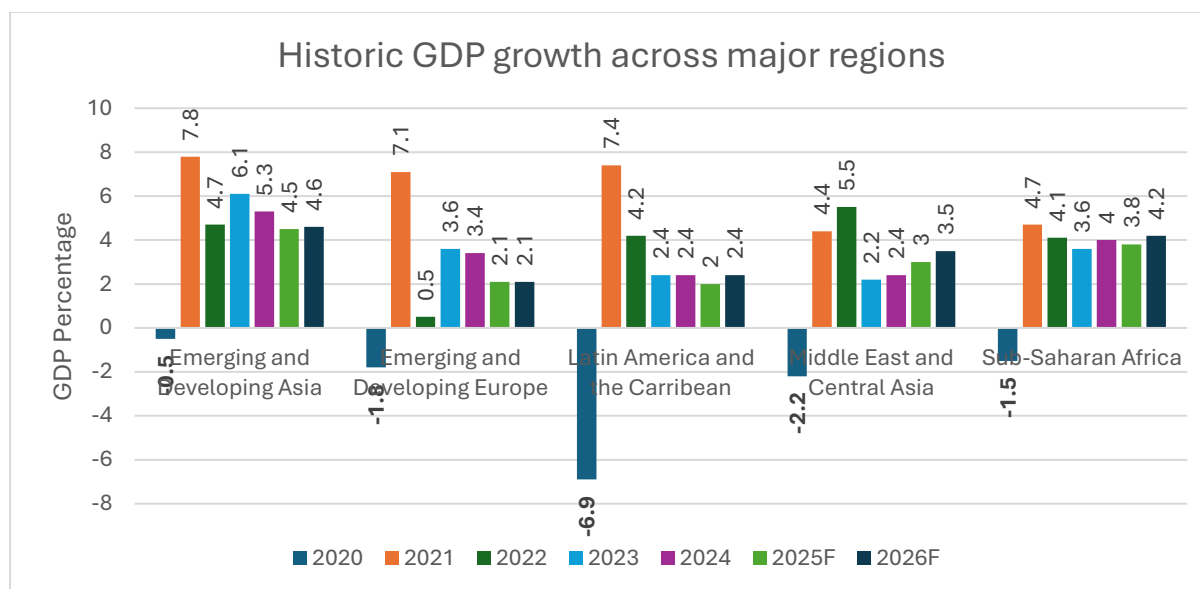
F – Forecast, Source – IMF World Economic Outlook April 2025

*Note: Advanced Economies and Emerging & Developing Economies are as per the classification of the World Economic Outlook (WEO). This classification is not based on strict criteria, economic or otherwise, and it has evolved over time. It comprises of 40 countries under the Advanced Economies including the G7 (the United States, Japan, Germany, France, Italy, the United Kingdom, and Canada) and selected countries from the Euro Zone (Germany, Italy, France etc.). The group of emerging market and developing economies (156) includes all those that are not classified as Advanced Economies (India, China, Brazil, Malaysia etc.)*

In the current scenario, global GDP growth is projected to decelerate to 2.8% in CY 2025, reflecting mounting economic pressures across both advanced and emerging markets. This marks a significant slowdown driven by intensifying trade fragmentation, the impact of new U.S. tariffs, and elevated geopolitical tensions. Structural weaknesses such as the ongoing real estate crisis in China, stagnant growth in the Eurozone, and tight financial conditions in major economies are expected to weigh heavily on global output. Additionally, stress in housing and banking sectors, coupled with subdued industrial activity, is contributing to a muted growth outlook. On the inflation front, the IMF projects global headline inflation to decline to 4.3% in CY 2025, continuing a disinflationary trend as energy prices stabilize and supply-side disruptions ease. The softening of labour markets—reflected in lower job vacancy rates and modest increases in unemployment—is also expected to help reduce core inflation. This provides room for some central banks to initiate cautious interest rate cuts, although the broader economic outlook remains uncertain due to persistent global risks.

### 1.3 GDP Growth Across Major Regions

GDP growth across major global regions—including Europe, Latin America & the Caribbean, Middle East & Central Asia, and Sub-Saharan Africa—continues to display varied trajectories. While some regions are stabilizing post-pandemic, others remain challenged by structural and cyclical issues. The global outlook presents a mixed scenario, with emerging economies continuing to outperform advanced economies.



Source-IMF World Economic Outlook April 2025 update.

In Emerging and Developing Asia, growth is projected to moderate from 5.3% in CY 2024 to 4.5% in CY 2025, before recovering slightly to 4.6% in CY 2026. India is expected to grow at 6.2% in CY 2025, supported by resilient rural consumption and sustained infrastructure investments, though lower than 6.5% growth recorded in CY 2024. In contrast, China's growth is likely to decelerate to 4.0% in CY 2025, amid persistent real estate concerns and weak domestic demand.

Sub-Saharan Africa is projected to grow at 3.8% in CY 2025, slightly below the 4.0% growth in CY 2024, with a further improvement to 4.2% in CY 2026. The recovery is being aided by improved weather conditions and better functioning supply chains.

In the Middle East and Central Asia, the economy is forecasted to expand at 3.0% in CY 2025, up from 2.4% in CY 2024, and further strengthen to 3.5% in CY 2026, driven by stabilization in oil production and ongoing economic reforms.

For Latin America and the Caribbean, modest growth of 2.0% is forecast for CY 2025, holding steady from CY 2024, with expectations of a rebound to 2.4% in CY 2026, helped by stronger macroeconomic management across key economies.



Emerging and Developing Europe remains subdued, with growth estimated at 2.1% in CY 2025, down from 3.4% in CY 2024, expected to be stable at 2.1% by CY 2026. The region continues to face structural manufacturing challenges, particularly in major economies like Germany.

Overall, while global growth is expected to remain steady, regional disparities persist, influenced by a combination of domestic challenges, external geopolitical tensions, and fluctuating commodity prices.

### **1.4 Global Economic Outlook**

At the midpoint of the year, so far in 2025 the global economy continues to exhibit mixed performance, with divergence in outcomes across regions due to differences in economic growth, inflation dynamics, and policy responses. The global GDP growth is projected at 2.8% in CY 2025, down from an estimated 3.3% in CY 2024. While short-term prospects have improved since early 2024 due to easing inflation and gradual loosening of monetary policy in several regions, the broader environment remains challenging. Structural headwinds, such as tighter credit conditions, supply-side bottlenecks, and lingering geopolitical risks, are keeping global growth below historical averages.

The United States has continued to outperform other advanced economies, with growth projected at 1.8% in 2025, though slightly down from 2.8% in 2024, as the economy absorbs the lagged effects of previous monetary tightening and persistent inflation. In contrast, the Euro Area remains subdued, with GDP growth expected to 0.8% in 2025, supported by the European Central Bank's first-interest rate cuts since 2019 (implemented in June 2024) and stronger domestic demand. However, countries like Germany, France, and Italy continue to struggle due to weak manufacturing performance, whereas Greece and Spain have benefited from robust tourism activity.

In China, growth has held up at a projected 4.0% for CY 2025, supported by targeted stimulus and a gradual recovery in the real estate sector. Growth in the rest of Asia is also benefiting from a revival in global trade and domestic demand. India remains one of the strongest performers globally, with GDP growth forecasted at 6.2% in 2025, supported by robust consumption, capital investment, and favourable demographics.

In Latin America and the Caribbean, growth is more uneven. Larger economies like Brazil and Mexico are seeing moderate expansions, but the overall regional outlook is weaker, with GDP growth forecast at 2.0% in 2025, due to external headwinds, commodity price volatility, and political uncertainty. Meanwhile, Sub-Saharan Africa's growth is expected to slow slightly to 3.8%, as global financial conditions tighten, and oil-exporting nations face declining revenues. The Middle East and North Africa (MENA) region is also seeing tempered prospects, with growth revised down to 2.6%, influenced by lower oil prices and ongoing geopolitical pressures.

Globally, industrial production has remained sluggish through the first half of 2025, constrained by high interest rates, trade fragmentation, and lingering supply chain disruptions. However, a mild recovery is anticipated in the second half of the year as global trade stabilizes and domestic demand for goods strengthens. Central banks in several advanced economies—including the Eurozone, Switzerland, Sweden, and Canada—have begun cutting rates to support demand, though inflation trends remain uneven. Disinflation

has progressed slower than expected, particularly in services and wage-heavy sectors, making monetary easing cautious and data-dependent.

Overall, the global economy appears to be stabilizing, but growth in CY 2025 remains below historical averages. Advanced economies continue to grow modestly under the weight of tight policies and weak external demand, while emerging markets, particularly in Asia, show stronger but slowing momentum. The outlook for the remainder of 2025 depends significantly on geopolitical developments, the trajectory of inflation, and the pace of monetary easing.

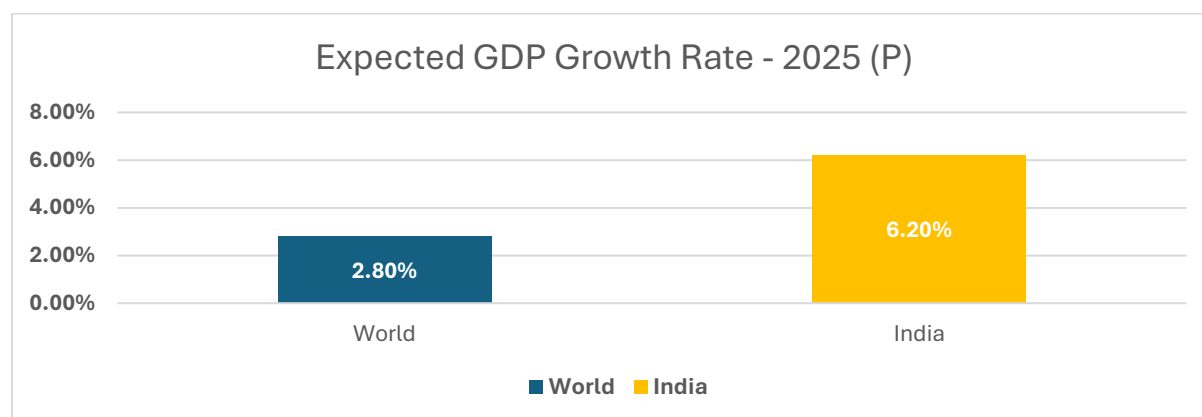
## 2. India's Macroeconomic Scenario

### 2.1 Gross Domestic Product (GDP)

#### *India Expected to Grow at Twice the Pace of Global Economic Growth*

#### Global and India Growth Outlook Projections (Real GDP growth)

The global economy continues to face persistent challenges, including the lingering effects of the COVID-19 pandemic, heightened geopolitical tensions, and climate-related disruptions that have affected energy and food supply chains. Global real GDP growth is projected at 2.8% in 2025, indicating a moderation in global momentum. In contrast, India's real GDP is projected to grow at 6.2% in 2025, continuing its trend of significantly outpacing global averages and reaffirming its position as the fastest-growing major economy. This implies that India is expected to grow at more than twice the pace of global GDP, supported by strong domestic demand, structural reforms, and increased infrastructure investment. India's resilience among the G20 economies further strengthens its role as a key driver of global economic growth in the coming years.



Notes: P-Projection; Source: IMF – World Economic Outlook, April 2025

#### **India's Economic Growth Momentum Remains Strong - Surpassed USD 4 Trillion.**

In FY 2024-25, India was the fifth-largest economy globally, with an estimated real Gross Domestic Product (GDP) at constant prices of INR 184.88 lakh crore, against the Provisional Estimate of GDP for the year 2023-24 of INR 173.82 lakh crore registering a GDP growth rate of 6.4% as compared to 8.2% in FY 2023-24. Since FY 2005, India's GDP growth has consistently outpaced global economic growth, often growing at nearly twice the global average, and this trend is expected to continue over the medium term.

Source: MOSPI, first advance estimates of GDP 2024-25 released on January 7<sup>th</sup>, 2025

In June 2025, India became the fourth-largest economy in the world and retained its position as the fastest-growing major economy. The country is projected to become the world's third largest economy by 2030, with an estimated GDP of USD 7.3 trillion.

Source: PIB, Press Release - India Becoming an Economic Powerhouse posted on June 16, 2025

### GDP Growth Rate Projections for India

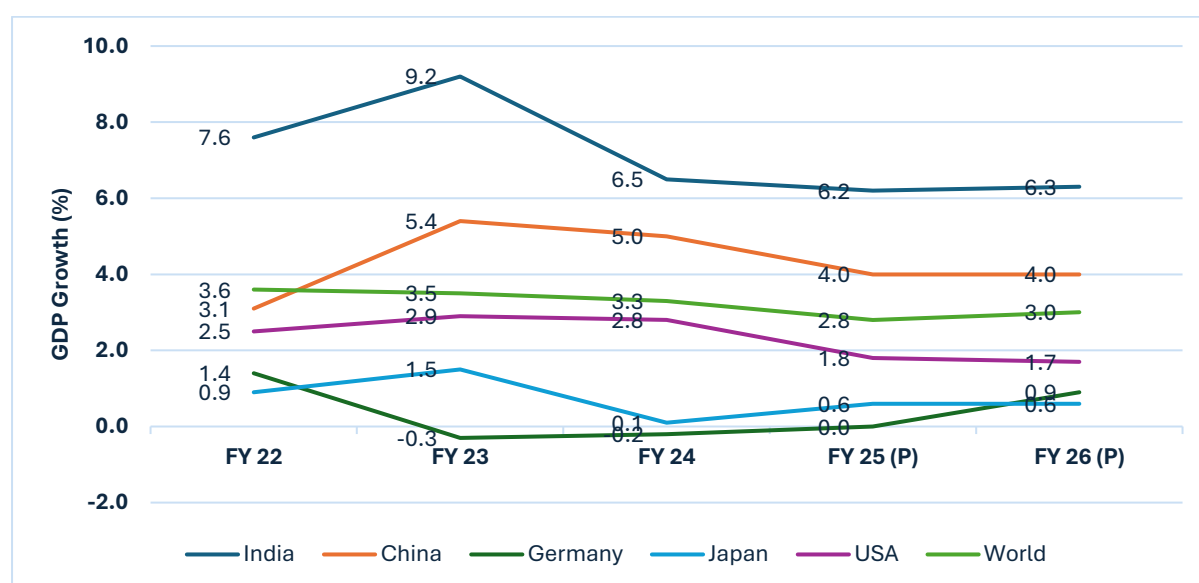
GDP growth projections by Government of India and other agencies are summarised below:

	Estimated GDP Growth Rate		
	FY 25E	FY 26E	FY 27E
Ministry of Finance, GOI	6.4%	6.3%-6.8%	N.A.
IMF*	6.2%	6.3%	N.A.
RBI#	6.6%	6.5%	N.A.
National Statistical Office (NSO)@	6.4%	N.A.	N.A.
PHDCCI@	6.5%	6.7%	6.7%
S&P Global@	6.8%	6.5%	6.8%
Morgan Stanley@	6.3%	6.5%	6.5%
Asian Development Bank#	6.5%	6.7%	N.A.
Moody's Agency	6.1%	N.A.	N.A.
Fitch Ratings@	6.3%	6.5%	6.3%

\* Source: World Economic Outlook Update April 2025

@ Data is updated as of 28th March 2025, #updated as of 10th April 2025

### India and Top 5 Global Economies GDP Growth Forecast



Note: P = Projections, Source: IMF World Economic Outlook April 2025 update.

In September 2024, India achieved a significant milestone by overtaking Japan to become the third most powerful nation in the Asia-Pacific region, as per the Asia Power Index 2024. India's overall score rose to 39.1, reflecting a 2.8-point increase from the previous year, driven by growing influence across economic, military, and diplomatic dimensions.

Key factors behind India's rise include its strong economic performance, expanding and youthful workforce, and increasing strategic engagement across the region. India's Economic Capability improved significantly, supported by its position as the world's third-largest economy in terms of purchasing power parity (PPP). Additionally, a notable increase in its Future Resources score highlights the demographic advantage that is expected to sustain its growth trajectory in the coming years.

## **2.2 Gross Value Added (GVA)**

Gross Value Added (GVA) is the measure of the value of goods and services produced in an economy. GVA gives a picture of the supply side whereas GDP represents consumption.

### **Industry and Services sector leading the recovery charge**

- India's economy demonstrated robust growth across various sectors. The gap between GDP and GVA growth turned positive. The positive gap between GDP and GVA growth indicates robust tax collections contributing to GDP growth.
- India's sector-wise economic performance in FY 2024–25 reveals a shift in momentum across its primary, secondary, and tertiary sectors, with notable differences compared to the previous fiscal year.
- The Primary Sector—comprising agriculture, livestock, forestry, fishing, and mining & quarrying—registered a growth of 3.6% in FY25, showing a notable improvement from the 2.1% growth in FY24. This uptick can be attributed to stronger performance in agriculture and allied activities, along with moderate gains in mining and quarrying. However, erratic monsoon patterns and rising input costs may have constrained agricultural output during the year.
- In contrast, the Secondary Sector—which includes manufacturing, electricity, gas, water supply & other utilities, and construction—recorded a solid growth of 6.5% in FY25, though lower than the impressive 9.7% growth seen in the previous year. This resilient performance was primarily driven by a notable recovery in manufacturing and robust momentum in infrastructure-related segments like construction and utilities.
- The Tertiary Sector or services sector posted 7.2% growth in FY25, slightly lower than the 7.6% achieved in FY24, yet it remained a major pillar of overall economic growth. Strong performances were observed in trade, hotels, transport, financial services, real estate, and professional services. However, public administration and defence services saw more modest growth, slightly dampening the overall momentum in this segment.
- Overall, growth in India's real Gross Value Added (GVA) in FY25 was primarily driven by the resurgence of the secondary sector and sustained strength in key segments of the services sector, even as the primary sector showed signs of moderation.

### **Sectoral Growth (Y-o-Y % Growth) - at Constant Prices**

Sector-wise growth in GVA at constant (2011-12) prices (in %)	FY 2024	FY 2025
Primary	2.1	3.6
Secondary	9.7	6.5
Tertiary	7.6	7.2

Source: MOSPI, First advance estimates of GDP 2024-25, released on January 7<sup>th</sup>, 2025

## 2.3 Consumer Price Index (CPI)

### *Inflation Stable Inflationary Environment*

In fiscal year 2025 (FY25), India's General Index inflation, as measured by the Consumer Price Index (CPI), averaged 4.6%, marking the lowest annual inflation rate since 2018–19. This moderation in inflation reflects a significant improvement in the country's price stability post-COVID. In March 2025, CPI Inflation stood at 3.34%, the lowest monthly rate since August 2019, indicating sustained disinflationary momentum in recent months.

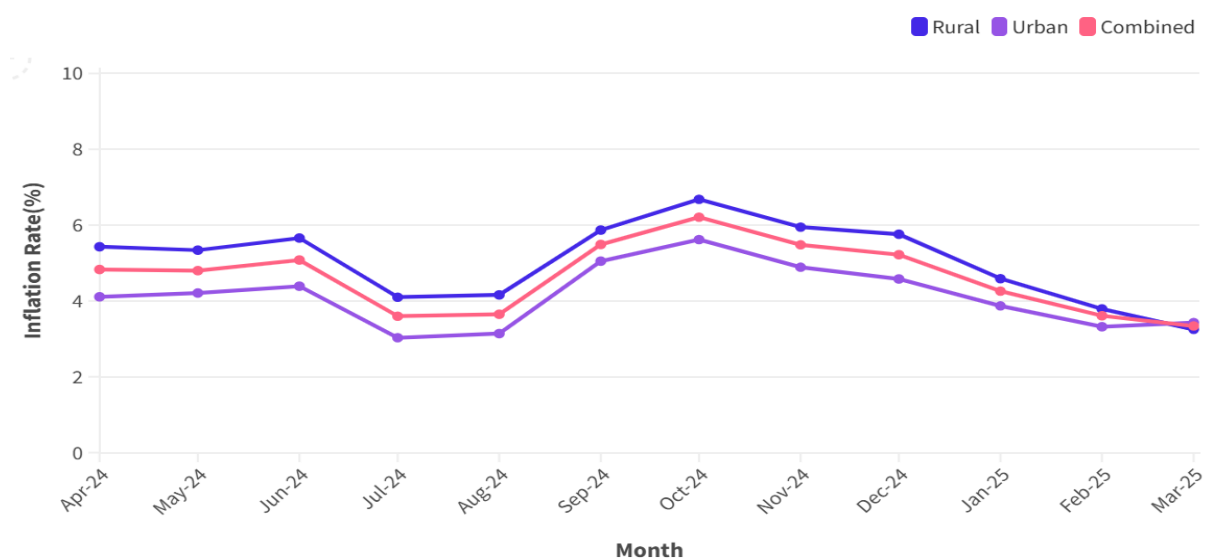
Source: - RBI, Annual Report-Inflation, Money and Credit Dated May 29<sup>th</sup>, 2025

Several key factors contributed to this decline in inflation:

The Reserve Bank of India (RBI) pursued a pro-growth monetary policy, aiming to strike a balance between supporting economic recovery and containing inflation. In parallel, the government actively intervened in food markets, particularly by augmenting buffer stocks of essential commodities and releasing them strategically to stabilize prices. These coordinated efforts helped ease supply-side pressures, especially on food inflation.

Looking ahead, projected CPI inflation for FY26 to average around 4%, signalling continued focus on maintaining price stability. In support of this trajectory, the RBI recently announced a cut in the repo rate, which is expected to result in a more accommodative monetary policy stance in the coming months. This environment of low inflation and easing interest rates may provide a favourable backdrop for economic expansion in the near term.

### India's CPI Inflation Monthly

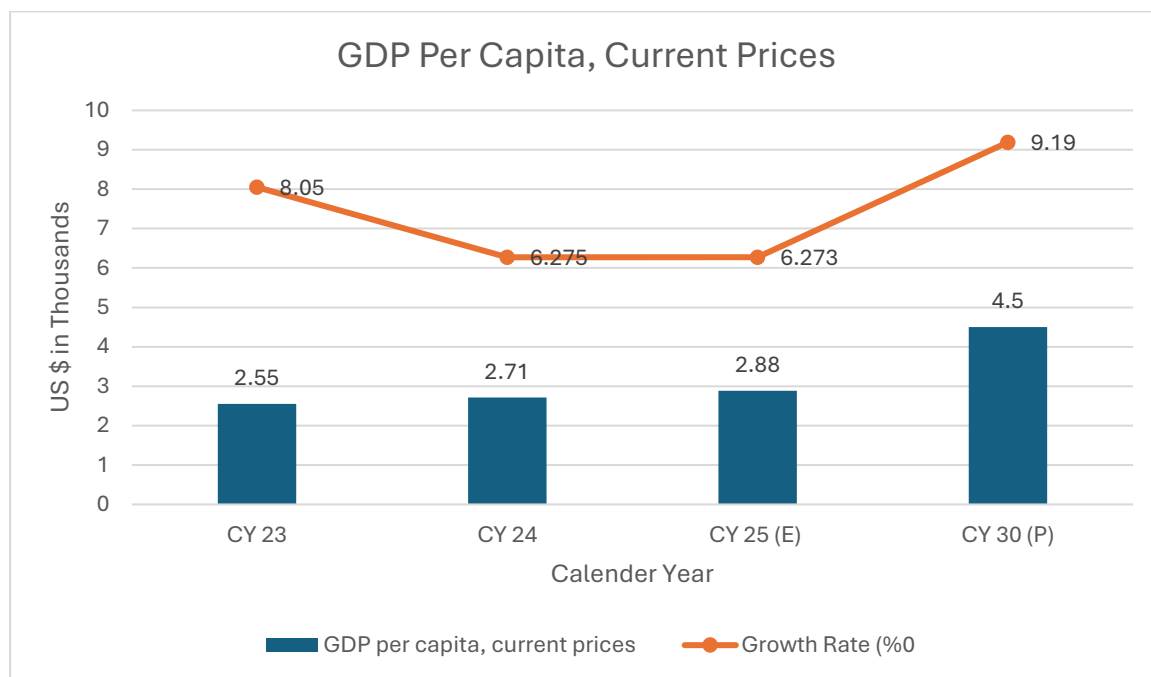


Source: MOSPI



## 2.4 India Per Capita GDP Forecast

Per capita GDP growth for India is estimated at 9.19 % CAGR between FY 2025-FY 2030. Increased individual incomes are expected to create additional discretionary spending, which may be beneficial for the sector.



*Note: E = Estimated, P = Projected*

Source: IMF Data Mapper, World Economic Outlook April 2025, India, GDP Per Capita

### **2.5 Private Final Consumption Expenditure (PFCE)**

Private Final Consumption Expenditure (PFCE) represents the total spending by resident households on final consumption of goods and services, serving as a key indicator of consumer demand and overall economic well-being. It reflects the extent of household consumption and plays a crucial role in driving GDP growth. In FY2025, PFCE at constant prices rose to 56.7% of GDP, up from 56.1% in FY2024, indicating a gradual improvement in household spending patterns. This increase suggests stronger consumer confidence, supported by factors such as easing inflation, improving income levels, and a favourable consumption environment.

*Source: - MOSPI, Second Advance Estimates of GDP 2024-25 dated February 28, 2025*

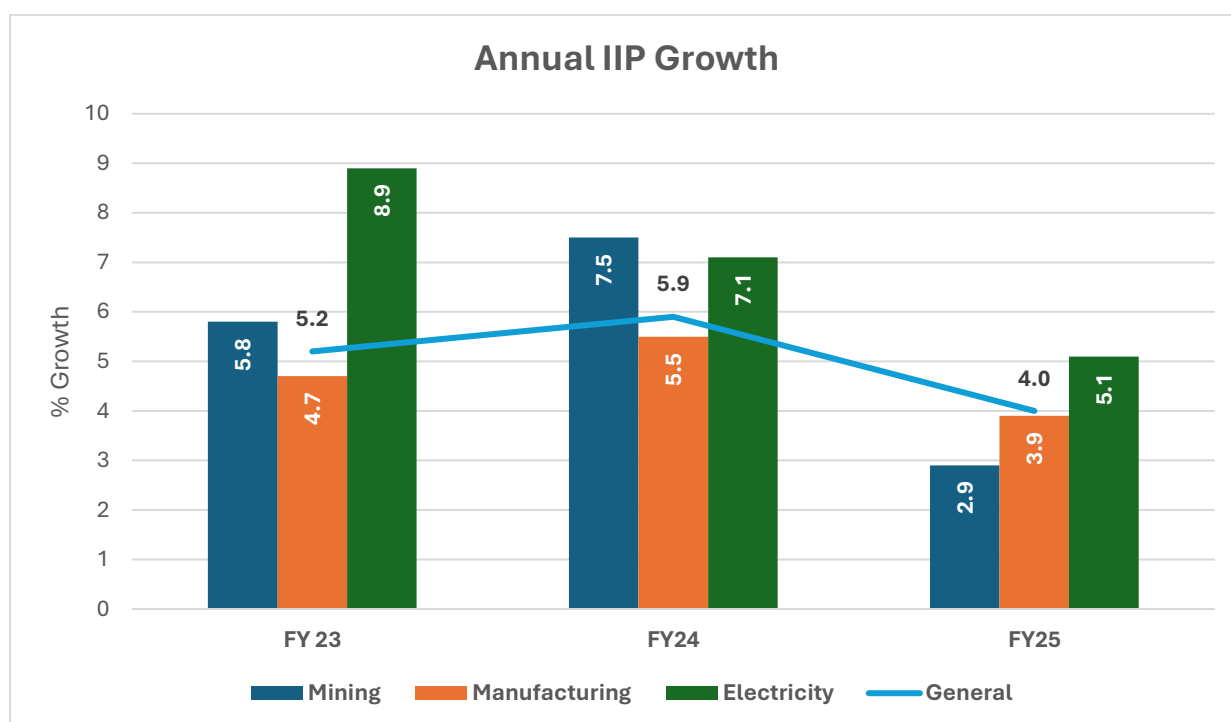
## 2.6 IIP Growth – Index of Industrial Production

As per the Index of Industrial Production (IIP), the industrial sector grew by 4.0% in FY 2025, moderating from 5.9% in FY 2024 and 5.2% in FY 2023. This deceleration in overall IIP growth in FY 2025 reflects a softening of industrial momentum amidst global headwinds and tighter financial conditions.

Among key components:

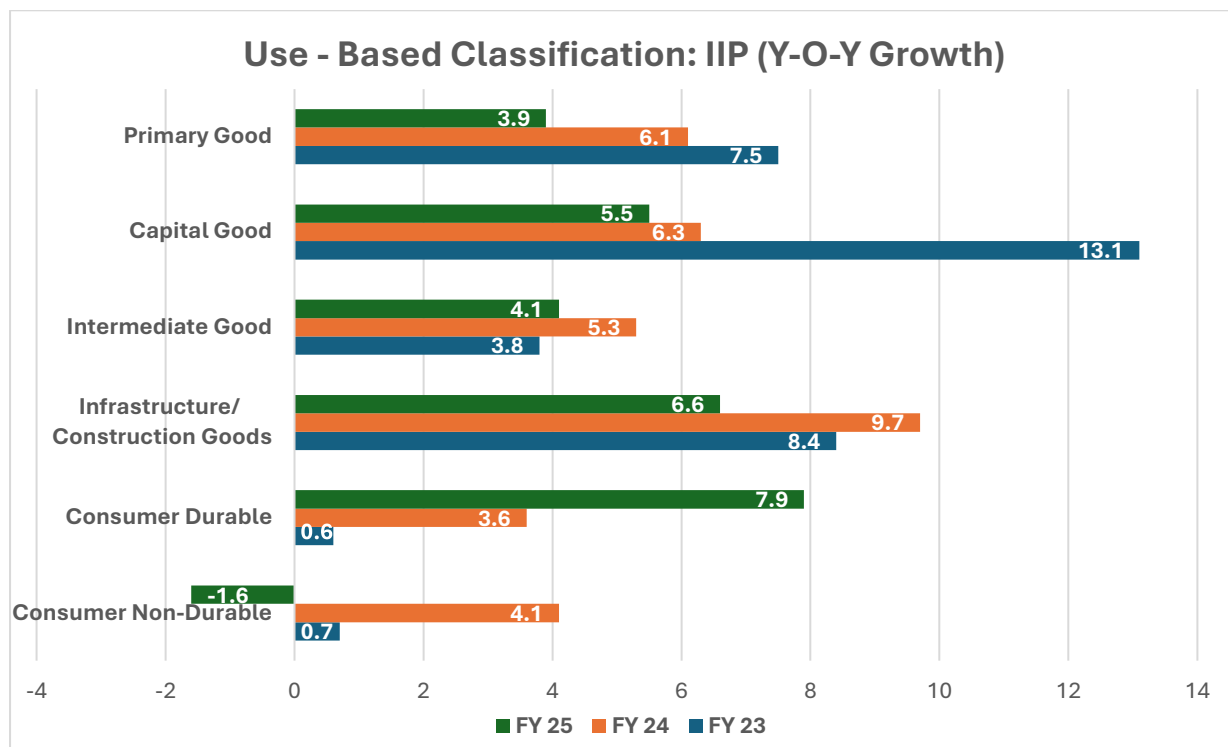
- **Manufacturing** (which holds a 77.6% weight in IIP) registered a slower growth of 3.9% in FY 2025, compared to 5.5% in FY 2024 and 4.7% in FY 2023.
- **Mining** growth also moderated sharply to 2.9% in FY 2025 from 7.5% in FY 2024 and 5.8% in FY 2023.
- **Electricity** growth remained relatively stable at 5.1% in FY 2025, slightly down from 7.1% in FY 2024 and significantly lower than 8.9% in FY 2023.

This slowdown indicates tightening domestic demand and spillover effects from a weaker global industrial cycle.



Source: Ministry of Statistics & Programme Implementation (MOSPI)

### Use-Based Classification Trends:



Source: Ministry of Statistics & Programme Implementation (MOSPI)

According to the use-based classification:

- Capital Goods segment growth slowed to 5.5% in FY 2025, down from a high of 13.1% in FY 2023 and 6.3% in FY 2024, indicating a reduction in investment momentum.
- Primary Goods also witnessed slower growth at 3.9%, compared to 6.1% in FY 2024 and 7.5% in FY 2023.
- Intermediate Goods rebounded modestly to 4.1% in FY 2025, up from 3.8% in FY 2023, although still lower than 5.3% in FY 2024.
- Infrastructure/Construction Goods slowed to 6.6% in FY 2025 from 9.7% in FY 2024 and 8.4% in FY 2023, pointing to softening construction and infrastructure activity.
- Consumer Durables grew significantly by 7.9%, rebounding from 3.6% in FY 2024 and 0.6% in FY 2023, indicating improved demand in consumer electronics and appliances.
- In contrast, Consumer Non-Durables contracted by 1.6% in FY 2025, reversing the 4.1% growth in FY 2024, likely reflecting subdued rural and essential goods demand.

The divergence in growth across segments suggests an uneven industrial recovery in FY 2025. While certain consumer categories have rebounded, investment-related and primary sectors remain under pressure.

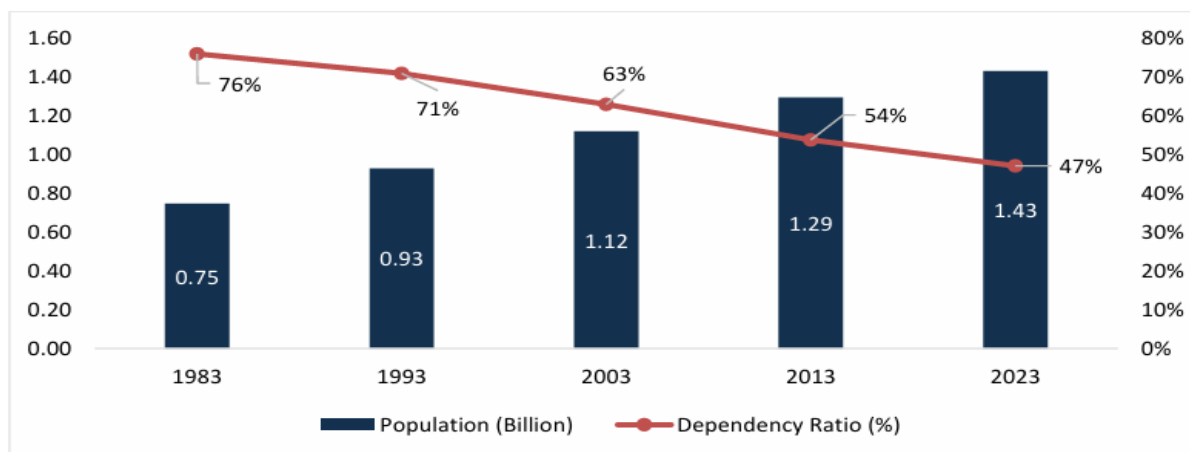
## 2.7 Overview on Key Demographic Parameters

### 2.7.1 Population growth and Urbanization

India's economic growth and expanding private consumption are intrinsically linked to its demographic and urbanization trends. According to the World Bank, India's population is estimated to have reached approximately 1.44 billion in 2024, reaffirming its position as the world's most populous country, ahead of China. This continued growth reflects an expanding labour force and consumer base, both of which are critical to sustaining long-term economic development.

A key metric in demographic analysis—the age dependency ratio, defined as the ratio of dependents (individuals aged below 15 or above 64) to the working-age population (15–64 years)—has been on a downward trajectory for several decades. From a high of 76% in 1983, the dependency ratio declined to 47% in 2023 and is estimated at 50.2% in 2024. This decline signifies that for every 100 working-age individuals, there are only about 50 dependents, indicating a favourable demographic dividend. A greater share of the population is now within the working-age group, potentially contributing to enhanced economic productivity and income generation.

#### Trend of India Population vis-à-vis dependency ratio



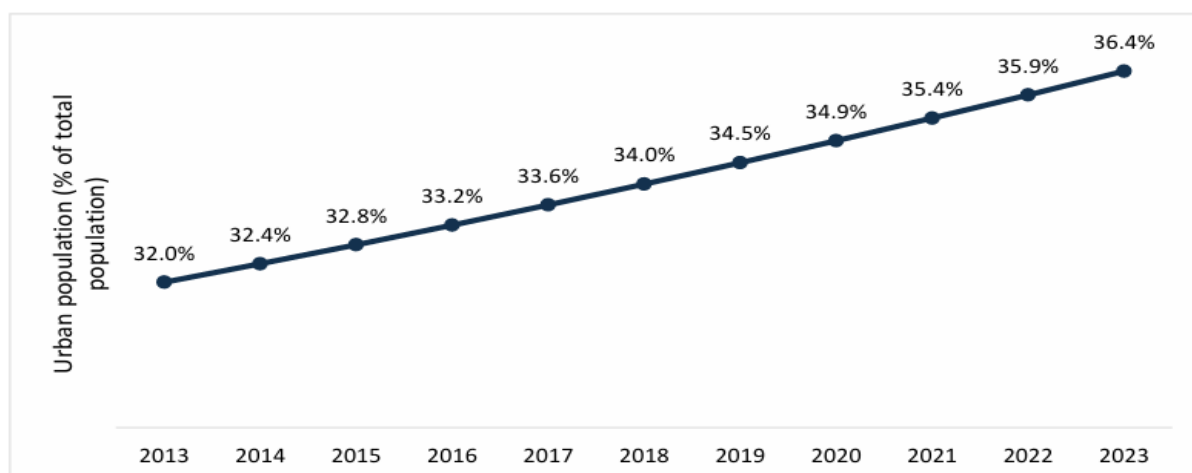
Source: World Bank Database

However, a parallel trend is emerging in the form of a rising old-age dependency ratio—the proportion of individuals aged 65 and above relative to the working-age population. This figure has gradually increased, reaching 10.4% in 2024, suggesting the onset of an aging demographic shift. This highlights the growing need for robust healthcare systems, pension reforms, and social security mechanisms to address future challenges associated with an aging population.

India's youthful demographic remains one of its most significant advantages. With a median age of around 29 years, India has one of the youngest populations globally. Nearly one-fifth of the world's youth resides in India, and as millions enter the workforce each year, this demographic bulge offers enormous potential—provided it is met with adequate job creation, education, and skills training.

Urbanization, too, is transforming India's socio-economic fabric. The urban population rose from 413 million in 2013 (32% of total population) to 519.5 million in 2023 (36.4%), and further to approximately 535 million in 2024 (36.9%), according to World Bank estimates. This rapid growth in urban areas underscores the need for sustainable urban planning, investment in infrastructure, and development of smart cities to accommodate and benefit from the shifting population dynamics.

### Urbanization Trend in India



Source: World Bank Database

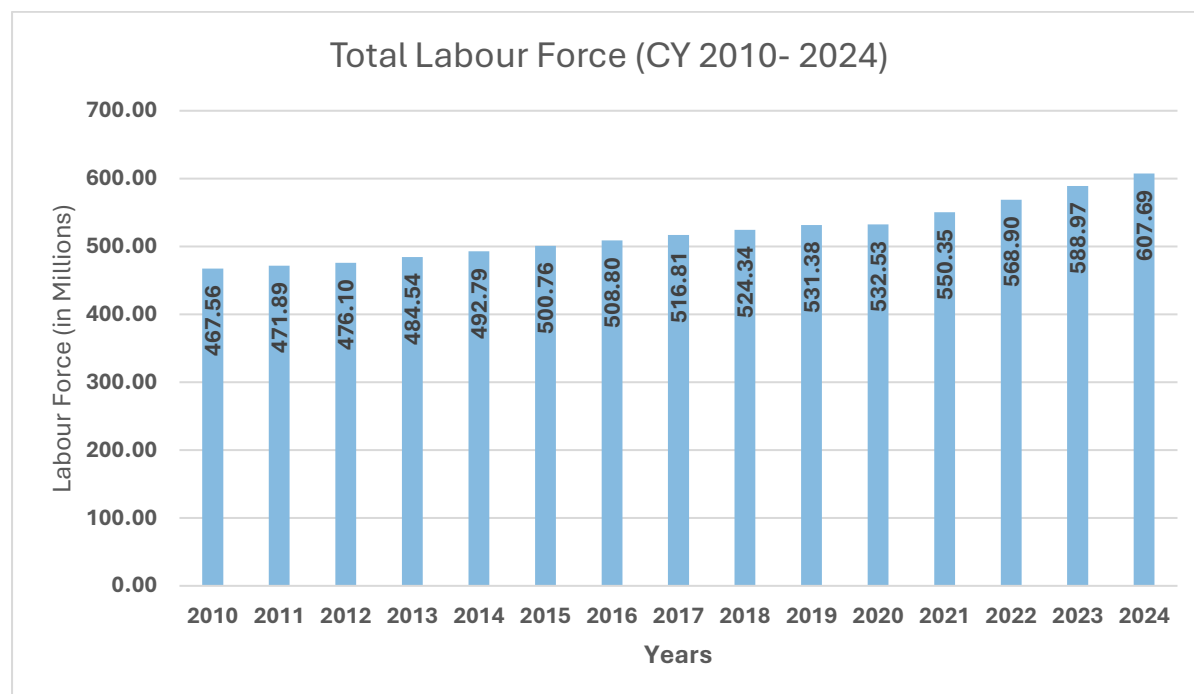
### 2.7.2 Labour Force in India

India's labour force has experienced significant growth over the past decade. In 2010, the total labour force was approximately 467.56 million. By 2024, this number had increased to 607.69 million, reflecting a Compound Annual Growth Rate (CAGR) of 1.89% over the 14-year period.

This upward trend underscores the expanding working-age population and the country's ongoing economic development. However, it also highlights the need for effective employment policies to ensure that the growing labour force is adequately absorbed into productive sectors.

The labour force participation rate (LFPR) has also seen fluctuations, influenced by various socio-economic factors. As of 2024, the LFPR stood at 45.1%, indicating the percentage of the working-age population that is either employed or actively seeking employment.

These statistics emphasize the importance of implementing strategies that not only create employment opportunities but also enhance the quality and inclusivity of jobs across different sectors of the economy.

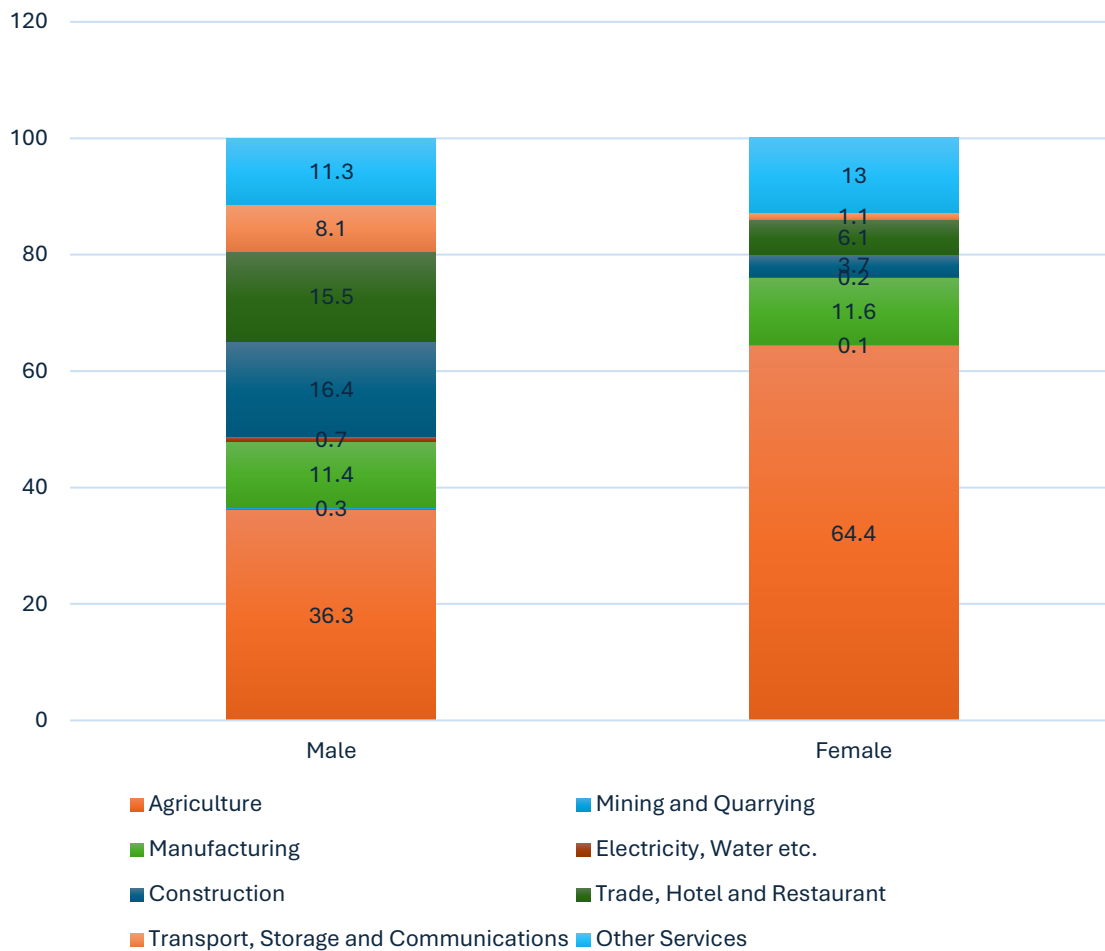


Source: World Bank Database

### **2.7.3 Breakdown of Employment by Sector**

According to the Periodic Labour Force Survey (PLFS) 2023–24, the employment distribution across various sectors exhibits distinct gender-based patterns. A significant portion of male workers are engaged in agriculture, followed by notable participation in construction, manufacturing, and trade-related activities. In contrast, female workers are predominantly employed in agriculture, with considerable involvement in manufacturing and other services sectors. While female representation in trade and construction is lower compared to males, Additionally, a substantial proportion of employed women are self-employed, often contributing as unpaid helpers in household enterprises or operating small businesses, indicating a reliance on informal employment avenues.

### Percentage distribution of workers by broad industry division 2023-24



Source: Annual Report 2023-24, Periodic Labour Force Survey

#### 2.7.4 Labour Laws in India

Labour is a subject under the Concurrent List of the Indian Constitution, enabling both the Central and State Governments to frame relevant legislation. In a major reform initiative, the Government of India has consolidated 29 existing central labour laws into four comprehensive Labour Codes to simplify compliance, reduce multiplicity of definitions, and promote transparency. These include:

- The Code on Wages, 2019
- The Industrial Relations Code, 2020
- The Code on Social Security, 2020
- The Occupational Safety, Health and Working Conditions Code, 2020



As of 31st December 2024, the Central Government and a majority of States/Union Territories had pre-published draft rules under all four Labour Codes. Regional consultations were held to align state-level rules with the central framework. Once fully implemented, these Codes are expected to harmonize the needs of workers and industry, facilitate ease of doing business, and support employment generation.

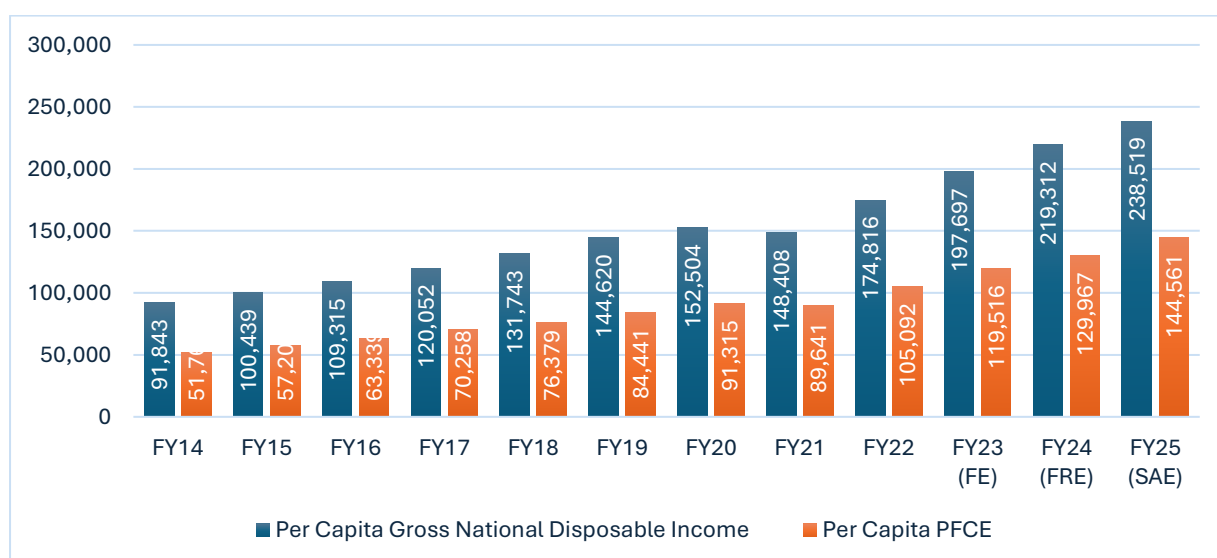
Additionally, the Ministry of Labour & Employment is revamping the Shram Suvidha Portal to improve regulatory compliance and has launched the e-Shram Portal to register workers from the unorganised sector. Over 30 crore registrations have been completed, and the portal has been integrated with 12 key social welfare schemes, enabling targeted delivery of benefits.

### **2.7.5 Disposable Income and Consumer Spending**

Gross National Disposable Income (GNDI) represents the total income available to a nation's residents for consumption and saving after accounting for income transfers with the rest of the world. In FY24, Per capita GNDI grew by 9.85%, followed by a moderate growth of 8.05% in FY25. This steady increase indicates that households and businesses had more income at their disposal, which is critical for supporting both consumption and savings—key components of economic resilience and expansion.

The rise in GNDI has translated into higher consumer spending, as reflected in the growth of Private Final Consumption Expenditure (PFCE), which measures the total value of goods and services consumed by households. Per Capita PFCE grew by 8.04% in FY24 and further accelerated to 10.09% in FY25, highlighting strong consumer confidence and robust domestic demand.

#### **Trend of Per Capita GNDI and Per Capita PFCE (Current Price)**



Note: Data mentioned is in Rs. Crore, FE – Final Estimates, FRE – First Revised Estimates, SAE – Second Advanced Estimate; Source: MOSPI

## **2.8 Union Budget FY25-26 Highlights**

The **Union Budget FY 2025–26**, presented by Finance Minister Nirmala Sitharaman, introduces a comprehensive set of measures aimed at stimulating economic growth, enhancing infrastructure, and fostering inclusive development. With a focus on sectors such as agriculture, MSMEs, infrastructure, innovation, and exports, the budget seeks to create a conducive environment for sustained economic expansion.

- **Capital Expenditure and Infrastructure Development**

The government has earmarked a substantial ₹11.21 lakh crore (3.1% of GDP) for capital expenditure in FY 2025–26. This allocation is directed towards infrastructure projects, including rural development, manufacturing, and skill-building initiatives. Notably, the Urban Challenge Fund has been established with a corpus of ₹1 lakh crore, aimed at financing 25% of the cost of bankable urban infrastructure projects, thereby promoting sustainable urban development.

- **Support for MSMEs**

Recognizing the pivotal role of Micro, Small, and Medium Enterprises (MSMEs) in India's economic landscape, the budget introduces several measures to bolster this sector. The Credit Guarantee cover has been enhanced to ₹10 crore, unlocking ₹1.5 lakh crore in additional funding for MSMEs over the next five years. Additionally, the establishment of a Fund of Funds with a ₹10,000 crore corpus aims to provide equity support to startups and potential MSMEs, focusing on high-growth sectors such as electronics and renewable energy.

- **Tax Reforms and Disposable Income**

To stimulate consumption and investment, the budget introduces significant tax reforms. The tax-free income threshold has been raised to ₹12 lakh, and the new tax regime offers reduced rates for higher income brackets. These changes are expected to increase disposable income, thereby encouraging higher savings and investment among the middle class.

- **Focus on Agriculture and Exports**

The budget prioritizes agriculture as a key engine of development, with increased allocations for agricultural credit and initiatives aimed at enhancing productivity. Furthermore, measures to promote exports include the reduction of customs duties on select goods and the introduction of policies to facilitate easier market access for Indian products.

- **Urban Development Initiatives**

A significant increase in the budget allocation for the Ministry of Housing and Urban Affairs to ₹96,777 crore reflects the government's commitment to urban development. Key initiatives include the establishment of the Urban Challenge Fund, enhanced loans under the PM SVANidhi scheme, and substantial provisions for the Pradhan Mantri Awas Yojana

and Urban Rejuvenation Mission, all aimed at improving urban infrastructure and living standards.

The Union Budget FY 2025–26 presents a balanced approach to economic growth by addressing immediate consumption needs and laying the foundation for long-term sustainability. Through targeted investments in infrastructure, support for MSMEs, tax reforms, and sector-specific initiatives, the budget aims to foster an inclusive and resilient economy. These measures are expected to create new opportunities for financial institutions, as the growing demand for investment products will provide avenues for expansion and innovation in the financial services sector.

## **2.9 Concluding Remarks about Macroeconomic Scenario**

The major headwinds to global economic growth remain significant, with escalating geopolitical tensions, volatile global commodity prices, high interest rates, inflationary pressures, instability in international financial markets, climate change, rising public debt, and the rapid evolution of new technologies. Despite these challenges, India's economy is relatively well-positioned compared to other emerging markets. According to the latest IMF forecast, India's GDP growth is expected to be 6.2% in 2025, maintaining its position as the fastest-growing major economy globally, well above the global growth projection of 2.8%. Key positive factors for the Indian economy include continued strong domestic demand, robust government support for capital expenditure, moderating inflation, growing investments in technology, and improving business confidence.

India's strategic position as a manufacturing hub is further strengthened by government initiatives, a skilled labour force, and a dynamic startup ecosystem, all of which bolster the country's economic outlook. The ongoing reforms and focus on innovation are enabling India to seize emerging opportunities, making it a growing player in the global manufacturing landscape. In addition, several high-frequency growth indicators—such as the Purchasing Managers' Index (PMI), E-way bills, bank credit, toll collections, and GST collections—have shown a positive trajectory in FY25. The normalization of employment post-economic reopening is expected to provide further support to consumption expenditure.

Public investment is also poised to grow, with the government allocating a significant ₹11.21 lakh crore for capital expenditure in FY25. The private sector's investment intentions are showing positive signs, as evidenced by increased new project investments and a strong import of capital goods. Furthermore, rural demand is likely to improve, bolstered by healthy sowing, better reservoir levels, and the positive progress of the southwest monsoon, coupled with the government's push for infrastructure investment and other policy measures. These factors are expected to further support the investment cycle and strengthen India's economic resilience in the coming years.

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### 3. Industry Overview – Sugar Industry

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The sugar industry is one of the most significant Agro-based industries in the world, playing a vital role in food security, economic development, and rural livelihoods. At its core, the sector is centred around sugarcane cultivation and processing, with sugar being a universally consumed commodity that sweetens countless food and beverage products across the globe. Beyond its role as a household staple, sugar is a critical input for a wide range of industries, including confectionery, dairy, bakery, pharmaceuticals, and packaged foods.

In India, Brazil, Thailand, and several other countries, the industry has developed into an integrated value chain where sugar production is closely interlinked with the generation of by-products such as ethanol, molasses, bagasse, and press mud, which support renewable energy, distilleries, biofuel blending programs, and fertilizer production.

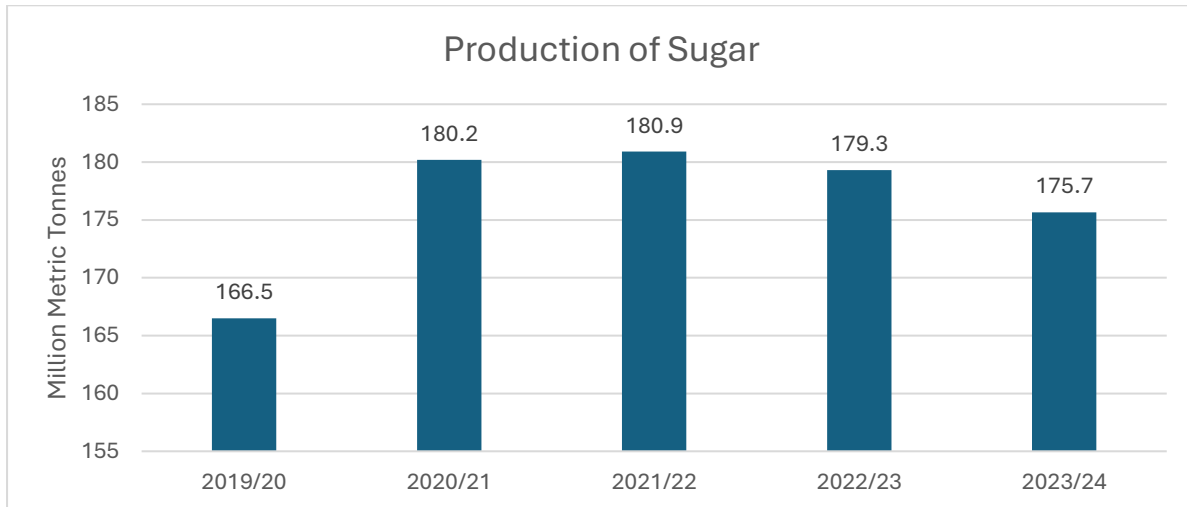
This diversification has elevated the sector from being a mere sweetener producer to a vital contributor to energy security and sustainability. Globally, sugarcane is among the most cultivated crops, and the industry supports millions of farmers, mill workers, traders, and retailers, making it both a source of livelihood and a driver of regional economies. The industry's dynamics are, however, deeply influenced by fluctuating climatic conditions, government policies on pricing and subsidies, international trade regulations, and changing consumer preferences, particularly with rising health consciousness and debates around sugar consumption. At the same time, new opportunities are emerging in the form of ethanol blending mandates, green energy initiatives, and the development of alternative sweeteners that align with health and sustainability trends.

As nations push for cleaner energy and circular economy practices, the sugar industry is undergoing a profound transformation, positioning itself as not just a supplier of sweeteners but also a provider of renewable energy, eco-friendly materials, and sustainable agricultural practices. In this evolving landscape, the sugar industry stands at the crossroads of tradition and innovation—balancing its centuries-old role as a food essential with its modern identity as a strategic sector that links agriculture, industry, energy, and trade in shaping global economic and social progress.

### 3.1 Market Segmentation

Category	Segments	Description / Applications
By Type	White Sugar	Refined product obtained from sugarcane or sugar beet; widely used in baking, non-alcoholic beverages, and processed foods due to fine grains and neutral flavour.
	Brown Sugar	Contains molasses; has a soft, sticky texture with sweet, toffee-like notes; used in cookies, breads, and even Savory dishes with meat.
	Liquid Sugar	Sugar specialty (sometimes referred to in industry as liquid or powdered sugar solutions); used in food processing, beverages, syrups, and blending for ease of application.
By Application	Food & Beverages	Largest segment: includes confectionery, bakery, dairy products, soft drinks, and processed foods where sugar is used for sweetness and texturization.
	Pharma & Personal Care	Functions as a stabilizer in medicines, coating agent for tablets, preservative, and in cosmetics as an exfoliator and humectant.
	Household/Retail	Direct use by consumers in cooking, baking, and sweetening of food and beverages at home.
	Others	Includes bioenergy (ethanol), industrial fermentation, and specialty chemicals derived from sugar.

### 3.2.1 Global Sugar Production



Source - USDA World Agricultural Supply and Demand Estimates (WASDE)

The global sugar production data from 2019/20 to 2023/24 shows a fluctuating yet slightly declining trend in recent years. Production rose from 166.5 million tonnes in 2019/20 to a peak of 180.9 million tonnes in 2021/22, reflecting an increase in output during this period. However, production has since decreased, reaching 175.7 million tonnes in 2023/24, indicating a modest downward correction. This trend could be influenced by factors such as adverse weather conditions, changes in agricultural practices, or shifts in sugarcane cultivation patterns in major producing countries. Overall, while global sugar production remains high, the slight decline in the last two years suggests potential tightening of supply in the near term.

### 3.2.2 Major Producing Countries

Countries	2023/24	% of Global Production
Brazil	41.0	23.34%
India	29.5	16.79%
European Union	15.6	8.88%
Thailand	8.8	5.01%
China	10.0	5.69%

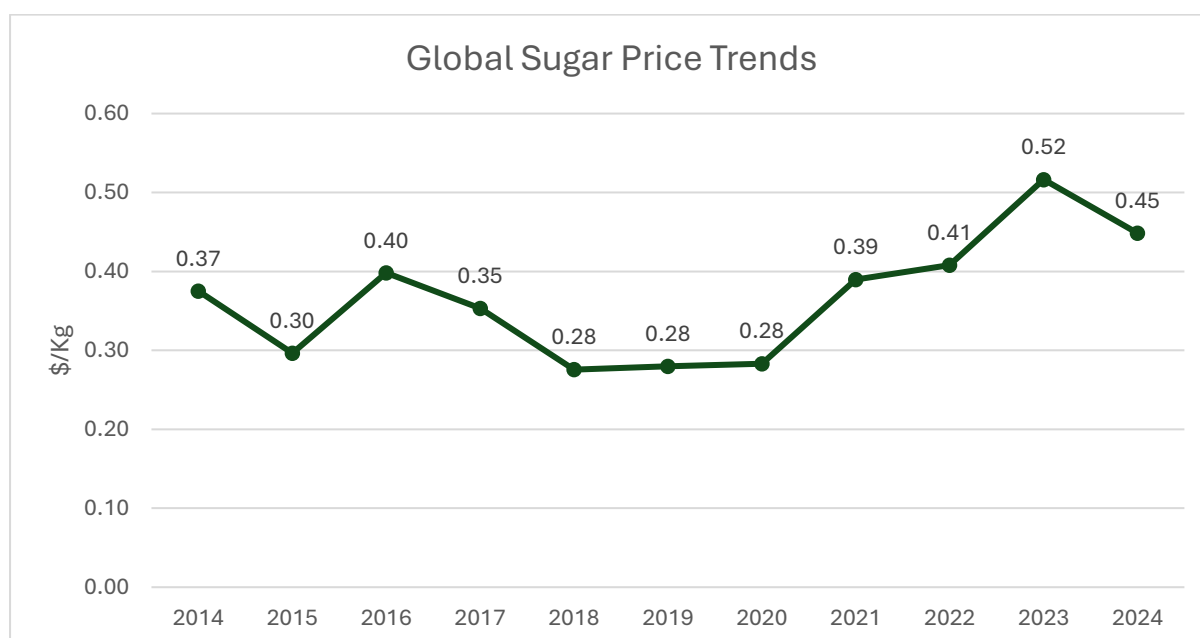
Source - USDA World Agricultural Supply and Demand Estimates (WASDE)

In the 2023/24 period, global sugar production remains concentrated among a few major producers, with Brazil leading the market, accounting for 23.34% of global output at 41 million tonnes. India follows as the second-largest producer, contributing 16.79% or 29.5 million tonnes, reflecting its critical role in both domestic consumption and export markets. The European Union produces 15.6 million tonnes (8.88%), showing a significant, though comparatively smaller, share. Thailand and China contribute 5.01% and 5.69%, respectively,

with production volumes of 8.8 million tonnes and 10 million tonnes, highlighting their roles as important regional players. Overall, the data underscores a highly concentrated global sugar production landscape, dominated by Brazil and India, which together account for over 40% of the total output.

### **3.2.3 International Price Trends of Sugar Commodity**

Global sugar prices have shown sharp fluctuations over the past decade, falling from \$0.37/kg in 2014 to a low of \$0.28/kg during 2018–2020 due to oversupply and weak demand. Prices then rebounded, reaching \$0.39/kg in 2021 and peaking at \$0.52/kg in 2023, driven by supply disruptions, rising costs, and strong import demand. In 2024, prices eased to \$0.45/kg, though they remain above the decade's average, reflecting the market's sensitivity to production cycles, climate conditions, and global trade dynamics.



Source – World Bank, Commodity Price

### **3.2.4 Major Trends**

- **Rising Global Demand** - Population growth, urbanization, and changing dietary patterns—particularly higher consumption of processed and protein-rich foods—are driving demand for key commodities like cereals, sugar, oilseeds, rice and pulses.
- **Volatility in Prices** - Agro-commodity markets remain highly susceptible to price fluctuations due to weather events, climate change, pest outbreaks, geopolitical tensions, and trade policy shifts. This has increased both risk and opportunity for producers, traders, and investors.
- **Technology Adoption** - Digital agriculture, precision farming, and data-driven supply chain management are being increasingly adopted to optimize yields, reduce input



costs, and improve market linkages. Technologies like satellite monitoring, AI-based crop prediction, and smart irrigation are gaining traction.

- **Sustainability and ESG Focus** - Sustainability is becoming central, with greater emphasis on carbon-neutral farming, soil health, water conservation, and responsible sourcing. Consumers and regulators are demanding traceability and environmental compliance across the value chain.
- **Digital Marketplaces and Direct-to-Consumer Models** - Online commodity trading platforms, Agri-fintech, and farm-to-retail models are reducing intermediaries, improving price discovery, and enhancing farmer incomes.
- **Shift Towards Value-Added Products** - There is growing emphasis on processed foods, functional foods, and plant-based products, encouraging Agro-commodity players to move beyond raw produce into higher-margin products.

### **3.3 Indian Sugar Industry**

The Indian sugar industry is one of the most prominent Agro-based industries in the country, contributing significantly to rural development, farmer livelihoods, and the broader economy. India is the world's second-largest producer of sugar after Brazil and the largest consumer, reflecting its dual role as both a production powerhouse and a vast domestic market. Centered primarily around sugarcane cultivation, the industry supports more than 50 million farmers and their families, while providing direct and indirect employment to millions through sugar mills, allied industries, and value-added sectors such as ethanol and cogeneration. Beyond sweetening household consumption, sugar is a critical input for confectionery, bakery, beverages, and pharmaceuticals, making it an indispensable commodity in India's food and industrial landscape.

India's sugar profile is shaped by strong regional diversity, with major production concentrated in Uttar Pradesh, Maharashtra, and Karnataka, which together account for more than 80% of the country's output. While the country remains self-sufficient in meeting its domestic sugar demand, its position as a leading exporter has strengthened in recent years due to government-backed policies and surplus production cycles. At the same time, the sector plays a strategic role in India's renewable energy ambitions, with molasses-based ethanol contributing significantly to the ethanol blending program, and bagasse being harnessed for cogeneration of electricity. This integration has positioned the sugar industry as not just a food supplier but also a contributor to energy security and sustainability.

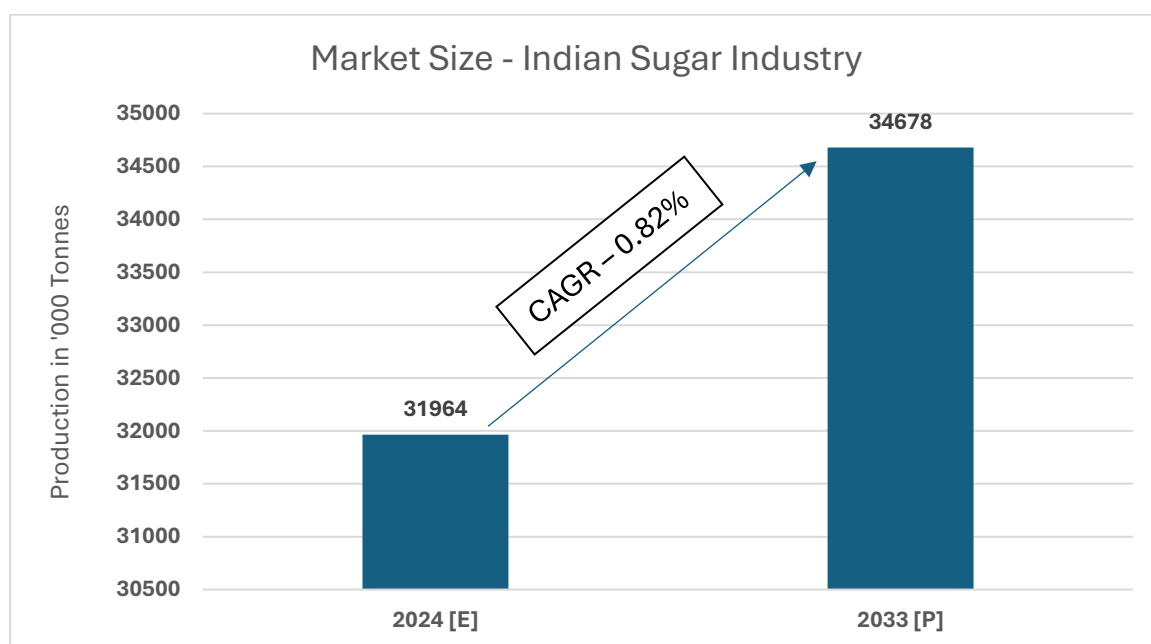
Despite its strong base, the industry faces several structural challenges, including cyclical fluctuations between surplus and deficit years, dependence on monsoon rains, water-intensive cultivation practices, high production costs, and delayed payments to farmers due to pricing mismatches. Additionally, health-conscious shifts in consumer preferences and rising debates around sugar consumption pose long-term demand-side considerations. However, modernization is gradually transforming the industry, with increasing adoption of mechanized farming, improved cane varieties, digital payment systems for farmers, and advanced technologies in milling and ethanol production.

Looking ahead, the Indian sugar industry is poised for a phase of transformation and diversification. With policy support for ethanol blending, increasing investments in bioenergy, and a steady rise in domestic consumption, the sector is expected to remain a critical driver of rural and industrial growth. Balancing the twin goals of supporting farmers and ensuring financial viability of mills will be key, alongside addressing sustainability concerns around water usage and climate change. As India continues to strengthen its role in global sugar trade while integrating deeper into the renewable energy ecosystem, the sugar industry is set to evolve as a sector that bridges tradition and innovation—nourishing people, empowering farmers, and fuelling the nation's clean energy future.

### 3.3.1 Market Size

The Indian Sugar Industry, based on production data, is estimated at 31,964 thousand tonnes in FY 2024 and is projected to reach 34,678 thousand tonnes by FY 2033 registering a modest CAGR of 0.82% over the period. The production trend has remained relatively stable in recent years, fluctuating between 31,000–36,000 thousand tonnes, highlighting the cyclical nature of sugarcane cultivation and the stabilizing impact of policy interventions. On the demand side, population growth, rising consumption in processed foods and beverages, and continued household use underpin steady domestic demand for sugar.

On the supply side, the industry benefits from India's large-scale cane cultivation, coupled with strong government interventions such as the Fair and Remunerative Price (FRP) policy, ethanol blending programs, and export incentives that ensure stability for farmers and millers alike. However, climate variability, global price volatility, and rising health concerns related to sugar consumption pose ongoing challenges. Despite these factors, sugar production remains strategically important, supporting both domestic food security and India's position as a leading contributor to global sugar trade during surplus years.



Source – CMIE, Infomerics Analytics & Research

Sugar production in India is one of the most significant Agro-based industries, deeply intertwined with the country's agricultural economy and rural livelihood. As the second-largest producer of sugar globally, India cultivates sugarcane across major states such as Uttar Pradesh, Maharashtra, Karnataka, Andhra Pradesh. The industry not only meets the domestic demand for sugar, a staple in Indian households, but also contributes substantially to ethanol blending programs, power cogeneration, and exports, thereby supporting both energy security and foreign exchange earnings. With millions of farmers engaged in sugarcane

cultivation, the sector plays a vital socio-economic role while shaping policy decisions related to agriculture, trade, and renewable energy.

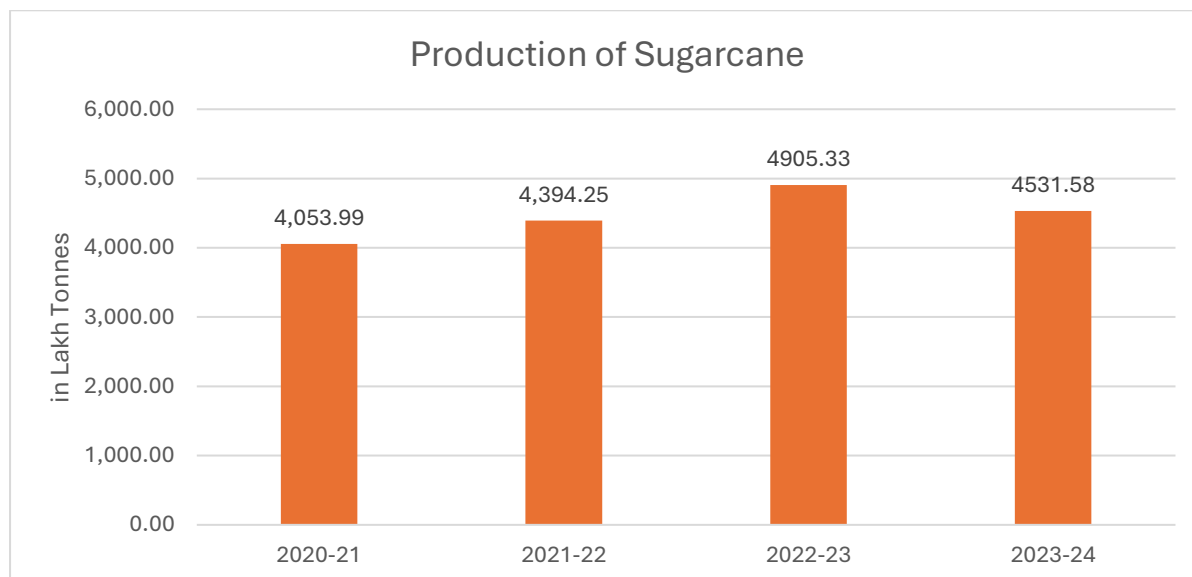
### **3.3.2 Employment**

The Indian sugar industry is an important Agro-based industry that impacts rural livelihoods of about 5 crore sugarcane farmers & their families and around 5 lakh workers directly employed in the sugar factories. Employment is also generated in various activities relating to transport, trade servicing of machinery and supply of agriculture inputs. India is the second largest producer and the largest consumer of sugar in the world. Today, Indian sugar industry's annual output is more than ₹1.3 lakh crore. *Source - PIB*

### **3.3.3 Value Chain Structure**

- **Sugarcane Cultivation & Harvesting** - Sugarcane cultivation is the foundation of the sugar industry, with farmers planting high-yield varieties and managing irrigation, fertilization, and pest control to maximize sucrose content. Once mature, cane is harvested manually or mechanically, ensuring optimal sugar extraction. Government policies like FRP and SAP safeguard farmer incomes and stabilize the sector.
- **Juice Extraction (Crushing)**- Crushing involves passing shredded cane through multi-stage rollers to extract raw juice. The fibrous residue, bagasse, is collected for use as boiler fuel or cogeneration, contributing to energy self-sufficiency and sustainable by-product utilization.
- **Juice Clarification** - Clarification removes impurities such as soil and fibres from the raw juice, using heat and lime treatment. The resulting sludge is processed into **press mud**, an organic fertilizer, while the clarified juice proceeds for evaporation and crystallization.
- **Evaporation & Crystallization** - Clarified juice is concentrated in multiple-effect evaporators to increase sugar content, then seeded with crystals in vacuum pans to induce crystallization. This step produces raw sugar crystals and molasses, which contains residual sugars for industrial uses like ethanol production.
- **Centrifugation & Drying** - Centrifugation separates sugar crystals from molasses, and the crystals are dried to produce marketable raw sugar. This step ensures uniform quality, extended shelf life, and suitability for either direct sale or further refining.
- **Refining & Value Addition** - Raw sugar undergoes refining to remove impurities and produce white sugar, while specialty products like powdered sugar, liquid sugar, and organic sugar cater to diverse industrial and consumer needs. Refining enhances value, stabilizes revenue, and supports downstream industries.

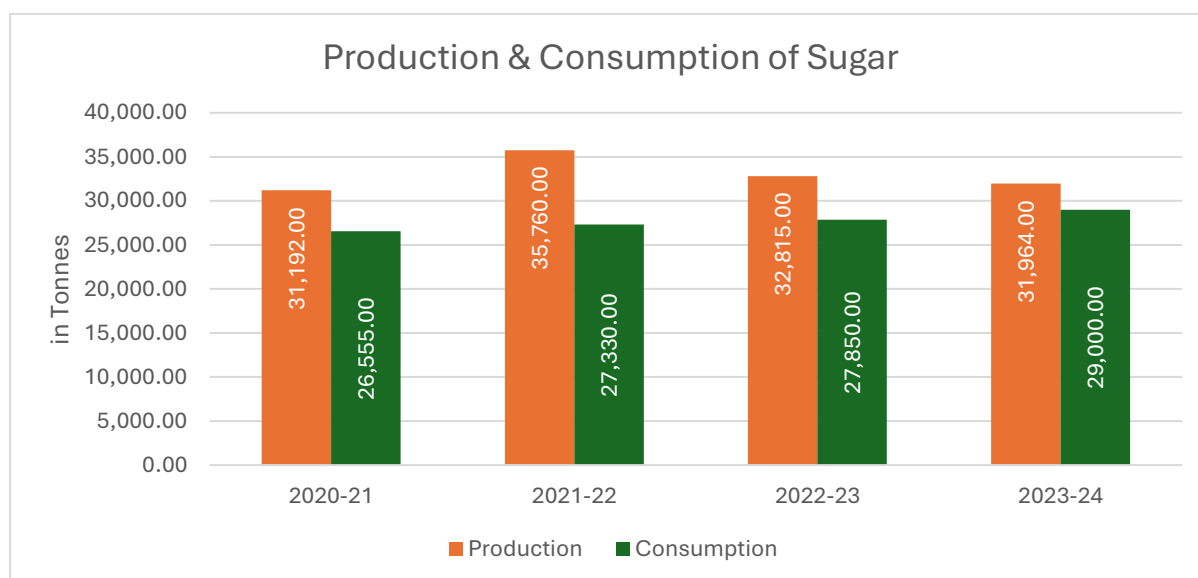
### 3.3.4 Production of Sugarcane in India



Source – DA&FW

The production data from 2020-21 to 2023-24 shows a generally increasing trend, with some fluctuations. Production rose from 4,053.99 lakh tonnes in 2020-21 to 4,905.33 lakh tonnes in 2022-23, reflecting a steady growth of around 20.9% over two years. However, in 2023-24, production declined slightly to 4,531.58, indicating a reduction of approximately 7.6% from the previous year. This minor dip could be attributed to factors such as adverse weather conditions, crop yield variations, or supply chain challenges. Overall, the data suggests a strong production capacity with periodic fluctuations typical of Agro-based or manufacturing sectors.

### 3.3.5 Production & Consumption of Sugar in India



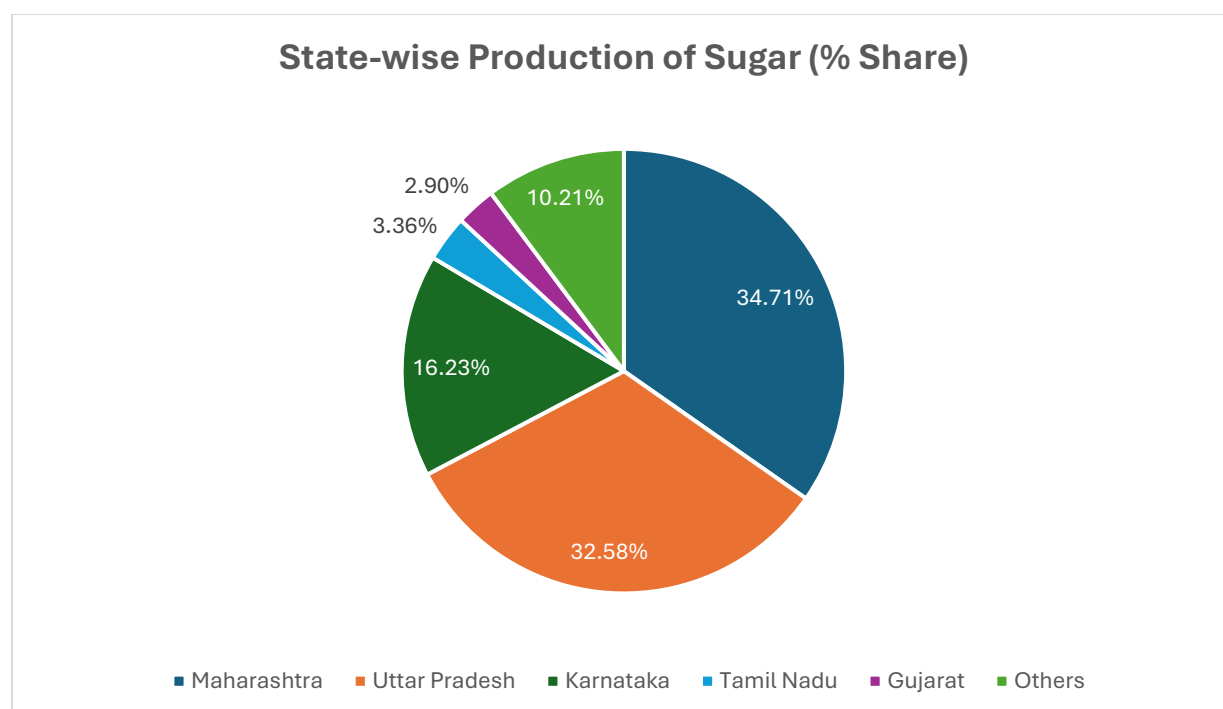
Source – CMIE

The data indicates fluctuations in sugar production and a gradual increase in consumption over the four-year period. In 2020-21, production stood at 31,192 thousand tonnes, comfortably above consumption of 26,555 thousand tonnes. Production peaked in 2021-22 at 35,760 thousand tonnes, while consumption increased moderately to 27,330 thousand tonnes, resulting in a larger surplus.

In 2022-23, production declined to 32,815 thousand tonnes, yet consumption continued its upward trend to 27,850 thousand tonnes, narrowing the gap between production and consumption. By 2023-24, production slightly decreased further to 31,964 thousand tonnes, while consumption rose more sharply to 29,000 thousand tonnes, indicating growing domestic demand and a shrinking surplus.

Overall, while sugar production has seen minor fluctuations, consumption has steadily increased, suggesting that supply-demand dynamics may tighten in the coming years if production does not keep pace with rising consumption.

### **3.3.6 State-wise Production of Sugar**

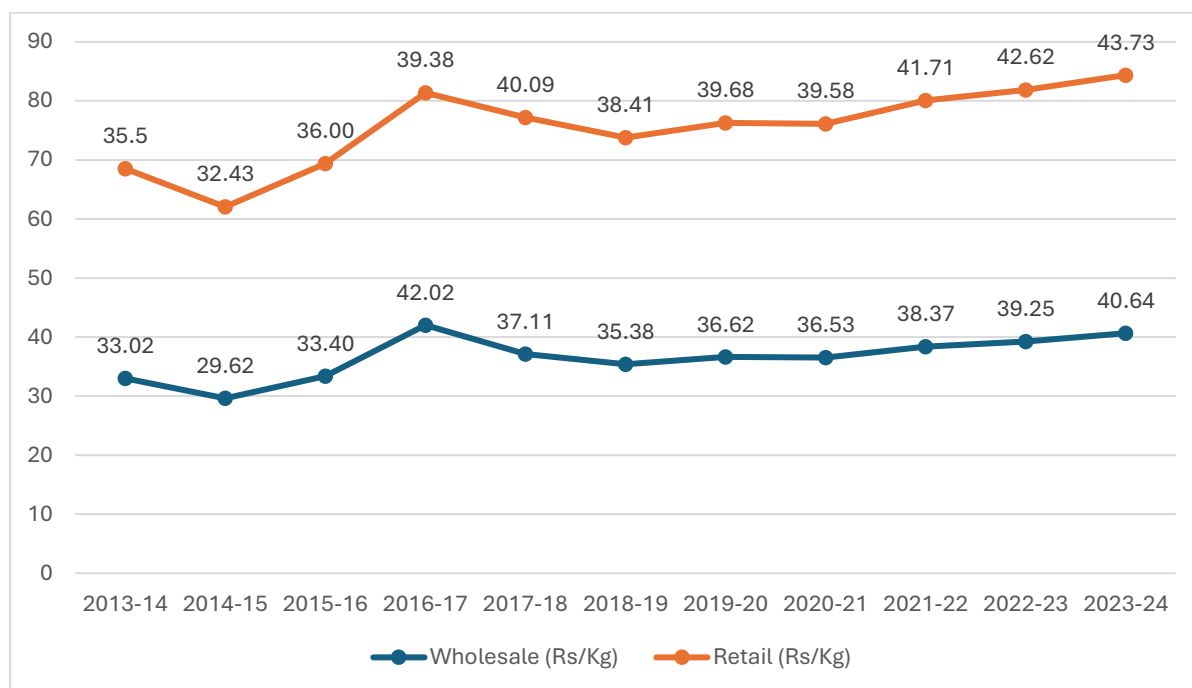


Source – CMIE, Infomerics Analytics & Research

The state-wise production data highlights that Maharashtra (34.71%) and Uttar Pradesh (32.58%) dominate the Indian sugar industry, together accounting for over two-thirds of the country's total output. Maharashtra leads due to its large cultivation of high-yield sugarcane varieties and favourable climatic conditions, while Uttar Pradesh benefits from extensive cane acreage and strong farmer participation. Karnataka contributes 16.23%, emerging as the third-largest producer, driven by efficient mills and rising cane productivity. In contrast, Tamil Nadu (3.36%) and Gujarat (2.90%) play relatively

smaller roles, constrained by climatic limitations and lower cane availability. The 'Others' category (10.21%) reflects contributions from states like Bihar, Andhra Pradesh, Punjab, and Haryana, which, though smaller in scale, add to the industry's geographic spread. This distribution underscores the regional concentration of sugar production in a few states, making the industry highly dependent on weather patterns, policy frameworks, and cane pricing in these key regions.

### 3.3.7 Wholesale & Retail Prices of Sugar

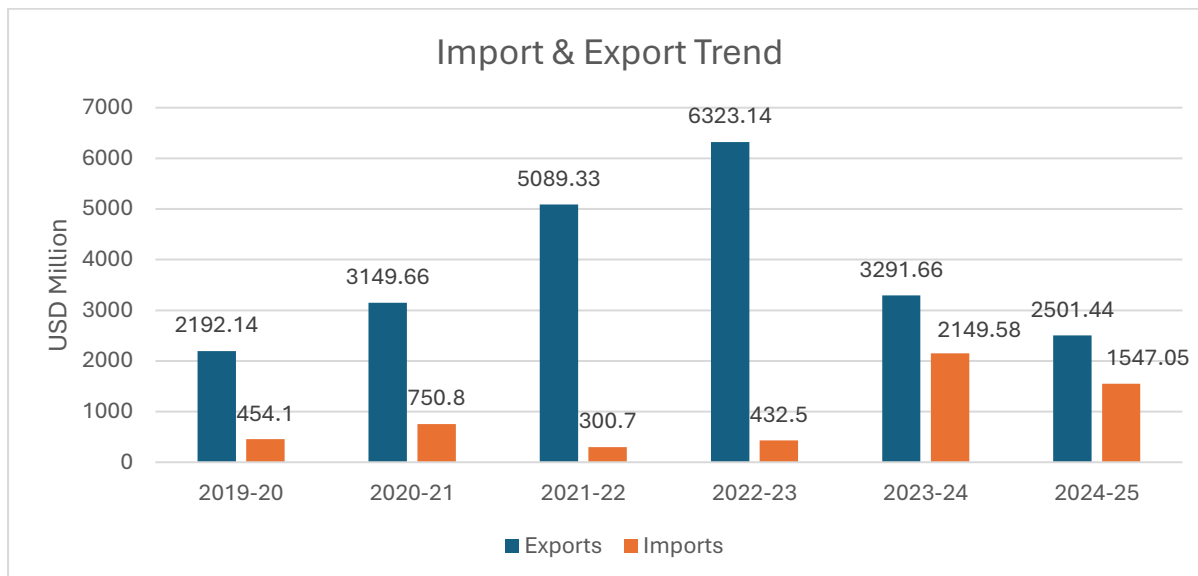


Source – Department of Food and Public Distribution (Directorate of Sugar)

Over the past decade, sugar prices in India have exhibited cyclical fluctuations while maintaining a steady upward trajectory. Wholesale prices moved from ₹33.02/kg in FY 2013-14 to ₹40.64/kg in FY 2023-24, while retail prices increased from ₹35.50/kg to ₹43.73/kg during the same period. The trend reflects the interplay of production cycles, government pricing policies, and market demand-supply dynamics.

Periods of oversupply, such as FY 2014-15, resulted in price corrections, whereas years of lower output, such as FY 2016-17, led to significant price spikes. Despite these variations, the spread between wholesale and retail prices has remained relatively stable at ₹2–3/kg, indicating consistent trade margins across the value chain. The overall upward trajectory underscores the resilience of the sugar sector, supported by steady domestic consumption growth, input cost adjustments, and policy measures including fair and remunerative price (FRP) for sugarcane and the ethanol blending programme. This stability and gradual appreciation in prices highlight the industry's long-term viability and its alignment with both consumer demand and structural reforms in the sector.

### 3.3.8 Import & Export Trend of Sugars & Sugar Confectionery



Source – DGCI, Ministry of Commerce & Industry

India's sugar and sugar confectionery trade has shown sharp fluctuations in recent years. Exports surged from 2,192.14 thousand tonnes in 2019-20 to a peak of 6,323.14 thousand tonnes in 2022-23, supported by surplus output and favourable global demand, before declining to 2,501.44 thousand tonnes in 2024-25 due to supply prioritization and government restrictions. Imports, though generally modest, spiked to 2,149.58 thousand tonnes in 2023-24 and 1,547.05 thousand tonnes in 2024-25, reflecting production shortfalls and rising demand for sugar confectionery. This trend underscores India's role as a net exporter while also highlighting its sensitivity to domestic supply cycles and policy decisions.



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#### 4. Beverage Industry

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The non-alcoholic beverage industry is one of the most dynamic and consumer-driven sectors of the global economy, encompassing a wide portfolio of products that range from essential hydration solutions to health-oriented and indulgent lifestyle drinks. Broadly segmented into categories such as bottled water, fruit juices, carbonated soft drinks, dairy-based beverages, ready-to-drink tea and coffee, functional drinks, and energy/sports beverages, the industry plays a pivotal role in meeting both basic hydration needs and evolving consumer aspirations. Beyond consumption, the sector is a significant contributor to economic growth, employment, global trade, and continuous innovation within the fast-moving consumer goods (FMCG) landscape.

The Indian non-alcoholic beverage industry is among the fastest-growing consumer markets in the country, fuelled by a vast young population, increasing disposable incomes, rapid urbanization, and changing lifestyle preferences. Covering a wide spectrum from bottled water, carbonated drinks, and fruit juices to dairy-based beverages, tea, coffee, and functional health-oriented drinks, the sector caters to both essential needs and aspirational choices. With one of the largest consumer bases in the world, India offers immense growth potential, making it an attractive hub for domestic and international players investing in production, distribution, and innovation.

India's non-alcoholic beverage consumption reflects a blend of deep-rooted traditional preferences and modern, convenience-driven trends. Tea and coffee continue to dominate daily household routines, while bottled water and packaged juices have gained strong ground as safe and hygienic alternatives. Carbonated soft drinks remain popular, especially among the youth, but are seeing a gradual shift towards low-calorie and sugar-free options. Functional beverages—such as energy boosters, probiotic drinks, and fortified juices—are growing rapidly in response to rising health awareness. Dairy beverages like flavoured milk, buttermilk, and lassi are also gaining prominence as consumers seek locally familiar, nutritious, and value-added options.

The market is supported by a strong and evolving distribution ecosystem, ranging from traditional Kirana stores and roadside vendors to organized retail, supermarkets, convenience stores, and a fast-expanding e-commerce channel. While rural markets remain critical due to their sheer size, urban markets are driving growth in premium, health-oriented, and value-added beverages. Improvements in cold-chain infrastructure, modern logistics, and digital-first delivery platforms are further expanding reach, even for niche or premium products. Marketing strategies—anchored in celebrity endorsements, localized campaigns, and digital engagement—are further boosting consumer connect and market penetration.

A defining trend reshaping the industry is the growing emphasis on health, wellness, and sustainability. Rising consumer awareness about sugar intake, artificial additives, and preservatives is prompting companies to innovate with natural, organic, plant-based, and functional beverages. Sustainability is becoming equally important, with companies investing in eco-friendly packaging, water-efficient production, and renewable energy adoption. On the policy side, GST reforms, stricter FSSAI regulations, and government initiatives promoting food processing, make in India, and cold-chain infrastructure are creating a more structured and supportive framework for growth.

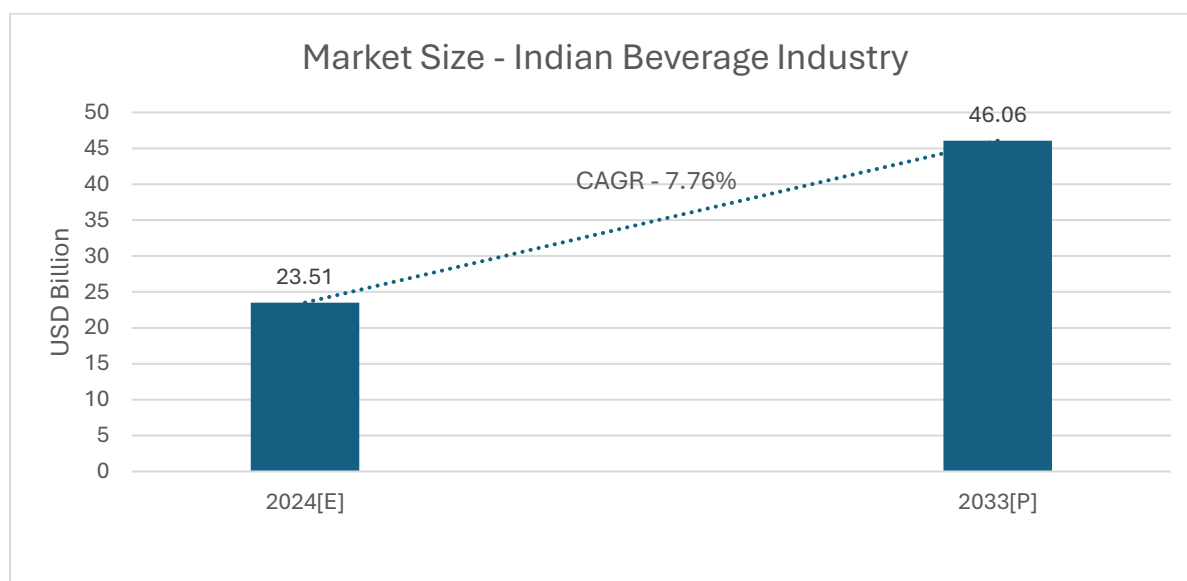
Looking forward, the Indian non-alcoholic beverage industry is set for sustained expansion, driven by favourable demographics, rising disposable incomes, urbanization, and shifting consumer aspirations. Despite challenges such as sugar-tax regulations, raw material price fluctuations, and intense competition, the sector holds significant opportunities in premiumization, functional wellness drinks, rural market penetration, and digital-led distribution. Positioned at the intersection of tradition and modernity, the Indian non-alcoholic beverage industry is poised to play a transformative role in shaping consumption patterns and driving long-term growth within the broader FMCG sector.

### Market Segmentation

Segment	Categories
<b>Product Type</b>	<ul style="list-style-type: none"> <li>Carbonated Beverages</li> <li>Non-Carbonated Beverages</li> </ul>
<b>Packaging Type</b>	<ul style="list-style-type: none"> <li>Bottles</li> <li>Cans</li> <li>Others (tetra packs, pouches, etc.)</li> </ul>
<b>Package Size</b>	<ul style="list-style-type: none"> <li>Below 250ml</li> <li>250ml–1 Liter</li> <li>Above 1 Liter</li> </ul>
<b>Sales Channel</b>	<ul style="list-style-type: none"> <li>Departmental Stores</li> <li>Supermarkets/Hypermarkets</li> <li>Convenience Stores</li> <li>Online</li> <li>Others (cafés, QSRs, HoReCa)</li> </ul>

#### 4.1 Market Size of Non-Alcoholic Beverage

The Indian non-alcoholic beverage industry, valued at USD 23.51 billion in 2024, is projected to nearly double to USD 46.06 billion by 2033, reflecting a healthy CAGR of 7.76%. This growth highlights the rising consumer shift towards diverse, branded, and healthier beverage options, driven by increasing disposable incomes, rapid urbanization, and wider distribution through both traditional and modern trade channels. The steady CAGR also signals strong underlying demand resilience, positioning the sector as a key contributor to India's fast-moving consumer goods (FMCG) market expansion over the coming decade.



Source – Infomerics Analytics Research

##### 4.1.1 Key Growth Drivers

- **Favourable Demographics:** India boasts a sizable young and middle-class populace eager to explore various offerings within this category. Additionally, with the burgeoning urban population, there's an anticipated uptick in demand for such products, driven by aspirations for an elevated standard of living.
- **Rising Health Consciousness:** Increasing awareness of lifestyle-related diseases is pushing consumers toward healthier drink options such as low-sugar beverages, fruit juices, herbal teas, and functional drinks with added nutritional value.
- **Rising Health Consciousness:** Increasing awareness of lifestyle-related diseases is pushing consumers toward healthier drink options such as low-sugar beverages, fruit juices, herbal teas, and functional drinks with added nutritional value.
- **Premiumization & Innovation:** Consumers are showing greater willingness to pay for premium products featuring natural ingredients, immunity-boosting properties, detox benefits, and unique flavours, driving innovation across categories.

- **Rise of Organized Retail & E-commerce:** Expansion of modern trade networks and online platforms has enhanced product visibility, accessibility, and distribution efficiency, broadening consumer reach significantly.
- **Government Initiatives & Infrastructure:** Policies promoting *Make in India*, food processing, and cold chain development are supporting beverage manufacturing and distribution efficiency across regions.
- **Climate and Seasonality:** India's long summers and warm climate naturally boost consumption of cooling, hydrating beverages such as juices, packaged water, and carbonated soft drinks.
- **Brand Investments & M&A Activity:** Large FMCG players like Coca-Cola, PepsiCo, Tata Consumer, and Dabur are investing heavily in product diversification, marketing, and distribution to capture a greater market share.
- **Growing Café & Quick-Service Restaurant (QSR) Culture:** With the rise of café and dining-out culture, demand for beverages like cold brews, iced teas, and smoothies is growing rapidly, especially among urban youth.
- **Enhanced Infrastructure & Packaging Solutions:** Improvements in cold chain logistics, transportation, and innovative packaging solutions have widened rural access and extended product shelf-life, enabling stronger nationwide penetration.

## 5. Market Dynamics

### 5.1 Key Growth Drivers with Impact Assessment

India's sugar industry is witnessing steady growth, supported by structural demand, government policies, and its expanding role in allied sectors such as ethanol and bioenergy. Below is a detailed assessment of the key growth drivers and their expected impact over time:

Growth Drivers	Impact (1–2 Years)	Impact (3–4 Years)	Impact (5–7 Years)
1. Rising Domestic Consumption of Sugar and Processed Foods	High	High	High
2. Government Support through MSP, Subsidies, and Export Incentives	High	High	Medium
3. Expansion of Ethanol Blending Program (E20 target by 2025-26)	Medium	High	High
4. Strong Export Opportunities due to Global Supply Fluctuations	Medium	High	Medium
5. Technological Advancements in Sugarcane Yield and Processing	Medium	High	High
6. Diversification into By-products (Bioenergy, Distilleries, Chemicals)	Medium	High	High
7. Rising Health Awareness Leading to Demand for Alternatives (Low-calorie, Jaggery, Organic Sugar)	Medium	Medium	High

#### Detailed Overview

**1. Rising Domestic Consumption of Sugar and Processed Foods** - India's growing population, coupled with rising disposable incomes and urbanization, continues to fuel demand for sugar in both direct household consumption and processed food industries. Sugar is widely used in confectionery, bakery, dairy products, soft drinks, and packaged foods, making it an essential

ingredient in India's expanding FMCG sector. This sustained demand ensures a stable domestic market base for the industry.

**2. Government Support through MSP, Subsidies, and Export Incentives** - The Indian government plays a pivotal role in supporting the sugar industry by announcing Minimum Support Prices (MSP) for sugarcane, providing subsidies for exports, and introducing policies to stabilize domestic prices. These interventions not only protect farmer incomes but also safeguard mill operations, ensuring a steady supply chain. However, over time, the reliance on subsidies may be moderated as structural efficiencies improve.

**3. Expansion of Ethanol Blending Program (E20 Target by 2025-26)** - The ethanol blending program has emerged as one of the biggest growth drivers for the sugar industry. With the government pushing for 20% ethanol blending with petrol (E20) by 2025-26, sugar mills are diversifying into ethanol production using molasses and sugarcane juice. This creates a new revenue stream, reduces dependence on volatile sugar prices, and aligns the sector with India's clean energy and import-substitution goals.

**4. Strong Export Opportunities due to Global Supply Fluctuations** - India has emerged as a significant sugar exporter in recent years, driven by production surpluses and favourable global demand-supply imbalances. Countries facing deficits, such as Indonesia and Middle Eastern nations, provide lucrative markets for Indian sugar. While export opportunities fluctuate based on global weather and production cycles, they serve as a valuable growth lever for the industry.

**5. Technological Advancements in Sugarcane Yield and Processing** - New agricultural practices, mechanization, and adoption of advanced varieties of sugarcane have improved yields and reduced crop cycles. In addition, technological upgrades in mills—such as cogeneration systems, advanced crushing machinery, and digital process monitoring—are enhancing efficiency and output quality. Over the long term, technology adoption will help India remain competitive in both domestic and global markets.

**6. Diversification into By-products (Bioenergy, Distilleries, Chemicals)** - Beyond sugar, mills are increasingly focusing on by-products such as ethanol, bio-CNG, bagasse-based power generation, and industrial chemicals. This diversification not only boosts revenues but also reduces the cyclical risk of sugar price volatility. The growing push for renewable energy and green chemicals strengthens the importance of these by-product segments.

**7. Rising Health Awareness Leading to Demand for Alternatives** - Consumer preferences are gradually shifting due to increasing health consciousness and concerns about lifestyle diseases like diabetes and obesity. This is driving demand for healthier alternatives such as jaggery, organic sugar, low-calorie sweeteners, and natural substitutes like stevia. While this trend may

reduce refined sugar's share in household consumption, it opens opportunities for diversification into premium and niche categories.

## 5.2 Challenges & Threats with Impact Assessment

Despite its strong base and growth potential, the Indian sugar industry faces several structural challenges that affect its stability and long-term sustainability. Below is a detailed analysis of the key restraints and their likely impact over different time horizons:

Threats & Challenges	Impact (1–2 Years)	Impact (3–4 Years)	Impact (5–7 Years)
1. Volatility in Sugarcane Prices and Farmer Arrears	High	High	Medium
2. Overdependence on Monsoon and Climatic Conditions	High	High	High
3. Regulatory and Policy Uncertainty (Export bans, MSP, subsidies)	High	Medium	Medium
4. Rising Input Costs (fertilizers, labour, energy)	High	High	Medium
5. Global Price Fluctuations and Trade Barriers	Medium	High	Medium
6. Health Concerns and Shift Toward Alternatives (jaggery, artificial sweeteners, low-calorie)	Medium	Medium	High

### Detailed Overview:

**1. Volatility in Sugarcane Prices and Farmer Arrears** - Sugarcane prices account for a major portion of production costs. Fluctuations in SAP (State-Advised Prices) and FRP (Fair & Remunerative Prices) often create mismatches with sugar realizations, leading to delayed farmer payments and arrears. While government intervention provides temporary relief, the issue remains a persistent structural challenge.

**2. Overdependence on Monsoon and Climatic Conditions** - Sugarcane is a water-intensive crop, making the industry highly dependent on monsoon rains. Erratic rainfall, droughts, or excessive floods can severely affect cane yields and disrupt supply. Climate change has amplified these risks, with rising temperatures and shifting weather patterns impacting both

productivity and quality. Unlike some other crops, sugarcane has limited flexibility in terms of crop cycles, which makes weather dependency a persistent long-term challenge.

**3. Regulatory and Policy Uncertainty (Export bans, MSP, subsidies)** - The sugar industry is one of the most regulated sectors in India. Government interventions, such as export bans, export subsidies, stock limits, and price controls, significantly influence profitability. For example, sudden restrictions on exports to stabilize domestic supply often hurt mills that rely on overseas markets. Similarly, ethanol pricing policies, blending mandates, and subsidy structures are frequently revised, creating uncertainty for long-term planning and investment.

**4. Rising Input Costs (Fertilizers, Labor, Energy)** - The industry faces constant pressure from rising input costs, including fertilizers, fuel, transportation, and labour wages. Energy-intensive operations such as cane crushing and refining amplify the impact of inflation in coal, oil, and electricity prices. Since sugar prices are often regulated or capped, mills find it difficult to pass on these rising costs to consumers, squeezing their margins and affecting profitability.

**5. Global Price Fluctuations and Trade Barriers** - Global sugar markets are highly volatile, influenced by supply-demand dynamics in major producing countries like Brazil, Thailand, and Australia. Indian sugar exports are thus vulnerable to international price swings and trade barriers. Subsidy disputes at the WTO, tariff changes by importing nations, and competition from low-cost producers further add to uncertainties in export-led growth. While India benefits from surplus production in some years, it faces risks when global prices fall below domestic costs of production.

**6. Health Concerns and Shift Toward Alternatives** - Growing awareness about health issues such as obesity, diabetes, and cardiovascular diseases has led to increasing scrutiny of sugar consumption. Both consumers and policymakers are pushing for reduced sugar intake, resulting in rising demand for alternatives like jaggery, stevia, organic sugar, and low-calorie sweeteners. This trend, while gradual, poses a long-term restraint on refined sugar demand, particularly in urban and health-conscious consumer segments. At the same time, taxation on sugary beverages (as seen globally with “sugar taxes”) could further curb demand in downstream industries like soft drinks and confectionery.



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## 6. Government Initiatives and Policy Support

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The Government of India has launched several strategic initiatives to support the sugar industry, with particular emphasis on boosting farmer income, ensuring fair and remunerative prices (FRP), diversifying sugarcane utilization, and promoting sustainability. These initiatives are designed to stabilize sugar prices, enhance export competitiveness, and modernize the sector through digital transformation and green energy integration.

- **Ethanol Blending Program (E20 by 2025-26)** - The Ethanol Blending Program (EBP) has emerged as a game-changer for the Indian sugar industry, with the government advancing the target of 20% ethanol blending with petrol to 2025-26. This initiative creates a steady demand for ethanol produced from sugarcane juice and molasses, enabling mills to divert surplus sugar and stabilize revenues. By mandating Oil Marketing Companies (OMCs) to procure ethanol at remunerative prices, the program ensures predictable income for mills, improves liquidity, and supports timely payments to farmers. Additionally, it helps reduce excess sugar stocks, lowers crude oil import dependence, and contributes to India's clean energy goals, making ethanol production a crucial growth driver for the sector.
- **Fair and Remunerative Price (FRP)** - The Cabinet Committee on Economic Affairs chaired by Prime Minister Shri Narendra Modi approved the Fair and Remunerative Price (FRP) of sugarcane for Sugar Season 2024-25 at ₹ 340/quintal at sugar recovery rate of 10.25%. This is historic price of sugarcane which is about 8% higher than FRP of sugarcane for current season 2023-24, ensures farmers receive a minimum guaranteed price for sugarcane based on production costs and recovery rates, thereby safeguarding their income.
- **Production & export Subsidies** - The Government of India has historically provided production and export subsidies to stabilize the sugar industry during surplus years. These include support for buffer stock creation, transport, freight, and marketing, enabling mills to export sugar competitively despite higher domestic costs. Such measures help reduce excess inventories, stabilize domestic prices, and ensure timely farmer payments, though they have faced scrutiny under WTO trade rules for impacting global market dynamics.
- **Soft Loans and Financial Assistance to Mills** - In the FY 2024–25, the National Cooperative Development Corporation (NCDC) provided approximately ₹7,618 crore in working capital loans to 46 cooperative sugar mills in Maharashtra—accounting for the bulk of the ₹7,975 crore disbursed across India that year. These loans, offered at subsidized interest rates, were primarily used to cover day-to-day operations such as sugarcane procurement, salaries, and utilities. Industry experts have raised concerns that while these loans addressed immediate liquidity shortfalls, they were largely not used for capacity expansion or modernization, raising questions about their long-term sustainability.

- **National Bio-Energy Policy & Diversification support** - Under the National Bio-Energy Policy, sugar mills are incentivized to diversify beyond sugar by setting up bagasse-based cogeneration plants for renewable power generation and exploring value-added by-products. Support extends to producing bio-CNG, green hydrogen, and specialty chemicals from residues like press mud and molasses, reducing dependence on sugar alone. This diversification not only stabilizes mill revenues and ensures consistent cane demand but also aligns with India's renewable energy and climate goals, positioning the sugar sector as a key player in the country's green energy transition.
- **Export Policy** - In the sugar export policy for SS 2022-23, Government has announced sugar mill wise export quota for all sugar mills in the country with an objective system based on average production of sugar mills in last three years and average sugar production of the country in last 3 years. Further, to expedite the sugar exports and to ensure flexibility to sugar mills in execution of the export quota, mills may decide to surrender the quota partially or fully within 60 days of the date of issue of order OR they can swap the export quota with domestic quota within 60 days. This system would ensure lesser burden on logistics system of the country as swapping system would reduce the need to transport the sugar from distant locations to the ports for exports and movement of sugar across the length and breadth of the country for domestic consumption.
- **Paramparagat Krishi Vikas Yojana (PKVY)** - The Government of India promotes organic and sustainable sugarcane cultivation through schemes like Paramparagat Krishi Vikas Yojana (PKVY), which provides financial support for organic inputs, training, and certification using a cluster-based approach. Farmers receive assistance for obtaining PGS-India and NPOP certification, enabling them to access premium domestic and international markets. With rising global demand, particularly in the EU and US, organic sugar offers India an export opportunity beyond conventional sugar, while sustainable practices like bio-fertilizers, drip irrigation, and waste utilization also improve soil health and resource efficiency. This strategy enhances farmer incomes and positions India as a competitive player in the organic sugar market.
- **Sugar Development Fund** - Sugar Development Fund (SDF) was established in the year 1982, through an act of Parliament. It is being utilized presently to grant loans to the sugar mills for facilitating the rehabilitation and modernization/ Bagasse based co-generation power projects/ production of anhydrous alcohol or ethanol from alcohol/ conversion of existing ethanol plant into Zero Liquid Discharge (ZLD) plant and development of Sugar cane.

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## 7. Technology & Digital Transformation

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The sugar industry, traditionally dependent on conventional production methods, is now undergoing a significant transformation through automation, digitalization, and sustainable technologies. Rising demand for efficiency, cost optimization, and value-added products has accelerated the adoption of Industry 4.0 practices across sugar mills.

- **Automation & AI** - Sugar mills are increasingly adopting automation, Internet of Things (IoT), and artificial intelligence (AI)-driven systems to streamline production. Automated machinery ensures precision in cane handling, juice extraction, clarification, and crystallization, minimizing human error and improving process efficiency. AI-powered predictive maintenance systems monitor turbines, boilers, and crushing units in real time, detecting potential failures before they occur. This not only reduces unplanned downtime but also lowers maintenance costs and ensures maximum utilization of crushing capacity during the limited harvesting season.
- **Digital Supply Chain & Traceability** - Digital platforms, including ERP (Enterprise Resource Planning) and blockchain-based systems, are being deployed to provide complete farm-to-factory traceability in sugarcane procurement. These systems help track cane supplies, manage weighbridge data, and ensure transparent and timely payments to farmers. Blockchain-enabled traceability also supports export requirements, as many international buyers now demand proof of ethical sourcing and sustainable cultivation practices. By digitizing procurement and supply chain functions, mills improve operational transparency, reduce disputes, and strengthen trust with farmers and buyers.
- **IoT Sensors & AI Quality Control** – IoT sensors combined with AI are transforming quality assurance in sugar production. Maintaining consistent colour, texture, and taste is critical, and AI systems continuously monitor these parameters to ensure every batch meets the required standards. If any deviation occurs—such as darker colour or altered sweetness—AI detects it in real time and makes corrective adjustments. Additionally, several Indian sugar mills are deploying AI to optimize energy consumption by analysing machine performance, identifying the most efficient usage patterns, and reducing both costs and environmental impact.
- **Blockchain – Enhancing Transparency in Sugar Supply Chains** – While blockchain is widely known for powering cryptocurrencies like Bitcoin, it is also proving valuable in the sugar industry. Acting as a secure digital ledger, blockchain records every step of the sugar supply chain—from cultivation of sugarcane to final retail delivery. What makes it powerful is its immutability: once data is entered, it cannot be changed or tampered with, ensuring complete transparency, traceability, and trust for all stakeholders.

- **Green Energy & By-product Utilization** - Sugar mills are diversifying into renewable energy and value-added by-products, with digital tools enabling greater efficiency. Bagasse-based cogeneration plants use automated control systems to optimize power generation and integrate with smart grids for electricity sales. Ethanol distilleries use digital fermentation controls to maximize yield while ensuring quality compliance with blending targets under the Ethanol Blending Programme (EBP). In addition, digital monitoring of bio-CNG units and press-mud composting plants helps mills achieve sustainable waste management while generating new revenue streams. These measures not only cut carbon emissions but also enhance long-term profitability.

## 8. PESTEL Analysis of the Industry

Factor	Key Insights
<b>Political Factors</b>	<ul style="list-style-type: none"> <li>Government support through FRP, MSP, and ethanol blending subsidies stabilizes the sector.</li> <li>Export quotas and incentives under the Sugar Export Policy regulate supply-demand balance.</li> <li>Rural development and farmer welfare schemes impact sugarcane cultivation and supply chain.</li> </ul>
<b>Economic Factors</b>	<ul style="list-style-type: none"> <li>Global sugar price volatility and domestic demand-supply shifts affect profitability.</li> <li>Millions of farmers depend on sugarcane for income, influencing rural credit and consumption.</li> <li>By-products like ethanol, molasses, and cogeneration are key for diversifying revenue.</li> </ul>
<b>Social Factors</b>	<ul style="list-style-type: none"> <li>Provides direct/indirect employment to ~50 million farmers and workers in India.</li> <li>Rising health awareness is driving demand for alternatives like low-calorie sweeteners.</li> <li>Mills contribute to rural community development in infrastructure, education, and healthcare.</li> </ul>
<b>Technological Factors</b>	<ul style="list-style-type: none"> <li>Mechanization, drip irrigation, and AI-based crop monitoring enhance farm productivity.</li> <li>ERP, IoT, and AI in mills improve efficiency, predictive maintenance, and energy use.</li> <li>Advancements in ethanol and bio-energy technologies support diversification and sustainability.</li> </ul>
<b>Environmental Factors</b>	<ul style="list-style-type: none"> <li>Sugarcane is highly water-intensive, vulnerable to droughts and resource scarcity.</li> <li>Industry focuses on sustainable practices: organic farming, effluent treatment, renewable energy.</li> <li>Climate change impacts rainfall, yields, and sugar recovery rates.</li> </ul>
<b>Legal Factors</b>	<ul style="list-style-type: none"> <li>FRP, MSP, and State Advised Prices (SAP) are mandatory, ensuring farmer payments but stressing mill finances.</li> <li>Mills must comply with environmental norms on effluent discharge and emissions.</li> <li>Strict food safety, labeling, and export standards regulate domestic and international trade.</li> </ul>

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## 9. Competitive Landscape

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The sugar industry in India is undergoing a transformation driven by digital adoption, evolving consumer preferences, product diversification, and sustainability-led practices. Competition is no longer determined solely by production capacity or price; it now revolves around operational efficiency, supply chain transparency, value-added product offerings, and farmer engagement. Mills and cooperatives are leveraging digital platforms, e-commerce channels, and technology-driven process optimization to strengthen their market presence. The following trends highlight how competition in the sugar industry is becoming more tech-enabled, customer-focused, and strategically diversified.

### 9.1 Key Factors shaping competition

- **Digital Supply Chain & Phygital Integration-** Sugar mills are increasingly adopting digital platforms for direct sales, e-auctions, and supply chain management. Integration of ERP, IoT, and blockchain enhances transparency, traceability, and operational efficiency. These technologies allow mills to track sugar quality, optimize logistics, and provide real-time data to buyers, ensuring reliability and trust.
- **Regional Expansion & Rural Sourcing-** With urban markets reaching saturation, mills are focusing on Tier-II, Tier-III, and rural regions for both procurement and distribution. Setting up collection centres, farmer service hubs, and local depots reduces transportation costs, ensures timely supply of sugarcane, and strengthens relationships with growers, which is crucial for operational stability.
- **Direct-to-Consumer (D2C) & Branded Products-** The industry is shifting from bulk B2B supply toward branded and packaged sugar, including organic, low-GI, and specialty sweeteners. Mills are leveraging retail channels and e-commerce platforms to sell directly to consumers, capturing premium segments and building brand loyalty beyond conventional sugar markets.
- **Value-Added Products & By-Product Diversification** - Competition is increasingly influenced by ethanol production, bagasse-based power, bio-CNG, and specialty chemicals. Mills that efficiently utilize by-products generate additional revenue streams, reduce dependency on sugar prices, and secure long-term contracts with industries like oil, energy, and FMCG.
- **Financial Agility & Farmer Payment Systems** - Timely and transparent farmer payments are key competitive differentiators. Mills adopting digital payment systems, crop-linked financing, and partnerships with NBFCs gain trust and loyalty from farmers. Financial efficiency also helps in maintaining cash flow and sustaining operations during periods of sugar price volatility.

- **Sustainability & Brand Differentiation** - Increasing consumer awareness about health and sustainability is driving mills to adopt organic farming, eco-friendly production, and certified quality standards. By highlighting traceability, environmental compliance, and social responsibility, mills can differentiate their products in both domestic and international markets, gaining a competitive edge.

## 9.2 Competitive Strategies

- **Brand Differentiation** - Sugar mills and cooperatives are increasingly leveraging branded and premium sugar products to differentiate themselves in a commoditized market. Packaged, organic, low-GI, and specialty sweeteners allow companies to establish brand equity, build consumer trust, and create emotional connections through certifications, eco-labels, and farm-to-table traceability.
- **Product Innovation & Value-Added Offerings** - Competition is shaped by value-added products and by-products such as ethanol, bio-CNG, specialty chemicals, and bagasse-based power. Mills that innovate in processing techniques, improve sugar purity, or introduce functional sugar variants gain an edge in both domestic and international markets.
- **Technology Integration** - Digital tools and automation are transforming mill operations and sales processes. ERP systems, IoT sensors, AI-driven quality control, and predictive maintenance improve efficiency, optimize energy use, and maintain consistent sugar quality. E-auctions, blockchain-based traceability, and online D2C platforms enhance market transparency and streamline buyer engagement.
- **Pricing & Promotional Strategies** - Mills are adopting dynamic pricing strategies linked to domestic demand, export opportunities, and ethanol incentives. Seasonal promotions, branded packaging, and bulk vs. retail pricing allow companies to appeal to different market segments. Tie-ups with distributors and fintech platforms facilitate easier transactions and financing for bulk buyers and retailers.
- **Localization & Regional Engagement** - To strengthen supply chains and market presence, mills focus on regional procurement and distribution hubs, local farmer engagement programs, and vernacular communication. Tailored solutions in semi-urban and rural areas ensure stronger loyalty from farmers and better penetration in regional markets.
- **Vertical Integration & Diversification** - Modern sugar companies are adopting vertical integration, covering cane procurement, milling, ethanol production, power generation, and retail sugar distribution. This integration streamlines operations, reduces costs, and opens multiple revenue streams beyond sugar, increasing overall competitiveness.
- **Network Expansion & Modernization** - Expansion into Tier-II and Tier-III markets through collection centres, processing units, and retail outlets strengthens market coverage. Modernization efforts, including digital platforms for sales, traceability dashboards, and smart logistics, improve operational efficiency and appeal to tech-savvy buyers and institutional clients.



### **9.3 Barriers to Entry**

While the sugar industry in India offers significant opportunities due to rising demand, government support, and diversification into ethanol and branded sugar products, new entrants face several structural and operational challenges. High capital requirements, strong incumbent presence, regulatory complexities, and technological demands make establishing a foothold difficult.

#### **Key barriers include:**

- **High Capital Investment** - Setting up a sugar mill or branded sugar processing unit requires substantial investment in land, machinery, crushing and refining infrastructure, storage, and logistics. Additional costs include working capital for sugarcane procurement, inventory management, energy supply, and by-product processing units (ethanol, cogeneration). This high upfront cost limits entry for small-scale players.
- **Regulatory Compliance and Licensing** - The sugar sector is highly regulated. New entrants must comply with FRP/MSP mandates, state-specific sugar control orders, pollution control norms, and food safety standards. Obtaining licenses for milling, production, exports, and ethanol blending involves complex approvals, which can be time-consuming and costly.
- **Established Brand Loyalty and Market Presence** - Existing mills and cooperatives enjoy strong relationships with farmers, distributors, and institutional buyers. Brand loyalty, trust in product quality, and long-term supply contracts make it difficult for new entrants to secure reliable cane procurement or penetrate retail markets effectively.
- **Thin Margins and Price Volatility** - Sugar prices are highly volatile and influenced by domestic production, global market trends, and government policies. New entrants face financial risk as profitability depends on high throughput, by-product revenue, and efficient cost management. Low margins in raw sugar sales increase pressure on working capital.
- **Technological and Process Requirements** - Modern mills increasingly rely on automation, IoT sensors, ERP systems, and AI-based quality control. Staying competitive requires technical expertise, skilled manpower, and investment in smart manufacturing, which can be a major hurdle for newcomers.
- **Distribution and Supply Chain Expectations** - To compete effectively, mills must develop robust supply chains for sugar, ethanol, and by-products, covering Tier-II and Tier-III regions. Establishing a widespread collection network, logistics infrastructure, and retail reach demands scale, experience, and significant investment, creating a barrier for smaller or new players.

## **9.4 Key Industry Players**

### **1. Shree Renuka Sugars Limited**

Shree Renuka Sugars Limited (SRSL) is an Indian agribusiness and bioenergy company, incorporated in 1995 and headquartered in Belagavi, Karnataka, with a corporate office in Mumbai. The company is engaged in sugar refining, ethanol production, and renewable energy generation.

SRSL operates integrated sugar mills, port-based refineries, ethanol distilleries, and bagasse-based co-generation power plants. It is a subsidiary of Wilmar Sugar and Energy Pte. Ltd., Singapore. The company markets its packaged refined sugar under the brand name Madhur Pure & Hygienic Sugar, which is available across India.

The company's products are supplied across India through general trade and modern retail and are also exported to multiple countries. Its ethanol is sold to Oil Marketing Companies (OMCs) in India.

#### **Product Portfolio**

The company's product range includes:

- **Madhur Pure & Hygienic Sugar:** Packaged refined sugar for retail consumers
- **Refined Bulk Sugar:** For industrial and export markets
- **Ethanol & Potable Alcohol:** Fuel-grade ethanol and spirits for blending and industrial use
- **Co-generated Power:** Electricity supplied to state grids
- **EPC Services:** Engineering, procurement, and construction solutions for distillery and bioethanol projects

### **2. Xotik Frujus Pvt Ltd.**

It is an Indian beverage company founded in 2007, specializing in Ready-to-Serve (RTS) fruit-based drinks. Headquartered in Daman and Diu, with an administrative office in Mumbai, XFPL has established a strong presence across India and internationally.

All machines used are fully automatic and we ensure that products produced are human touch or interference free.

- Modern Machinery.
- Human touch free production.
- Internationally certified products - FSSAI, HALAL, FDA

XFPL's products are available in over 230,000 general trade outlets across India, including major modern trade chains such as Big Bazaar, DMart, Reliance Retail, and Metro Cash & Carry. Additionally, their beverages are sold at most railway stations in Central, Western, Northwestern, and South-Central Railway networks, as well as through IRCTC. Internationally, XFPL has expanded its reach to countries including the USA, UK, Middle East, Australia, South Africa, and Malawi, aiming to cater to the global Indian diaspora.

### Product Portfolio

The company's diverse product range includes:

- **Xotik Frujus:** Traditional fruit-based drinks in various Flavors.
- **Xotik Clear Lemon:** A sparkling lemon juice-based beverage.
- **Xotik Cola:** A cola variant with an apple juice base.
- **Masala Nimbu:** A lemon-flavored drink infused with Indian spices.
- **Divian Delight:** Includes Nimbu Fresh and Mango variants.
- **J by Jeeru:** A fizzy masala drink with apple juice and spice extracts.

### 3. Archian Foods Pvt. Ltd

**Archian Foods Pvt. Ltd.**, established in 2021, is an Indian food and beverage company specializing in non-alcoholic, flavoured aerated drinks. Operating under the brand **Lahori**, the company offers a range of traditional Indian beverages with a modern twist. Archian Foods operates manufacturing facilities in **Fatehgarh, Punjab** and **Bhilad, Gujarat**, adhering to strict quality and safety standards with certifications such as **ISO 9001:2015** and **HACCP**. By focusing on unique taste experiences and contemporary branding, the company aims to carve a distinctive niche in India's competitive beverage market.

#### Key Products:

- **Lahori Zeera:** A cumin-flavoured carbonated drink, inspired by traditional Indian Flavors.
- **Lahori Lemon:** A lemon-flavored carbonated beverage.
- **Lahori Aam:** A mango-flavoured carbonated drink.
- **Lahori Shi kanji:** A spiced lemonade beverage.

### **9.5 Company Positioning – C K K Retail Mart Limited**

CKK Retail Mart Limited, incorporated in 2005 and headquartered in Mumbai, has evolved from its origins in commodities trading into a diversified player in packaged agro-commodities and beverages. Initially focused on trading, the company strategically expanded into retail and wholesale distribution to reduce dependency on commodity price fluctuations and ensure sustainable growth. Since 2023, its focus has been on packaged sugar, pulses, and rice, distributed across Maharashtra, Bihar, West Bengal, and the North-Eastern states. In addition, the company has entered the beverage sector, launching carbonated soft drinks under the brand Fizzz Up !! and fruit-pulp-based drinks under Fruitzzz Up !!, targeting the General Trade market in Mumbai. To enhance accessibility, products are also available on quick commerce and e-commerce platforms such as Zepto, Blinkit, and Amazon.

CKK Retail Mart's business model emphasizes direct procurement of raw materials from reputed mills in Maharashtra, Gujarat, Karnataka, Uttar Pradesh, and Telangana, ensuring timely and competitive sourcing. All raw materials undergo stringent quality control and post-packaging quality assurance checks, maintaining product integrity. Packaged goods are transported through trusted logistics partners and distributed via wholesalers, superstockists, distributors, retail outlets, and online platforms.

The company caters to a diverse target market, including household consumers who purchase small retail packs for daily use, small retailers and kirana stores who buy for resale, and foodservice and institutional buyers such as bakeries, restaurants, and caterers. Within these segments, CKK Retail Mart focuses on quality-conscious, brand-aware consumers and bulk buyers seeking consistent quality.

CKK Retail Mart Limited's product portfolio is designed to balance essential staples with emerging beverage offerings, creating a comprehensive range for both household and institutional demand. The core focus remains on packaged sugar, offered in multiple SKUs to meet varying consumption needs. Complementing this, the company has added pulses and rice to strengthen its presence in the branded staples segment.

## 9.6 Swot Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>✓ Established presence in packaged Agro commodities with a strong focus on sugar, ensuring brand recognition in a staple category.</li> <li>✓ Strong distribution network across Maharashtra, Bihar, West Bengal, and North-Eastern regions.</li> <li>✓ Experienced management team with deep knowledge of the Agri-commodities and sugar sector.</li> <li>✓ Strong supplier relationships enabling timely and competitive procurement of sugar.</li> </ul>	<ul style="list-style-type: none"> <li>✗ Limited diversification in beverages; currently focused on sugar and initial-stage beverage products.</li> <li>✗ relatively low brand recognition in beverages segment compared to established competitors.</li> <li>✗ Dependence on supplier mills for raw materials may affect consistency or pricing.</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>🌱 expanding sugar SKUs and value-added products (e.g., fortified sugar, organic variants)</li> <li>🌱 Increasing presence on quick commerce and e-commerce platforms to reach urban digital consumers.</li> <li>🌱 Adoption of advanced technologies for production efficiency and quality control in sugar.</li> <li>🌱 Exploring export opportunities for branded sugar and beverages to international markets.</li> </ul>	<ul style="list-style-type: none"> <li>⚠️ Intense competition from other branded sugar manufacturers and local unbranded suppliers.</li> <li>⚠️ Climate change impacts affecting sugarcane yields and production costs.</li> <li>⚠️ Emergence of global beverage brands in regional markets increasing competition.</li> <li>⚠️ Geopolitical tensions and trade restrictions affecting import/export of sugar.</li> </ul>

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## 10. Future Outlook

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### **10.1 Sugar Industry**

India's sugar industry is poised for steady growth and structural transformation in the coming decade, driven by rising domestic consumption, proactive government policies, technological adoption, and export opportunities. With India being the world's second-largest sugar producer, the sector plays a crucial role in the agricultural economy and rural employment. Increasing focus on sustainable and organic sugar production, alongside value-added products like specialty sugars and beverages, is expected to expand market potential both domestically and internationally.

The Indian Sugar Industry is estimated at 31,964 thousand tonnes in FY 2024 and is projected to reach 34,678 thousand tonnes by FY 2033 registering a modest CAGR of 0.82% over the period. This expansion is driven by multiple demand-side factors, including population growth, rising disposable incomes, and changing dietary preferences, which are fuelling higher per capita sugar consumption across both urban and rural markets.

The Indian sugar industry is also gradually embracing diversification. Mills are increasingly investing in co-generation plants for bioenergy, producing ethanol and renewable energy from sugarcane by-products, while exploring downstream opportunities such as organic sugar, fortified sugar, and packaged consumer-ready sugar products. This diversification is expected to improve profitability and reduce dependency on commodity price fluctuations.

On the global front, India's sugar exports are expected to rise as the country leverages quality, cost competitiveness, and bilateral trade agreements. Growing demand for sustainable and organic sugar in Europe, North America, and Asia presents new revenue streams. Meanwhile, integration with modern logistics and quick-commerce platforms is enabling packaged sugar brands to reach urban and semi-urban consumers more efficiently.

Overall, the Indian sugar industry is positioned for long-term stability and moderate growth, underpinned by policy support, technological transformation, product innovation, and diversification into energy and value-added sugar products. While challenges such as climate variability, raw material price fluctuations, and international market dynamics remain, proactive measures and investments in modernization are expected to sustain the sector's competitiveness and contribute meaningfully to India's agricultural and industrial growth in the next decade.

## **10.2 Non-Alcoholic Beverage Industry**

India's non-alcoholic beverage industry is poised for sustained growth, supported by rising disposable incomes, urbanization, and evolving consumer lifestyles. The sector spans across carbonated drinks, fruit-based beverages, packaged juices, ready-to-drink (RTD) teas and coffees, dairy-based beverages, energy and sports drinks, and functional wellness beverages. With increasing health consciousness, consumers are shifting towards low-sugar, natural, and functional products, while demand for premium and innovative beverages is steadily rising.

The Indian non-alcoholic beverage market, valued at USD 23.51 billion in 2024, is projected to nearly double to USD 46.06 billion by 2033, registering a healthy CAGR of 7.76%. This trajectory reflects both rising consumer demand for branded and healthier options, as well as the industry's expansion into new geographies through enhanced retail penetration, e-commerce, and quick-commerce platforms.

Technology adoption is becoming a defining growth enabler, with companies deploying automation, AI, IoT, and data analytics to enhance production efficiency, ensure quality control, and optimize supply chains. Parallely, digital marketing, influencer-driven campaigns, and direct-to-consumer (D2C) platforms are strengthening consumer engagement and brand loyalty.

Looking ahead, expansion into Tier 2 and Tier 3 cities, continued product innovation (plant-based, functional, and fortified drinks), and strategic collaborations with modern retail and e-commerce players are expected to drive deeper market penetration. While the sector faces challenges such as raw material price fluctuations, climate-related impacts on fruit availability, and intensifying competition, the industry's resilience, coupled with government support through food safety standards and food processing incentives, ensures strong long-term growth prospects. Positioned at the intersection of health, convenience, and lifestyle, the non-alcoholic beverage industry is set to play a pivotal role in shaping India's FMCG landscape over the coming decade.

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