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1.Global Macroeconomic Scenario

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. **Source - Source – IMF World Economic Outlook April 2025**

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.

Source – IMF World Economic Outlook April 2025

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%.

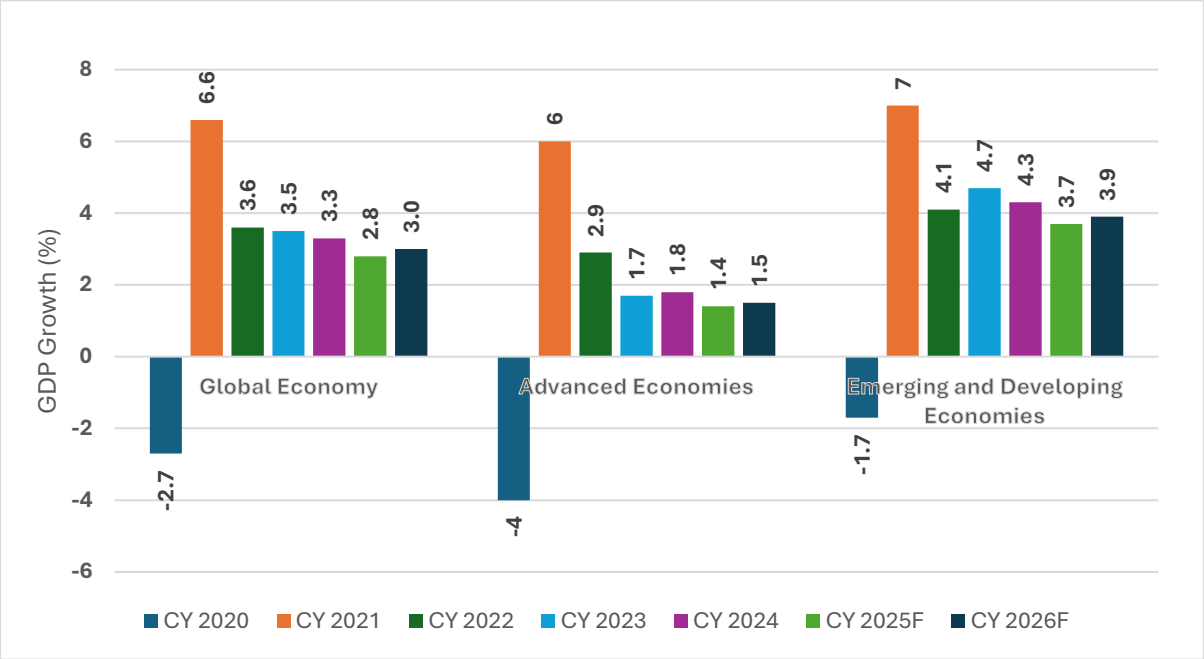
In CY 2021, supply chain disruptions significantly impacted both advanced economies and low-income developing economies. The rapid spread of the Delta variant and the threat of new variants in mid-2021 further heightened uncertainty in the global economic environment.

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



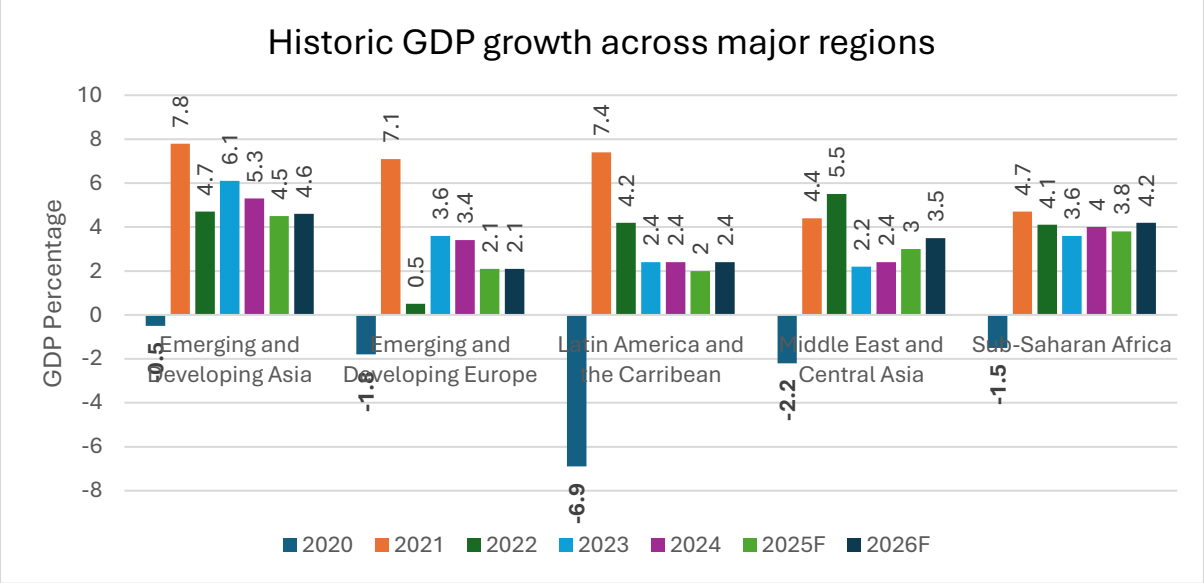
F – Forecast, Source – IMF World Economic Outlook April 2025

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.



Note: Forecast, 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.

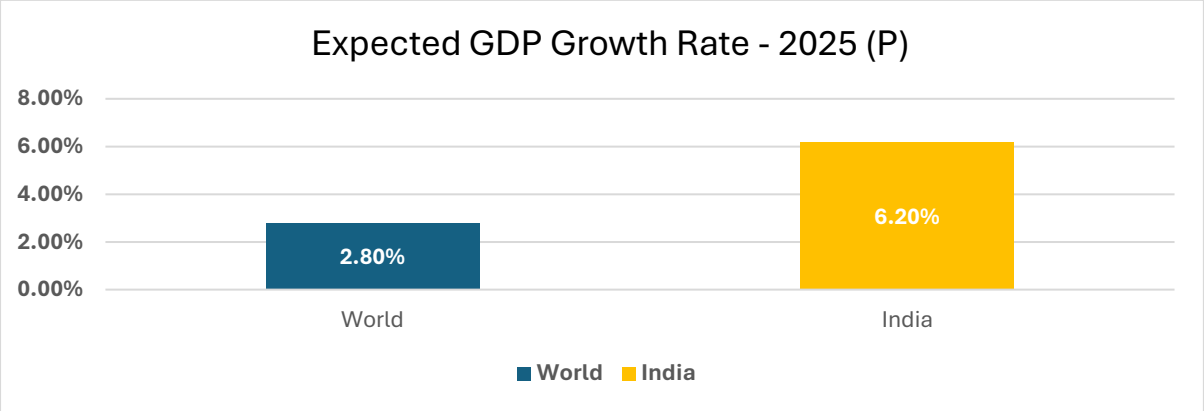
Overall, the global economy appears to be stabilizing, but growth in CY 2025 remains below historical averages. Advanced economies continue to grow modestly under the weight of tight policies and weak external demand, while emerging markets, particularly in Asia, show stronger but slowing momentum. The 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

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

Global and India Growth Outlook Projections (Real GDP growth)

India's Economic Growth Momentum Remains Strong, Poised to Surpass USD 4 Trillion by 2025

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.

According to IMF, India's GDP is projected to cross USD 4 trillion in CY 2025 and is on track to become the fourth-largest economy by CY 2025 surpassing Japan.

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

GDP Growth Rate Projections for India

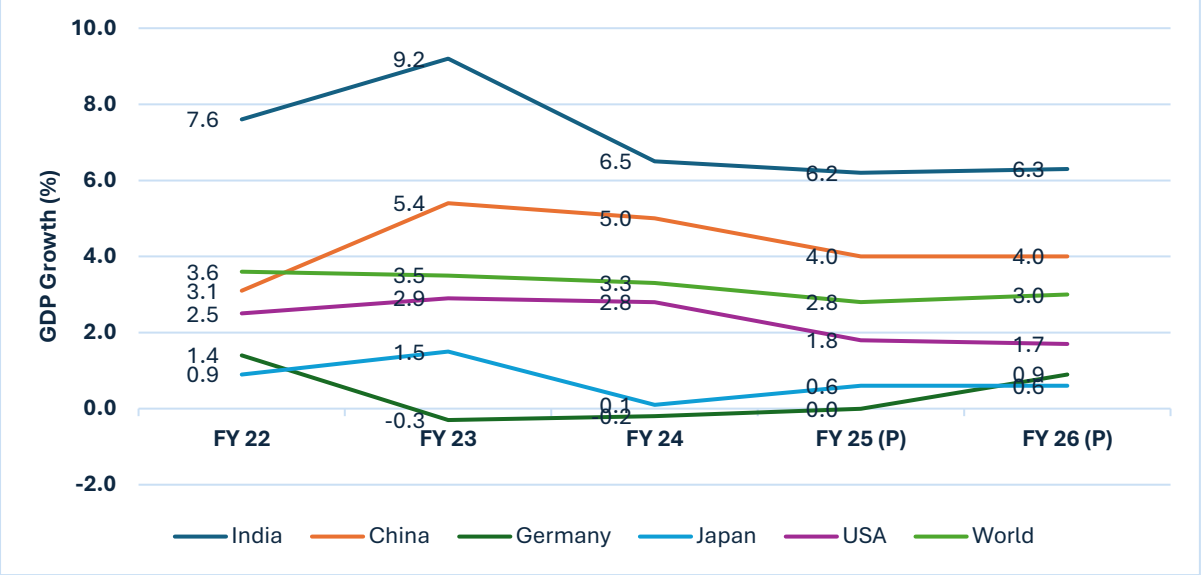
GDP growth projections by Government of India and other agencies are summarised below:

	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 2.7-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 7th , 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.

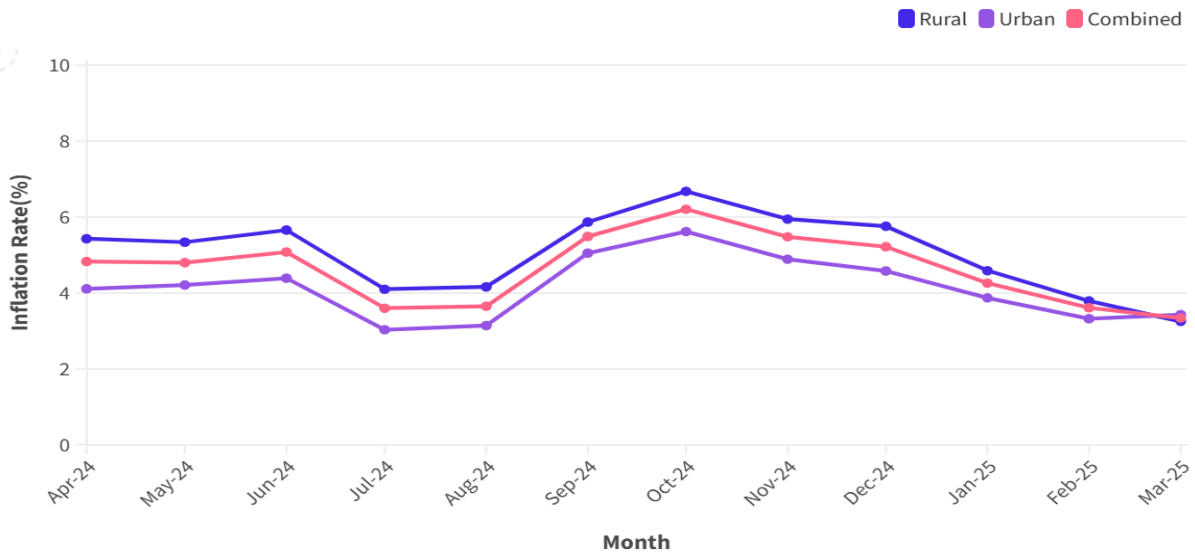
Source: - RBI, Annual Report-Inflation, Money and Credit Dated May 29th, 2025

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.

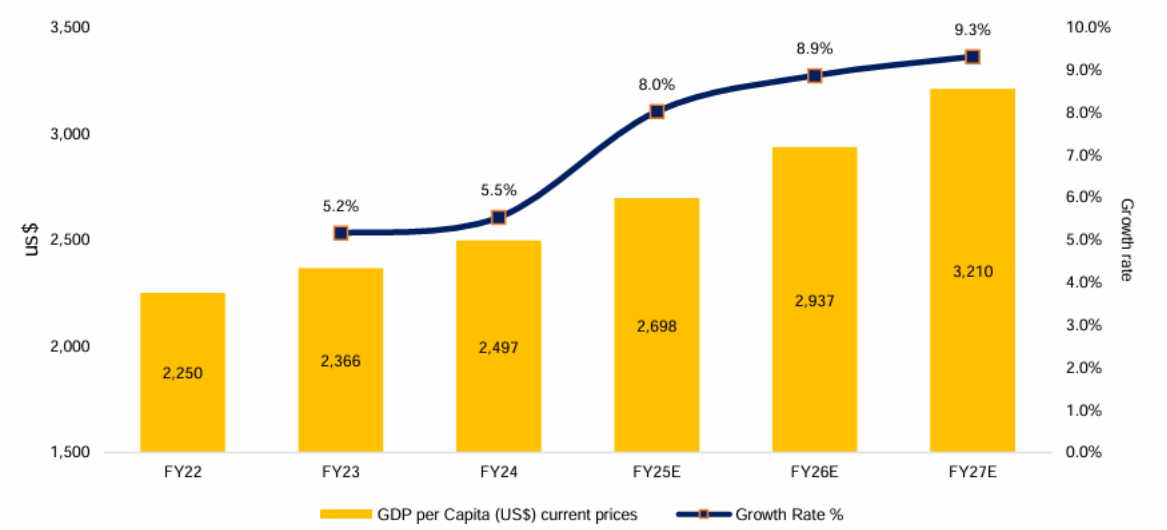
India's CPI Inflation Monthly



Source: Ministry of Statistics and Programme Implementation (MOSPI)

2.4 India Per Capita GDP Forecast

Per capita GDP growth at current prices for India is estimated at 8.0% for FY25. Increased individual incomes are expected to create additional discretionary spending, which may be beneficial for the Cookware Industry.



Note: E = Estimated

Source: IMF World Outlook October 2024 National Statistics Office, Ministry of Statistics & Programme Implementation (MoSPI), Govt of India

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

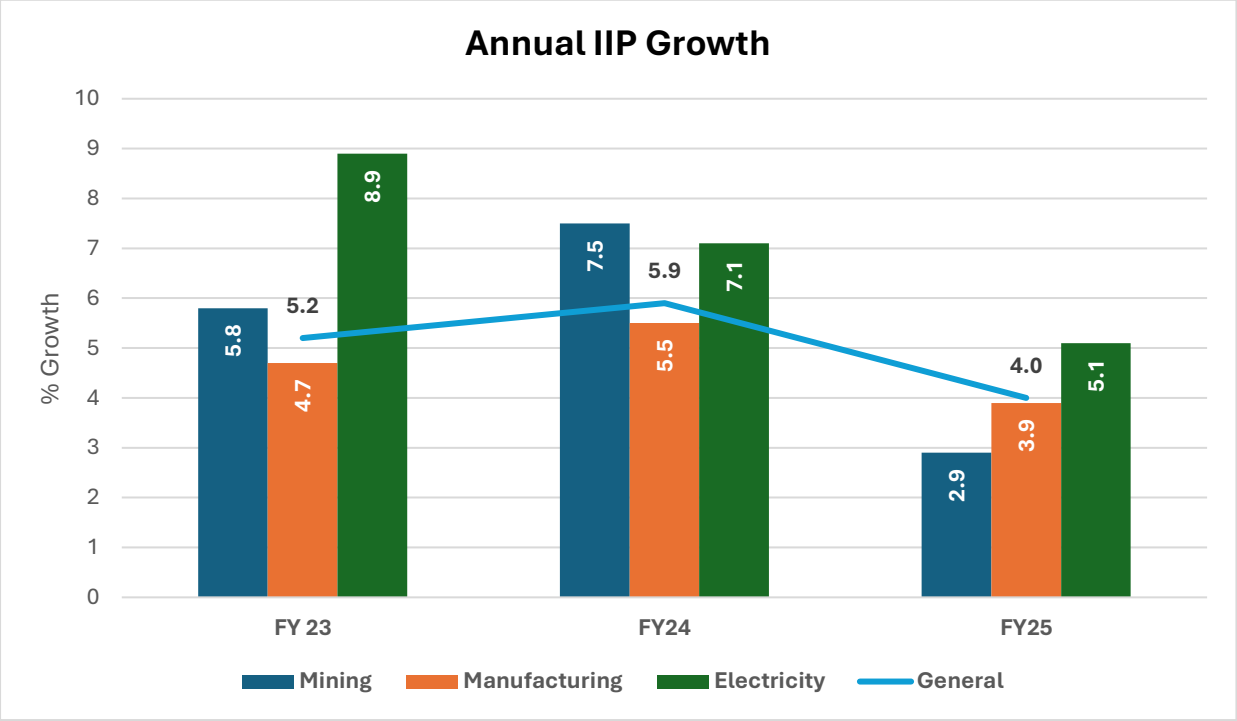
2.6 IIP Growth – Index of Industrial Production

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:

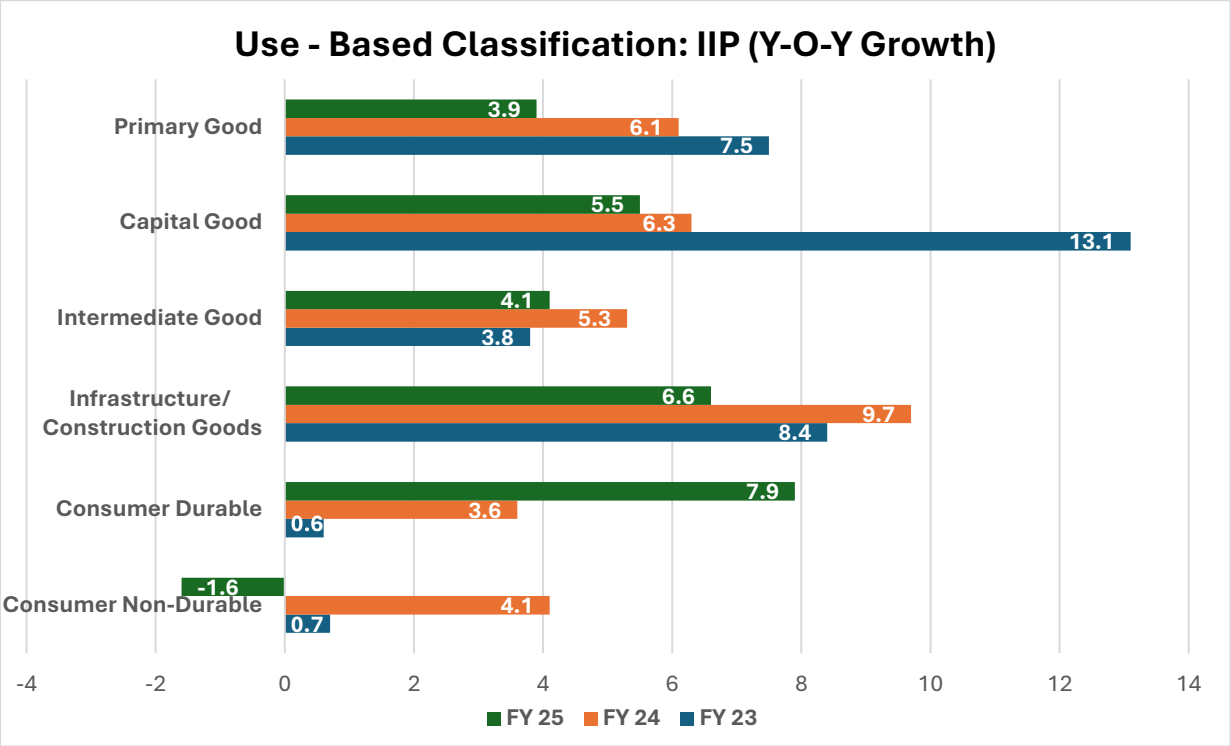
- **Manufacturing** (which holds a 77.6% weight in IIP) registered a slower growth of 3.9% in FY 2025, compared to 5.5% in FY 2024 and 4.7% in FY 2023.
- **Mining** growth also moderated sharply to 2.9% in FY 2025 from 7.5% in FY 2024 and 5.8% in FY 2023.
- **Electricity** growth remained relatively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

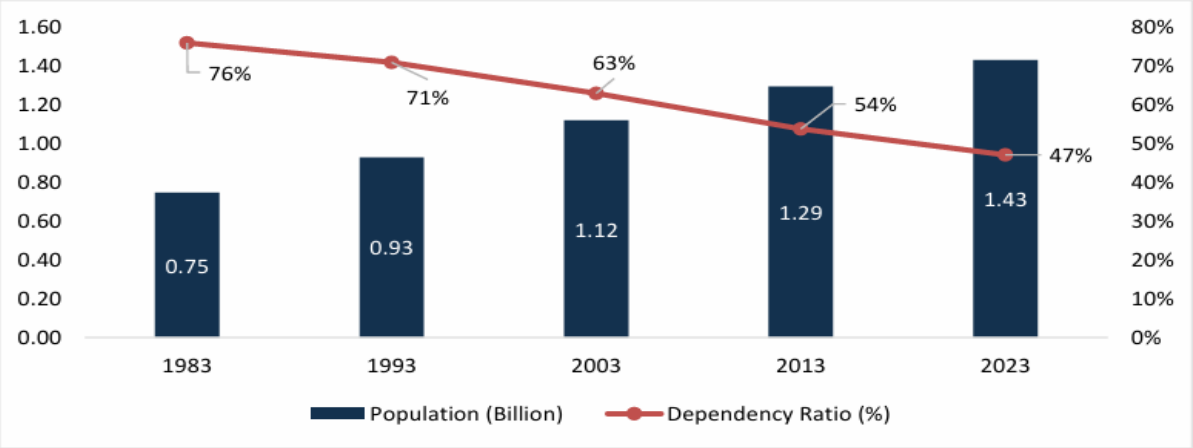
2.7 Overview on Key Demographic Parameters

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



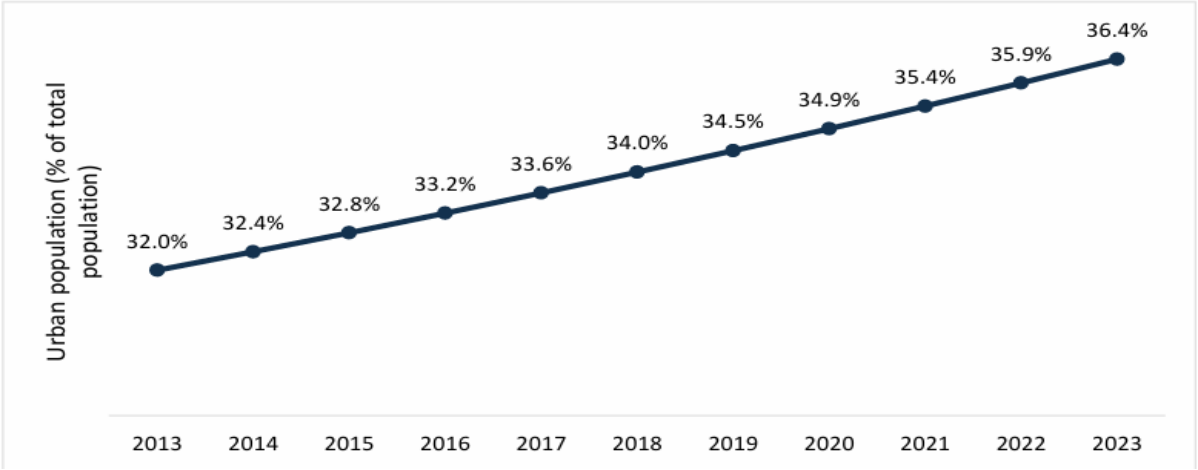
Source: World Bank Database

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



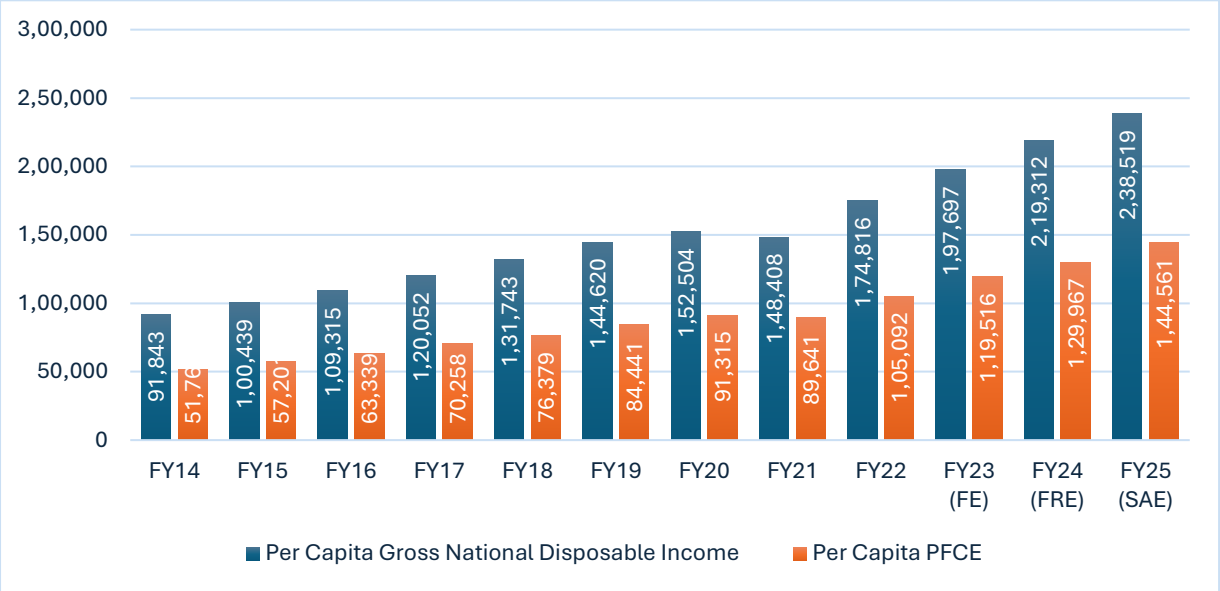
Source: World Bank Database

2.7.2 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.

3. Industry Overview

Introduction

Some may associate cotton with the soft touch of a summer shirt, a handwoven saree, or the comfort of a bedsheet—but behind these familiar textures lies a vast and intricate industrial ecosystem. The cotton processing and export industry is one of the most enduring and economically vital sectors in global manufacturing and agriculture, transforming raw farm produce into one of the world's most traded natural fibers. From ginning factories in India to textile mills in Bangladesh and retail shelves in Europe and America, cotton powers a supply chain that blends tradition with technology, and rural livelihoods with global commerce.

The cotton industry's influence extends far beyond fabric. It underpins multiple sectors, from fashion and home furnishings to industrial textiles and personal care products. The process begins with the ginning of seed cotton—an essential step that separates the valuable lint from the seeds—followed by pressing the fiber into transportable bales. These bales serve as the building blocks for yarn spinning, weaving, dyeing, and manufacturing apparel across continents. In every cotton garment lies the outcome of a sophisticated supply chain involving cultivation, mechanization, logistics, and international trade.

India, the United States, and China form the backbone of the global cotton economy, each contributing in distinctive ways. India boasts the world's largest cotton cultivation area, supported by a network of smallholder farmers and cooperative ginning units. The U.S. dominates in high-efficiency, large-scale mechanized farming and exports top-quality bales to over 80 countries. China, with its vertically integrated textile parks and vast spinning capacity, remains the world's largest consumer of cotton fiber. Together, these nations shape the volume, quality, and direction of cotton trade worldwide.

Technological innovation is steadily transforming the cotton processing landscape. From advanced roller gins to contamination-free baling systems, modern ginning units are evolving into smart, traceable processing hubs. The integration of digital quality control, QR-coded bale tracking, and AI-powered classification systems is bringing transparency and precision to a traditional manual industry. Meanwhile, satellite-based crop monitoring and blockchain-backed procurement platforms are revolutionizing the upstream cotton supply chain—ensuring that each bale tells a verifiable story of its origin, quality, and sustainability.

Globally, trends such as ethical sourcing and traceable fiber content are redefining how cotton is grown, processed, and sold. Retail brands are under pressure to demonstrate environmental and social accountability, pushing the demand for responsible grown and certified cotton. For exporters, this has meant aligning with international standards like GOTS, OEKO-TEX, and BCI, and investing in bale traceability and contamination-control technologies. From farm to fashion, the demand is shifting toward cleaner, certified, and identity-preserved cotton.

As environmental awareness deepens, the industry is embracing sustainable practices. Water-efficient irrigation, organic farming, low-impact ginning, and circular packaging are gaining traction globally. In India, the government's Kasturi Cotton Bharat initiative is reinforcing the country's reputation as a supplier of pure, ethically produced cotton, with branding and traceability protocols that rival international benchmarks. This move is not only elevating India's cotton profile but also creating a new premium category for export markets.

India, with its vast agrarian base, technical capabilities, and export orientation, is emerging as a global hub for cotton processing and trade. Supportive policy frameworks like the Production Linked Incentive (PLI) Scheme, Remission of Duties and Taxes on Exported Products (RODTEP), and various agri-export subsidies are driving sectoral growth. The expanding demand from international markets, combined with rising domestic consumption from textile clusters, is fueling steady growth in processing capacity, export volume, and innovation.

As India strengthens its role in the global cotton economy, the cotton processing and export industry is poised to become a cornerstone of sustainable industrial transformation. With the convergence of technology, trade, and environmental consciousness, this industry is set not just to clothe the world—but to do so with greater accountability, resilience, and value in the years to come.

Key Market Segments

The cotton industry can be segmented based on product type, application, processing type, distribution channel. Each segment serves different market demands and value chains.

Segmentation Category	Segment	Details & Examples
1. Product Type	Raw Cotton	Unprocessed cotton directly from farms; sent to ginning mills.
	Cotton Lint	Fiber separated from seeds post-ginning; input for spinning mills.
	Cotton Bales	Pressed lint packed in standardized units for storage and export.
	Cottonseed	By-product from ginning; used in oil extraction and feed.
	Cotton Cake	Residue after cottonseed oil extraction; used as high-protein cattle feed.
	Organic Cotton	Grown without chemical fertilizers/pesticides; GOTS or India Organic certified.
	Recycled Cotton	Processed from textile waste (post-consumer/post-industrial); supports circular economy.
	Cotton Yarn	Yarn spun from cotton lint—used in knitting, weaving, and sewing
	Open end Yarn	Coarser yarn produced by rotor (open-end) spinning; bulkier, more absorbent, abrasion-resistant; ideal for towels, denim, industrial fabrics
2. Application	Textiles & Apparel	Spun into yarn for clothing—shirts, denim, T-shirts, etc.
	Home Furnishings	Bedsheets, pillowcases, curtains, towels, cushion covers.
	Medical & Hygiene	Used in absorbent cotton, surgical dressings, swabs, pads.
	Industrial Use	Cotton used in canvas, tents, filters, insulation, tarpaulins.
	Oil Extraction	Cottonseed crushed to extract edible oil.

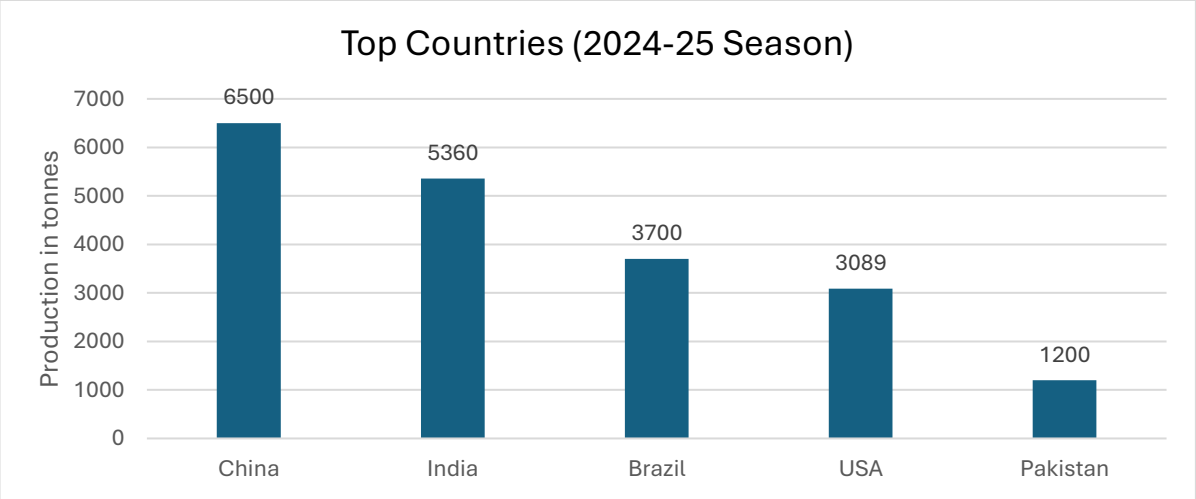
	Animal Feed	Cotton cake used as feed in dairy and poultry farming.
	Personal Care Products	Cotton balls, baby wipes, makeup removal pads, hygiene products.
3. Processing Type	Conventional Cotton	Grown using agrochemicals and standard seeds; most common method.
	Organic Cotton	Certified eco-friendly production without synthetic inputs.
	Bt Cotton	Genetically modified for pest resistance; ~90% of Indian cotton area.
4. Distribution Channel	Domestic Wholesalers & Traders	Purchase from ginners; sell to mills, exporters, or retailers.
	Spinning & Textile Mills	Directly procure lint for converting into yarn/fabrics.
	Exporters & International Buyers	Export cotton bales/lint to countries like Bangladesh, China, Vietnam.
	E-commerce & Retail Brands	Sell finished organic cotton products online (e.g., Amazon, D2C brands).
	Institutional Buyers	Hospitals, industries, government procure for bulk cotton usage.

3.1 Global Cotton Industry

Cotton refers to a natural fiber obtained from the seeds of the cotton plant, belonging to the genus Gossypium. This fiber is one of the most extensively utilized fibers in the textile industry owing to its softness, breathability, and durability. The extensive use of cotton as a primary raw material for textiles and high demand for clothing, home textiles, and industrial fabrics are significantly boosting the market growth. The increasing global population is leading to a higher demand for cotton-based products, particularly in emerging economies with a growing middle-class population which is influencing the market growth. According to the United Nations, the world's population is more than three times larger than it was in the mid-20th century. The global cotton market size reached 25.1 million Tons in 2024. By 2033, the market expects to reach 28.2 million Tons, at a projected CAGR of 1.24% during 2025-2033. ***Source – Imarc)***

Top Producers

China remains the world's largest cotton producer with 6,500 thousand tonnes, driven by highly mechanized and technology-integrated farming, particularly in the Xinjiang region, which contributes over 80% of national output. The country's use of Bt cotton, machine harvesting, and precision agriculture ensures high productivity, supporting its vast domestic textile sector. India ranks second with 5,360 thousand tonnes, Brazil, with 3,700 thousand tonnes, continues to gain ground as a major cotton exporter known for clean, contamination-free lint, largely produced in Mato Grosso and Bahia through double cropping systems and GM seed adoption. The United States, producing 3,089 thousand tonnes, exemplifies efficient, large-scale cotton farming, with exports comprising nearly 75% of its output—favoured globally for its high-quality long-staple cotton under the Cotton USA brand. Meanwhile, Pakistan, producing around 1,200 thousand tonnes, faces declining yields due to pest outbreaks, floods, and policy gaps, although cotton remains a critical input for its robust textile export economy, particularly in Punjab and Sindh.



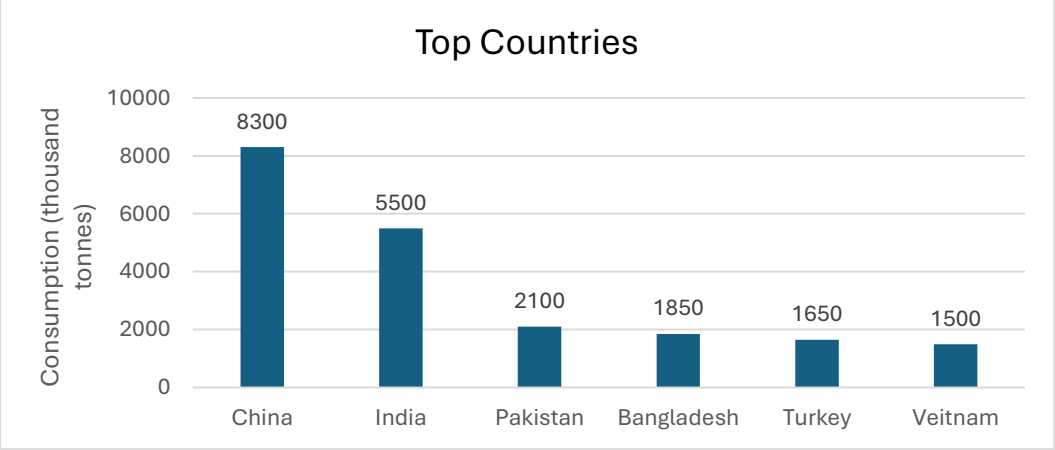
Source – ICAC (International Cotton Advisory Committee)

3.1.1 Cotton Use and Trade by major Countries

Cotton consumption is a key indicator of textile manufacturing activity in a country. It reflects how much raw cotton is processed (primarily into yarn and fabric), and correlates directly with industrial output in the textile and apparel sectors. The 2024/25 season data highlights Asia's continued dominance in global cotton consumption, with China and India leading the way.

Top Consumers

China remains the world's largest cotton consumer with 8,300 thousand tonnes, accounting for over 30% of global cotton use. This high consumption supports China's vast textile ecosystem, including spinning, weaving, dyeing, and garment manufacturing, concentrated in regions like Zhejiang, Jiangsu, and Guangdong. Despite rising labour costs, China maintains competitiveness through automation, vertical integration, and strategic cotton imports, particularly from the U.S., Brazil, and India. India, consuming 5,500 thousand tonnes, is the second-largest consumer globally, with cotton forming about 60% of the raw material base for its textile industry. Major hubs like Tirupur, Ludhiana, Ahmedabad, and Surat drive consumption for yarn, knitwear, and home textiles, although India also imports extra-long staple cotton to meet quality demands. Pakistan consumes around 2,100 thousand tonnes, supporting its export-oriented textile industry, while compensating for declining domestic cotton production with imports. Bangladesh, with 1,850 thousand tonnes of consumption, relies almost entirely on imports to power its massive garment manufacturing sector that supplies major global brands. Turkey, at 1,650 thousand tonnes, has a vertically integrated industry backed by strong domestic and export demand, with production centred in Denizli, Istanbul, and Gaziantep. Lastly, Vietnam consumes 1,500 thousand tonnes, fuelled by rapid FDI-led growth in textile manufacturing as global brands diversify away from China. Nearly all of Vietnam's cotton is imported, and its consumption is expected to rise further due to continued infrastructure expansion and export momentum.



Source – ICAC (International Cotton Advisory Committee)

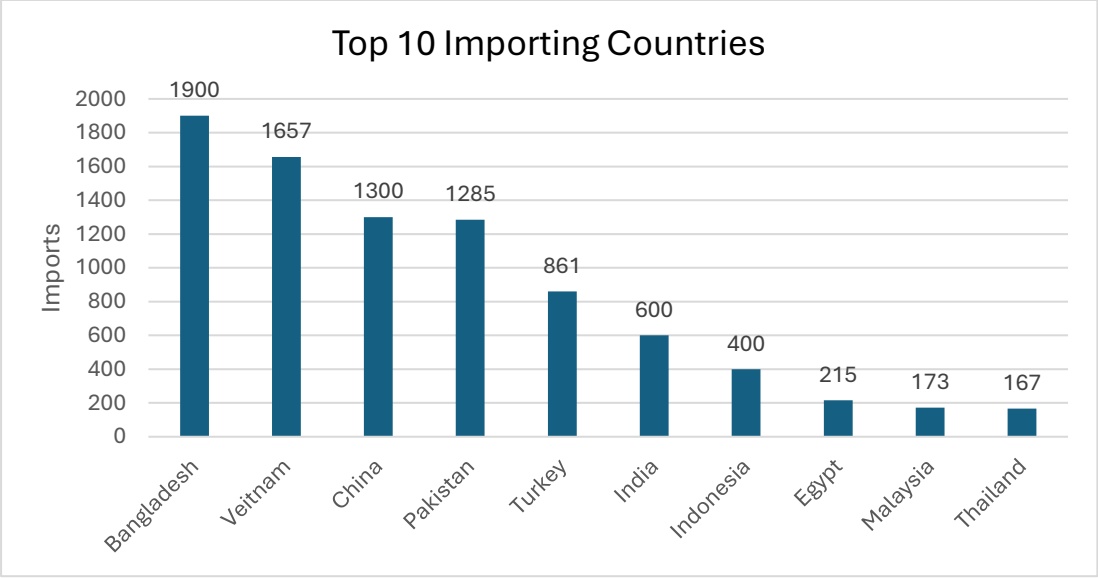
Trade Dynamics

Top 10 Importing Countries

The leading global importers of cotton during the forecasted cotton season, measured in thousand tonnes. According to the data, Bangladesh emerges as the largest importer, with cotton imports reaching 1,900 thousand tonnes. This is reflective of its highly export-driven ready-made garment (RMG) industry, which lacks sufficient domestic cotton production and thus relies heavily on imports for spinning and textile production.

Following Bangladesh, Vietnam ranks second with 1,657 thousand tonnes, driven by rapid expansion in textile and apparel exports, particularly to U.S. and European markets. China, traditionally a cotton producer, still ranks third with 1,300 thousand tonnes of imports. This indicates that despite large-scale domestic cultivation, China's internal demand for high-quality or specific varieties of cotton continues to outpace its production.

Pakistan, another major cotton-spinning country, imported approximately 1,285 thousand tonnes, largely due to declining domestic yields affected by weather volatility. Turkey also features prominently with 861 thousand tonnes, as it continues to be a global hub for denim and home textiles. India, despite being one of the largest cotton producers globally, appears sixth on the list with 600 thousand tonnes of imports and Indonesia at 400, which are likely to meet shortfalls in specific grades or for blending purposes in mills. The remaining three countries—Egypt (215), Malaysia (173), and Thailand (167)—show considerably lower import figures.

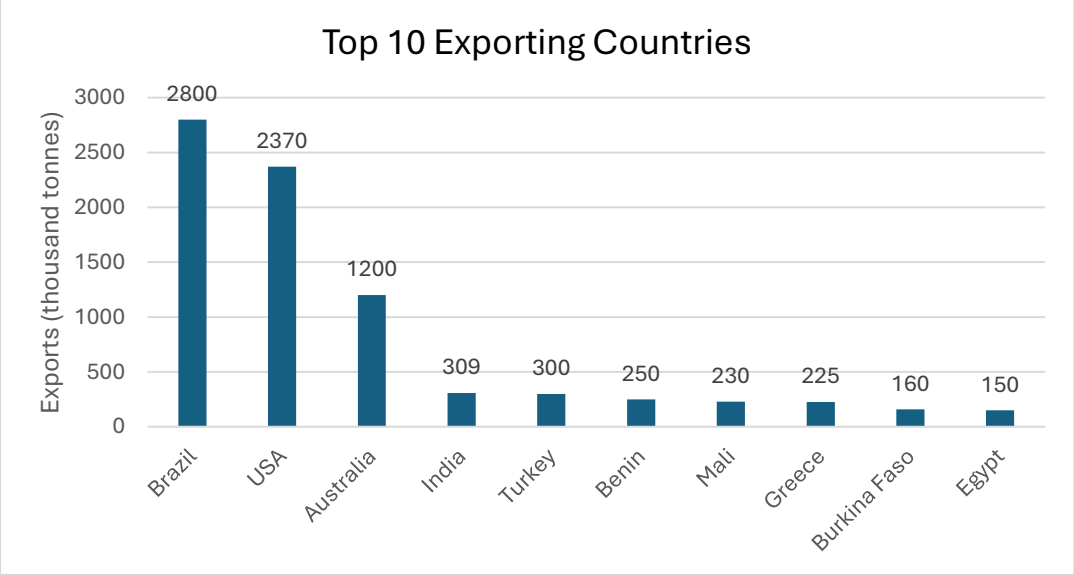


Source – ICAC (International Cotton Advisory Committee)

Top 10 Exporting Countries

Brazil leads the global export market with 2,800 thousand tonnes, reinforcing its position as the largest cotton exporter, supported by vast arable land, favourable climate, and advanced mechanization. The United States follows closely with 2,370 thousand tonnes, a traditional leader in cotton exports due to its efficient supply chain and high-quality output. Australia, despite its relatively smaller size, secures third place with 1,200 thousand tonnes, owing to its technologically advanced irrigation and farming practices.

India ranks fourth with 309 thousand tonnes, indicating a relatively lower export volume despite being one of the largest cotton producers, as much of its cotton is consumed domestically. Turkey is close behind with 300 thousand tonnes, benefiting from its integrated textile industry. The remaining exporters—Benin (250), Mali (230), Greece (225), Burkina Faso (160), and Egypt (150)—are mostly smaller economies in Africa and Europe that rely heavily on cotton exports for foreign exchange earnings. This distribution highlights both the dominance of major agricultural economies and the significant contribution of developing nations in the global cotton trade.



Source – ICAC (International Cotton Advisory Committee)

3.1.2 Trend in International cotton prices

The annual average global cotton prices over the past five years reveal a pattern of sharp fluctuations followed by gradual stabilization, reflecting shifting market fundamentals. In 2021, cotton prices averaged $0.9346 per pound, driven by strong post-COVID recovery in textile demand and constrained global supply chains. Prices peaked in 2022 at an annual average of $1.1284, marking the highest level in over a decade, largely due to droughts in the

U.S., floods in Pakistan, and soaring input costs. However, the market corrected sharply in 2023, with prices averaging $0.8298, as global demand softened and inventories increased. The declining trend continued in 2024, when prices fell to an average of $0.7703, impacted by weak apparel demand, increased global production, and currency pressures in emerging economies. In 2025, cotton prices are projected to average $0.6643, indicating a further moderation as the global market adjusts to balanced supply-demand conditions. This five-year trend underscores the importance of climatic conditions, input costs, and macroeconomic shifts in influencing cotton price trajectories. ***Source – Macrotrends.net***

International cotton prices have shown significant fluctuations over the past decade, influenced by global supply-demand imbalances, weather shocks, trade policies, and macroeconomic factors**.**

- **Currency Fluctuations -** Strengthening US Dollar, As of June 13, 2025, the USD/INR exchange rate stood at approximately ₹86.09 per US dollar, a 3% depreciation from a year ago (₹83.56 on June 13, 2024). A stronger dollar makes US cotton more expensive for buyers paying in local currencies. During mid-2022, the US dollar index reached a two-year high, which steered importers toward alternative suppliers like Brazil and India. Exporters in countries with weaker currencies can sometimes offset this shift by offering cotton at lower USD-adjusted prices—boosting competitiveness.

- **Weather Conditions -** Cotton is a climate-sensitive crop that requires a precise balance of temperature, rainfall, and sunshine. As such, it is highly vulnerable to extreme weather events like droughts, floods, and unseasonal rainfall. Disruptions in key producing regions can significantly impact global cotton supply, triggering price volatility in international markets**.**

- **Global Demand Fluctuation -** Global demand for cotton is closely tied to the health of the textile and apparel industry, which in turn is influenced by broader economic trends, fashion cycles, and retail consumption patterns. Sudden drops in demand—such as those witnessed during the COVID-19 pandemic in 2020—can trigger sharp declines in cotton prices. During the early months of the pandemic, widespread retail closures, order cancellations, and supply chain disruptions led to a global halt in garment production, causing a dramatic drop in raw cotton demand.
  Conversely, demand surges—often driven by post-crisis recovery, fashion booms, or inventory restocking cycles—can cause rapid upward movement in prices. For example, in the aftermath of COVID-19, as global economies reopened and brands rushed to rebuild inventories, cotton consumption soared across key textile-producing countries such as China, India, Bangladesh, and Vietnam.

- **Government Policies & Trade -** Government interventions and international trade policies have a profound influence on the global cotton market, shaping supply dynamics, pricing, and international competitiveness. In 2022, India implemented a temporary export restriction on cotton, intending to stabilize domestic fiber prices and secure raw material supplies for its textile sector.

3.2 Indian Cotton Industry

India is the largest producer of cotton globally, accounting for 23% of total global cotton production. It is a crop that holds significant importance for the Indian economy and the livelihood of Indian cotton farmers. Cotton grows over 13.06 million hectares in India compared to 33.1 million hectares globally. The Indian cotton industry provides livelihood to about 60 million people in the country. The Southern Zone (which comprises states like Telangana, Andhra Pradesh, Karnataka, and Tamil Nadu) is the second biggest producer of cotton, producing about 28.5% of the nation's cotton, with Telangana producing the largest in the Southern Zone and the third largest in the country, contributing 5.31 million bales (bales of 170 kg each). India Cotton Market Size is expected to reach a significant CAGR of 7.2% during the forecast period 2025-2031. Source – 6W research

Trade Dynamics for Cotton

Trade Flow	April-March2024 (R)	Apr-Mar 2025 (F)	%Growth
Export	6780.81	6333.82	-6.59
Import	791.01	1418.58	79.34

Major Imports (Values in US$ Million)

Major Countries	Apr-Mar2025(F)	% Share
Australia	258.27	18.20
U S A	235.11	16.58
Brazil	180.84	12.75
Egypt	123.80	8.73
China	99.56	7.02
Other Countries	521.00	36.72
Total	1418.58	100%

Source – Ministry of Commerce and Industry

Major Exports (Values in US$ Million)

Major Countries	Apr-Mar2025(F)	% Share
Bangladesh	2,803.21	44.25
Vietnam	320.57	5.06
Sri Lanka	292.57	4.62
China	235.74	3.72
Egypt	192.17	3.03
Other Countries	2489.56	39.32
Total	6333.82	100%

3.3 Indian Cotton Yarn& Processing Industry

3.3.1 Overview on Ginning, Pressing & Spinning

Cotton yarn is one of the most essential intermediate products in the textile value chain, serving as the backbone of fabric production across both woven and knitted applications. Produced by spinning raw cotton fibers into continuous threads, cotton yarn is graded by its fineness (count), twist, and fiber quality. India, as one of the world's largest producers and exporters of cotton yarn, plays a pivotal role in supplying global markets—particularly countries like Bangladesh, China, and Vietnam. Cotton yarn is manufactured in various forms such as carded, combed, or compact yarn, each designed to meet specific requirements for softness, strength, and durability. A key segment within cotton yarn production is open-end yarn—also known as rotor-spun yarn—which is created through a cost-efficient, high-speed process that eliminates the need for traditional ring spinning. While open-end yarn is typically coarser and less strong than ring-spun yarn, it is widely used in the manufacture of bulk fabrics like denim, towels, and industrial cloth, where cost and volume efficiency matter more than fineness.

The Indian cotton value chain begins at the farm level and transitions through several stages—**ginning**, **pressing**, and **spinning**—before cotton is transformed into yarn and fabric. These intermediate processes form the backbone of India's textile manufacturing ecosystem and are critical for both domestic supply and export readiness.

1.Ginning & Pressing

Ginning is the foundational mechanical process in the cotton value chain that prepares raw seed cotton, commonly known in India as *kapas*, for further processing into yarn and fabric.It involves the crucial step of separating the cotton fibers, referred to as *lint*, from the seeds embedded in the cotton boll. Before this separation, the cotton is typically cleaned to remove field debris such as leaves, sticks, and dust. In India, the ginning process is most carried out using **Double Roller (DR) gins**, which are especially suitable for long-staple cotton and are preferred for their ability to produce cleaner lint with less fiber damage. However, in regions where high-speed processing is prioritized—such as parts of Gujarat and Maharashtra—**Saw gins** are also used due to their higher throughput capacity, though they are generally more suited to short- and medium-staple cotton varieties.

Once the lint is separated from the seeds, it is transferred to the pressing unit, where it is compacted into standardized cotton bales, each weighing approximately 170 kilograms as per Indian market standards. These bales are wrapped and labelled, often with QR codes or barcodes, especially if intended for export or organic certification.

The entire ginning and pressing process is central to the cotton supply chain, as the resulting bales are the **primary raw material for spinning mills**, where they are further processed into yarn. The quality of ginning—particularly fiber length, cleanliness, and uniformity—directly affects the efficiency and quality of yarn production. As a result, modern ginning units in India are increasingly incorporating **contamination removal systems**, moisture regulators, and digital traceability systems to meet the quality requirements of both domestic textile mills and global apparel brands

Core Machine Used in Ginning

- **Cotton picker & module builder—**that pack cotton into modules for transport by truck. A feeder/dispenser then unloads modules for processing
- **Wad Buster** - It breaks up the clumps of seed cotton by tossing it against a screen. Loose remains fall through the screen openings down a narrow chute.
- **Steady Flow** - Then the seed cotton moves through this machine, which divides it equally between two processing lines.
- **Burr Machine** - On each line, the seed cotton enters a Burr Machine, which grabs the seed cotton with a circular saw and swings it against metal bars.
- **Gin Stands** - Multiple saw-type gin stands extract lint by pulling fibers through ribs, leaving seeds behind—standard in modern ginneries
- **Pneumatic and belt conveyors** - It transfer lint to cleaners, where finer impurities are removed

Types of Ginning:

- **Saw Ginning** -Saw ginning employs rapidly spinning circular saw blades that pull fibers through narrow ribs, effectively separating lint from seed cores and removing trash; this method is ideal for short- to medium-staple cotton with high contaminant content, and offers high throughput, though it can damage fibers and increase short-fiber and nep content.
- **Roller Ginning** - Roller ginning (also known as knife or McCarthy ginning) uses grooved leather rollers that gently grip the fibers and a stationary or rotary knife to slice the fibers away from seeds, preserving fiber length and purity and yielding cleaner, longer lint—making it the method of choice for long-staple cotton—but it processes more slowly and is best used with low-trash, well-moisturized cotton

2.Spinning

The spinning process is a critical stage in the cotton textile value chain, where pressed cotton lint from ginning units is transformed into yarn through a sequence of operations that include

cleaning, combing, drawing, and twisting the fibers. In India, two major spinning technologies dominate the industry: Ring-Spun Yarn (RSY) and Open-End (OE) Yarn. Ring spinning is the most widely used method, especially for producing medium to fine yarn counts ranging from 20s to 60s (Ne). It delivers yarn that is stronger, smoother, and more durable, making it ideal for apparel, shirting, and export-quality woven fabrics. On the other hand, Open-End spinning uses rotor technology and is preferred for coarser yarn counts (typically 10s to 20s). This method is faster and more economical, though it produces yarns with relatively lower softness and strength, and is best suited for denim, towels, and industrial textile applications. As global markets shift toward sustainable sourcing, India is also witnessing a rise in Compact Spinning, which enhances yarn quality by reducing hairiness and improving strength. Furthermore, demand for recycled and organic cotton yarns—especially those certified under GOTS (Global Organic Textile Standard) and BCI (Better Cotton Initiative)—is accelerating, driven by ethical sourcing mandates from global apparel brands.

3.3.2 Domestic Demand and Supply dynamics

- India's cotton yarn sector is poised for substantial revenue growth, forecasting a 7-9% increase in FY26. The demand for Indian cotton yarn is shaped by a combination of domestic consumption patterns, global sourcing shifts, trade agreements, and the evolving needs of the international textile industry. As one of the world's largest producers and exporters of cotton yarn, India benefits from strong and sustained demand across both domestic and global markets.

- The domestic demand and supply dynamics of India's cotton yarn industry are shaped by several interlinked factors, including regional spinning capacities, seasonal raw material availability, and end-user industry demand. India hosts some of the largest spinning mill clusters in the world, with major hubs located in Tiruppur and Coimbatore (Tamil Nadu), Ludhiana (Punjab), and Ichalkaranji (Maharashtra). These regions have developed strong ecosystems around spinning, supported by proximity to cotton-growing areas, skilled labor, and established textile markets

- On the supply side, cotton yarn production is highly seasonal, driven by the cotton harvest cycle, which typically spans October to March. During the post-harvest period, cotton availability peaks, leading to higher ginning and spinning activity, relatively stable prices, and better capacity utilization in spinning mills. However, during the off-season (April to September), cotton availability tightens, and mills either rely on stored bales or reduce operations, often leading to higher input costs and price volatility.

- Despite growing competition from man-made fibres (MMFs) such as polyester, cotton continues to dominate the Indian fibre basket, accounting for more than 60% of the

raw material usage in the textile sector (Ministry of Textiles, 2024). Domestic demand experiences seasonal spikes, especially during festival seasons and apparel export cycles, contributing to periodic inventory adjustments in spinning mills. Structural challenges include cotton price volatility, energy costs, and labour availability, yet these are partly offset by policy support measures like the Production Linked Incentive (PLI) Scheme, Remission of Duties and Taxes on Exported Products (RoDTEP), and the Technology Upgradation Fund Scheme (TUFS).

- Driven by a rising middle class, urbanization, and robust textile infrastructure, India's domestic cotton yarn market is projected to remain resilient and growth oriented. Continued modernization, value-added manufacturing, and government-backed competitiveness initiatives ensure that India maintains its stronghold in both domestic and global cotton yarn trade.

- Domestic demand also fluctuates based on festive and export cycles, with peaks observed during the second and third quarters of the financial year. Additionally, the market has seen increasing substitution pressure from synthetic yarns, especially in low-cost garments, although cotton continues to hold dominance in premium and natural fiber segments. Challenges such as rising power costs, labor shortages, and cotton price volatility periodically affect mill margins and production scheduling. Nevertheless, strong fundamentals, government support through PLI schemes, and sustained downstream demand from the apparel and home furnishing sectors ensure a stable and growing demand base for cotton yarn within India.

3.3.3 Trade Dynamics for Cotton Yarn

India has long been a leading exporter of cotton yarn, contributing significantly to the global textile supply chain. India Exported over $ 3354.70 million in Apr-March 2025 of cotton yarn (HSN Code 5205), as per the Directorate General of Commercial Intelligence and Statistics (DGCI&S). This makes cotton yarn one of the top textile-related export categories for the country. Indian cotton yarn is known for its high quality, wide range of counts, competitive pricing, and availability in both ring-spun and open-end forms, catering to diverse global fabric and garment manufacturing needs.

Trade Dynamics – Cotton Yarn

Trade Flow	April-March2024 (R)	Apr-Mar 2025 (F)
Export	3,576.34	3,354.70
Import	23.49	22.44

Major Imports (Values in US$ Million)

Major Countries	Apr-Mar2025(F)	% Share
Vietnam	11.70	52.14
Egypt	7.55	33.63
China	0.55	2.45
U Arab	0.52	2.32
Italy	0.51	2.27
Other Countries	2.66	11.85
Total	22.44	100%

Major Exports (Values in US$ Million)

Major Countries	Apr-Mar2025(F)	% Share
Bangladesh	1682.12	50.12%
China	216.09	6.44%
Peru	158.45	4.72%
Vietnam	156.63	4.67%
Egypt	153.08	4.56%
Other Countries	988.33	29.46%
Total	3354.70	100%

Note: R – Revised Final, F- Final, Source – Ministry of commerce and Industry (Directorate General of Commercial Intelligence and Statistics (DGCI&S)

3.4 Organic Cotton Industry – Global & Indian

Introduction

Organic cotton is grown in agricultural systems that work with nature, rather than against it. The organic way of farming combines tradition, innovation, and science to benefit the environment, promoting fair relationships and improved quality of life for all. Organic farming systems have the potential to sustain and promote the health of soils, ecosystems, and people by relying on ecological processes, biodiversity, and cycles that are adapted to local conditions, rather than using external inputs that could have adverse effects.

Organic cotton has emerged as a transformative segment within the global textile industry, representing a critical shift toward environmentally responsible and ethically sourced raw materials. Unlike conventional cotton, organic cotton is cultivated without the use of synthetic pesticides, fertilizers, genetically modified seeds, or harmful chemicals, making it significantly less harmful to ecosystems, soil health, and farm workers. This sustainable fiber is grown using natural farming techniques such as crop rotation, organic composting, and biological pest control, which help conserve water and maintain biodiversity.

Over the past decade, the global organic cotton market has gained substantial traction, driven by a rising consumer preference for eco-friendly products, stricter environmental regulations, and growing commitments from fashion brands to adopt sustainable sourcing practices. As global concerns over climate change, pesticide overuse, and textile pollution intensify, organic cotton has become a preferred alternative in industries ranging from fashion and home textiles to medical and baby products. Major apparel brands—such as Patagonia, H&M, Levi's, and C&A—are increasingly setting ambitious goals to transition toward 100% organic or sustainable cotton in their supply chains.

The state governments are responsible for production of all types of cotton including organic cotton. The Department of Agriculture & Farmers Welfare (DA&FW) advocates for promotion of specialty/ organic cotton through user industry to enable farmers get maximum returns for produce. Agricultural & Processed Food Products Export Development Authority (APEDA), Ministry of Commerce & Industry is the Secretariat for implementation of National Programme for Organic Production (NPOP). NPOP provides an institutional mechanism for accreditation of certification bodies and certification of organic process & products.

3.4.1Global Organic Cotton Market

Global Organic Cotton Market Value and Growth rate

1. **Strong Market Growth and CAGR**
    - The global organic cotton market size was USD 1.58 billion was 2024 and will touch USD 6.13 billion by 2032, exhibiting a CAGR of 18.49% during the forecast period. ***Source – Business research insights***
    - The global organic cotton market size was USD 1,113.5 million in 2023. The global **organic cotton market** is experiencing **exceptional growth**, driven by a convergence of environmental awareness, corporate sustainability goals, and shifting consumer preferences. ***Source – Fortune Business insights***.

2. **Post-COVID Recovery and Demand Surge**
    - During COVID-19 (2020), Organic Cotton Industry Had a Negative Effect Due to supply chain disruption during COVID-19 Pandemic. The global COVID-19 pandemic has been unprecedented and staggering, with the market experiencing lower-than-anticipated demand across all regions compared to pre-pandemic levels. The sudden market growth reflected by the rise in CAGR is attributable to the market's growth and demand returning to pre-pandemic levels.
    - Despite these setbacks, the organic cotton market demonstrated remarkable resilience. By late 2021, as economies reopened and supply chains adapted to new health protocols, global demand for organic cotton not only recovered but surged beyond pre-pandemic levels.
    - The pandemic, rather than derailing sustainability efforts, acted as a catalyst for deeper industry reform. It highlighted systemic vulnerabilities in conventional, price-driven supply chains and reinforced the importance of transparency, environmental stewardship, and long-term supplier relationships. For consumers, the COVID-era brought heightened awareness of health, ethical sourcing, and environmental impact, further strengthening

the market for products made with organic cotton—especially in segments like infant clothing, home textiles, and wellness apparel.

3. **Shift in Consumer and Brand Preferences**
    - Over the past five years, the global textile and apparel industry has witnessed a fundamental transformation in both consumer expectations and brand procurement strategies, with a marked shift toward organic, sustainable, and ethically sourced cotton. This trend has emerged as one of the primary demand drivers for the organic cotton market, influencing everything from farm-level practices to global retail operations.

4. **Prominent fashion and lifestyle brands**
    - Including H&M, Levi's, Nike, Adidas, Patagonia, and C&A—have publicly committed to increasing the share of organic or sustainably sourced cotton in their product lines. Many have integrated targets under frameworks Textile Exchange's 2025 Sustainable Cotton Challenge, which encourages brands to source 100% sustainable cotton by 2025.

As sustainability and transparency become mainstream consumer expectations, brands are prioritizing procurement from suppliers who meet recognized international certifications: GOTS (Global Organic Textile Standard): Ensures the cotton is grown organically and processed with minimal environmental and chemical impact. OEKO-TEX and SA8000: Ensure that finished textile products are free of harmful substances and manufactured ethically.

3.4.2Market segmentation on types of organic cotton

Category	Segment	Description
By Type	Medical Grade Organic Cotton	Specially processed for medical use, ensuring hypoallergenic properties, high purity, and safety. Commonly used in hospitals and clinics.
	Normal Organic Cotton	Widely used in textiles and non-medical products. Known for its sustainability and low environmental impact. Applied in casual wear, home textiles, and daily-use items.
By Application	Medical Products	Used in dressings, gauzes, bandages, and other sterile medical items. Preferred for its softness and safety in hygienic environments.

	Apparel	Popular in the garment industry for its comfort, breathability, and eco-friendly appeal. Growing demand from sustainable fashion brands.
	Others	Includes home furnishings, personal care items, and industrial textiles. Valued for its biodegradability and suitability in eco-conscious industries.

Organic Cotton Market Regional Insights

- **North America -** The United States organic cotton market is growing rapidly because of the rising demand from customers for environment-friendly products. High market shares of the region are attributed to the environmental-conscious fashion brands, organic cotton is replacing conventional cotton in clothing manufacturers, and government supports given for organic farming and other agricultural sustainable practices. All put together, North America currently occupies the largest share globally regarding the organic cotton market with huge percentages taken by the United States itself.
- **Europe -** Organic cotton market share in Europe is one of the most significant regions for its share and growth. There has been strong consumer awareness of this region about sustainable, environment-friendly, and ethically produced textiles. Germany, United Kingdom, and France have significant markets for organic cotton in apparel and home textiles. European regulations and certifications in promoting organic cotton farming increase the growth and share in this region.
- **Asia -** Asia is growing at a high rate in the organic cotton market because countries like India and China, which are major producers of cotton, are increasing their production. The demand for organic cotton in Asia is increasing because consumers in both developed and emerging markets are becoming more conscious of environmental issues and sustainable products. This accelerating growing trend in the organic cotton market share in the region is being seen due to the growth in the textile sector of these nations and increased exports.

  Source – Business research Insights

3.4.3 Trend in Global Organic Cotton Consumption and Market Share

- This has highly contributed to its growing demand among environmentally sensitive consumers and industries looking forward to reducing carbon emissions. Most applications include clothing, textiles, and personal care products with towels and baby wear in which organic cotton is used.

- Consumption of organic cotton is also taking the lead in North America and Europe; the boom is seen because of consumer preference towards eco-friendly and sustainable products. India and China are leading in production due to favourable climatic conditions, established organic farming, and governmental initiatives in Favor of this trend of sustainable agriculture. Improvements in processing techniques of organic cotton makes it more accessible and affordable by developing further retail channels. The organic cotton market is very huge when it comes to growth potential due to sustainability being the directive force for consumer behaviour and industrial practices in today's world. This, in turn, hence, becomes a bigger stride toward greener and more accountable life.

3.4.4 Trend in Global Organic Cotton Market Value and Volume Forecast

- **Climate and Weather Variability -** Organic cotton farming is inherently more climate-sensitive than conventional or genetically modified (GM) cotton cultivation because it relies on natural processes, avoids synthetic inputs, and is largely rain-fed in major producing regions. This makes it particularly vulnerable to weather fluctuations and extreme climate events. Organic cotton does not use synthetic fertilizers or genetically modified seeds; farmers have fewer tools to compensate for poor weather. GM cotton, by contrast, can sometimes better withstand drought or pest pressure. There is growing global emphasis on climate-resilient and regenerative organic farming, which includes Soil improvement through composting, crop rotation, and green manures to retain moisture. Use of indigenous cotton seed varieties that are more adaptable to local conditions. Mulching and agroforestry to buffer against drought and heatwaves. Training programs (e.g., by Textile Exchange and C&A Foundation) that teach farmers to implement climate-smart methods.
- **Government & Institutional Regulations -** Government and institutional regulations are increasingly shaping the global organic cotton industry through stricter compliance, certification, and traceability mandates. In India, the government supports organic cotton through APEDA's National Programme for Organic Production and has introduced QR code-enabled bale tagging for traceability from farm to export. Meanwhile, in the U.S., the USDA's National Organic Program (NOP) governs organic cotton standards, ensuring compliance with pesticide-free and non-GMO criteria. Together, these frameworks are formalizing the organic cotton supply chain, increasing transparency, and supporting global market growth.

- **Sustainability and Digital Innovation -** A big trend shaping markets today is an emphasis on sustainability and digital innovation across industries. Growth in demand is being witnessed due to the increasing numbers of environmentally conscious consumers and businesspeople, which is affecting sustainable products, renewable energy, and circular economies. Alongside, operational efficiency changes in artificial intelligence, blockchain, and Internet of Things developments open new avenues for growth. Remote work and hybrid models continue to shape the character of workplaces as technology adoption by the healthcare and retail industries leads to scenarios of personalization and on-demand services. Sustainability and digital transformation redefine the industries hence a more connected and responsible global economy emerges.

3.5. Indian Organic Cotton Industry

3.5.1 Overview on Organic Cotton, Cotton Seeds, and Cotton Linter

India is the world's largest producer of organic cotton, contributing over 50% of global certified organic cotton output. Grown without synthetic pesticides, fertilizers, or genetically modified seeds, organic cotton in India is cultivated primarily by small and marginal farmers across states like Madhya Pradesh, Maharashtra, Odisha, Gujarat, and Rajasthan. Certified under the National Programme for Organic Production (NPOP) by APEDA, Indian organic cotton follows strict guidelines ensuring ecological sustainability and traceability. The production process involves manual harvesting to prevent contamination, ginning in certified facilities, and environmentally responsible spinning, weaving, and dyeing—often certified under GOTS (Global Organic Textile Standard). A key challenge in the Indian organic cotton ecosystem is the limited availability of region-specific, non-GMO seeds. These seeds must be untreated or treated with organic inputs and certified for genetic purity and pesticide residue under APEDA's TraceNet system. Parallel to fiber production, cottonseed yields valuable by-products, particularly cotton linter—the short fuzz left on seeds after ginning. Rich in cellulose, cotton linter is used in India's pharmaceutical industry to produce excipients like microcrystalline cellulose and ethyl cellulose, essential for tablets, capsules, and surgical products. It is also processed into high-purity pulp for specialty papers such as currency notes, filter papers, and archival materials. India exports significant quantities of cotton linters to countries like Germany, Japan, and South Korea for further industrial use. Together, organic cotton, certified seeds, and value-added products like linters form a robust and increasingly export-oriented segment of India's sustainable agriculture and textile ecosystem.

3.5.2 Trend in Indian Organic Cotton Consumption and Market Share

- India has consistently maintained its position as the world's largest producer of organic cotton, contributing over 50% of global production throughout this period. Despite high production, domestic consumption of organic cotton in India remains limited, with most of the produce being exported to meet demand in Western markets.

- In 2019–2020, domestic consumption of organic cotton was negligible, mostly restricted to niche brands and urban consumers. Over time, urban middle- and upper-income segments in Tier 1 and Tier 2 cities began to show increasing interest in sustainable textiles, fuelled by rising awareness of environmental and health concerns.

- From 2021 onward, COVID-19 significantly accelerated this awareness, with a growing preference for natural, sustainable, and skin-friendly fabrics. While India's market share in global production has remained stable, its domestic market share (within total Indian cotton consumption) has remained under 2%, indicating limited penetration.

- By 2023–2024, organic cotton began gaining traction in domestic fashion collections, yoga wear, children's clothing, and premium loungewear categories—though largely in blended fabric forms due to high costs.

- High price differentials (30–40% higher than conventional cotton) and limited certified retail options have kept wider adoption in check. However, e-commerce platforms and D2C (direct-to-consumer) organic fashion brands have emerged in recent years, improving accessibility and visibility.

3.5.3 Trend in Indian Organic Value, Volume and Price

- India's organic cotton production has been steadily increasing! In 2020-21, production was 810,934 metric tonnes (MT), compared to 335,712 MT in 2019-20 and 312,876 MT in 2018-19, marking a 142% growth over the previous year. Market value was relatively modest, with organic cotton mainly catering to export markets and niche domestic demand. ***Source - dfupublications.com***

- The prices of organic cotton, both extra-long staple (ELS) and long staple, have shown an upward trend since June 2021. The price of ELS organic cotton (34.5 mm) has surged by 34 per cent since June 2021, while that of long staple organic cotton (28.5 mm to 34.4 mm) has jumped 108 per cent. India produces nearly 50 per cent of the world's organic cotton. ***Source- Fibre2Fashion***

- The prices of organic cotton (Shankar-6, 28 mm) have been in a decreasing trend from December 2023 to November 2024 in Asia (Domestic India). This decline can be attributed to various factors including fluctuations in demand, changes in production costs, and broader economic conditions affecting the textile industry.

3.5.4 Trend in Indian Organic Cotton Market Value and Volume Forecast

- The India organic cotton market size reached USD 51.0 Million in 2024, and it expects the market to reach USD 955.9 Million by 2033, exhibiting a growth rate (CAGR) of 38.50% during 2025-2033.

- The market is driven by rising consumer demand for sustainable textiles, government incentives promoting organic farming, and increasing global preference for eco-friendly apparel. Growing awareness of environmental concerns, reduced water usage in organic cultivation, and expanding export opportunities further support market growth, attracting investments from major textile brands.

- Rising acreage under organic cultivation, supported by initiatives like the PKVY and state-level incentives. Growing certification compliance, which enhances farmers' access to international markets. Organic cotton production is expected to continue its upward trend through 2027, albeit growth may level compared to the dramatic 2019–21 surge as farmers balance yield considerations and certification costs.

3.5.5 Demand Drivers

- **Rising Demand for Sustainable and Ethical Fashion –** The increasing preference for eco-friendly clothing among Indian and global consumers is shaping the organic cotton market. Shoppers are increasingly aware of sustainability, with increased demand for clothing made of organic cotton that is not treated with synthetic pesticides and fertilizers. Large apparel brands and retailers are launching extended lines of organic cotton clothing to achieve sustainability goals and cater to ethically conscious consumers. Furthermore, e-commerce has offered direct access to clothing made of organic cotton, stimulating sales. Brands are also focusing on fair trade practices and transparency in sourcing, which further drives the market growth. With increasing awareness of sustainability, organic cotton is emerging as a central element of ethical fashion, driving adoption in different segments of the textile market**.**

- **Government Support and Organic Farming Initiatives -** The Indian government is actively promoting organic cotton cultivation through subsidies, certification programs, and awareness campaigns. Policies like the Paramparagat Krishi Vikas Yojana (PKVY) provide financial and technical support to help farmers transition to organic farming. The Agricultural and Processed Food Products Export Development Authority (APEDA) oversees organic certification and export promotion, strengthening India's global market position. As of March 31, 2023, India had 10.17 million hectares under organic certification, including 5.39 million hectares of cultivable land and 4.78 million hectares for wild harvest collection. State governments in cotton-producing regions offer incentives and support farmer cooperatives to enhance organic farming. These initiatives lower

production costs, ensure compliance with international standards, and improve market competitiveness, driving the expansion of organic cotton domestically and internationally.

- **Expansion of Export Opportunities and Global Collaborations -** India's organic cotton exports are rising as global markets emphasize sustainable sourcing. Europe and North America are key drivers due to stringent environmental regulations and evolving consumer preferences. Leading international brands are collaborating with Indian organic cotton suppliers to ensure a stable supply of sustainable raw materials, fostering long-term commitments. Certification programs like the Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS) enhance India's reputation in global markets. Increased participation in sustainability initiatives, such as the Better Cotton Initiative (BCI), further strengthens India's presence in the eco-friendly textile sector**.**

3.6 Introduction of Fabric Industry in India

India's fabric industry is a critical pillar of the country's textile and apparel sector, which is one of the largest contributors to the nation's economy and export earnings. The fabric industry is a vital part of India's textile value chain, encompassing the manufacturing of woven, knitted, and non-woven textiles. It serves as a foundation for the apparel, home furnishings, and technical textile sectors.

India is the second-largest producer of textiles and garments globally, with the fabric industry forming the backbone of this sector. The textile industry contributed about 2.3% to India's GDP and 13% to industrial production and 12% to exports. India is the world's largest producer of cotton. In the first advances, the agriculture ministry projected cotton output for 2023-24 at 31.6 million bales. According to the Cotton Association of India (CAI), the total availability of cotton in the 2023-24 season has been pegged at 34.6 million bales, against 31.1 million bales of domestic demand, including 28 million bales for mills, 1.5 million for small-scale industries, and 1.6 million bales for non-mills. Cotton production in India is projected to reach 7.2 million tonnes (~43 million bales of 170 kg each) by 2030, driven by increasing demand from consumers. It is expected to surpass US$ 30 billion by 2027, with an estimated 4.6-4.9% share globally. ***Source -IBEF***

Types of Fabric

The Indian fabric industry comprises three major categories of fabrics—woven, knitted, and non-woven—each differing in structure, manufacturing techniques, applications, and market dynamics.

- **Woven fabrics** – These are produced by interlacing two sets of yarns—warp (longitudinal) and weft (horizontal)—at right angles on a loom. This traditional and widely used fabric type is known for its dimensional stability and strength. Woven fabrics can be categorized into different weaves such as plain weave (e.g., voile and poplin), twill weave (e.g., denim and drill), and satin weave (used in premium garments and furnishings). These fabrics dominate India's production landscape and are widely used in apparel, home furnishings, industrial applications, and exports. India's large cotton base supports the widespread manufacturing of cotton-based woven fabrics, especially in Gujarat and Maharashtra.
- **Knitted fabrics** - On the other hand, are formed by looping yarns either in a weft or warp direction. This method imparts flexibility, softness, and stretchability, making these fabrics particularly suitable for sportswear, casualwear, innerwear, and children's clothing. India's leading knitwear cluster is Tirupur in Tamil Nadu, which is globally recognized for producing high-quality cotton knits. Knitted fabrics are gaining popularity due to changing fashion trends and rising demand for comfort wear.

- **Non-woven fabrics** - These are engineered by bonding fibers together using thermal, chemical, or mechanical processes, rather than weaving or knitting. These fabrics are typically made from synthetic fibers like polypropylene and are widely used in medical textiles (e.g., surgical masks, gowns), hygiene products, automotive filters, geotextiles, and packaging. With the rise of technical textiles and government support under the National Technical Textiles Mission, the non-woven segment is witnessing rapid growth, especially in post-pandemic sectors like healthcare.

In summary, these three fabric types—woven for durability, knitted for comfort, and non-woven for functionality—form the backbone of India's diversified textile production and are critical to meeting the needs of both traditional and modern end-user industries

3.6.1 Product of Dyed/Printed Fabric

The dyed and printed fabric segment in India plays a crucial role in adding aesthetic value and market appeal to both traditional and modern textiles. This segment has evolved from using conventional dyeing and manual printing methods to more eco-friendly and technologically advanced processes, driven by both environmental concerns and global market demands.

Dyed and Printed Fabrics

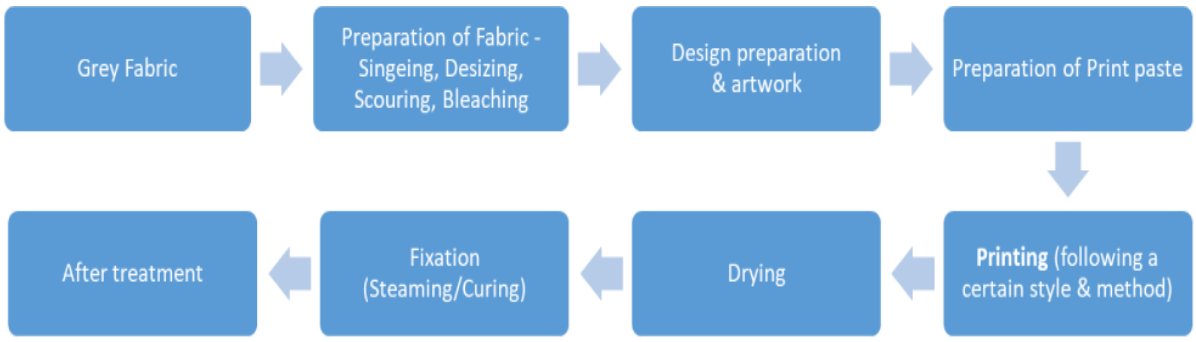
Dyeing and printing are two of the most widely used value-addition processes in cotton fabric manufacturing, playing a critical role in enhancing both the aesthetic appeal and marketability of textile products. In the dyeing process, colour is applied uniformly across the entire fabric, either through chemical dyes or increasingly, through natural and plant-based dyes in the sustainable textile segment. Techniques such as reactive dyeing (commonly used for cotton), pigment dyeing, vat dyeing, and direct dyeing are employed depending on the colour fastness required, cost, and the nature of the product. Each method varies in its affinity for the fiber, resistance to washing and sunlight, and vibrancy of output.

Printing, on the other hand, refers to the application of colour or pattern only on specific areas of the fabric. Traditional block printing, rotary screen printing, and more recently digital printing are popular methods used in Indian cotton textiles. Digital printing is gaining momentum due to its ability to offer shorter turnaround times, small batch flexibility, and high-definition designs. It is especially favoured by fast fashion brands and export houses catering to markets like the EU, UK, and U.S., where design customization and speed-to-market are critical.

These dyed and printed cotton fabrics are used across a wide range of applications such as shirts, dresses, sarees, bedsheets, children's wear, traditional ethnic garments, and uniforms. With consumers increasingly seeking eco-conscious fashion choices, there is a noticeable shift toward AZO-free dyes, low-water dyeing techniques, and digital pigment printing that reduce environmental impact.

As a result, dyeing and printing have transformed from basic textile finishing steps to strategic differentiators that add both design and functional value to Indian cotton products in domestic and global markets.

Fabric printing involves the following steps



Types of Printing Styles

Fabric can be printed in three different styles: direct, discharge, & resist styles.

Direct Style

The most common style of printing textile fabric is direct printing. The dye is directly applied onto white fabric or coloured fabric. The printed portion is significantly darker than the dyed background. The direct style of printing is used in block printing, screen printing, or roller printing methods.

• Discharge style

Discharge printing in textile is also known as extract printing. It is based on the chemical destruction of the original dye in the printed area. The discharging agents used can be oxidizing or reducing agents, acids, alkalis and various salts. For discharge printing, the ground of the substrate should be dischargeable. It is recommended that dyed discharge fabric should be pre-padded with 2-3 GPL Resist salt. The actual amount of discharging agent requirement for optimum discharge will depend upon:

- The dyes to be discharge.
- The depth of the ground.
- The fabric being printed.

If no colour is added to the discharge print paste, the result is a white discharge. Discharge is only carried out by reduction. Colour discharge printing in textile can be done by Pigment dispersion on Reactive or Vat dye on the reactive ground.

- **Resist style**

In the resist style of printing style, RFD fabric is first printed with resist paste which prohibits the penetration of the dye into the fabric. The fabric is then dyed and subsequently, the resist paste is removed & leaving the desired pattern.

3.6.2 End User Industries for Fabrics

Fabric, especially woven cotton and cotton-blended fabrics, is a foundational material used across a broad spectrum of industries. With increasing emphasis on sustainability, functional finishes, and technical textiles, the application of fabrics has expanded far beyond traditional clothing. Below are the major end-user industries:

End-User Industry	Key Applications	Common Fabric Types Used
Apparel & Fashion	Shirts, trousers, dresses, ethnic wear, uniforms, casual wear	Cotton woven fabrics, cotton blends, stretch fabrics, organic cotton
Automotive Interiors	Seat covers, roof lining, door panels, sun visors, floor mats	Cotton-polyester blends, flame-retardant & UV-resistant fabrics
Medical & Healthcare	Hospital gowns, bed linen, surgical drapes, masks, bandages	Antimicrobial cotton, non-woven blends, hypoallergenic fabrics
Home Furnishings	Curtains, cushion covers, upholstery, bed linens, towels, tablecloths	Cotton, cotton-linen blends, yarn-dyed & printed fabrics
Bags & Accessories	Travel bags, backpacks, handbags, belts, gloves	Canvas, denim, twill cotton, water-resistant fabrics
Industrial & Technical	Filtration cloths, conveyor belts, protective gear, geotextiles	Coated cotton, functional blends, high-tensile technical textiles
Childcare Products	Baby clothes, nappies, blankets, bibs, soft toys	GOTS-certified organic cotton, ultra-soft and breathable fabrics

3.6.3 Trend in the production of Cotton woven Fabrics.

- **Rise in Value Added Fabric -** India's cotton woven fabric industry is witnessing a strong shift from producing basic greige (unfinished) fabrics to high-value finished products such as printed and dyed shirting and suiting materials, stretch and organic cotton blends, and fabrics with advanced finishes like anti-microbial, wrinkle-free, water-resistant, and UV-resistant coatings. This transformation is driven by rising demand from domestic fashion brands and export buyers in markets like Europe, the U.S., and Japan, who increasingly seek sustainable, ready-to-use, and performance-enhanced textiles. Supported by government schemes like TUFS and growing adoption of digital printing and eco-friendly dyeing technologies, Indian manufacturers are enhancing profitability and positioning themselves as global suppliers of value-added cotton textiles.
- **Increasing Use of Sustainable and Organic Cotton -** With growing global demand for eco-friendly textiles, the use of sustainable and organic cotton in India's woven fabric industry has seen a significant rise. Certified standards such as GOTS (Global Organic Textile Standard) and Fair Trade have become increasingly common, especially among exporters targeting Europe, the U.S., and Japan. Textile hubs in Tamil Nadu—like Tirupur, Karur, and Erode—are leading the way by integrating organic cotton sourcing with environmentally friendly processes such as low-impact dyeing and water recycling. Similarly, producers in Gujarat are capitalizing on the state's strong organic cotton base by investing in sustainable finishing technologies and zero-liquid discharge systems.
- **Technology Modernisation -** India's cotton weaving industry has undergone significant technological modernization, with over 60% of the country's power looms upgraded under key government schemes such as the Amended Technology Upgradation Fund Scheme (ATUFS) and the Integrated Processing Development Scheme (IPDS). These initiatives have provided capital subsidies and infrastructure support, enabling the installation of high-speed shuttle-less looms, rapier looms, and automated dyeing and finishing units. As a result, weaving clusters in Maharashtra, Gujarat, and Tamil Nadu have seen marked improvements in productivity, fabric quality, and energy efficiency. Modernized units are now capable of producing complex fabric weaves, high-thread-count shirting, technical textiles, and value-added cotton fabrics with precision and reduced defects

4. Market Dynamics

4.1 Growth Drivers

- **Expansion of home textiles and furnishings sector -** Cotton is commonly used in the production of bed sheets, pillowcases, curtains, upholstery, and other household textiles. Its natural properties, such as breathability, softness, and durability, make cotton yarn a popular choice for creating comfortable and aesthetically pleasing home textiles. Moreover, it can absorb moisture, which makes it suitable for towels and bathrobes. As the demand for home decor and interior design continues to grow, the sales of cotton yarn is also rising to meet the need of quality cotton-based textiles for homes and hospitality industries.

- **Strong Domestic Raw Material Base -** India is the largest cotton cultivator globally and among the top producers, providing a steady and cost-effective supply of raw material for spinning and fabric manufacturing. This creates an inherent competitiveness for Indian textile units.

- **Modernization of Ginning & Spinning Infrastructure**- Adoption of modern ginning technologies (contamination removal, QR tagging) and investment in compact spinning, auto-coning, and contamination-free yarn systems have enhanced India's reputation as a high-quality cotton supplier.

- **Sustainability & Organic Cotton Push** - India leads in organic cotton production, contributing over 50% of global output. Global brands' shift toward sustainable sourcing (e.g., GOTS, Fair Trade) and India's emphasis on traceable, organic bale tagging (via APEDA) are fuelling growth in premium cotton segments

- **Government Support through MSP and CCI** - The Government of India ensures price stability for farmers through the Minimum Support Price (MSP) and procurement operations by the Cotton Corporation of India (CCI). This encourages steady cotton sowing and helps maintain raw material availability for the industry.

- **Increasing usage in medical applications -** Cotton has inherent qualities that make it suitable for medical applications. Its softness, breathability, and hypoallergenic properties make it ideal for use in bandages, wound dressings, surgical gowns, and other healthcare textiles. It can absorb moisture effectively, contributes to patient comfort and helps maintain a sterile environment.

4.2 Challenges

- **Volatility in Raw Material Prices -** Cotton, the primary raw material for yarn production, is an agro-based commodity, and its pricing is subject to seasonal cycles, monsoon performance, pest outbreaks (like pink bollworm), and global market forces. Fluctuations in domestic cotton prices, often caused by uneven rainfall or sudden policy changes (like export bans or MSP interventions), can have an immediate and significant impact on yarn production costs.

- **Fragmented and Unorganized Fabric Sector -** A large portion of the weaving and dyeing segment remains unorganized, with outdated machinery and limited access to capital, resulting in quality inconsistency and lower productivity.

- **Environmental Compliance and Pollution** - Fabric processing, especially dyeing and finishing, generates high volumes of effluents. Units face challenges meeting **Zero Liquid Discharge (ZLD)** and **pollution control norms**, particularly in clusters with limited CETP infrastructure.

- **Energy and Logistics Costs** - Fluctuating power tariffs and high inland logistics costs add to manufacturing expenses, especially for units located far from ports or cotton-growing zones.

5. Government Initiatives and Policy Support

The Union Budget announced an outlay of ₹5272 crores for the Ministry of Textiles for 2025-26. This is an increase of 19% over budget estimates of 2024-25 (Rs. 4417.03 crore). ***Source – Press Information Bureau***

Key Highlights

- **Cotton Mission**: A five-year plan to improve cotton productivity, especially extra-long staple varieties, with science and technology support.
- **Tax Exemptions on Looms**: Duty removed on select shuttle-less looms to reduce costs and modernize weaving.
- **Customs Duty on Knitted Fabrics**: Increased from "10% or 20%" to "20% or ₹115 per kg, whichever is higher" to curb cheap imports.
- **MSME Boost**: Focus on exports, credit enhancement, and policies like the National Manufacturing Mission, Export Promotion Mission, Bharat Trade Net, and Fund of Funds to promote employment and entrepreneurship.

1.Production Linked Incentive (PLI) Scheme for Textiles - Under this scheme, as per the Quarterly Review Reports (QRRs) released on 31.03.2024, the turnover achieved was Rs. 1,355 crore including export of Rs.166 crore. It's a strategic initiative aimed at strengthening the country's textile manufacturing base, with a significant focus on cotton-based products. The scheme offers financial incentives to eligible companies based on their incremental production and sales of high-value textile products over a five-year period. Specifically, it targets the production of man-made fibers (MMF), technical textiles, and also includes support for cotton yarn and fabric manufacturing. The inclusion of cotton products is vital given India's status as one of the world's largest cotton producers. Under the scheme, companies are encouraged to invest in new production capacities and adopt advanced technologies that can enhance product quality and global competitiveness. By incentivizing domestic production, the government seeks to reduce dependency on imports, boost exports, and generate employment, especially in rural and semi-urban areas where cotton ginning, spinning, and weaving are concentrated.

2.Remission of Duties and Taxes on Exported Products (RODTEP) - The Remission of Duties and Taxes on Exported Products (RODTEP) scheme is a flagship export promotion initiative introduced by the Government of India, effective from January 1, 2021, to enhance the global competitiveness of Indian goods, including cotton and cotton-based products. The primary objective of RODTEP is to reimburse exporters for the hidden and non-creditable taxes and

levies that are incurred during the production and distribution processes but were previously not refunded under any mechanism. These include state and central levies such as VAT on fuel, electricity duties, mandi tax, stamp duty on export documents, and embedded GST on inputs.

For the cotton sector, which forms a crucial part of India's agricultural and textile export economy, this scheme plays a significant role in improving cost efficiency. Cotton-based products such as cotton yarn, fabric, and garments often bear multiple unrebated taxes during farming, ginning, spinning, and transportation. By refunding these costs directly to exporters as a percentage of the Free on Board (FOB) value through a transferable duty credit scrip, RODTEP reduces the net effective export price, thereby allowing Indian cotton products to be priced more competitively in the international market.

3.Comprehensive Economic Partnership Agreement (CEPA) with UAE - The Comprehensive Economic Partnership Agreement (CEPA) between India and the United Arab Emirates (UAE), which came into force in May 2022, is a landmark bilateral trade deal aimed at enhancing economic cooperation between the two countries. Under CEPA, a wide range of goods, including cotton and cotton-based textile products, benefit from significantly reduced or zero import tariffs, simplified customs procedures, and preferential market access in the UAE. This has created a strong export advantage for Indian producers in the cotton value chain—spanning raw cotton, yarn, fabrics, and readymade garments. The India-UAE CEPA provides a **strategic boost to India's cotton export sector**, increasing market share, improving trade balances, and supporting millions of farmers and workers involved in the cotton and textile value chain. Since the signing of CEPA, bilateral merchandise trade has nearly doubled from USD 43.3 billion in FY 2020-21 to USD 83.7 billion in 2023-24. During the current FY till January'25, it reached USD 80.5 billion.

4.Financing Subsidy Schemes - The government of India, along with institutions like NABARD (National Bank for Agriculture and Rural Development), State Governments, and the Ministry of Textiles, has implemented a range of financing and subsidy schemes aimed at supporting cotton farmers and strengthening the overall cotton sector. These initiatives provide low-interest loans and targeted financial assistance to help farmers invest in modern agricultural practices and infrastructure improvements. For instance, subsidies are offered for the adoption of drip irrigation systems, which promote efficient water use and improve cotton crop yields in water-scarce regions. Financial support is also extended for purchasing advanced farm machinery such as seed drills, tractors, and cotton harvesters, enabling mechanization and reducing labour costs. Additionally, subsidies encourage sustainable practices like organic cotton farming, which not only cater to growing global demand for organic textiles but also contribute to soil health and environmental conservation.

5.Environment and Sustainability Regulations - The government promotes environmental sustainability in the cotton sector through several regulations and initiatives. It mandates Zero-Liquid Discharge (ZLD) compliance in spinning and dyeing units to minimize water pollution. Use of plastic-free bale packaging aligned with BIS standards is encouraged to reduce plastic waste. There is strong support for organic and recycled cotton production, backed by the India Organic Certification program.

6.Business-Related Regulations and Approvals (Domestic & Global) - Exporters and manufacturers in India, particularly in sectors like cotton, textiles, and organic products, must comply with various mandatory registrations and certifications to legally operate and access international markets:

Domestic Regulations and Approvals-

- **Goods and Services Tax (GST) Registration -** All manufacturers and exporters must register under GST if their turnover exceeds the prescribed threshold. GST registration enables legal collection and input tax credit on goods and services used in manufacturing and exporting. GST is a unified indirect tax system in India that replaced multiple taxes to streamline trade.
- **Import-Export Code (IEC) from DGFT**: IEC is a mandatory 10-digit code issued by the Directorate General of Foreign Trade (DGFT) required for import and export activities. IEC registration helps track and facilitate foreign trade and avail export benefits.
- **Registration-cum-Membership Certificate (RCMC) -** Issued by export promotion councils like TEXPROCIL (The Cotton Textiles Export Promotion Council) or other sectoral bodies. RCMC certifies the exporter as a recognized member, enabling them to claim export incentives and participate in government schemes.

Global Certifications and Buyer Requirements – To access international markets, Indian exporters must meet global certification standards and buyer requirements to ensure product quality, safety, and ethical sourcing. For example, prime-market buyers—including large retailers like Primark to premium brands such as H&M, which is committed to sourcing 100% of its cotton as organic, recycled, or from its own Primark Cotton Project—demand certifications such as GOTS (Global Organic Textile Standard) and OEKO-TEX Standard 100, ensuring transparent, traceable, and responsible sourcing. Meanwhile, recycle-market buyers—often sustainable brands and circular-economy-focused companies—expect OEKO-TEX Standard 100 (with recycled-material modules) and certifications like Global Recycled Standard (GRS) or Recycled Claim Standard (RCS) to guarantee that their recycled or reclaimed cotton inputs are safe, verifiable, and meet stringent ecological criteria.

- **GOTS (Global Organic Textile Standard) -** The leading textile processing standard for organic fibers. It includes ecological and social criteria for organic textile production, ensuring chemical restrictions and fair working conditions. Most organic cotton exporters seek GOTS certification to access premium markets.

- **OEKO-TEX Standard 100 -** A globally recognized certification guaranteeing textiles are free from harmful substances. Widely required by international buyers to ensure safety for consumers. Helps Indian manufacturers demonstrate compliance with strict chemical regulations**.**

6. PESTEL Analysis of the Industry

The analysis underscores the multifaceted factors influencing India's cotton sector and exports, highlighting areas of strength and challenges that shape its growth trajectory

Factors	Key Insights
Political Factors	• **Supportive Government Policies:** The government promotes cotton farming through schemes like the PM Cotton Development **Program** and Production Linked Incentive (PLI) for textiles, boosting farmer income and export competitiveness. • **Trade Agreements & Export Promotion:** India leverages trade agreements (e.g., CEPA with UAE) and export councils like TEXPROCIL and APEDA to ease cotton exports.
Economic Factors	• **Large Domestic Market & Export Potential:** India is the world's largest cotton producer, with strong domestic textile demand and exports contributing significantly to foreign exchange. • **Input Cost Volatility:** Fluctuations in fertilizer, pesticide, and seed prices affect production costs and farmer profitability. • **Currency Impact:** Exchange rate volatility impacts export competitiveness.
Social Factors	• **Farmer Livelihoods:** Cotton farming supports millions of smallholder farmers, with social challenges including debt cycles and fluctuating incomes. • **Rising Consumer Demand for Organic & Sustainable Cotton:** Increasing awareness drives demand for certified organic and sustainable cotton products domestically and abroad.
Technological Factors	• **Adoption of Bt Cotton and Hybrid Seeds:** Over 90% of Indian cotton area uses genetically modified Bt cotton, increasing yields and pest resistance. • **Digital Farming Tools:** Use of IoT, drones, AI advisory platforms, and satellite monitoring improves crop management and yield forecasting.

	• **Blockchain and Traceability:** Emerging adoption of QR code bale tagging and blockchain enhances transparency in exports.
Environmental Factors	• **Water-Intensive Crop & Climate Risks:** Cotton cultivation demands significant water, straining resources amid changing rainfall patterns and drought risks. • **Sustainability Pressures:** Increasing global focus on sustainable cotton production, including organic farming, reduced pesticide use, and zero-liquid discharge (ZLD) in processing units. • **Soil Health Degradation:** Continuous cotton cropping risks soil fertility depletion.
Legal Factors	• **Regulatory Compliance for Exports:** Exporters must comply with Goods and Services Tax (GST), Import-Export Code (IEC), and Registration-cum-Membership Certificate (RCMC) from export promotion councils. • **Global Certifications:** Compliance with GOTS, OEKO-TEX, and Fair-Trade certifications is increasingly required for accessing premium export markets. • **Intellectual Property & Seed Regulations:** Evolving laws around GM cotton and seed varieties affect innovation and adoption.

7. Competitive Landscape

7.1 Key Industry Players

The Indian cotton ginning and textile industry comprises a mix of unlisted regional processors and large integrated textile manufacturers. While many ginning units operate in the unorganized segment, players like Milan Ginning Pressing Pvt Ltd represent a growing base of professionally managed firms focused on sustainable and high-quality cotton processing. The industry is critical to India's textile supply chain, especially as the country remains one of the largest cotton producers globally. The competitive landscape is shaped by the presence of vertically integrated textile conglomerates that offer spinning, weaving, and fabric production capabilities alongside standalone ginners.

Company Profile and Operations

Axita Cotton Ltd – According to the details mentioned on the company's website, the company was Incorporated in 2013 as a public limited company headquartered in Ahmedabad, Gujarat, Axita Cotton Ltd and its group firm Axita Exports Pvt Ltd commenced operations from a partnership dating back to 2007. The company specializes in cotton bales, cotton seeds, oil, and cotton seed cake, with a ginning and pressing capacity of ~87,600 MT per annum using modern machinery. It's certified under ISO 9001:2015, BCI, and GOTS, and it exports cotton bales to Pakistan, Bangladesh, and Vietnam.

Pashupati Cotspin Ltd. - A flagship company under Pashupati Group since 1997, Pashupati Cotspin is listed on NSE and operates an integrated supply chain from ginning to weaving, including oil milling and spinning, weaving, sizing, and warping The ginning plant handles up to 250,000 bales (≈40,000 MT) annually, utilizing 112 double-roller gins, while the spinning mill features 37,000 spindles, producing around 10,950 MT of varied yarns annually. ***Source-pashupati.cotspin.com***

Strategic Positioning

Company	Focus & Strengths
Axita Cotton Ltd	Axita Cotton is strategically positioned as a specialized cotton processor focused on ginning, pressing, and trading of raw cotton, cotton bales, and cottonseed by-products. Operating primarily from Gujarat, Axita leverages proximity to major cotton-producing zones and maintains certifications such as ISO 9001:2015, BCI, and GOTS to cater to both domestic and export markets. Its lean operational model and efficient supply chain give it flexibility in competitive pricing. Though smaller in scale, its focus on quality

	compliance and regional export relationships—especially with Bangladesh, Pakistan, and Vietnam—make it a reliable supplier in the raw cotton and cottonseed cake segment.
Pashupati Cotspin Ltd	Pashupati Cotspin is a vertically integrated textile company with a comprehensive farm-to-fabric model. Its operations span ginning, spinning (with over 37,000 spindles), weaving, sizing, and oil milling, giving it control over the full value chain. The company is strongly positioned in the sustainable textile ecosystem, supported by certifications including GOTS, BCI, GRS, and IKEA compliance. Pashupati actively engages with over 5,000 cotton farmers through traceable sourcing initiatives and invests in renewable energy (17.6 MW from solar and wind). With exports to over 35 countries, it caters to demand for greige yarn, finished fabrics, and certified cotton products, making it a globally trusted ESG-compliant supplier.

7.2 Competitive Strategies

The Indian cotton ginning and fabric industry is characterized by a fragmented yet rapidly consolidating structure, with numerous small and medium-sized players co-existing alongside integrated large-scale enterprises. Competitive strategies vary significantly based on scale, market orientation (domestic vs export), technology adoption, and product specialization.

A dominant strategy across the industry is backward and forward integration. Leading textile conglomerates such as KPR Mill, Vardhman Textiles, and Trident Ltd. have established full-scale operations—from ginning and spinning to weaving, dyeing, and garmenting. This integration enhances quality control, reduces costs, and ensures timely delivery, especially for export clients. These companies also focus on global certifications (e.g., GOTS, OEKO-TEX) and traceability systems to meet international compliance standards and align with the growing demand for sustainable textiles.

Technology upgradation and mechanization form another cornerstone of competition. Private players and government-supported entities are investing in advanced ginning machinery, contamination control systems, and digital bale tagging (QR/barcoding). Modern units such as Milan Ginning Pressing Pvt. Ltd. differentiate by offering low-contamination cotton, better press packing, and organic/BCI-certified lint. Additionally, many players in the fabric value chain are embracing digital printing, zero-liquid discharge (ZLD) effluent systems, and eco-friendly dyeing techniques under initiatives like the National Technical Textiles Mission and Amended Technology Upgradation Fund Scheme (ATUFS).

Regional dominance and cluster specialization also define strategic positioning. Gujarat and Maharashtra house large-scale ginning and cotton weaving units, while Tamil Nadu has emerged as a spinning and apparel hub, especially in Coimbatore, Tiruppur, and Erode.

Companies often leverage local supply chains and skilled labour clusters for operational efficiency and cost advantage.

On the financial side, listed peers like Vardhman, RSWM, and Nahar Spinning follow strategies focused on diversified customer bases, currency hedging, and value-added products such as melange yarns, fancy fabrics, or knitted grey cloths to maintain profitability amid raw material volatility. These companies also prioritize energy efficiency and renewable adoption (e.g., KPR's wind energy capacity), which supports both ESG positioning and cost control.

In the export segment, firms tailor strategies to tap into free trade agreements (FTAs), government export incentives (like RoDTEP and RoSCTL), and fast-changing global fashion trends. Export-oriented firms often maintain product design cells, collaborate with fashion houses, and adopt short lead-time models to win large orders from the US, EU, and Japan.

Smaller or regional players in the unorganized segment typically compete on cost, location proximity to raw cotton belts, and volume-based pricing, often catering to domestic demand or contract-based processing for larger buyers. Some have begun upgrading to semi-automated ginning systems to improve productivity and meet traceability demands from buyers. In conclusion, competitive strategies in India's cotton and fabric industry revolve around vertical integration, sustainability, regional specialization, technological adoption, and export focus. Firms that successfully blend operational efficiency, compliance, digitalization, and customer-centric innovation are positioned to thrive amid global shifts in textile sourcing and rising ESG norms.

7.3 Barriers to Entry

While India's cotton ginning and fabric industry is a vital component of the textile value chain and presents growth opportunities, it also poses formidable barriers to entry for new players. The sector is dominated by established regional players, vertically integrated conglomerates, and family-run enterprises with deep-rooted supply chain linkages. Entrants—especially MSMEs—face structural and operational challenges ranging from capital intensiveness to stringent regulatory requirements and entrenched market competition. These barriers inhibit innovation, limit scale-up potential for smaller players, and consolidate the advantages of incumbents. Key entry barriers include:

1.High Capital Investment Requirements - New entrants face substantial upfront costs across multiple areas of the cotton and fabric value chain:

- **Plant and Machinery:** Setting up modern ginning or fabric weaving units requires significant investment in automated gins, contamination control systems, looms, and dyeing/printing machinery. The cost of a medium-sized ginning plant alone can range between ₹3–5 crore.

- **Land and Infrastructure:** Industrial plots with access to cotton-producing belts and textile clusters are both expensive and scarce, particularly in Gujarat, Maharashtra, and Tamil Nadu.
- **Working Capital Needs:** Procurement of raw cotton requires high working capital during the harvesting season (Oct–Mar), often exposing new firms to price volatility and liquidity constraints. These investments carry considerable risk and demand long gestation periods before achieving break-even.

2.Regulatory and Compliance Burden- Navigating India's regulatory ecosystem is particularly challenging for newcomers:

- **Ginning Licensing and Pollution Norms:** Firms must register with local textile boards, comply with BIS standards, and obtain pollution control board clearances, especially for dyeing/printing units under Zero Liquid Discharge (ZLD) norms.
- **Labor and Factory Laws:** Compliance with the Factories Act, minimum wage laws, and other labour codes adds to administrative complexity.
- **Traceability and Certification:** Export-focused units need certifications like GOTS, OEKO-TEX, and BCI-compliant sourcing, which require traceable supply chains and quality management systems.

These regulatory requirements often demand legal expertise and strong internal compliance mechanisms, which new firms typically lack.

3. Raw Material Volatility and Supply Chain Dependence- The industry's heavy dependence on cotton—a seasonal and climate-sensitive crop—creates input risks:

- **Price Fluctuations:** Cotton prices are highly volatile due to monsoon variability, global commodity trends, and export-import policies. New entrants may lack hedging mechanisms or the financial cushion to absorb shocks.
- **Supply Chain Relationships:** Established players have long-standing ties with cotton farmers, ginning co-operatives, and textile traders, allowing them to ensure uninterrupted supply and better pricing.

This entrenched ecosystem is difficult for new entrants to penetrate without prior relationships or strong distribution networks.

4. Technological Competitiveness and Scale Efficiency- Technology plays a central role in productivity and quality assurance:

- **Automation and Contamination Control:** Incumbents are investing in double roller gins, fully automated pressing units, and RFID-based traceability, which enhance quality and reduce waste.

- **Digital Transformation:** Fabric mills are adopting CAD-based design tools and digital printing technologies to reduce turnaround time and meet fashion market demands.

New entrants may find it difficult to match these capabilities without substantial capex and trained manpower.

5. Branding and Market Trust- In both domestic and export markets, trust and consistency matter significantly:

- **Buyer Stickiness:** Large domestic buyers and export houses prefer dealing with known suppliers with proven quality and delivery performance.
- **Brand Absence:** New companies lack brand equity in B2B markets, especially in fabric categories like premium shirting, denim, and technical textiles.
- **Credit Terms:** Smaller or new firms often struggle to provide extended credit terms, which are customary in textile trade. Brand invisibility and weak cash cycles limit the ability of new firms to attract and retain large buyers.

7.4 Company Positioning – Milan Ginning Pressing Limited

The Company is founded by the Chairmen Mr. Husenali Yusufali Narsinh in 1995, it is engaged in manufacturing and export of best quality cotton bales, cotton seeds and cotton cake in all principal world market and to the end users in the major world market. The Company is professionally managed company having large network and infrastructure in home as well as abroad; company is equipped with state-of-art infrastructure backed by large and fully automatic plant for cotton-to-cotton bales. Company has its roots since, the beginning of Cotton Ginning & Pressing in this region. Starting with trading of Cotton, it gradually expanded business activities establishing a Ginning press for ginning and baling of cotton to be supplied to the cotton yarn industry across the country, besides supplying cotton seeds, linters etc.

Milan Ginning Pressing limited is also engaged in organic contract farming activity covering around 1,000 acres of farming land with the help of more than 70,000 farmers in various villages surrounding to the location of their business activities and also allocated 15000 farmers for Primark & BCI cotton. Having in-depth knowledge of the business, help to delivering optimum result in specified business challenges apart from global competition with futuristic approached they have increased the capacity to 200% in last few years.

This yields overall increases in turnover of company to supply good quality cotton word wide. Milan Ginning Pressing Pvt. Ltd is located at LIMBDI, District - SURENDRANAGAR (Saurashtra-Gujarat – India). The company is spread over 50,000 square yard and equipped by the latest machineries & technology for ginning and pressing cotton & crushing of cotton seeds. Tye company have more than 36 double roller ginning machine, latest Ginning machineries, approved by government of India ministry of textiles through TMC project and gives AA grade.

Milan Ginning Pressing Pvt Ltd is among the supply chain of many brands like C&A, H&M, Primark, Inditex, PVH, Jako, Carrefouretc for organic cotton and is one of the reputed suppliers to them, along with cotton yarn by Sustainable Spinning & Commodities Pvt Ltd. (Group Concern Company) Certification for supply of organic cotton and yarn, has been obtained by group concern from Oekotex to meet the requirements of Europe and Latin American importers.

8. Future Outlook

India's cotton sector stands at the cusp of a transformation, supported by favourable agro-climatic conditions, global sustainability trends, and targeted policy interventions. As the world's largest cotton producer and the second-largest textile exporter, India is strategically positioned to lead in value-added and organic cotton production. Over the next decade, rising demand for traceable and eco-friendly fiber, coupled with government-backed modernization and export incentives, is expected to reshape the cotton value chain—from farm to fabric.

India's cotton processing and export industry is entering a phase of strategic realignment, driven by growing global demand for sustainable fiber, increasing traceability norms, and diversification away from China in the global textile supply chain. Between 2024 and 2030, the industry is expected to shift from low-margin, bulk-oriented exports to higher-value, certified cotton products such as organic cotton bales, contamination-free lint, and spun yarn with environmental compliance. Export volumes, particularly of cotton yarn and fabric, are projected to grow steadily, with India poised to expand its market share in Southeast Asia, the Middle East, and Europe under trade pacts such as the India-UAE CEPA and upcoming FTAs with the UK and EU. At the same time, modern ginning and pressing infrastructure is being scaled across Gujarat, Maharashtra, and Telangana, supported by the Amended Technology Upgradation Fund Scheme (ATUFS), enabling higher efficiency and better fiber quality. The government's emphasis on traceability through bale tagging (QR-coded under APEDA), and the adoption of international certifications like GOTS, BCI, and OEKO-TEX, are further strengthening India's value proposition as a reliable and ethical sourcing destination. As a result, the cotton processing segment is likely to witness greater vertical integration—from farm to spinning to packaging—facilitating reduced lead times and enhanced export competitiveness. Additionally, a focus on organic and recycled cotton, regenerative farming, and contamination-free pressing is expected to allow processors to command premium prices in global markets. By 2030, India's cotton processing and export sector is forecasted not just to retain its global leadership in volume, but also to evolve into a benchmark for sustainable, high-quality cotton value chains aligned with global ESG expectations.