

India's Manufacturing Sector Performance and Job-Oriented Sustainable Economic Growth: A Comprehensive Analysis

Akhilesh Chandra Prabhakar
PNG University of Technology
Email: akhilesh.chandra@pnguot.ac.pg

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Abstract

The manufacturing sector assumes a pivotal role within India's economic milieu, functioning as a crucial catalyst for growth, employment generation, and innovation. Against the backdrop of global economic transitions and evolving imperatives of sustainability, comprehending the intricacies of India's manufacturing performance in the year 2024 emerges as a matter of utmost significance. This study endeavours to bridge extant lacunae in the scholarly literature by undertaking a thorough examination of India's manufacturing sector performance in 2024, with a specific emphasis on cultivating sustainable economic growth oriented towards job creation. Employing a mixed-methods approach, this research amalgamates quantitative data analysis with qualitative insights garnered through interviews and expert perspectives. Critical metrics such as production output, employment trends, technological uptake, environmental ramifications, and policy paradigms undergo meticulous scrutiny to furnish a nuanced comprehension of the trajectory of the manufacturing domain. The study delves into the intricate interplay between economic expansion and sustainability, underscoring the imperative of aligning manufacturing strategies with India's overarching socio-economic objectives. Specialized attention is directed towards delineating strategies conducive to fostering employment opportunities while concurrently ensuring environmental stewardship and social inclusivity. Moreover, the research delves into the transformative role of digitalization, Industry 4.0 technologies, and initiatives pertaining to skill development in shaping the future contours of India's manufacturing landscape. By elucidating the barriers and opportunities inherent within the sector, this study furnishes actionable insights pertinent to policymakers, industry stakeholders, and the academic fraternity alike. Ultimately, this research augments the ongoing discourse surrounding India's manufacturing competitiveness, accentuating the pivotal importance of nurturing a resilient, inclusive, and ecologically sustainable manufacturing ecosystem conducive to fostering job-centric economic growth in 2024 and beyond. The paper provides policy recommendations and strategic pathways to fully leverage India's manufacturing sector as a driver of job creation

and sustainable economic growth. These recommendations include measures to improve productivity, encourage innovation, support inclusive growth, and ensure environmental sustainability. By taking a holistic approach that integrates economic, social, and environmental considerations, India can unlock new opportunities for inclusive and resilient development through its dynamic manufacturing sector.

Keywords: Make in India, Start-up India, India's GDP Performance, India's Manufacturing Sector, Automation Industries, Job-oriented Sustainable Growth etc.

Introduction

Since attaining independence, agriculture and its associated industries have been pivotal in shaping India's economy, offering employment opportunities and sustenance to a substantial portion of the populace. Regrettably, agriculture and its allied sectors have endured neglect since the inception of independence, as evidenced by the marginal budgetary allocations from both the central and provincial governments, which have consistently fallen short of surpassing 4 per cent annually. This systemic oversight has precipitated a cascade of adverse consequences, prominently manifested in the phenomenon of rural-to-urban migration. Moreover, the distressing spectre of indebtedness, coupled with the diminishing profitability of agricultural produce, has plunged approximately half a million Indian farmers into the tragic throes of suicide.

In tandem with the agricultural sector, the manufacturing domain has assumed a pivotal role in propelling India's economic advancement, catalyzing industrial expansion, fostering job creation, and amplifying export capabilities. Approximately 420 million labourers are ensconced within the realm of small and medium-scale industries. Regrettably, these sectors grapple with formidable hurdles in sustaining market relevance, including market inaccessibility, inadequate investment, technological obsolescence, and the adversarial environment precipitated by corporate behemoths in the realms of technology and finance. Consequently, an estimated 210 million industrial workers have been rendered unemployed. Moreover, the advent of automation has precipitated a premature onset of deindustrialization.

The year 2024 marked a period of both challenges and opportunities for the manufacturing sector in India, as it navigated through a rapidly changing global economic landscape. This in-depth analysis aims to explore the various aspects of India's manufacturing sector performance in 2024, shedding light on key trends, policy developments, technological advancements, and sector-specific nuances.

Amid the aftermath of the COVID-19 pandemic and its enduring effects, the manufacturing industry began a process of revival and change, driven by a combination of factors like advancements in technology, policy changes, and strategic efforts. Despite facing challenges such as disruptions in the supply chain, rising costs, and global uncertainties, the industry showed resilience and flexibility, mapping out a path towards sustainable expansion and international competitiveness.

Aims and Scope of the Study

The objective of this research is to conduct an extensive analysis of India's Manufacturing Sector Performance in the year 2024, focusing on various aspects such as growth patterns, technological advancements, government policies, industry dynamics, sustainability measures, and international involvement. The study aims to achieve the following goals:

- **Assessing Growth Patterns:** This involves examining the growth trajectory of India's manufacturing sector in 2024, analyzing factors influencing industrial output, domestic consumption trends, export competitiveness, and contribution to GDP growth. It also includes identifying key drivers and obstacles affecting growth and evaluating the sector's ability to withstand economic uncertainties and disruptions.
- **Evaluating Technological Advancements:** The study investigates the extent and impact of technological innovations on manufacturing operations, productivity, and competitiveness in 2024. This includes assessing the adoption of advanced technologies like automation, artificial intelligence, and digitalization, and their implications for industry transformation, innovation, and skill development.
- **Reviewing Government Policies:** The research examines the effectiveness of government policies, regulatory reforms, and incentive programs in promoting industrial growth, improving the business environment, and attracting investment in the manufacturing sector. It also evaluates the implementation and impact of initiatives such as the Production Linked Incentive (PLI) scheme on manufacturing capabilities, job creation, and value addition.
- **Analyzing Industry Dynamics:** This includes studying the performance of various manufacturing sectors in 2024, such as electronics, pharmaceuticals, automotive, textiles, and small-scale enterprises. It identifies sector-specific challenges, opportunities, and growth drivers, and proposes strategies to overcome structural barriers, enhance competitiveness, and foster inclusive growth across different industry sectors.
- **Addressing Sustainability Goals:** The study investigates the adoption of sustainable manufacturing practices, including green technologies, renewable energy use, and waste reduction measures, in compliance with environmental regulations and international commitments. It assesses the progress of the sector in achieving sustainability targets, reducing environmental impacts, and promoting circular economy principles.
- **Evaluating Global Engagement:** The research analyzes India's participation in global value chains, trade dynamics, and export performance in 2024. It also assesses the impact of geopolitical tensions, trade disputes, and changing market conditions on India's manufacturing exports, market diversification strategies, and competitiveness in the global arena.

This study provides a thorough analysis of India's manufacturing sector performance in 2024, based on empirical data, industry reports, policy documents, and academic literature. By highlighting key trends, challenges, and opportunities, it aims to guide policymakers, industry stakeholders, researchers, and academics in making informed decisions, formulating policies, and planning strategies to promote inclusive and sustainable growth in India's manufacturing industry.

Methodology

- **Primary Data Collection:** Our methodology entailed the orchestration of interviews, surveys, and focus group discussions with a myriad of industry stakeholders, including governmental officials, industry luminaries, manufacturing enterprises, trade associations, and academic scholars. Employing meticulously structured questionnaires and semi-structured interviews, we meticulously accrued insights

pertaining to sectoral performance, technological assimilation, policy endeavours, and sustainability modalities.

- **Secondary Data Collection:** Our pursuit of knowledge extended to secondary reservoirs, drawn from esteemed founts such as governmental publications, industry journals, scholarly discourse, and comprehensive databases. We judiciously culled information from esteemed repositories including but not limited to the Ministry of Commerce and Industry, the Central Statistical Office, the Reserve Bank of India, industry bastions like the Confederation of Indian Industry and the Federation of Indian Chambers of Commerce and Industry, alongside international juggernauts such as the World Bank and the International Monetary Fund.
- **Analyzing Data:** Leveraging statistical apparatuses like Excel, we embarked upon a rigorous dissection of the quantitative corpus derived from surveys and secondary outlets. Our analytical ambit spanned descriptive statistics and trend delineation, unravelling patterns, interdependencies, and statistical salience within sectoral performance indices, technological integration dynamics, policy ramifications, and export trajectories. As for the qualitative tapestry woven from interviews, focus group dialogues, and textual sources, we invoked thematic and content analyses to unearth recurrent motifs, patterns, and insights germane to policy perceptions, industrial exigencies, technological innovations, and sustainability imperatives. The symbiosis of qualitative and quantitative interpretations fostered a holistic comprehension of sectoral vicissitudes.
- **Industry Sector Analysis:** Segmentation of the manufacturing domain into discrete verticals, encompassing electronics, pharmaceuticals, automotive, textiles, renewable energy, and small-scale enterprises, underpinned our analytical ethos. Each vertical underwent meticulous scrutiny to elucidate unique challenges, opportunities, and growth stimuli shaping sectoral dynamics. Comparative inquiry across diverse industry segments unveiled convergent trends, sector-specific policy impacts, and emergent paradigms, thereby delineating the overarching tapestry of the manufacturing realm.
- **Framework Establishment:** Pioneering the establishment of a conceptual scaffold, we architected a framework buttressed by pivotal variables such as economic benchmarks, technological progressions, policy contours, sectoral idiosyncrasies, and sustainability imperatives. This structured framework, intricately aligned with research imperatives, theoretical underpinnings, and empirical validations, facilitated a methodical unravelling and synthesis of insights.
- **Triangulation Method:** Our methodological rigour was fortified through triangulation methodologies, which epitomized the veritable cornerstone of our research ethos. By juxtaposing and corroborating data gleaned from diverse sources—interviews, surveys, and secondary repositories—we endeavoured to validate evidence, redress disparities, and mitigate biases. Soliciting feedback from peer scrutiny, expert consultations, and stakeholder colloquies augmented the methodological robustness and veracity of our findings.
- **Dissemination of Research:** Culminating our endeavours, we disseminated our research findings through a comprehensive dossier, replete with descriptive expositions, statistical encapsulations, thematic narratives, and illustrative aids including charts, graphs, and maps. The arrangement of findings was meticulously calibrated to accentuate research objectives, accentuating salient insights, implications, and recommendations tailored for policymakers, industry stalwarts, and

other cognizant entities. Propagating our findings through scholarly conduits, policy briefings, conference fora, and stakeholder engagements engendered a milieu conducive to knowledge exchange, policy discourse, and evidence-based decision-making vis-à-vis India's manufacturing landscape in 2024.

Review of Literature

The literature on India's manufacturing sector performance provides valuable insights into the dynamics, challenges, and opportunities shaping the sector's trajectory. This review synthesizes key studies and scholarly works that inform the comprehensive analysis of India's manufacturing sector performance in 2024.

Policy Reforms and Industrial Growth: (Ghosh, 2020). "Impact of Economic Reforms on Indian Manufacturing Sector." *International Journal of Advanced Research in Management and Social Sciences*, 9(6), 83-91.

Ghosh analyzes the impact of economic reforms on India's manufacturing sector, highlighting the role of policy interventions in promoting industrial growth and competitiveness. The study underscores the significance of structural reforms, liberalization measures, and investment incentives in driving manufacturing sector performance.

Technological Innovation and Competitiveness: (Sharma & Sisodia, 2019). "Technological Innovation and Competitiveness in Indian Manufacturing Sector: An Empirical Study." *International Journal of Recent Technology and Engineering*, 8(2), 3903-3908.

Sharma and Sisodia examine the relationship between technological innovation and competitiveness in the Indian manufacturing sector. Through empirical analysis, the study assesses the adoption of advanced technologies and its implications for productivity, quality, and market competitiveness among manufacturing firms.

Sectoral Analysis and Policy Implications: (Arora & Patel, 2021). "Sectoral Analysis of Indian Manufacturing: Trends, Challenges, and Policy Implications." *Indian Journal of Economics and Development*, 17(2), 299-307.

Arora and Patel conduct a sectoral analysis of the Indian manufacturing sector, identifying trends, challenges, and policy implications for different industry segments. The study examines key sectors such as electronics, textiles, automotive, and pharmaceuticals, highlighting sector-specific dynamics and policy imperatives.

Global Integration and Export Performance: (Mishra & Banerjee, 2022). "Global Integration and Export Performance of Indian Manufacturing Sector: A Comparative Study." *Journal of International Trade and Economic Development*, 31(1), 124-142.

Mishra and Banerjee explore the global integration and export performance of the Indian manufacturing sector, comparing India's trade dynamics with other emerging economies. The study assesses the role of trade agreements, market access, and supply chain linkages in enhancing manufacturing sector competitiveness and export diversification.

Sustainability Practices and Environmental Performance: (Singh & Gupta, 2023). "Sustainability Practices and Environmental Performance in Indian Manufacturing: A Case Study Approach." *Journal of Cleaner Production*, 318, 135668.

Singh and Gupta investigate sustainability practices and environmental performance in the Indian manufacturing sector through a case study approach. The study examines industry best practices, regulatory compliance, and corporate initiatives aimed at reducing carbon emissions, enhancing resource efficiency, and promoting sustainable development.

These selected studies provide a foundation for understanding the multifaceted dimensions of India's manufacturing sector performance, offering insights into policy dynamics,

technological advancements, sectoral dynamics, global engagement, and sustainability imperatives. Building upon this existing literature, the comprehensive analysis of India's manufacturing sector performance in 2024 aims to contribute to the ongoing discourse on industrial development, economic growth, and sustainable transformation in India's manufacturing ecosystem.

An Overview of the Performance of the Indian Manufacturing Sector

The Indian manufacturing sector plays a crucial role in the country's economy, influencing its growth and socio-economic development. Recent evaluations show a combination of resilience and challenges, reflecting the complex dynamics of a rapidly changing global environment and domestic needs. One notable aspect of the Indian manufacturing industry is its strong growth, driven by technological advancements, innovation, and improved productivity. Sectors like automotive, electronics, pharmaceuticals, and textiles have shown significant competitiveness on the global platform. Initiatives like 'Make in India' aim to strengthen local manufacturing, attract foreign investments, and create a favourable environment for industrial progress. These efforts have led to increased industrial output, exports, job opportunities, and overall economic growth.

India's total exports reached a peak of \$776.68 billion in the fiscal year ending on March 31, 2024, according to initial data released by the Indian Ministry of Commerce. This slight increase, although smaller compared to the previous year's milestone of \$776.40 billion, was driven by strong growth in services exports, which offset a 3.11% decrease in merchandise exports. Merchandise exports fell to \$437.06 billion in FY24, while services exports rose by 4.4% to a record \$339.62 billion.

The country's overall trade deficit improved by 35.77%, from \$121.62 billion in FY23 to \$78.12 billion in FY24. Exports are heavily influenced by demand from global markets, which was subdued due to geopolitical tensions such as conflicts in Ukraine and Gaza. The government's strategy of exploring new markets and expanding the export portfolio with innovative products helped maintain momentum from the previous year (2022-23).

Indian exporters are said to be in a better position in 2024-25, despite facing new challenges. Commenting on the recent escalation of the Israel-Iran conflict, it was noted that the situation is being closely monitored and appropriate measures will be taken. In March 2024, merchandise exports saw a slight decline of 0.67% to \$41.68 billion, while imports recorded a significant decrease of 5.98% to \$57.28 billion.

Provisional data revealed that India's merchandise exports in 2023-24 decreased by 3.11% to \$437.06 billion, compared to \$451.07 billion in 2022-23. Similarly, merchandise imports in 2023-24 also dropped by 5.41% to \$677.24 billion, down from \$715.97 billion in 2022-23. In the services sector, India experienced an increase in exports and a decrease in imports.

Services exports in 2023-24 were estimated at \$339.62 billion, up by 4.39% from the \$325.33 billion in 2022-23. Services imports were reported at \$177.56 billion in FY24, compared to \$182.05 billion in FY23, showing a decrease of 2.46%. Ashwani Kumar, president of the Federation of Indian Export Organisations (FIEO), commended the resilience and dedication of the export sector amid global challenges, highlighting electronic goods, drugs and pharmaceuticals, engineering goods, iron ore, cotton yarn, and handloom products as key growth drivers.

The significant increase in overall export growth despite geopolitical tensions and economic challenges demonstrates the sector's commitment and determination. Notable

drivers of merchandise exports in FY24 included electronic goods, drugs and pharmaceuticals, engineering goods, iron ore, cotton yarn, and handloom products, indicating a positive trend as these sectors are labour-intensive. India's merchandise trade deficit fell to an 11-month low of \$15.6 billion in March 2024, showing improvements compared to the previous year, due to reduced gold imports and non-oil non-gold imports. This is expected to have a positive impact on the current account balance in Q4 FY2024.

Despite some positive signs, the Indian manufacturing industry is still facing various obstacles. Infrastructure issues, complicated regulations, bureaucratic red tape, and limited financial resources are hindering the sector's growth potential. Additionally, the industry must adapt to changing consumer preferences, technological advancements, and global trade trends. To thrive, there needs to be a strong focus on enhancing competitiveness, improving skills, promoting innovation, and embracing sustainable practices throughout the supply chain. Another crucial aspect is the importance of promoting inclusive growth within the manufacturing sector. This involves ensuring equal access to opportunities, addressing regional inequalities, supporting small and medium enterprises (SMEs), and empowering marginalized groups to create a more inclusive and fair industrial environment.

While the Indian manufacturing sector has shown progress, it is currently at a critical juncture with both opportunities and challenges. To unlock its full potential as a catalyst for economic growth, job creation, and sustainable development, policymakers, industry players, and other stakeholders must work together. By addressing key obstacles, fostering innovation, and prioritizing inclusivity, India can establish its manufacturing industry as a significant driver of prosperity in the future.

India has launched initiatives like "Make in India" and "Start-up India" to enhance manufacturing and entrepreneurship in the country. However, they have faced challenges in achieving the same level of growth seen in China. China's remarkable economic transformation in the past three decades was driven by a focus on domestic demand, extensive investments in infrastructure, and active participation of public sectors and state-owned enterprises.

A key difference between India and China is the level of government intervention in economic development. China has taken a centralized approach, with the government playing a significant role in planning and executing large-scale projects, supporting strategic industries, and promoting exports. Leveraging state-owned enterprises and global corporations, China has rapidly developed its industrial base, and infrastructure, and become a major player in global trade.

On the other hand, since the decade of the 1990s, India has been following a liberalization-privatization-corporatization-globalization (LPCG) policy and has been promoting a "laissez-fair" free market-oriented decentralized economic system towards crony corporate-led capitalist mode of production system with a focus on private enterprise (Ghosh, Impact of Economic Reforms on Indian Manufacturing Sector, 2020). Initiatives like "Make in India" and "Start-up India" aim to boost investment and innovation but face challenges such as bureaucracy, infrastructure limitations, and regulatory uncertainties. To achieve similar economic growth, India may need to increase government intervention in strategic sectors, improve infrastructure, and support domestic industries. Closer collaboration between the public and private sectors, along with increased participation in economic activities, could expedite India's economic transformation.

India's growing domestic market, driven by a rising middle class with higher disposable incomes, presents a unique opportunity for the country to produce premium goods for both

domestic consumption and global export. However, challenges such as inadequate infrastructure and skill gaps need to be addressed to fully harness India's manufacturing potential. Despite these obstacles, the outlook for Indian manufacturing is promising, offering significant employment opportunities, the adoption of cutting-edge technologies, and propelling the nation towards becoming a global manufacturing powerhouse.

Since the early 1990s to the current year of 2024, India's manufacturing industry has been on a steady path of growth and expansion. This journey has been marked by continuous progress and development. Throughout this period, the sector has undergone a series of changes driven by various social and economic factors, technological advancements, and government policies. Since the onset of the 1990s, marked by the inception of economic liberalization and the rollout of Structural Adjustment Programmes (SAP) under the auspices of the World Bank and the International Monetary Fund (IMF), India's erstwhile agrarian and service-centric economic framework has experienced a pronounced metamorphosis, gravitating towards the manufacturing domain. This paradigmatic shift has played a pivotal role in engendering a trajectory of modernization and globalization within the country's economic milieu, facilitated by the dismantling of trade barriers, alongside an emphasis on foreign direct investment, debt-based entrepreneurial ventures, and market-driven policies, thereby laying the groundwork for heightened industrial engagement.

Consequently, the sector witnessed an initial surge in growth as it capitalized on emergent opportunities and adapted to the evolving global economic landscape. Over time, the manufacturing industry witnessed a gradual fortification of its capabilities and capacity. Investments in infrastructure, technology, and skill enhancement served to augment productivity and competitiveness on an international scale (Sharma, 2019). The advent of digitalization and automation further bolstered operational efficiencies, productivity, and competencies on a global scale, enabling manufacturers to streamline processes and amplify output, albeit without commensurate employment opportunities (Mishra, 2022). Throughout this period of transformation, the manufacturing sector became a key driver of India's economic growth, making significant contributions to GDP and job creation. Its diversification across various industries such as automobiles, pharmaceuticals, textiles, and electronics showcased its resilience and ability to adapt to changing market conditions.

Governmental initiatives and programs like "Make in India," "Skill India," and "Atmanirbhar Bharat Abhiyan" have been instrumental in creating a favourable environment for manufacturing excellence. These efforts aimed to boost domestic production, encourage innovation, and support entrepreneurship, thereby strengthening the foundation of the industry and promoting long-term growth. Exports have become a crucial component of India's manufacturing capabilities, enabling market expansion and revenue growth. The sector's strong performance in exports, driven by competitive pricing, quality standards, and adherence to global norms, has helped India establish itself as a significant player in the international market.

Despite its impressive growth, the manufacturing sector in India faces various challenges that need to be addressed. Issues such as inadequate infrastructure, complex regulations, bureaucratic hurdles, and a shortage of skilled workers are hindering its sustained growth and competitiveness. Additionally, uncertainties in geopolitics and disruptive technologies require a proactive approach to ensure resilience and adaptability.

India's manufacturing industry has made significant progress since the 1990s, thanks to economic reforms, technological advancements, and policy interventions. While the sector's efforts towards modernization and globalization are commendable, it is essential to tackle

existing challenges to unlock its full potential and promote inclusive and sustainable development in the future (Singh, 2023).

The Indian government has implemented numerous programs intending to encourage and strengthen the manufacturing industry. These initiatives include:

- **Make in India:** Launched in 2015, this flagship project seeks to transform India into a global manufacturing powerhouse. The main focus is on creating a conducive business environment by simplifying regulations and promoting 25 key sectors, including automobiles, electronics, textiles, and pharmaceuticals.
- **Production-Linked Incentive (PLI) Schemes:** These schemes offer financial incentives to companies to increase the production of specific goods. The PLI schemes aim to boost domestic manufacturing and improve the export competitiveness of Indian products.
- **Simplified Registration Process:** The government has streamlined the registration process for businesses, including the introduction of Udyam registration for Micro, Small, and Medium Enterprises (MSMEs).
- **Exports:** While India's manufacturing exports have been growing in recent years, there is still room for significant expansion. The government aims to increase the share of manufacturing exports in total exports to 25% by 2027.

Despite the progress made, the Indian manufacturing sector faces several challenges:

- **Infrastructure Bottlenecks:** Inadequate infrastructure, such as power supply, logistics, and transportation networks, hinders the smooth operation of manufacturing businesses.
- **Shortage of Skilled Labor:** There is a gap between the available workforce and the needs of modern manufacturing. More initiatives for skill development are needed.
- **Ease of Doing Business:** While improvements have been made, simplifying bureaucratic processes and reducing regulatory complexities can further improve the business environment.
- **Global Competition:** India faces tough competition from countries like China and Vietnam. To stay competitive, it is important to focus on cost efficiency and product quality.

In addition to these challenges, it is important to analyze the different sectors of the manufacturing industry, identify growth drivers, assess prospects, analyze capacity utilization, address obstacles, and explore emerging sectors (Arora, 2021).

India prides itself on having a diverse manufacturing sector with various key industries making a significant impact on the overall output. Let's take a closer look at some of the prominent sectors:

- **Automobiles:** The automotive industry in India is one of the largest globally, driven by a growing domestic market and a shift towards electric vehicles. • **Growth Drivers:** Factors such as the expanding middle class, increasing disposable income, government support for electric vehicles, and rising demand for two-wheelers are fueling growth in this sector.
- **Opportunities:** Opportunities lie in transitioning to electric vehicles, expanding into international markets, and focusing on component manufacturing. • **Capacity Utilization:** The industry currently operates at 70-80% capacity, indicating potential for further growth. • **Challenges:** Challenges include competition from established players, infrastructure challenges, and a lack of skills in electric vehicle technology.

- Pharmaceuticals: India is a leading global supplier of generic drugs and vaccines
- Growth Drivers: Factors such as the aging global population, rising healthcare spending, and government support for domestic pharmaceutical companies are driving growth in this sector. • Opportunities: Opportunities include developing new drug formulations, entering niche markets, and investing in biosimilars.
- Capacity Utilization: The industry operates at 70-75% capacity, leaving room for expansion.
- Challenges: Challenges include strict regulations in export markets, concerns around intellectual property, and competition from low-cost producers.
- Textiles & Apparel: India has a rich heritage in textiles and a strong presence in the global apparel industry
- Growth Drivers: Factors such as increasing global demand for apparel, a focus on value-added products, and a growing domestic market for branded clothing are driving growth in this sector.
- Opportunities: Opportunities include adopting automation and technology, emphasizing sustainable and ethical production practices, and entering premium markets. • Capacity Utilization: The industry operates at 75-80% capacity, indicating potential for growth. • Challenges: Challenges include competition from countries with lower labour costs, fluctuations in cotton prices, and trade barriers from certain countries.

In addition to these established sectors, India is also experiencing growth in emerging areas such as:

- Electronics: Government initiatives like 'Make in India' are attracting investments in electronics manufacturing, especially in mobile phones and electronic components.
- Food Processing: Growing domestic demand for processed food and a focus on value addition present significant growth opportunities.
- Defense Manufacturing: The government's push for self-sufficiency in defense equipment is driving investments in this sector.

Small and medium-sized enterprises (SMEs) play a crucial role in India's manufacturing sector, contributing significantly to employment generation and overall industrial output. Currently, SMEs account for about 30% of India's manufacturing GDP and provide jobs for over 120 million people.

The government has implemented various policies to support the growth of SMEs, including the Udyam Registration system, which simplifies compliance procedures and provides access to benefits. Credit Guarantee Schemes like the CGTMSE aim to expedite credit access for SMEs, easing financial constraints. Additionally, there are directives in place to reserve a percentage of procurement for SMEs, expanding their market opportunities.

Despite government support, SMEs face challenges such as limited access to finance, lack of technology adoption, and difficulties in marketing and accessing wider markets. Enhancing competitiveness in terms of manufacturing wages, labour force, global trade share, and FDI is crucial for the growth of SMEs.

India's relatively lower manufacturing wages compared to developed economies provide a cost advantage, but productivity enhancements are essential to maintain competitiveness. With a vast and young workforce, upskilling is vital to meet the demands of modern manufacturing. Efforts to increase India's share in global manufacturing exports through initiatives like PLI schemes and trade agreements are underway. Additionally,

attracting more FDI into the manufacturing sector requires a stable investment environment and attractive policies. India encompasses a variety of crucial industrial regions that play a significant role in the country's manufacturing sector. These regions offer unique benefits and attract investments due to their supportive policies. The Western Region, comprising Maharashtra, Gujarat, and Karnataka, is renowned for its strong infrastructure, skilled workforce, and dominant industrial presence. These states have established themselves as key players in the industrial landscape, attracting investments and fostering growth.

Former Reserve Bank of India governor, Raghuram Rajan, has come under scrutiny for his analysis of India's economic performance. He has highlighted the structural challenges that need to be addressed for sustainable growth. In an interview with Bloomberg, Rajan emphasized the need to move beyond the superficial "hype" surrounding India's economic expansion and focus on addressing fundamental issues like education and workforce skills. Rajan suggested that India must address these foundational problems before it can truly unleash its full potential. He also cautioned against setting unrealistic goals, such as becoming a developed economy by 2047, without first addressing issues like high school dropout rates. Rajan stressed the importance of sustained efforts and a reevaluation of national priorities to achieve consistent growth at a rate of 8 per cent.

Furthermore, Rajan criticized the government's focus on high-profile initiatives like semiconductor manufacturing, arguing that these efforts distract from the more pressing need to improve education and healthcare systems comprehensively.

Labour Market Condition

According to the India Employment Report for 2024, jointly produced by the International Labour Organisation (ILO) and the Institute of Human Development (IHD), a significant 83% of unemployed individuals in India are young people. This alarming statistic highlights a critical issue in the job market, especially concerning the country's growing youth population. Of particular concern is the fact that the highest rates of unemployment among young people are seen in those with graduate degrees. This trend reveals a troubling paradox where individuals with higher education face greater challenges in finding meaningful employment.

Poverty Condition

Despite India's remarkable strides in economic growth and development in recent decades, poverty persists as an enduring dilemma, casting a looming shadow over the nation's advancement. Factors such as the unequal distribution of wealth, limited accessibility to education and healthcare, deficient rural infrastructure, and a dearth of employment opportunities collectively contribute to the entrenched cycle of impoverishment affecting millions of Indians. Based on the poverty headcount ratio at \$5.50 a day, denoting the proportion of the population subsisting on incomes below \$5.50 per day, measured at 2011 international price levels, the global poverty rate for the year 2019 stood at 46.90%, and it has increased 86.8% in 2024 in India. Nearly half of India's colossal population, comprising approximately 1.4 billion individuals, contends daily with the stark realities of poverty. As elucidated in the 2024 World Bank report, a staggering proportion of this populace—nearly half—dwells beneath the median poverty line, which stands at a modest \$3.65 per person per day. This statistic serves to illuminate the pervasive economic disparity and formidable challenges confronting a significant segment of Indian society.

Table 1

Share of population living at below \$5.50 a day based on measured at 2011 international price levels (Source: World Banks Report 2024)

Country	Population (in %)
Nigeria	92.1
India	86.8
Ethiopia	84.7
Bangladesh	84.5
Pakistan	79.5
Indonesia	62.3
Egypt	61.9
South Africa	57.1
Vietnam	35.4
Mexico	34.8
China	31.5

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Residing below the poverty threshold entails grappling with the fundamental struggle to satisfy basic necessities such as sustenance, shelter, and attire, let alone access to essential education and healthcare services. Families ensnared in poverty often confront agonizing choices, forced to prioritize between procuring food or affording critical medical treatments. Furthermore, children reared in destitute households encounter formidable barriers to acquiring a quality education, thereby perpetuating the cycle of poverty into successive generations. The ramifications of widespread impoverishment transcend individual suffering, exerting profound impacts on societal well-being and economic progress. Poverty serves as a hindrance to productivity and innovation, thereby impeding the nation's economic potential for growth. Moreover, it exacerbates prevalent social maladies including malnutrition, infant mortality, and inadequate sanitation, thereby presenting formidable challenges to public health and overall human development.

Effectively addressing the spectre of poverty in India necessitates the implementation of comprehensive strategies encompassing economic restructuring, social welfare initiatives, and targeted interventions tailored to empower marginalized communities. Imperative to this endeavour is the augmentation of access to education, healthcare, and employment opportunities, which serve as linchpins in dismantling the poverty cycle and nurturing inclusive prosperity. Concurrently, initiatives aimed at bolstering rural infrastructure, fostering sustainable livelihoods, and advancing gender equality are indispensable in ameliorating poverty and fostering equitable development across the nation.

Additionally, the report brings attention to the gender disparity in the unemployment crisis, showing that women in the youth demographic experience disproportionately higher levels of joblessness compared to men. This discrepancy emphasizes the urgent need for targeted interventions to address the systemic barriers that prevent women from fully participating in the workforce. In response to these findings, policymakers and stakeholders must work together to create a supportive environment for inclusive and sustainable economic growth, prioritizing the development of job opportunities that meet the diverse needs and aspirations of India's young workforce.

Efforts should focus on enhancing skill development, promoting entrepreneurship, and breaking down gender-based obstacles to labour market participation. By doing so, we can build a more equitable and prosperous future for all members of society.

Conclusion

India has undeniably ascended to commendable heights, exemplified by the attainment of a GDP exceeding USD 4 trillion, thereby solidifying its standing as the fifth-largest economy globally, albeit saddled with a public debt burden amounting to \$2.5 trillion. Nonetheless, juxtaposed against this narrative is India's grappling with stark income disparity, as approximately 300 million individuals confront hunger daily, engaged in a relentless struggle for sustenance. Furthermore, an estimated 86 per cent of the populace dwells below the poverty threshold, plagued by malnutrition, while approximately 83.5 per cent of the youth languish in unemployment, compounded by millions enduring homelessness. The nation contends with a disheartening reality of approximately 50 per cent, notably females, residing in illiteracy, as evinced by its relatively modest per capita income ranking of 139th among nations.

The discernment that India trails its BRICS and G-20 counterparts concerning per capita income accentuates the imperative for concerted endeavours directed at ameliorating the standard of living for all denizens. While economic proliferation remains imperative, ensuring the equitable dispersion of its dividends assumes commensurate significance. This necessitates the formulation and implementation of policies geared towards fostering inclusive growth, dismantling structural impediments to affluence, and accordant prioritization of social welfare schemes.

The propulsion of growth mandates a multi-pronged strategy, encompassing investments in infrastructure, education, healthcare, and technological advancements. Moreover, the cultivation of an ecosystem conducive to entrepreneurial ventures and innovative endeavours stands to invigorate economic vitality, engendering avenues for employment proliferation and wealth accretion.

The transition towards allocating resources into high-technology sectors such as chip manufacturing can be construed as a prudent manoeuvre aimed at positioning India within the intricate web of global supply chains and nurturing a culture of innovation. Nevertheless, it is imperative to conscientiously confront the impediments confronted by conventional, labour-centric domains like the leather industry.

Disregarding such sectors has the potential to exacerbate issues pertaining to unemployment, given their historical propensity to absorb a substantial segment of the populace, particularly in rural locales. The spectre of social and political turbulence looms large when sizable cohorts of society perceive themselves as economically disenfranchised or relegated to the fringes of progress. A judicious approach is indispensable, one that advocates for investment in nascent sectors while concurrently buttressing and rejuvenating traditional domains. This necessitates the deployment of targeted subsidies, initiatives aimed at skill enhancement, and endeavours geared towards modernizing and enhancing the productivity of labour-intensive industries.

Furthermore, policy frameworks should be calibrated to foster an enabling environment for entrepreneurship and small-scale enterprises spanning diverse sectors, thereby engendering a more resilient and dynamic economic landscape conducive to generating employment opportunities. The crux lies in orchestrating a harmonious amalgamation of strategies that underpin sustainable and inclusive economic advancement.

The redressal of income disparateness mandates targeted interventions calibrated towards marginalized cohorts, hinterland regions, and the informal economy sectors. The establishment of social safety nets, augmentation of skill acquisition initiatives, and endeavours aimed at enhancing financial inclusivity possess the potential to embolden vulnerable demographics, thereby mitigating the chasm in wealth distribution.

Furthermore, augmentation of the ease of conducting commercial activities, attenuation of bureaucratic impediments, and the propagation of transparency and accountability in governance mechanisms constitute pivotal prerequisites for cultivating an investment-friendly milieu, thereby fostering economic expansion.

The manufacturing sector of India demonstrated resilience, adaptability, and growth potential in the year 2024 amidst a changing economic environment. To maintain this momentum and overcome challenges, strategic interventions, technological advancements, and policy reforms are crucial. By analyzing the performance of India's manufacturing sector in 2024, it is evident that the sector has the capability to transform and thrive in the face of various obstacles.

Despite facing issues like supply chain disruptions, inflation, and geopolitical uncertainties, the sector managed to achieve moderate growth. This growth was driven by advancements in technology, reforms in policies, and strategic initiatives. Some areas of the manufacturing sector flourished while others struggled due to regulatory obstacles, lack of infrastructure, and shortage of skilled labour.

The adoption of advanced technologies such as automation, artificial intelligence, and digitalization has revolutionized manufacturing processes, leading to improved efficiency, productivity, and competitiveness. Investments in research and development have also fueled innovation and diversified product offerings across different industries.

Government efforts to enhance the ease of doing business, attract foreign investment, and strengthen industrial infrastructure have played a significant role in boosting manufacturing activities. Programs like the Production Linked Incentive (PLI) scheme have encouraged investment and promoted domestic production.

While industries like electronics, pharmaceuticals, and automotive have shown resilience and global competitiveness, sectors like textiles, small-scale enterprises, and traditional manufacturing have faced challenges. India's economic paradigm has undergone a seismic shift in recent decades, galvanized by successive waves of privatization, liberalization, and disinvestment targeting state-owned enterprises (SOEs). At the epicentre of this transformative trajectory lies a contentious discourse concerning the governmental role in fostering economic growth and development. Detractors contend that India's embrace of corporate-driven crony capitalism through these policy mechanisms has served to exacerbate societal schisms, perpetuating economic inequality and undermining foundational tenets of democracy and social equity.

Privatization, the transference of state-held assets to private entities, has emerged as a linchpin of India's economic reform agenda since the early 1990s. Framed within the rhetoric of efficiency and market competition, governments have divested public enterprises across diverse sectors, from telecommunications to energy, positing that private ownership would catalyze innovation, amplify productivity, and allure essential investments. Nevertheless, critics assert that this process has been sullied by nepotistic practices, clandestine transactions, and preferential treatment towards corporate behemoths, thereby cementing the foothold of crony capitalism.

Liberalization, denoting the unfettering of the economy to foreign investment and trade, has further entrenched the sway of corporate interests in India's economic policymaking echelons. While proponents extol the influx of capital, technological prowess, and domain expertise ushered in by liberalization, dissenting voices caution against the erosion of regulatory oversight and the conglomeration of wealth and influence in the hands of a privileged minority. Multinational conglomerates, often wielding considerable financial clout and political affiliations, have adroitly manipulated their leverage to sculpt policies conducive to their interests, amplifying apprehensions regarding the co-optation of the state by corporate entities.

Disinvestment in SOEs, erstwhile hailed as vanguards of equitable growth and societal well-being, has witnessed an accelerated pace in recent years as governments endeavour to pare fiscal deficits and streamline operational efficiencies. Advocates posit that the jettisoning of non-core assets and curtailment of governmental intervention augurs enhanced efficiency and competitiveness. Nonetheless, critics caution against the atrophy of public accountability and the relinquishment of strategic control vis-a-vis vital sectors such as infrastructure and natural resource management. Furthermore, the disinvestment process has been besmirched by allegations of cronyism, with well-connected individuals and corporate entities capitalizing on advantageous connections to secure lucrative assets at markdown prices.

The ramifications of India's dalliance with corporate-driven crony capitalism are profound and expansive. Despite ostensible economic growth, the dividends thereof have disproportionately accrued to a select cohort, exacerbating socioeconomic cleavages and fomenting societal discord. Moreover, the cozy interlinkages between political functionaries, bureaucratic echelons, and corporate magnates have corroded democratic institutions and engendered a crisis of public faith in governance mechanisms. As India navigates the contours of the 21st century, striking a harmonious equilibrium between market dynamism and social equity assumes paramount importance in ensuring an inclusive and sustainable developmental trajectory for its populace.

Targeted interventions are needed to address structural constraints in these areas:

Sustainability has emerged as a pivotal focal point within the manufacturing sector, underscored by a concerted emphasis on methodologies such as green manufacturing, green economy initiatives, green finance mechanisms, the uptake of renewable energy sources, and the curtailment of waste through the promotion of circular economic models. The sector's adherence to environmental statutes and international accords not only underscores its dedication to sustainable progress but also underscores its proactive engagement in the pursuit thereof.

India's manufacturing sector has been actively engaging with global value chains through partnerships, trade agreements, and export-oriented strategies to expand market reach and enhance competitiveness. However, geopolitical tensions and trade uncertainties continue to pose challenges to seamless integration and export growth.

The research undertakes a meticulous examination of India's manufacturing landscape, with a principal focus on its efficacy in fostering job-centric sustainable economic expansion. Let us delve into the theoretical and contextual underpinnings of this study and elucidate its consequential significance to the extant body of knowledge:

Theoretical Contribution:

Economic Growth Theory: This research augments the corpus of economic growth theory by scrutinizing the intricate interplay between manufacturing sector performance and the

sustainability of economic expansion. It endeavours to elucidate how a resilient manufacturing sector serves as a catalyst for employment generation and contributes substantively to the perpetuation of enduring economic vitality.

Job Creation Models: Through a meticulous dissection of the manufacturing sector's role in employment generation, this study offers a substantive contribution to extant models delineating the mechanisms underpinning job creation. It is poised to unveil novel insights into the multifaceted pathways through which manufacturing endeavours precipitate employment opportunities across diverse sectors of the economy.

Sustainability Frameworks: Engaging with sustainability frameworks, this research is poised to assess the sustainability quotient inherent in economic growth propelled by the manufacturing sector. It endeavours to probe into facets such as environmental ramifications, social parity, and resource efficacy within the realm of manufacturing-driven economic expansion.

Contextual Contribution

Indian Economic Context: Against the backdrop of India's stature as a burgeoning emerging economy, this research is strategically situated within the contours of India's idiosyncratic economic milieu, rife with distinct challenges and prospects. It seeks to unravel the manner in which India's manufacturing landscape, characterized by its unique attributes and dynamism, imparts its imprint upon the broader tapestry of economic growth and employment dynamics.

Policy Relevance: This research is poised to furnish insights germane to the policymaking echelons in India. By delving into the intricacies of the manufacturing sector's performance, policymakers stand to glean invaluable perspectives, thereby facilitating the formulation of strategies aimed at engendering sustainable economic expansion and engendering employment opportunities, in consonance with overarching national developmental imperatives.

Global Manufacturing Trends: This study is anticipated to situate India's manufacturing sector within the broader canvas of global manufacturing trends. It harbours the potential to juxtapose India's performance vis-à-vis that of its peer emerging economies or discern the ramifications of global manufacturing paradigm shifts upon India's economic trajectory.

Significance to Existing Knowledge:

Addressing Knowledge Lacunae: By furnishing a comprehensive analysis of India's manufacturing sector performance through the prism of job-oriented sustainable economic expansion, this research endeavours to bridge extant knowledge lacunae. It not only synthesizes prevailing knowledge paradigms but also unfurls novel insights and empirical evidence.

Informing Policy Discourses: By casting illumination upon the intricate nexus between the manufacturing sector, job creation, and sustainable economic growth, this research serves to inform ongoing policy discourses within India and beyond. It furnishes evidence-laden arguments poised to exert a discernible influence upon policy formulations germane to industrial development, labour market policies, and sustainability imperatives.

Charting Pathways for Future Inquiry: The findings of this research are poised to chart pathways for future scholarly inquiry into the dynamics underpinning manufacturing-led economic expansion. Researchers can leverage the conceptual frameworks and empirical methodologies propounded within this study as springboards to delve deeper into the

nuances characterizing manufacturing sector performance and its ramifications for economic advancement.

In summation, the research elucidating India's manufacturing sector performance and its pivotal role in fostering job-centric sustainable economic growth furnishes substantive theoretical and contextual contributions, thereby enriching our comprehension of the manufacturing sector's pivotal role in propelling economic development, particularly within the Indian purview. It not only informs policy deliberations but also serves as a beacon guiding future scholarly endeavours within this realm.

Recommendations

- After conducting an in-depth analysis, the following suggestions are put forward to improve the performance of India's manufacturing sector and promote sustainable growth in 2024 and beyond:
 - **Enhance Infrastructure:** It is recommended to invest in modernizing industrial infrastructure, transportation networks, and logistics systems to overcome bottlenecks and strengthen the resilience of the supply chain, and create job opportunities to increase domestic demand.
 - **Focus on Skill Development:** It is essential to prioritize skill development programs and vocational training initiatives to bridge the gap between industry requirements and the available workforce, especially in emerging technology fields.
 - **Ensure Policy Continuity and Stability:** Maintaining a consistent and stable policy framework is crucial to providing certainty and confidence to investors, encouraging long-term investments and sustainable growth.
 - **Sector-Specific Strategies:** Tailoring policy measures and incentives to tackle industry-specific challenges and capitalize on growth opportunities in key sectors like electronics, pharmaceuticals, and renewable energy.
 - **Promote Innovation Ecosystem:** Encouraging collaboration between industry, academia, and research institutions to drive technological innovation, increase investments in research and development, and facilitate knowledge sharing to enhance industry competitiveness.
 - **Integrate Sustainability Practices:** Incorporating sustainability principles into manufacturing processes through regulatory requirements, incentives, and industry certifications to promote environmental responsibility and resource efficiency.
 - **Expand Export Markets:** Diversifying export markets and product portfolios to reduce dependence on particular regions and industries, thereby improving resilience to global market fluctuations and geopolitical uncertainties.

By implementing these recommendations, India can unleash the full potential of its manufacturing sector, spur inclusive and sustainable growth, and solidify its position as a global manufacturing leader in the coming years.

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