

"Exploring The Connection Between Fast Fashion, Urbanization, And Sustainability In India: An Empirical Analysis Of Consumer Attitudes And Behaviours "

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Abstract: Fast fashion has gained significant popularity in India, but its impact on urbanization, consumer habits, and sustainability is a topic of concern. This study uses secondary and primary data analysis to investigate the relationship between fast fashion and these factors. We analyzed consumer spending on clothing & footwear, urbanization, GDP per capita, and CO2 emissions in India from 2000 to 2021 and found a positive correlation. We collected data from 106 young consumers aged 18-25 through a qualitative survey to understand their shopping habits, awareness, and attitudes toward sustainability. We found that while consumers are aware of the negative impact of fast fashion, their shopping habits are still heavily influenced by the latest trends and affordability. Our findings highlight the need for policy interventions that promote sustainable consumption and mitigate fast fashion's environmental and social impact. The results of this study will contribute to the existing literature on the effects of urbanization and economic growth on the fashion industry and provide insights into consumer behavior and attitudes toward fast fashion and sustainability in developing countries like India.

Keywords: Fast fashion, Urbanisation, consumer behavior, circular economy, sustainability

I. INTRODUCTION

Fast fashion, a significant force in the fashion business, is characterized by inexpensive, trend-driven apparel created quickly [1,2]. In India, the size of the online fashion retail market is anticipated to increase by US\$22.97 billion between 2021 and 2026 [3]. Manufacturers are producing more clothes of cheap quality and reasonable pricing to meet the growing demand for the latest fashion trends. Social media platforms like Instagram, Twitter, Facebook, and fashion influencers have significantly promoted fast fashion. People tend to follow the latest fashion trends, resulting in high demand for clothes. The Indian fashion sector alone is anticipated to grow to \$102 billion by 2026 [4], making the fashion industry a substantial contributor to the world economy. This expansion, though, was with a price. The fast fashion sector, in particular, has come under fire for its detrimental effects on the environment and society. The world's second-most polluting sector is the apparel industry [5]. For instance, the fashion business is responsible for a sizable share of the world's industrial water use, and the fast fashion sector's production methods produce many greenhouse emissions.

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The need for rapid fashion rises as more people settle in urban areas [6]. Urbanization has impacted fast fashion in India by increasing the number of shopping malls and retail outlets. Many urban areas in India have seen the development of large shopping malls and retail outlets, which offer a variety of fast fashion products from local and international brands. These malls and outlets have become popular destinations for urban consumers, who enjoy the convenience of having multiple brands and products under one roof.

This study makes an essential contribution to the discourse about the social and environmental effects of the fashion industry by emphasizing the role of customers in bringing about long-lasting change. This research aims to inform policy and industry stakeholders on supporting a more sustainable and responsible fashion ecosystem in India by focusing on the intricate interactions between rapid fashion, urbanization, and sustainability.

The structure of the study is as follows: first, we provide a background that identifies the need for investigating the relationship between urbanization and fast fashion and the importance of understanding consumer perspectives on fast fashion consumption. This is followed by a literature review examining previous studies on our research question. Next, we describe the research methodology used to gather data on consumer attitudes and behaviors toward fast fashion in India. The primary data findings are then presented and categorized into three sub-headings: awareness, sustainability, and shopping habits. We discuss the implications of these findings in light of the literature and provide policy recommendations. Finally, we conclude the study by summarizing our key findings and contributions to the field.

II. BACKGROUND OF THE STUDY

Fast fashion, urbanization, and consumer habits are all essential aspects that significantly impact the environment. The fashion industry is one of the most polluting industries globally [7], and India is one of the largest fast-fashion consumers [8]. As India's economy grows, the urban population and the demand for fast fashion increase. According to a report by the Global Fashion Agenda, the fashion industry's carbon emissions are projected to increase by 60% by 2030 [9] if immediate action is not taken. India is currently the third-largest producer of textiles and clothing globally, contributing to around 5% of the country's GDP [10]. However, the fast fashion industry is characterized by a linear economic model, where resources are extracted, and products are manufactured, used, and disposed of [11]. This model has resulted in a significant increase in textile waste generation. In India, textile waste generation is more than 1 million tons annually [12], with only a tiny fraction being recycled.

Urbanization in India has boosted disposable income [13], increasing consumer spending. People are exposed to new fashion trends in urban areas, growing their desire to buy clothes. The rise of the middle class in urban areas has also increased the demand for fast fashion. With many international fast fashion brands entering the Indian market in recent years, the fast fashion industry has multiplied. With these brands, people can stay updated with the latest trends at affordable prices. Despite this, fast fashion has been scrutinized for its negative environmental impact, as it generates a lot of waste and pollution. In addition to urbanization, a growing demand for skilled labor has increased the number of people working in the fashion industry. However, many workers

in the fashion industry in India work under poor conditions and are paid low wages, which has led to calls for greater regulation of the industry.

Therefore, studying the relationship between fast fashion, urbanization, and consumer habits is crucial to understanding the environmental impact and the need for a circular economy. Creating consumer awareness about sustainable fashion practices, promoting eco-friendly production methods, and encouraging circular business models are essential to ensure a sustainable future.

III. REVIEW OF LITERATURE

Niinimäki et al. (2020) conducted a comprehensive study on the environmental impacts of the fashion industry, revealing critical points in the value chain from production to consumption. The study highlighted water use, chemical pollution, CO₂ emissions, and textile waste, demonstrating that the industry generates over 92 million tonnes of waste annually and consumes 79 trillion liters of water. This emphasizes the need for sustainable practices in the fashion sector [14].

Pooja Garg (2019) noted the role of fast fashion in contributing to the clothing waste problem due to the pressure on brands to showcase the latest collections and increase profits. The author highlighted the deep connection between the fashion and textile industries and the environment [15].

Tarai and Shailaja's (2020) study investigated consumer awareness of textile waste's implications on the environment and their perception of purchasing second-hand clothing in Odisha, India. The findings suggest that consumers need a better understanding of textile waste's environmental consequences, but a proper approach can change their mindset. The study also found that consumers prioritize quality and hygiene when purchasing second-hand clothes and are willing to pay a reasonable amount [16].

Peters, Li, and Lenzen's (2021) research on the global sustainability perspective of the garment industry discovered that the climate impact of clothing and footwear consumption has increased from 1.0 to 1.3 Gt carbon dioxide equivalent over the 15 years until 2015. China, India, the USA, and Brazil were the major contributors to these figures. The study shows that the impact per garment has improved considerably, but the climate and water use impacts are more significant than the benefits of employment and wages. The findings suggest a need to address the issue of fast fashion and its impact on the environment [17].

Reichart and Drew (2019) provide compelling evidence of the significant environmental impact of fast fashion. They note that producing one cotton shirt requires an astonishing 2,700 liters of water, equivalent to two-and-a-half years' worth of drinking water for an average person. Moreover, they reveal that non-biodegradable fabrics commonly used in clothing can decompose in landfills for up to 200 years. Additionally, the authors highlight the high carbon emissions associated with the production of denim jeans, revealing that manufacturing a single pair can release as much greenhouse gas as driving a car for over 80 miles. These findings demonstrate

the urgent need for more sustainable practices in the fashion industry to mitigate its damaging environmental effects [18].

Binet et al. (2018) highlighted the negative impact of fast fashion on the planet and humanity and the unsustainable consumption and demand it has led to. The authors also noted the shift in consumer behavior and the need for sustainability in the fashion industry. They suggested that incorporating sustainability into the fashion industry could bring innovative strategies and technologies into the production process, generating a new perspective for the industry [19].

The fashion industry's extensive and intricate supply chain is linked to high water and energy use, chemical use, air and water pollution, and waste creation, ultimately leading to microplastic production. Cotton, about 30% of all textile fiber use, is often farmed using water, pesticides, and fertilizer [20]. Polyester contributes to wasteful overproduction in the garment industry [21].

The textile industry is the world's second-largest polluter after the oil and gas industry. Fast fashion production is responsible for significant greenhouse gas emissions, water consumption, and waste generation. The industry produces more greenhouse gas emissions than all international flights and maritime shipping. India is one of the world's top hubs for fast fashion production, and the country's demand for clothing is also rising [22]. Around 70% of the 53 million tonnes of fiber produced annually by the fashion industry is discarded in landfills, and India alone dumps about 1 million tonnes of textiles each year (IndiaSpend). According to the Ellen MacArthur Foundation, the equivalent of one garbage truck of materials is landfilled or burned every second.

While there are numerous studies on fast fashion's impacts, there is a gap in research on the Indian context, such as consumer attitudes towards fast fashion, shopping habits, and the relationship between urbanization and fast fashion. Such analysis can show how to promote sustainable practices in the Indian fashion industry.

IV. RESEARCH METHODOLOGY

IV a. Research Objective

The objective of this study is to analyze:

1. To explore the relationship between fast fashion consumption and urbanization in India.
2. To comprehend consumer attitudes and habits towards fast fashion in India, focusing on graduate students between 18 and 25.
3. To examine the role of sustainability in fast fashion consumption and its implications for the industry and consumers.
4. To provide policy recommendations for promoting sustainable fashion practices in India.

IV b. Data Collection

The study will use both secondary and primary data sources. Secondary data will be collected from reputable sources such as the World Bank, government reports, academic articles, and websites like Statista. The preliminary data will be collected through a structured questionnaire administered to 106 participants. The survey questionnaire will gather information on participants' attitudes towards fast fashion, including their shopping habits, frequency of clothing purchases, usage and disposal, and awareness of fast fashion's environmental and social costs.

IV c. Sampling Technique

The study will use a convenience sampling technique to select participants from various urban areas in India. The participants will be selected based on their willingness to participate in the study and availability during the survey.

IV d. Ethical Considerations

The study will follow ethical principles such as informed consent, confidentiality, and voluntary participation. The participants will be fully informed about the purpose and nature of the research. The data collected from the participants will be kept confidential and used only for research purposes.

IV e. Significance

The study will contribute to the literature on fast fashion and its environmental and social costs, particularly in India's urbanization context. The study's findings will provide insights for policymakers, fashion industry stakeholders, and consumers on the need for sustainable and ethical fashion practices. The study will also highlight the importance of creating awareness among consumers on the environmental and social impacts of their clothing choices.

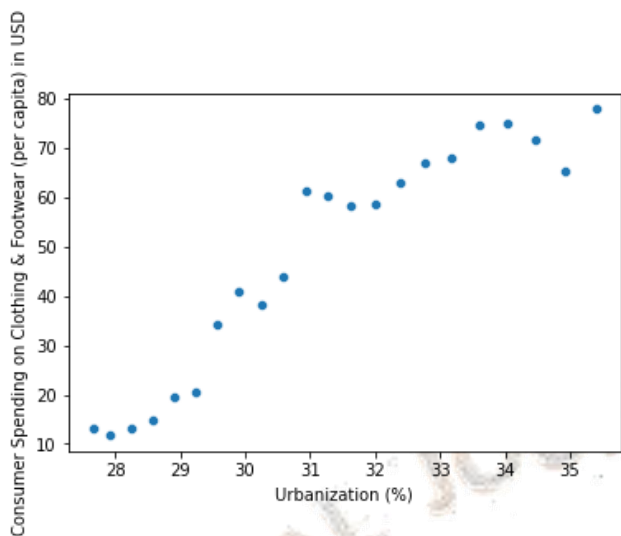
V. RESULTS

V a. Secondary data

There is a positive relationship between urbanization and consumer spending on clothing and footwear:

The data analysis revealed a strong positive correlation between urbanization and consumer spending on clothing & footwear in India ($r = 0.94$, $p < 0.01$). This finding supports that urbanization is associated with increased consumer spending on clothing & footwear. This may be attributed to several factors, such as the growth of the fashion industry, increased availability of fashion products, and changing consumer preferences in urban areas.

Figure 1: Correlation between Urbanization and Consumer Spending on Clothing & Footwear in India

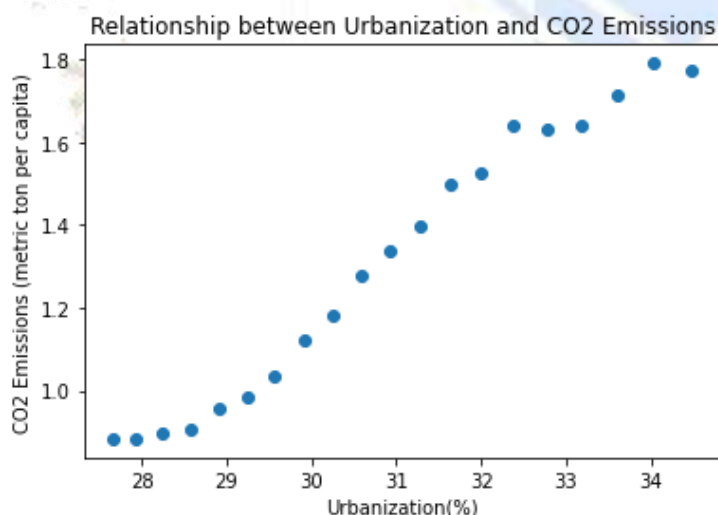


There is a positive relationship between urbanization and CO2 emissions from the fashion industry:

Our study found a positive relationship between urbanization and CO2 emissions from the fashion industry. The correlation coefficient between urbanization and CO2 emissions was 0.9876, indicating a strong positive correlation between these variables. This finding suggests that as urbanization increases, so does the level of CO2 emissions from the fashion industry.

The positive relationship between urbanization and CO2 emissions can be explained by the fact that as urbanization increases, there is a greater demand for fashion products, leading to a rise in the production and transportation of these products, resulting in higher CO2 emissions.

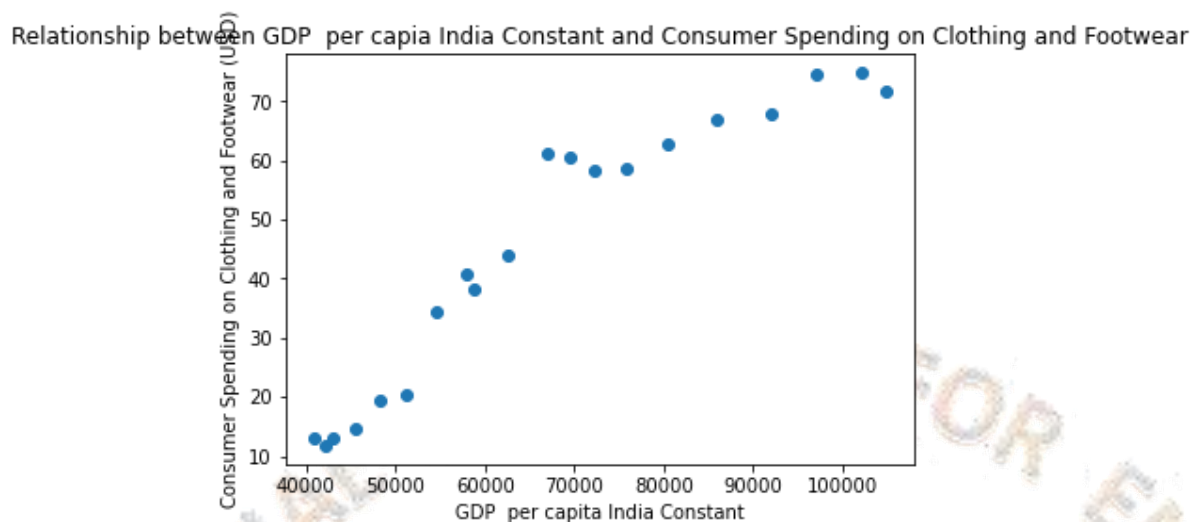
Figure 2: Correlation between Urbanization and CO2 Emissions in India



A positive relationship exists between GDP per capita and consumer spending on clothing and footwear:

The analysis also revealed a strong positive correlation between GDP per capita and consumer spending on clothing & footwear ($r = 0.95, p < 0.01$). This finding supports that increased wealth, as reflected by GDP per capita, is associated with increased spending on clothing & footwear. This relationship may be due to higher disposable incomes, changing consumer preferences, and the availability of a broader range of fashion products in higher-income economies.

Figure 3: Correlation between GDP per capita and Consumer Spending on Clothing & Footwear in India



V b. Primary data

The research is done by collecting qualitative data from an online questionnaire. A questionnaire is being created and circulated among youth, especially graduate students aged 18-25 (as they are more aware of new fashion trends). A random sample of 106 young consumers was collected to understand their shopping habits and perspective toward fast fashion and to analyze the need for sustainability quickly. Among 106 respondents, 51.9% of females and 48.1% of males responded, which helps analyze a gender-based perspective. Age ranges from 18 to 24, with an average of 21.

The fashion industry has witnessed significant growth over the past few decades with the rise of fast fashion. Fast fashion is a business model that emphasizes producing large quantities of low-cost garments quickly sold and replaced by newer styles. However, the fast fashion industry's environmental impact is a concern, as it generates considerable waste, pollution, and carbon emissions. This study investigates consumers' awareness, shopping habits, and attitudes toward sustainability in fast fashion.

I. Awareness:

The study found that although half of the respondents knew of the term fast fashion, a significant portion (37%) needed to be made familiar. This highlights the need for more education and awareness campaigns to promote the sustainable fashion movement and its importance.

II. Shopping Habits:

Regarding shopping habits, most respondents (50.9%) preferred to follow current fashion trends, indicating that the fast fashion model's appeal is still widespread. However, the study also found that many respondents were willing to consider sustainable options, with 36.2% willing to pay more for eco-friendly and sustainable clothes.

The survey also revealed that consumers' preference for branded clothing is higher (63.2%) than regular clothing (36.8%). This suggests that brands have a crucial role in promoting sustainable fashion by adopting more sustainable practices.

Regarding the frequency of shopping, the study found that most people shop once a month (45.3%), indicating that the fast fashion industry's business model effectively drives frequent purchases. Respondents' preference for trending colors (44.3%) also suggests focusing on current fashion trends rather than long-term use of clothing items.

The study also found that a significant proportion of respondents (66%) keep their clothes for more than a year, indicating that consumers must follow the fast fashion industry's ethos of quickly replacing clothes.

III. Sustainability:

The study found that while 81% of respondents have donated clothes before, only 52% were aware of the consequences of mass production in the fashion industry. This highlights the need for more education and awareness campaigns on the environmental impact of fast fashion.

Interestingly, the survey found that a significant proportion of respondents (90.3%) preferred less expensive clothes over expensive ones, indicating that the fast fashion industry's business model's appeal is primarily based on low cost.

Regarding sustainability, the survey found that a significant portion of respondents was willing to consider eco-friendly and sustainable clothes, with 36.2% willing to pay more. However, a considerable proportion of respondents (47.5%) needed clarification about their willingness to pay more, indicating a need for more education and awareness campaigns on the importance of sustainable fashion.

VI. DISCUSSION

These findings have important implications for policymakers and fashion industry stakeholders. As urbanization and GDP per capita continue to increase in India, there is likely a corresponding increase in consumer spending on clothing & footwear. This may lead to higher demand for fast fashion products, linked to environmental degradation and social issues such as labor exploitation. Therefore, it is essential for policymakers and industry stakeholders to promote sustainable and ethical fashion practices and to create awareness among consumers about the environmental and social costs of their clothing choices.

In conclusion, this study provides evidence of the positive relationship between urbanization and consumer spending on clothing & footwear and between GDP per capita and consumer spending on clothing & footwear in India. These findings highlight the need for sustainable and ethical fashion practices in the country and the importance of creating awareness among consumers about their clothing choices' environmental and social impacts.

The findings related to the awareness, shopping habits, and sustainability of fast fashion among consumers can be connected to the larger context of the impact of fast fashion on the environment and the economy. The high preference for current fashion trends and the desire for inexpensive clothing can be linked to the rise of fast fashion and its negative environmental impact due to the increased production and disposal of clothing. This can also be related to the correlation between urbanization and consumer spending on clothing and footwear, as urbanization often leads to higher consumption rates and greater demand for fashion trends.

Additionally, the respondent's willingness to pay more for eco-friendly and sustainable clothing can be linked to the potential for sustainable fashion to address the negative impact of fast fashion on the environment. This can also be related to the correlation between GDP per capita and consumer spending on clothing and footwear. Higher GDP levels often correlate with greater consumer spending power and the potential for consumers to prioritize sustainable fashion options.

- The study provides valuable insights into consumers' awareness, shopping habits, and attitudes toward sustainability in fast fashion.
- It highlights the need for more education and awareness campaigns on the environmental impact of fast fashion and the importance of sustainable fashion.
- Brands also have a crucial role in promoting sustainable fashion by adopting more sustainable practices. The findings also suggest consumers are willing to consider eco-friendly and sustainable clothing options, but the fast fashion industry's low-cost appeal remains significant.

Overall, the insights from this report can help to provide a deeper understanding of the relationship between fast fashion, urbanization, GDP, and sustainability and can help to inform potential solutions and interventions to address the negative impact of fast fashion on the environment and the economy.

VII. POLICY IMPLICATIONS

Based on the above results, several policy implications can be drawn:

1. Create awareness campaigns
2. Promote sustainable fashion
3. Encourage a circular economy:

The circular economy is a sustainable model that emphasizes using resources and materials in a closed loop, minimizing waste, and reducing environmental impact. Adopting a circular economy approach in the fashion industry can reduce the adverse environmental effects. It involves designing long-lasting, reusable, and recyclable products and adopting innovative recycling and reuse methods.

4. Encourage research:

As the results showed a strong correlation between urbanization and CO₂ emissions from the fashion industry, there is a need for more research to understand the relationship between these two factors. Governments can invest in research to understand the environmental impact of urbanization and fast fashion on the environment.

5. Regulate the fast fashion industry:

As the fast fashion industry is one of the significant contributors to environmental pollution, there is a need for regulations to be put in place to minimize its negative impact. Governments can penalize manufacturers who do not comply with sustainability standards or engage in unethical practices.

6. Promote responsible consumption:

As a significant percentage of respondents preferred less expensive clothes, there is a need to promote responsible consumption through policies and campaigns. Governments can encourage consumers to buy only what they need and to avoid buying clothes that are not ethically sourced or produced.

Overall, the policy implications drawn from the results suggest that governments must actively promote sustainable fashion and responsible consumption while regulating the fast fashion industry to minimize its negative impact on the environment and society.

VIII. CONCLUSION

Based on the findings of this research, there is a strong connection between fast fashion, urbanization, and sustainability in India. The country's rapid urbanization has increased the demand for fast fashion products, which has led to negative environmental and social impacts. The study also found a positive relationship between CO₂ and Fast Fashion which calls us to take more measures to reduce the adverse effects of fast fashion on the environment, like having a circular economy model, which helps achieve sustainability through waste reduction as the textile industry has different stages of production, which releases much waste to the environment. However, the study also highlights that consumers are becoming more aware of the issues and are willing to change their attitudes and behaviors toward fast fashion. Moreover, the study also revealed a need for more awareness among consumers about the consequences of fast fashion and the need for sustainable fashion. Most respondents prefer less expensive clothes to expensive ones, and only a small percentage are willing to pay more for sustainable fashion. This presents an opportunity for the fashion industry to shift towards more sustainable practices and educate consumers about sustainability's importance.

The study has some limitations, such as convenience sampling, which may limit the generalizability of the findings. The study also relies on self-reported data, possibly subject to social desirability bias. Nevertheless, this study provides valuable insights for policymakers, fashion industry leaders, and consumers to make informed decisions and take action toward a more sustainable future.

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