



# INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

## Sustainable Consumption In India: Insights, Issues And Policy Measures

Nirav B. Dalwadi<sup>1</sup>, Sonal Bhatt<sup>2</sup>

<sup>1</sup>Research Scholar, Department of Economics, Sardar Patel University, Vallabh Vidyanagar, Gujarat (India).

<sup>2</sup>Professor and Research Supervisor, Department of Economics, Sardar Patel University, Vallabh Vidyanagar, Gujarat (India).

**Abstract:** This paper examines the practices of unsustainable consumption in India and its impact on the environment, across several sectors. Increased population coupled with increasing incomes and improving standards of living has led to an increase in waste generation from packaging, greenhouse emissions, wastewater etc. Additionally, increased consumption by human beings leads to resource depletion and pollution in the environment. In order to combat this, a shift is required sustainable consumption faces, which however, faces several challenges such as rigid lifestyles and personal habits, higher cost and low accessibility of sustainable products and services, weak policy enforcement as well as 'greenwashing' by producer firms. In order to address these issues, many measures have been suggested such as awareness campaigns, promotion of sustainable choices, improved infrastructure for provision of sustainable solutions, stricter policy enforcement as well as government initiatives. It concludes that promoting sustainable consumption is a shared responsibility that could be achieved by combining efforts for individual awareness, appropriate industrial ecosystem and conducive policy action.

**Index Terms** - Sustainable Consumption, Sustainable Consumption Behaviour, India, Fast Fashion, Environmental Impact, Environmental Policy.

### 1. INTRODUCTION

Consumption refers to the final use of goods and services and the culmination of economic activities that involves resource extraction and use, processing, value-addition, transportation and distribution. Adam Smith defined consumption as the sole end and purpose of all production (Roach et al., 2023). While consumption is the ultimate objective of the economic activity, its significance lies in its environmental consequences as well. A study revealed that environmental degradation at an alarming rate is the result of unsustainable consumption (Lob, 2025).

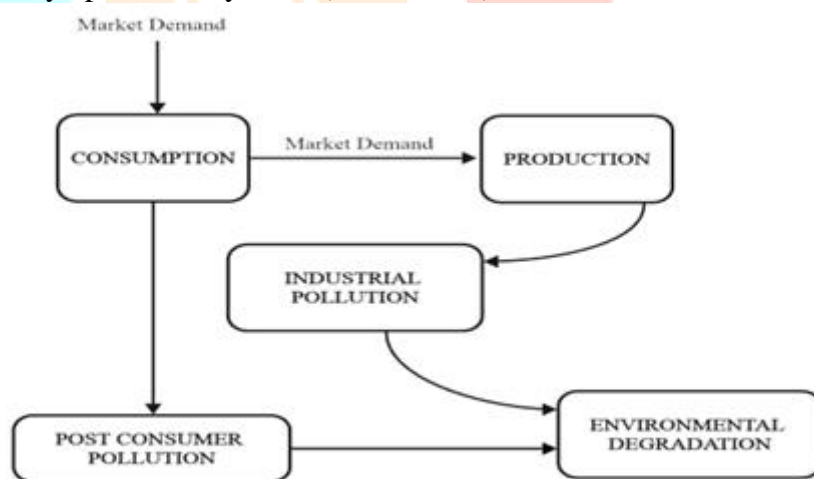
When people consume more goods and services, industries produce more to meet that demand. Also, while production is often done in a separate location where it can heavily affect local ecosystems. On the other hand, final consumption is distributed across different countries, often far away from the place of production (Gereffi et al., 2005). Therefore, it is less visible to the consumers who engage in unsustainable consumption, making it harder to gain public support for sustainable change. This results in unabated consumer apathy and a continuous surge of demand for unsustainable goods and services, in turn initiating a spiral of production that endangers the environment at different stages of the production and consumption process. In order to break this vicious circle, it is important to propagate sustainable consumption.

Sustainable Consumption is linked to the broader concept of sustainable development. As outlined in the Brundtland Report, "the concept of sustainable development focuses on meeting the needs of the present without compromising the future generations" (World Commission on Environment and Development, 1987). Furthering this idea, the United Nations 2030 Agenda for Sustainable Development listed its Sustainable Development Goal 12 (SDG 12) as "To ensure sustainable consumption and production patterns." This goal

focuses on breaking the link between economic growth and environmental damage, so that the traditional means of development could be transformed from one that is based on resource consumption, energy consumption, and pollution towards one that is based on resource conservation, development and mitigation of pollution. In other words, it advocates the growth of the economy without harming the environment. The UNEP (2021) explains sustainable consumption and production as “Doing More and Better with Less” by focusing on three goals. Firstly, to separate economic growth from environmental damage by reducing resource use, pollution and waste, while simultaneously improving the standards of living. Secondly, to emphasize a life cycle view, which takes into account, and reducing the negative environmental impact of products throughout their life cycle. Thirdly, to enable developing countries to avoid resource-heavy growth models and substitute them by efficient resource-use.

Production, consumption and pollution are closely interconnected. Unsustainable patterns of both consumption and production are known to be the root cause of the planetary crisis including climate change, loss of biodiversity, increased waste and pollution (United Nations Environment Programme, 2025). The process of making goods from extracting raw materials, production, transportation, and disposal creates waste and pollution that harms the environment. As people consume more of a good or service, producers increase production to meet that demand. The increase in production involves the use of resources, energy, raw materials and water this whole process creates pollution at different stages. Thus, waste generation and pollution is an unavoidable outcome of economic activities such as agriculture, industry, and services, which in turn are created by the demand for consumer goods and services that these activities generate (Bhatt & Luhar, 2025).

According to Doran (2021), sustainable consumption directly impacts greenhouse gas emissions. Consumption habits contribute significantly to carbon output as households are responsible for 21% of CO<sub>2</sub> emissions and 29% of global energy use. Changes in lifestyle and consumer choices could reduce global greenhouse gas emissions by up to 70% by 2050 (OECD, n.d.).



**Figure 1.** Consumption–Production–Pollution–Degradation Pathway

*Source: Compiled by the Authors*

India is one of the fastest growing economies and is undergoing some significant changes such as higher economic growth, increasing output, incomes, population and urbanization, higher purchasing power, leading to the rise of a new consumer class (Prakash, 2015) that aspires for more consumption, higher convenience, comfort and gadgets that support a modern lifestyle. While this growth has resulted in improved living standards, it has also put pressure on natural resources, leading to increased pollution. A surge in consumption brings short-term vibrancy in the market but results in disturbance of ecological stability in long term. This creates an urgent need to shift towards sustainable consumption and reduce potentially irreversible environmental damage.

## II. Unsustainable Consumption Pattern

### 2.1 Dietary Shifts towards Unsustainable Foods

As reported by the United Nations Department of Economic and Social Affairs (2025), In 2022, food waste from retail, food service and households reached 1.05 billion metric tons, which is equivalent to 132 kg per person.

The traditional Indian diet was plant-based, fresh, low-processed, with plenty of vegetables, fruits, pulses and whole grains. But in recent decades, there has been a major shift in the Indian diet, with the traditional diet shifting to a more 'western' diet (Garg et al., 2017; Green et al., 2016). The clearest changes in Indian consumption have been seen in packaged processed foods. Urbanization, higher incomes, and more women joining the workforce have fuelled the demand for convenience foods (Prakash, 2015; Suresh et al., 2024). The data reveals a shift in household consumption of packaged processed foods from 82.17% in 2011-12 to 96.55% in 2022-23. This growth is strong in certain categories, reflecting the increasing demand for modern tastes and convenience. Households consuming snack items such as chips increased by 7.38% to 44.17% during the same period. Consumption of noodles and bread has also increased, reflecting this shift in lifestyle changes (Suresh et al., 2024).

Along with the rise in processed foods, food habits of the people have changed in another major way. People now consume fewer staple cereals such as rice and wheat and more high-value foods such as fruits, vegetables, milk and meat. This type of dietary diversification is a common sign of economic development, which reflects changing consumer preferences. The share of total output of agricultural high-value products has increased from 37.3% in 1983-84 to 47.4% in 2007-08 (Sharma & Jain, 2011). This diversification of diet also carries climate cost. The sector is a major source of greenhouse gas emissions in India, accounting for approximately 14% of the country's total emissions. The single largest contributor to this sector is livestock. High agricultural value products such as meat and dairy products are significant emitters of greenhouse gases. The digestive process of ruminant animals such as cattle and buffalo, called enteric fermentation, accounts for 54.6% of India's total greenhouse gas emissions (Chachei, 2024). Domestic demand for high agricultural value products directly increases emissions. Therefore, as the production of high value agricultural products increases, emissions increase, thereby contributing to global warming.

### 2.2 Fast Fashion and Unsustainable Clothing

Fast fashion has a huge impact on the environment. The global apparel and footwear industries produce 8-10% of all carbon emissions, more than both international flights and shipping. The reason is that the process of making clothes involves an energy-heavy supply chain that relies heavily on fossil fuels, especially in major manufacturing hubs such as India, China, and Bangladesh (Leal Filho et al., 2022). Fast fashion harms the environment in many ways, such as using non-renewable resources, producing greenhouse gases, and consuming huge amounts of water and energy. The fashion industry is the second largest consumer of water, requiring 700 gallons to make a single cotton shirt and 2,000 gallons to make a single pair of jeans. Textile manufacturing is also a major water polluter, with dye water being released into rivers and streams (Maiti, 2025). One consequence of fashion is the increasing volume of textile waste. As people buy more clothes and discard them after a while, unwanted garments add to landfills. According to Ponnambalam et al. (2023), 1 million tonnes of textiles are thrown away every year in India. Of this, 41% of post-consumer textile waste ends up in landfills or is burned. In these landfills, synthetic fibers take hundreds of years to break down, releasing harmful chemicals that pollute the environment for generations (Fashion for Good, 2022).

Indian textile practices were fundamentally based on efficient use of resources and the creation of long-lasting garments. Garments such as *Sari*, *Dhoti*, *Dupatta*, and *Pagdi* are made from unstitched, continuous lengths of fabric directly woven from handlooms (Siddhu & Santosh, 2024). Although, the retail landscape in India has now changed with the rise of fast fashion, which involves the rapid production of inexpensive, trendy clothing that is thrown away after a short time of use (Ray & Nayak, 2023). This has fuelled a culture of overconsumption, which is at odds with traditional practices such as buying clothes whose fabrics last 50-80 washes and long-term use (Lopes, 2022).

### 2.3 Electronics and the E-Waste Burden

The increase in the use of electronics has led by a change in lifestyles. Electronic devices such as smartphones, laptops and other home appliances have become an inseparable part of life. At the same time, government policies for the promotion of digitalization in order to improve access to public services with the help of digital devices have resulted in a significant increase in the use of electrical and electronic equipment.

The growing ICT sector is a major source of increase in the country's e-waste (Raj, 2022). Number of internet and smartphone users in India have grown exponentially. The Government of India's Digital India

Mission has increased the access to affordable internet, increasing the economic exposure and opportunities for its large population of youngsters, but at the same time, given rise to an increase in the demand for electronic and electrical equipment (Reddy et al., 2021), leading to a huge amount of e- waste. Rapid technological upgradation, short product lifecycles (Maharashtra Pollution Control Board, 2007), greater adoption of electronic products, and increasing purchasing power of the middle class (Government of India, 2011) adds to this burden.

Growth in the use of electrical and electronic equipment resulted in 62 billion kg of e-waste in 2022 and is projected to be around 82 billion kg by 2030 (United Nations, 2025). India is the world's third-largest producer of e-waste after China and the United States (Sandwal et al., 2025). Electronic waste generation in India in 2019-2020 was 10,14,961 metric tons, while in 2021-2022 it increased to 16,01,155 metric tons and at 17,51,236 metric tons in 2023-2024. It shows that e-waste has increased by 73% from 2019-20 to 2023-24 (GoI, 2024).

India produces 3.23 million tonnes of waste every year, of which more than 90% is treated by the informal sector. These waste collectors are called *kabadiwalas* who recycle household waste, including e-waste (Sengupta et al., 2023). Yet, their recycling methods include a hazardous of practices, such as burning cables in the open to extract copper and using acid baths to recover certain metals. Such unsafe handling of e-waste results in landfills accumulating up to 70% toxic materials which harm the environment on a large scale (Deshwal, 2025). When e-waste such as old televisions, mobile phones, computers, and fax machines are improperly dumped, harmful substances enter the soil, contaminate land and water sources, and evaporate from the ground and are released into the air, resulting in damage to air, water, and land (Nisha et al., 2022).

## 2.4 Unsustainable Growth of Private Vehicles

The number of registered motor vehicles in India increased from 141.87 million in 2011 to 354 million in 2022, averaging a growth of 5.8% per year, indicating a major increase in the vehicle population of the country (CEIC, 2022). Projections show that India's total number of vehicles is expected to increase to more than double by 2050 (Mohan et al., 2025). increase in the number of private cars will put India on a high-emissions trajectory, making it difficult to meet climate goals. The transport sector is the fastest growing source of emissions in the country, contributing 13.5% of India's total energy-related CO<sub>2</sub> emissions. Road transport, which runs largely on petrol and diesel, uses 90% of the sector's energy (New Climate Institute & Climate Analytics, 2020).

## 2.5 Unsustainable Water Consumption

Water is a fundamental resource for human survival and water consumption in India has become a major concern due to urbanization and population growth. Demand for water from household water, agriculture and industrial water is putting pressure on the water system. India's total water footprint is the highest in the world, estimated at 1,047 BCM per year (Mehla et al., 2023).

Biswas (2022) states that the problem of water scarcity has become more serious due to poor water quality, with an estimated 90% of wastewater from domestic and industrial sources being discharged directly into the environment. Residents in many urban and rural areas rely on contaminated water sources for their daily needs, due to poor management of water supply system. No part of India has a reliable 24/7 water supply where people can drink water safely straight from the tap. Due to this, most households are forced to become self-reliant in terms of water storage and purification by investing in private storage tanks and household purification systems so that they can have a ready access to clean water.

## 2.6 Plastic Waste:

The steady increase in the consumption of processed and packaged goods results in a huge amount of plastic waste. The packaging industry is the largest global consumer of synthetic plastics which are derived from fossil fuels (Ncube et al., 2020). According to Gomes (2025), the FMCG sector is one of the largest contributors to the country's plastic waste. India generates approximately 3.4 million tonnes of plastic waste annually; a large portion of which is used for single-use packaging of food, beverages and other FMCGs. Single use depicts a linear model of 'take-make-waste'; where resources are extracted, products are made and the thrown away after single use, creating a waste. Since recycling systems cannot handle such huge volumes, most of the plastic waste ends up in landfills where it contaminates soil and groundwater over time (Hossain et al., 2022).



### III. Challenges in promoting sustainable consumption in India:

Even as its importance is easy to realize, it is equally challenging to propagate sustainable consumption. Historically, many practices in India were naturally sustainable, characterized by frugality, careful use of resources, and respect for nature (GoI, MoEF, 2019; Sharma, 2023). Traditional Indian customs and lifestyle embedded the art of thrifting, repairing, recycling, re-using, re-purposing and recycling household articles, heirloom items, clothing, jewellery etc. and consuming fresh and local food and non-motorized transport effortlessly into our daily lives. According to Shar (2023), 98% of Indian consumers already practice sustainable consumption in some form, whether they realize it or not. However, with the breaking up of traditional joint family system and advent of modern, individualistic lifestyles, these practices are becoming less and less common. It is necessary to address these socio-cultural shifts, knowledge gaps and technical and challenges and orient our economic policy around it.

#### 3.1 Economic challenges:

The biggest challenge in sustainable consumption in India is affordability, and many low and middle-income earning consumers perceive eco-friendly products to be 'out of reach', as they are usually found to be more expensive. Also, many families, despite knowing the environmental impact of their consumption, opt for cheaper options, even if they are damaging to the environment. The higher price of eco-friendly products in comparison with regular products is due to their higher cost in production. On an average, eco-friendly products are 20% to 80% more expensive than regular products; hence sustainable consumption is seen as a luxury, so that which only the wealthy can afford to live 'green' (Poddar, 2025), which creates a certain amount of social exclusion for the environmentally conscious consumers. The difference in price between eco-friendly and regular products, known as the 'environmental premium, increases the consumer's reluctance to buy green goods (Kumar et al., 2011) and at the same time, adds to the risk faced by the producer.

#### 3.2 Access and Availability challenges:

Supply of sustainable products is limited and sustainable products are difficult to find in India, especially outside major cities. Similarly, many products are labelled as 'partially sustainable', which is a rather vague term, adding to the consumers' confusion. Due to lesser availability and limited options, people are compelled to give up their intention to consume sustainably, even if they wish to. A study found that 75% of urban Indian consumers had a strong desire to shop sustainably and ethically but found it difficult to access sustainable products (Switch Asia, 2015). Even businesses who wished to procure sustainable raw materials, struggled to shift towards greener supply chains. This results in consumers giving up their intention of sustainable consumption, which leads to lesser demand for eco-friendly products and in turn, fewer firms engaging in the production of eco-friendly products.

#### 3.3 Lack of Information and Trust:

Another challenge behind promoting sustainable consumption in India is the lack of reliable information. When companies make false claims about their products being 'eco-friendly', it is termed as 'greenwashing'. When consumers experience 'greenwashing', their trust erodes rapidly and its results in decreasing the preference for sustainable products (Press Trust of India, 2025). Trust in the products and the producing firm (brand) plays a key role in whether people will buy sustainable products or not. If the company's claims are found to be deceitful even in few instances, consumers would not purchase their products, however eco-friendly, affordable or readily available they may be. In order to avoid this, the producer companies must practice honest practices such as correct labelling along with accurate description of the ingredients, methods of production and the eco-friendly characteristic of the concerned product. Strong and unambiguous quality standards, rules and regulations are necessary to enforce these practices. In turn, it would build consumers' trust in eco-friendly products and increase their demand in the market (Press Trust of India, 2025; GoI, 2024).

### IV. Measures for fostering the Sustainable Consumption

India has improved its sustainability rankings from 121 in 2022 to 99 in 2025 in the Sustainable Development Goals Index (Sachs et al., 2025). According to GoI (n.d.), in terms of SDG 12 (promoting sustainable consumption and production), the reuse and recycling of waste increased from 44.9% in 2018-19 to 55% in 2022-23. Also, 91.5% of biomedical waste was treated systematically in 2022. Some measures that could promote sustainable consumption in India are discussed as follows:

#### 4.1 Stricter Policies Enforcement

There is a need to extend the implementation of environmental laws to the last mile, i.e. to the consumer. Policies such as 'Extended Producer Responsibility' are essential so that manufacturers are required to take care of their products even after they are used and create systems for systematic waste collection and recycling (Confederation of Indian Industry, 2022).

## 4.2 Awareness Programs

Public awareness campaigns must provide more than just information, because real change can come not only from knowledge but also through attitudes and behaviour (Tiwari et al., 2025). Environmental campaigns need to highlight the connection between people's personal health, well-being and quality of life with the quality of air, water, land, forest wealth, bio-diversity etc.

## 4.3 Sustainable Consumption Choices

### 4.3.1 Promoting Slow Fashion

The alternative to fast fashion in clothing has been identified as slow fashion, which values quality, durability, timeless design and ethical production. This approach is relevant for India as it is based on the country's strong textile and craftsmanship traditions. Supporting local artisans and handloom weavers not only preserves our cultural heritage but also supports a low-impact production model (Natarajan & Mounaguruswamy, 2025) by re-discovering sustainable materials such as organic cotton, recycled fabrics, bamboo, jute and coir as well as discovering new and innovative fibres made of waste such as banana stems (Awasthi & Swami, 2023; Lokhande, 2025; Natarajan & Mounaguruswamy, 2025). According to the Government of India (2019), Project SU.RE ("Sustainable Resolution"), a partnership between Ministry of Textiles, GoI and the United Nations, has encouraged India's sixteen major apparel and retail brands to adopt sustainable material sourcing practices and using certified, eco-renewable materials for their output.

Sustainable fashion is more expensive due to high-quality materials and the lengthy production cycle. However, with government support through subsidies and incentives, eco-friendly fashion has the potential to become more affordable and widely accepted by consumers (Lokhande, 2025).

### 4.3.2 Promoting Organic Products

India ranks 6th in the world in terms of land under organic cultivation and 1st in terms of number of organic farmers (Willer et al., 2023). However, due to low domestic demand for organic food products, a large portion is exported. Jain & Rathore, (n.d.) note that several schemes have been launched in order to shift the farmers towards organic farming. The Paramparagat Krishi Vikas Yojana (PKVY) provides financial assistance, technical guidance and certification to farmers who convert from regular to organic farming (Jain & Rathore, n.d.; Patidar, Pandey, & Yadav, 2024).

## 4.4 Promotion of Sustainable Infrastructure

### 4.4.1 Strengthening Public Transport System

Public transportation systems need to be improved not only in order to improve urban mobility but also tackle unsustainable growth in the number of private vehicles; that lead to congestion, air pollution as well as loss of time and productivity in for urban commuters. Major investments are required in order to expand public transport and make it affordable, efficient, accessible, reliable and safe. This could reduce the dependence on private vehicles and in turn, carbon emissions as well as traffic congestion (Mahadevia et al., 2023). Shifting people from private vehicles to shared transport such as buses and trains reduces per capita emissions, energy consumption and road space usage (Arora, 2024). According to Mukherjee (2024), India's drive to reach net zero emissions by 2070 is bringing about many changes in the transport sector, including rules for vehicle pollution, such as Bharat Stage (BS) standards, and a big push for manufacturing electric vehicles (EVs).

### 4.4.2 Promotion of Electric vehicles

India's Electric Vehicle Policy was released in 2015, with an ambitious target of covering 30% of all vehicles into EVs by 2030. To achieve this, the Government of India introduced the FAME (Faster Adoption and Manufacturing of hybrid and Electric vehicles) scheme. ₹11,500 crore were allocated for FAME Phase-II in order to boost production and usage of EVs. Consumers were also offered a subsidy of ₹10,000 for every 1 kWh of battery capacity in the two wheeler electric vehicles. In some States, EV consumers were offered benefits such as zero road tax and zero registration fees. The number of charging points for EVs have steadily increased, reaching a number of 6,500 public charging points by March 2023 (Gulati, 2025).

### 4.4.3 UJALA Scheme (Unnat Jyoti by Affordable LEDs for All)

The UJALA scheme was launched in 2015 and has become the world's largest zero.- subsidy programme in domestic lighting, with around 36.87 crore LED bulbs distributed across the country by January 2025. This initiative has made energy efficient electrical appliances such as LED bulbs, fans and tube-lights widely available and affordable in Indian households. UJALA also helps reduce 6.2 million tonnes of CO<sub>2</sub>

every year and reduces electricity demand by 1500 MW. It has also played a significant role in bringing down the price of LED bulbs from Rs 450-500 to Rs 70, prompting a sale of 407 crore LED bulbs in India (GoI, 2025).

#### 4.4.4 Lifestyle for Environment (LiFE) Mission

Life Mission was introduced by India at the COP26 summit. It encourages people to make small everyday changes in their lifestyle in order to protect nature such as reducing plastic usage, saving electricity, saving water and reducing wastage of food. LiFE imposes a collective duty on all individuals to live in such a way that does not harm nature. People who adopt this lifestyle are recognized as pro-planet people under LiFE (GoI, n.d.). Observer Research Foundation (2024) noted that Mission LiFE outlines 75 daily actions grouped into 7 broad areas. It follows the “Avoid, Shift, Improve” (ASI) model, i.e. avoiding environmentally harmful habits, shifting to better options and improving these practices. Early studies show that if these actions are followed, they could cut annual emissions by 2 billion tons of CO<sub>2</sub> by 2030 and save \$440 billion globally.

#### 4.4.5 Other initiatives

Several other programs promoting sustainable consumption have also been implemented in India. For example, the Swachh Bharat Mission was launched in 2014. It includes collecting garbage from every household, separating dry and wet waste, increasing sanitation and setting up waste-to-energy plants. The Solid Waste Management Rules 2016 issued guidelines on handling waste at the household level. They denote that household waste must be separated into three categories i.e. biodegradable, non-biodegradable and hazardous waste at the household level itself. This could promote recycling and composting by the households. The Plastic Waste Management Rules 2016, (Amended in 2022) were introduced in order to reduce plastic pollution. Waste to Energy (WTE) projects have been encouraged in India to convert solid waste into useful products such as electricity and biogas. This reduces waste going to landfills and also generates renewable energy; making the households independent for their energy needs and reducing the dependence on non-renewable sources to a certain extent. This has been successfully implemented in cities like Indore, Delhi and Pune as waste-to-energy plants (The Green Planet Solutions, 2025).

All the above measures are likely to succeed more if implemented simultaneously. While strict policy enforcement provides a regulatory push and encourages businesses to adopt cleaner technologies and eco-friendly products, promotion of EVs, LEDs and adopting practices outlined under LiFE, could take one closer to sustainable consumption. Macro-level measures such as improved public transport and a propagating a culture of slow fashion in the society could make sustainable consumption behaviour more acceptable and popular.

### V. Conclusion:

India's economic growth may have brought some benefits of development, but it has also led to an increase in unsustainable consumption across several sectors. The consequences of this are already evident in the form of increasing plastic waste, e-waste, rising greenhouse gas emissions, water pollution and accumulation of landfills. If the current trend continues, these consequences will become more serious, threatening the country's ecological stability. The path towards sustainable consumption faces many challenges, not only in the form of a lack of public concern but also deeper systemic issues that incentivise unsustainable consumption behaviour. Moreover, apart from convenience consumer choices are determined by availability, reliability and cost of products.

This challenge is exacerbated due to systemic issues such as the poor enforcement of the laws. However, sustainable consumption is possible to be popularized in India for which the government has taken many initiatives. To summarize, sustainable consumption is a shared responsibility and partnership between the government, firms, institutions, voluntary agencies, educational institutions and the common people at every level.

### References

1. Arora, K. (2024, October). *Steering India's public transport system towards sustainability*. ISB Executive Education. Retrieved October 10, 2025, from <https://execed.isb.edu/en/ep/research-perspectives/article/steering-india-public-transport-system-towards-sustainability.html>
2. Awasthi, A., & Swami, C. (2023). Sustainable fashion in Indian context: An analysis. *International Journal for Multidisciplinary Research (IJFMR)*, 5(5), 1–8. <https://www.ijfmr.com/papers/2023/5/7127.pdf>



3. Bhatt, S., & Luhar, H. (2025). Environmental conservation – A consumer's perspective. *GAP Bodhi Taru – A Global Journal of Humanities*, 8(2), 1–7. Retrieved from [https://www.gapbodhitaru.org/res/articles/\(1-7\)-ENVIRONMENTAL-CONSERVATION-A-CONSUMER-S-PERSPECTIVE-20250712031404.pdf](https://www.gapbodhitaru.org/res/articles/(1-7)-ENVIRONMENTAL-CONSERVATION-A-CONSUMER-S-PERSPECTIVE-20250712031404.pdf)
4. Binnuri, A., & Rajanikanth, M. (2024). Consumerism, sustainable consumption, and consumer citizenship in the Indian context. *Cogent Business & Management*, 11(1), Article 2428777. <https://doi.org/10.1080/23311975.2024.2428777>
5. Biswas, A. K. (2022). India's unsustainable water development. *Current Science*, 122(8), 875–876. <https://doi.org/10.18520/cs/v122/i8/875-876>
6. CEIC. (2022). *India registered motor vehicles: Total*. CEIC Data. Retrieved July 18, 2025, from <https://www.ceicdata.com/en/india/number-of-registered-motor-vehicles/registered-motor-vehicles-total>
7. Chachei, S. K. (2024). Greenhouse gas emissions in the Indian agriculture sector and mitigation by best management practices and smart farming technologies—a review. *Environmental Science and Pollution Research*, 31(32), 44489–44510. <https://doi.org/10.1007/s11356-024-33975-7>
8. Confederation of Indian Industry. (2022, July). *A journey towards sustainable solutions in the food industry: Reducing the plastic footprint* (Report). Retrieved October 15, 2025, from <https://facecii.in/wp-content/uploads/2022/07/Reducing-the-plastic-footprint-A-journey-towards-sustainable-solutions-in-the-food-industry.pdf>
9. Dasgupta, N. (2000). Environmental enforcement and small industries in India: Reworking the problem in the poverty context. *World Development*, 28(5), 945–967.
10. Deshwal, N. (2025). India's e-waste management: Analysis and opportunities for a sustainable future. (Master's dissertation, Queen Mary University of London, School of Geography). Retrieved September 23, 2025, from [https://www.researchgate.net/profile/Natasha-Deshwal/publication/389263080\\_India's\\_E-Waste\\_Management\\_Analysis\\_and\\_Opportunities\\_for\\_a\\_Sustainable\\_Future/links/67bb49e696e7fb48b9cb6d08/Indias-E-Waste-Management-Analysis-and-Opportunities-for-a-Sustainable-Future.pdf](https://www.researchgate.net/profile/Natasha-Deshwal/publication/389263080_India's_E-Waste_Management_Analysis_and_Opportunities_for_a_Sustainable_Future/links/67bb49e696e7fb48b9cb6d08/Indias-E-Waste-Management-Analysis-and-Opportunities-for-a-Sustainable-Future.pdf)
11. Doran, P. (2021, August 18). *Doing more with less: Ensuring sustainable consumption and production*. International Institute for Sustainable Development. Retrieved October 15, 2025, from <https://www.iisd.org/articles/deep-dive/doing-more-less-ensuring-sustainable-consumption-and-production>
12. Fashion for Good. (2022). *The state of textile waste in India*. In *Wealth in Waste: India's Potential to Bring Textile Waste Back Into the Supply Chain* (Chapter 3 of *Wealth in waste: India's potential to bring textile waste back into the supply chain*). Retrieved September 27, 2025, from <https://reports.fashionforgood.com/report/sorting-for-circularity-india-wealth-in-waste/chapterdetail?reportid=813&chapter=3>
13. Garg, A. K., Singh, A., Vishnoi, H., Singh, C., & Adlakha, M. K. (2017). Traditional dietary pattern of Indian food and its scientific basis: An overview. *AYUSHDHARA*, 4(1), 1063-1068. ISSN: 2393-9591. <https://ayushdhara.in/index.php/ayushdhara/article/view/239>
14. Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy*, 12(1), 78–104. <https://doi.org/10.1080/09692290500049805>
15. Gomes, S. M. (2025). Indian FMCG industry sees boom in sustainable packaging: Real impact or greenwash? *The Voice of Creative Research*, 7(2), 197–202. <https://doi.org/10.53032/tvcr/2025.v7n2.26>
16. Government of India, Central Consumer Protection Authority. (2024). *Guidelines for Prevention and Regulation of Greenwashing or Misleading Environmental Claims*, 2024.
17. Government of India, Ministry of Environment, Forest and Climate Change. (2019). *Pamphlet on climate-friendly lifestyle practices in India*. <https://moef.gov.in/uploads/2019/10/Pamphlet-on-climate-friendly-lifestyle-practices-in-India.pdf>
18. Government of India, Ministry of Housing and Urban Affairs. (2024, December 16). *Unstarred Question No. 2384: E-Waste Management in Urban Areas*. [https://sansad.in/getFile/annex/266/AU2384\\_9gmDUV.pdf?source=pqars](https://sansad.in/getFile/annex/266/AU2384_9gmDUV.pdf?source=pqars)
19. Government of India, Ministry of Information and Broadcasting. (2019, August 22). *Union Textiles Minister launches Project SU.RE on Sustainable Fashion Day at Lakmé Fashion Week*. <https://www.pib.gov.in/PressReleaseDetailm.aspx?PRID=1582685>
20. Government of India, Ministry of Power. (2025, January 6). *UJALA: 10 years of energy-efficient lighting*. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2090639>



21. Government of India, NITI Aayog. (n.d.). *Goal 12: Ensure sustainable consumption and production patterns*. Retrieved June 28, 2025, from <https://www.niti.gov.in/goal-12-ensure-sustainable-consumption-and-production-patterns>
22. Government of India, Rajya Sabha Secretariat. (2011, June). *E-waste in India (Occasional Paper No. 372)*. [https://cms.rajyasabha.nic.in/UploadedFiles/ElectronicPublications/E-Waste\\_in\\_india.pdf](https://cms.rajyasabha.nic.in/UploadedFiles/ElectronicPublications/E-Waste_in_india.pdf)
23. Government of India, MyGov. (n.d.). *Lifestyle for Environment – LiFE*. Retrieved June 28, 2025, from <https://www.mygov.in/life/>
24. Green, R., Milner, J., Joy, E. J. M., Agrawal, S., & Dangour, A. D. (2016). Dietary patterns in India: A systematic review. *British Journal of Nutrition*, 116(1), 142–148. <https://doi.org/10.1017/S0007114516001598>
25. Green Planet Solutions. (n.d.). *5 waste management initiatives taken by the Indian government*. The Green Planet Solutions. Retrieved September 10, 2025, from <https://thegreenplanetsolutions.com/blog/5-waste-management-initiatives-taken-by-the-indian-government/>
26. Gulati, D. (2025, January). *EV Policy of India*. O. P. Jindal Global University, Jindal Policy Research Lab. Retrieved June 28, 2025, from <https://jgu.edu.in/jsgp/jindal-policy-research-lab/ev-policy-of-india/>
27. Hossain, R., Islam, M. T., Shanker, R., Khan, D., Locock, K. E. S., Ghose, A., Schandl, H., Dhodapkar, R., & Sahajwalla, V. (2022). Plastic waste management in India: Challenges, opportunities, and roadmap for circular economy. *Sustainability*, 14(8), 4425. <https://doi.org/10.3390/su14084425>
28. Jain, R., & Rathore, A. (n.d.). *Challenges and opportunities of organic food industry in India*. The IIS University. Retrieved July 23, 2025, from <https://iisuniv.researgence.com/AuthorDocument/Publication/1010750.pdf>
29. Kumar, D., Goyal, P., Rahman, Z., & Kumar, I. (2011). Sustainable Consumption in India: Challenges and Opportunities. *International Journal of Management & Business Studies*, 1(3), 68–73. <https://www.ijmbs.com/13/devesh.pdf>
30. Leal Filho, W., Perry, P., Heim, H., Dinis, M. A. P., Moda, H., Ebhuoma, E., & Paço, A. (2022). An overview of the contribution of the textiles sector to climate change. *Frontiers in Environmental Science*, 10, 973102. <https://doi.org/10.3389/fenvs.2022.973102>
31. Lob, B. (2025). Environmental crisis in the modern era: A comprehensive analysis of urban growth, consumption, climate change, and sustainability challenges. *Revista Científica Sistemática*, 15(2). <https://doi.org/10.56238/rcsv15n2-010>
32. Lokhande, J. S. (2025). Sustainable fashion in India: Challenges, impact and solutions. *Journal of Emerging Technologies and Innovative Research (JETIR)*, 12(5). <https://www.jetir.org/papers/JETIR2505921.pdf>
33. Lopes, F. (2022, January 31). *Climate change: How fast fashion hurts the environment*. IndiaSpend – EarthCheck India. Retrieved from <https://www.indiaspend.com/earthcheck/climate-change-how-fast-fashion-hurts-the-environment-793662>
34. Mahadevia, D., Mukhopadhyay, C., Lathia, S., & Gounder, K. (2023). The role of urban transport in delivering Sustainable Development Goal 11: Learning from two Indian cities. *Heliyon*, 9(9), e19453. <https://doi.org/10.1016/j.heliyon.2023.e19453>
35. Maharashtra Pollution Control Board. (2007, March). *Report on assessment of electronic wastes in Mumbai-Pune area*. Retrieved October 15, 2025, from <https://www.mpcb.gov.in/sites/default/files/focus-area-reports-documents/ewastereport1.pdf>
36. Maiti, R. (2025, January 20). *Fast fashion and its environmental impact*. Earth.Org. Retrieved October 15, 2025, from <https://earth.org/fast-fashions-detrimental-effect-on-the-environment/>
37. Mehla, M. K., Kothari, M., Singh, P. K., Bhakar, S. R., & Yadav, K. K. (2023). Water footprint assessment and its importance in Indian context: A meta-review. *Water Supply*, 23(8), 3113–3127. <https://doi.org/10.2166/ws.2023.174>
38. Mohan, D. S., Elango, S., Mallya, H., & Jain, H. (2025). How will India's private and passenger vehicle ownership grow by 2050? Council on Energy, Environment and Water (CEEW). Retrieved from <https://www.ceew.in/publications/how-will-indias-private-and-passenger-vehicle-ownership-grow-by-205>
39. Mukherjee, A. (2024, January). *LiFE lessons: Rethinking policies for lifestyles for sustainable development* (Background Paper No. 19). Observer Research Foundation. Retrieved October 15, 2025, from

- <https://static1.squarespace.com/static/5ca0ec9b809d8e4c67c27b3a/t/65ae6bf63e2bd31a1e7b5ce5/1705929718349/ORF-MissonLife-Paper-011824.pdf>
40. Natarajan, A., & Mounaguruswamy, P. (2025). Sustainable fashion in India: Navigating challenges, unveiling solutions, and unlocking opportunities for entrepreneurs. *Journal of Emerging Technologies and Innovative Research*, 12(1), 1–10. <https://www.jetir.org/papers/JETIR2501004.pdf>
  41. Ncube, L. K., Ude, A. U., Ogunmuyiwa, E. N., Zulkifli, R., & Beas, I. N. (2020). Environmental Impact of Food Packaging Materials: A Review of Contemporary Development from Conventional Plastics to Polylactic Acid Based Materials. *Materials (Basel, Switzerland)*, 13(21), 4994. <https://doi.org/10.3390/ma13214994>
  42. New Climate Institute & Climate Analytics. (2020, December). Decarbonising the Indian transport sector: Pathways and policies (Report). Retrieved August 22, 2025, from [https://climateactiontracker.org/documents/832/CAT\\_2020-12-09\\_Report\\_DecarbonisingIndianTransportSector\\_Dec2020.pdf](https://climateactiontracker.org/documents/832/CAT_2020-12-09_Report_DecarbonisingIndianTransportSector_Dec2020.pdf)
  43. Nisha, B., Shajil, S., Dutta, R., & Jain, T. (2022). Consumer awareness and perceptions about e-waste management in semi-urban area of northern Tamil Nadu: A mixed-method approach. *Journal of Family & Community Medicine*, 29(2), 132–137. [https://doi.org/10.4103/jfcm.jfcm\\_318\\_21](https://doi.org/10.4103/jfcm.jfcm_318_21)
  44. Organisation for Economic Co-operation and Development. (n.d.). *Sustainable consumption*. OECD. Retrieved July 27, 2025, from <https://www.oecd.org/en/topics/sustainable-consumption.html>
  45. Patidar, J., Pandey, A., & Yadav, B. L. (2024). Study on market dynamics and trends in India's organic crop sector. *International Journal of Multidisciplinary Research in Science, Engineering and Technology*, 7(6), Article 0706023. [https://www.ijmrset.com/upload/23\\_Study.pdf](https://www.ijmrset.com/upload/23_Study.pdf)
  46. Poddar, S. K. (2025, May 27). *The price of green: Why sustainable choices must be made affordable in India*. Impact and Policy Research Institute (IMPRI). <https://www.impriindia.com/insights/sustainablechoicesmadeaffordableinindia/>
  47. Ponnambalam, S. G., Sankaranarayanan, B., Karuppiah, K., Thinakaran, S., Chandravelu, P., & Lam, H. L. (2023). Analysing the barriers involved in recycling the textile waste in India using fuzzy DEMATEL. *Sustainability*, 15(11), 8864. <https://doi.org/10.3390/su15118864>
  48. Prakash, J. (2015). Consumption trends of processed foods among rural population selected from South India. *International Journal of Food and Nutritional Sciences*, 2(6), 1–6. <https://doi.org/10.15436/2377-0619.15.039>
  49. Press Trust of India (2025, June 14). *Faking 'green credentials' can hamper brand value; discourage sustainable shopping: IIM study*. The Economic Times.
  50. Qutubuddin, M. K. (2023, May 24). Fast fashion in India: The dark side of cheap clothes. Unsustainable Magazine. <https://www.unsustainablemagazine.com/fast-fashion-in-india/>
  51. Raj, G. (2022, March 9). *E-waste management in India and role of technology*. Invest India. Retrieved October 15, 2025, from <https://www.investindia.gov.in/team-india-blogs/e-waste-management-india-and-role-technology>
  52. Ray, S., & Nayak, L. (2023). Marketing sustainable fashion: Trends and future directions. *Sustainability*, 15(7), 6202. <https://doi.org/10.3390/su15076202>
  53. Reddy, Y. M., Methew, C., Suresh, & Kennedy, H. (2021). Social media: Internet trends in India and growth of social media in the recent times. *International Journal of Business Administration and Management Research*, 8(1), 20-24. <https://doi.org/10.6084/m9.figshare.14597682>
  54. Roach, B., Goodwin, N., & Nelson, J. A. (2023). Consumption and the consumer society [Teaching module]. Boston University, *Economics in Context Initiative*. [https://www.bu.edu/eci/files/2019/06/Consumption\\_and\\_the\\_Consumer\\_Society.pdf](https://www.bu.edu/eci/files/2019/06/Consumption_and_the_Consumer_Society.pdf)
  55. Sachs, J. D., Lafortune, G., Fuller, G., & Iablonski, G. (2025). Financing sustainable development to 2030 and mid-century: Sustainable Development Report 2025. SDSN; *Dublin University Press*. <https://doi.org/10.25546/111909>
  56. Sandwal, S. K., Jakhar, R., & Styszko, K. (2025). E-Waste Challenges in India: Environmental and Human Health Impacts. *Applied Sciences*, 15, Article 4350. <https://doi.org/10.3390/app15084350>
  57. Sengupta, D., Ilankoon, I. M. S. K., Kang, K. D., & Chong, M. N. (2023). Circular economy and household e-waste management in India. Part II: A case study on informal e-waste collectors (Kabadiwalas) in India. *Minerals Engineering*, 200, 108154. <https://doi.org/10.1016/j.mineng.2023.108154>
  58. Sharma, R. (2023). Revisiting the concept of sustainable consumption in Indian consumers: Delhi-NCR region. *International Journal of Scientific Research in Engineering and Management (IJSREM)*, 7(5), 1–12. <https://doi.org/10.55041/IJSREM22492>

59. Sharma, R. (2023). Sustainability as a way of life in Indian consumers: Then and now. *Effulgence*, 21(2), 37–42. Retrieved from [https://effulgence.rdias.ac.in/user/article\\_pdf/Artical\\_vol21\\_2\\_5.pdf](https://effulgence.rdias.ac.in/user/article_pdf/Artical_vol21_2_5.pdf)
60. Sharma, V. P., & Jain, D. (2011). High-value agriculture in India: Past trends and future prospects (Working Paper No. 2011-07-02). Indian Institute of Management Ahmedabad, *Research and Publication* Department. Retrieved from <https://www.iima.ac.in/sites/default/files/rnpfiles/21442132562011-07-02.pdf>
61. Siddhu, M., & Santosh, B. (2024). Textiles and sustainability: An Indian context. In Proceedings of the 2nd International Conference on Emerging Trends in Design & Arts (ICETDA), 2(2), pp. 31–40. Faculty of Design & Arts, Indian Institute of Craft & Design. <https://www.researchgate.net/publication/389216964> TEXTILES AND SUSTAINABILITY AN INDIAN CONTEXT
62. Soren, A. A., & Singh, S. (2025). An analysis of policies and implementation of environmental legislation and green governance in India. *The Rubrics: Journal of Interdisciplinary Studies*, 7(6), 26–43. <https://doi.org/10.5281/zenodo.15813536>
63. Suresh, A., Rajesh, I. D., & Chellattan Veettil, P. (2024). Trends in consumption of packed processed foods in India: Insights and implications (Research Note 62). *Transforming Agrifood Systems in South Asia* (TAFSSA), CGIAR. Retrieved from <https://cgspace.cgiar.org/server/api/core/bitstreams/324e072f-4475-4e5b-a32b-f5667ddc7d1f/content>
64. Switch Asia. (2015). *Switching India's consumption to fair and sustainable goods*. Retrieved October 15, 2025, from <https://www.switch-asia.eu/project/switching-indias-consumption-to-fair-and-sustainable-goods/>
65. Tiwari, R., Srivastava, S., Mishra, B. R., Kumar, A. K. S., Johnpaul, M., & Singh, R. (2025). From awareness to action: Evaluating the impact of environmental marketing campaigns on sustainable product adoption. *Advances in Consumer Research*, 2(4), 1038–1044.
66. United Nations. (1987). *Our common future: Report of the World Commission on Environment and Development* (A/42/427). World Commission on Environment and Development. Retrieved October 15, 2025, from <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>
67. United Nations, Department of Economic and Social Affairs. (2025, July 14). *The Sustainable Development Goals Report 2025*. United Nations. Retrieved October 15, 2025, from <https://unstats.un.org/sdgs/report/2025/The-Sustainable-Development-Goals-Report-2025.pdf>
68. United Nations Environment Programme. (2021, June 18). *Sustainable consumption and production policies*. United Nations Environment Programme. Retrieved October 15, 2025, from <https://www.unep.org/explore-topics/resource-efficiency/what-we-do/sustainable-consumption-and-production-policies>
69. United Nations Partnership for Action on Green Economy. (2025, January). *New Eco-mark Rules: a Significant Advancement for India's Sustainability Effort*.
70. Willer, H., Schlatter, B., & Trávníček, J. (Eds.). (2023). *The world of organic agriculture: Statistics and emerging trends 2023* (Report No. 1254). Research Institute of Organic Agriculture FiBL. Retrieved October 15, 2025, from <https://www.fibl.org/fileadmin/documents/shop/1254-organic-world-2023.pdf>