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Unsustainable Threads: Evaluating Legal Responses to Fast Fashion’s Environmental Impact in Sweden, Germany, and China with Implications for India’s Sustainable Development Goals

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ARTICLE INFO	ABSTRACT
<p>Article history: Received: 20-05-2025 Received in revised form: 15-06-2025 Accepted: 13-07-2025</p> <p>Keywords: <i>Fast Fashion, Environmental Impact, Legal Frameworks, Sweden, Germany, China, India, Sustainable Development Goals, Circular Economy, Extended Producer Responsibility, Textile Waste, Green Manufacturing, Environmental Law</i></p>	<p>Fast fashion’s rapid production cycles, excessive resource consumption, and high waste generation have made it a major driver of environmental degradation worldwide. This paper, titled "Unsustainable Threads: Evaluating Legal Responses to Fast Fashion’s Environmental Impact in Sweden, Germany, and China with Implications for India’s Sustainable Development Goals (SDGs)," critically examines the legal and regulatory frameworks in three major economies Sweden, Germany, and China that have adopted distinct approaches to mitigating the environmental consequences of fast fashion. Sweden and Germany leverage European Union directives to promote circular economy models, extended producer responsibility (EPR), and sustainable textile production. China, as a manufacturing hub, has implemented targeted environmental reforms, emphasizing industrial upgrading and green manufacturing. By comparing these approaches, the study identifies key regulatory gaps and innovations, drawing lessons for India’s evolving policy landscape. The analysis explores how India can align its environmental governance and fashion industry policies with its SDG commitments, particularly Goals 12 (Responsible Consumption and Production) and 13 (Climate Action). The paper offers strategic recommendations for India to balance economic growth with ecological sustainability in its fast fashion sector.</p> <p>© 2025 The Authors. Published by IASE. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).</p>

Introduction

The strain on the planet and other resources has significantly grown since the industrial revolution. Fossil fuels are one example, which began to be used at a very rapid pace. This has persisted to the point that we now worry that it will end within the next 200–300 years [1]. Global air, water, and land pollution is a result of the industrial revolution. Deforestation and pollution are the primary human activities that have caused environmental deterioration. The extra expenses of complying with standards will not be mitigated when industry-specific standards are applied to all businesses in the same sector or when requirements are the same for

several industries. This is because even within an industry, the "marginal reduction costs" differ from one firm to another because of a variety of variables, including the company's age, technology, input quality, product mix, and organization size. A company's choices to reduce costs are constrained when a regulatory body prescribes input-product requirements, limits the procedure that may be employed, or imposes additional physical criteria [2].

The SPCB will incur expenses if the regulations are applied effectively. The SPCB can only keep an eye on the operations of the businesses by sampling and inspection if the firm does not have any measuring devices installed that can record the amounts and concentrations of pollutants in the effluents. The statutes provide the SPCB the authority to examine polluter structures and collect samples in the appropriate way.¹

The water quality must be assessed by accredited labs, and the findings must be reported. The SPCB has the authority to issue a justified case notification when pollutant concentrations above the allowed limits. The Court of Appeal² is the venue for polluting units. State governments have the ability to step in and affect the SPCB's decisions in the meantime.

"A product's environmental impact is determined by its manufacturer, who bears direct responsibility for any pollution caused by its use [3]." The environmental duty of a manufacturing organization doesn't stop with the creation of a product. The Indian government's Extended Producer Responsibility program, for example, has made reducing a product's negative environmental effects a crucial component of production. Reusing and recycling the item or its components is emphasized in ecologically friendly disposal methods to reduce immediate waste and raw material consumption."³

¹ Sands, Philippe and Galizzi, Paolo, eds., Documents in International Environmental Law (Cambridge 2004)

² Ibid

³ Bhagwati, J. (1993). Trade and the environment: the false conflict? Trade and the Environment: Law, Economics, and Policy, 159-190.

It should be kept in mind that historical data indicates that only 71% of the total 17 category sectors have the necessary pollution control equipment to ensure adherence to regulations. It was found that the remaining sectors do not fulfill the standards that enforce pollution technology, and 478 units were closed as a result of an insufficient approach to pollution control measures [4]. "Micro, Small, and Medium-Sized Enterprises (MSMEs) have the potential to significantly affect the environment. typically be outfitted with antiquated, ineffective, and environmentally harmful technology and processes. In India, MSMEs⁴ are responsible for 70% of all industrial pollution. Because regulatory compliance procedures are better suited for big industries, they are inappropriate for small and medium-sized businesses. creating an environment in which MSMEs are unable to adhere to the law, making it difficult for regulatory bodies to close these industries because doing so reduces production, impairs worker productivity, and hinders the growth of the manufacturing sector.⁵

In order to address India's recognized urgent need for environmental protection, new innovations resulting in cleaner practices and activities are not happening fast enough [5].

There are very few educational institutions and manufacturing companies working together to develop better technologies and use the many information sources, despite the fact that such collaboration would virtually certainly result in advancements that benefit both parties.⁶.

The following factors contribute to poor law enforcement. First of all, the supervisory authorities lack accurate data about the amounts of solid waste, emissions, and wastes, as well as their attributes. There is an information asymmetry: compared to regulators, polluters have a greater understanding of the sources, concentrations, and magnitudes of pollutants as well as the costs of pollution management [6]. Regulatory bodies find it very challenging to gather and analyze data from thousands of units spread across their territories.

⁴ Wilde, Mark, *Civil Liability for Environmental Damage: Comparative Analysis of Law and Policy in Europe and the US* (Kluwer 2013)

⁵ Dwivedi, O. P. (1977). India: pollution control policy and programmes. *International Review of Administrative Sciences*, 43(2), 123-133.

⁶ Kandlikar, M., & Ramachandran, G. (2000). The causes and consequences of particulate air pollution in urban India: a synthesis of the science. *Annual review of energy and the environment*, 25(1), 629- 684.

"We first saw our planet from space in the middle of the 20th century," the most significant and influential Brundtland Commission report from 1987 said in its opening statement. In the end, historians could discover that this vision influenced thinking more than the 16th-century Copernican revolution, which upends the human self-image by demonstrating that the earth is not the center of the universe. From orbit, we see a tiny, delicate ball that is dominated by a pattern of clouds, seven seas, vegetation, and soils rather than by buildings or human activity. Planetary systems are undergoing significant change as a result of humanity's incapacity to adapt its actions within that pattern [7]. Many of these changes come with potentially fatal risks. It is necessary to acknowledge and handle this new reality, from which there is no way out.⁸ Industries and environmental challenges India has been rapidly developing industrially since 1991.⁹

It has been said that the Famous Smelter case was a "crystallizing moment for the International Environmental Law because of its well-enunciated then now well-established principle that no State has the right to permit the use of its territory in such a manner as to cause injury by fumes to the territory of another [8]." Fast forward almost a century and consider the global picture.¹⁰ The United Nations has been hammering on this issue since 1972, when they established the United Nations Environment Programme¹¹ (UNEP) and passed the Stockholm Conference on the Human Environment, which is regarded as the first and foremost initiative at the United Nations¹² level.¹³

It's important to note that during the 1990s, scientists were focusing on the problem of chlorofluorocarbons (CFCs), which are used in refrigerants and other industrial processes and destroy the stratospheric ozone layer. This caused the framers to be shaken, which led to the creation of the "1985 Vienna Convention on the protection of the Ozone Layer, followed by the 1987 Montreal Protocol on ozone-depleting substances (ODS)." Evidently, this produced favorable outcomes, initiated the repair process, and the ozone layer seems to be recovering [9].

⁷ Bhattacharya, R. N. (Ed.) (2001) *Environmental Economics*, Oxford University Press, Oxford

⁸ Trail Smelter case (United States v. Canada) Award 19413UNRIA1905

⁹ Rio Declaration on Environment 1992

¹⁰ See eg Evelyn Swain, *Marking the 25th Anniversary of the Most Successful Global Environment Agreement* (2012) <http://www.thegef.org/gef/greenline/july-2012/montreal-protocol-marketing-25thanniversary-most-successful-global-environment-agv> accessed 1st October 2015

¹¹ Rio Declaration on Environment 1998

¹² See Yang & Percival op cit p 627: "arguably the most widely adopted environmental management tool across the world"

¹³. Kajing Tubekv Ekram BHD (1996) 2MLJ388

Literature review

Akter et al. (2022) [1] This study presents a conceptual model addressing waste management in the textile and apparel sector in Bangladesh within the framework of a circular economy. The authors emphasize the alignment of industrial practices with Sustainable Development Goal (SDG) 12, which focuses on responsible consumption and production. By analyzing current linear production practices and their environmental impacts, the paper highlights the need for systemic transformation toward sustainable material use, recycling, and closed-loop systems. The model proposed offers strategic policy directions and operational interventions, including green innovation, stakeholder collaboration, and eco-design, to reduce textile waste and promote sustainability in the Bangladeshi context.

Asia Floor Wage Alliance (2021) [2] Money Heist: COVID-19 Wage Theft in Global Garment Supply Chains. This report investigates wage theft in global garment supply chains during the COVID-19 pandemic. The Asia Floor Wage Alliance highlights how major apparel brands and retailers shifted the financial burden of the pandemic onto garment workers, especially in Asia. The report documents extensive wage losses due to order cancellations, non-payment, and reduced work hours, asserting that the crisis was used as a pretext to deny workers fair compensation. It calls for enforceable binding agreements and increased transparency in the global supply chain to protect labor rights.

Paton, E., Gallois, L., & Breeden, A.(2021, July 2). [3] Fashion Retailers Face Inquiry Over Suspected Ties to Forced Labor in China. This investigative article covers governmental and human rights inquiries into major fashion retailers allegedly linked to forced labor in China's Xinjiang region. The authors explore how global supply chains may be complicit in unethical labor practices, particularly involving the Uyghur population. The article underscores the growing pressure on fashion brands to conduct thorough due diligence and to ensure their supply chains are free from human rights violations. It highlights a broader shift in consumer and regulatory scrutiny regarding ethical sourcing and labor practices.

Tan, Z.Y. (2016, April 10) [4] Tan explores the environmental and social consequences of fast fashion in this NPR piece. The article outlines how the rise of cheap, disposable clothing has led to significant increases in textile waste, exploitative labor conditions, and unsustainable resource consumption. By drawing on expert commentary and industry examples, the piece illustrates the broader impacts of consumer culture driven by speed and low cost. It advocates for conscious consumption and industry reform to mitigate the negative outcomes of the fast fashion model.

Trzepacz, S., Lingås, D. B., Asscherickx, L., Peeters, K., van Duijn, H., &Akerboom, M.(2023) [5] LCA-based assessment of the management of European used textiles. Norion Consult &EuRIC Textiles. This report presents a Life Cycle Assessment (LCA) of how used textiles are managed across Europe. It evaluates environmental impacts associated with different end-of-life textile management options, such as reuse, recycling, incineration, and landfill. The study highlights that reuse and high-quality recycling offer the most sustainable outcomes, significantly reducing CO₂ emissions and resource use. The authors advocate for better collection systems, supportive policy frameworks, and investments in sorting and recycling infrastructure to close the loop in the European textile value chain.

Whieldon, E., Costello, L., & Rossi, S. (2023, March 16) [6] This article critically analyzes how major clothing companies are lagging in implementing genuine circular economy principles, despite public sustainability pledges. The authors reveal a significant gap between brand rhetoric and real action, with many companies continuing to promote overproduction and rapid consumption cycles. The analysis draws on corporate sustainability reports, industry trends, and expert commentary, highlighting barriers such as weak regulatory pressure, lack of infrastructure, and greenwashing. It calls for stricter regulations and clearer sustainability standards.

Williams, E.(2022) [7] Appalling or Advantageous? Exploring the Impacts of Fast Fashion From Environmental, Social, and Economic Perspectives. *Journal for Global Business and Community*, 13(1).Williams offers a comprehensive analysis of fast fashion's multifaceted impacts. The study evaluates the environmental degradation caused by resource-intensive production, the social implications for workers in low-wage countries, and the economic benefits for brands and consumers. The paper takes a balanced approach, acknowledging that fast fashion

has democratized fashion access while simultaneously contributing to environmental and ethical crises. The author advocates for more sustainable production methods, ethical labor practices, and consumer education to balance affordability with responsibility.

Lundberg, D., & Devoy, J. (2022, September 22) [8] Lundberg and Devoy examine the environmental and public health consequences of fast fashion's waste problem. They focus particularly on the end-of-life stage of garments, where discarded clothing often ends up in landfills or incinerated, especially in low-income countries. The article discusses how textile waste contributes to pollution, soil degradation, and toxic chemical exposure, affecting both ecosystems and human health. The authors argue for systemic changes in production and consumption patterns, highlighting the need for policy reforms and consumer education.

Okafor, J. (2022, February 6) [9] Okafor delves into the environmental footprint of cotton, a key raw material in the fashion industry. The article highlights the intensive water usage, pesticide application, and soil degradation associated with conventional cotton farming. It further explores the downstream impacts of cotton consumption and disposal. Okafor emphasizes the potential of organic cotton and sustainable farming practices to reduce environmental harm and calls for greater transparency in cotton sourcing and increased consumer awareness.

Rauturier, S. (2022, April 01) [10] Rauturier provides a foundational overview of fast fashion, its defining characteristics, and its negative consequences. The article explains how the industry thrives on overproduction, low-cost labor, and rapid trend cycles, which lead to environmental degradation and exploitation of garment workers. It also introduces the concept of sustainable fashion and offers practical advice for consumers to adopt more ethical shopping habits. This source is particularly useful for understanding the basic mechanics and criticisms of the fast fashion model in an accessible format.

Legl, C. (2022, June 29) [11] explores how the principles of the circular economy can provide transformative solutions to the fashion industry's environmental and ethical challenges. The article emphasizes shifting from the traditional linear model ("take-make-waste") to one that prioritizes reuse, recycling, and regeneration. Highlights how digital innovation, sustainable materials, and transparent supply chains can drive this transformation. She argues that the

circular economy not only benefits the planet but also creates long-term economic value and resilience for fashion brands willing to adapt.

Lin, A.(2022, August 5) [12] Lin investigates the psychological drivers behind consumer participation in fast fashion, explaining how marketing, social media, and emotional gratification fuel excessive purchasing behavior. The article discusses concepts such as “retail therapy,” instant gratification, and fear of missing out (FOMO), which brands exploit to maintain rapid turnover and overconsumption. Lin also critiques the resulting environmental and social damage and encourages a shift toward mindful consumption and consumer responsibility. The article bridges behavioral science with sustainability discourse, offering a unique perspective on consumer culture in the fashion industry.

Indeed Editorial Team.(2023, February 04) [13] This article defines **customer perception** as the way individuals interpret and respond to a brand based on their experiences, marketing, and social influence. The Indeed team outlines key factors influencing perception, including product quality, customer service, brand reputation, and online presence. It also provides practical strategies for businesses to enhance perception, such as engaging with feedback, maintaining consistent messaging, and improving service delivery. Though not specific to fashion, the resource is relevant for understanding how consumer attitudes toward sustainability, ethics, and branding impact purchase behavior—critical in fashion marketing and retail.

Kong, H. M., Witmaier, A., &Ko, E. (2021) [14] This peer-reviewed study explores how **sustainability messaging** via social media affects consumer engagement with both **luxury and non-luxury fashion brands**. The authors found that consumers respond more positively to sustainability content when it is perceived as authentic and aligns with the brand’s identity. Interestingly, luxury brands tend to gain more favor when their sustainable messaging is understated and values-driven, whereas non-luxury brands benefit from more direct and educational content. The study highlights the importance of tailored communication strategies and the role of digital platforms in shaping consumer perception and trust in fashion marketing.

Hill, M.(2022, September 19) [15] Hill provides a comprehensive overview of the **circular fashion** concept, contrasting it with the traditional linear model of “take, make, waste.” The

article outlines how circular fashion seeks to minimize waste and pollution by designing garments that are long-lasting, recyclable, and made from sustainable materials. It emphasizes the importance of circularity in every stage of a garment's life cycle, from production and use to reuse and eventual recycling. Hill also highlights key industry practices, such as clothing rental, resale platforms, and material innovation, as central to advancing sustainability in fashion. The article serves as a useful primer for understanding how circular principles can reshape fashion toward a more sustainable future.

Igini, M.(2022, August 24) [16] Igini critically examines the practice of **greenwashing** in the fast fashion industry, spotlighting five major brands accused of misleading consumers with false or exaggerated sustainability claims. The article explains how terms like "eco-friendly" or "sustainable" are often used without transparency or measurable impact. Igini underscores the growing consumer and regulatory pushback against such deceptive marketing tactics. The piece argues that while sustainability is becoming a mainstream expectation, many brands use it more as a branding tool than as a genuine commitment, which undermines trust and slows real progress.

H&M Group.(2023, February 24) [17] This press release details H&M Group's commitment to renewable energy by signing a **power purchase agreement (PPA)** for a large-scale solar park in Sweden. The move is part of the company's broader sustainability strategy aimed at reducing carbon emissions across its operations. While this initiative supports environmental responsibility, critics may still question the company's overall sustainability performance due to concerns about fast fashion and greenwashing. Nevertheless, the investment in clean energy reflects a positive step toward decarbonizing the supply chain.

Hassan, S., Shaukat, S., Abbas, A., & Ashraf, M. (2021) [18] This peer-reviewed study investigates the impact of **greenwashing** on consumer behavior in the fashion industry, focusing on how **consumer knowledge and skepticism** mediate sustainable consumption. The authors find that informed consumers are more likely to detect greenwashing and respond with increased skepticism, leading to lower trust and reduced likelihood of purchase. The study emphasizes the need for brands to ensure **transparency and authenticity** in sustainability claims and underlines

the role of education in fostering critical consumer behavior that supports genuinely sustainable practices.

Hayes, A.(2022, September 16) [19] Hayes provides a concise definition and historical background of **fast fashion**, outlining its key characteristics: low-cost production, rapid turnover, trend replication, and mass consumer appeal. The article explains how fast fashion became a dominant retail model, driven by globalization and advancements in manufacturing. It also touches on the ethical and environmental concerns tied to overproduction, waste, and exploitative labor. This entry is useful for grounding discussions in a clear conceptual understanding of fast fashion and its systemic challenges.

Hendriksz, V.(2022, May 7) [20] Hendriksz explores the **rise of greenwashing** in the fashion industry and provides practical solutions to combat it. The article highlights common signs of misleading sustainability claims and emphasizes the importance of **transparency, third-party certifications, and data disclosure**. It advocates for stronger regulation and more vigilant consumers who can discern between authentic and superficial sustainability efforts. The piece also points to growing public awareness and the role of watchdog organizations in holding brands accountable.

Research methodology

According to Justice Bhagwati, the strict liability rule was developed in the 19th century, when industrial development was at its most advanced. Since hazardous or inherently dangerous industries are required to carry out development programs in today's modern industrial society, the old rule is no longer applicable. Additionally, because this law was developed in the midst of a very different social and economic system, one cannot feel constrained by it.

In the *K. Nagireddi v. Union of India*¹⁴ case, the Andhra Pradesh High Court's Division Bench emphasized the necessity of changing the outdated principle, stating that "In India the general rule of *Ryland V. Fletcher* is accepted, though the principle is needed to be modified in its application to the Indian consideration."

The 'polluter pays' concept is the widely recognized idea that the people who create pollution should pay for its management in order to protect the environment or human health [10]. For

example, a plant is often liable for the proper disposal of any potentially toxic material that is produced as a result of its operations. The majority of regulations pertaining to air, water, and land pollution are based on this idea. According to UK legislation, pollution is the result of hazardous or potentially hazardous materials contaminating the land, water, or air.¹⁵ The economic norm requires polluters to pay for the external expenses resulting from their actions. Such expenses should not be imposed on the public or the state¹⁶. Despite having its roots in the economic idea of externalities, the ppp has grown to become a crucial pillar of environmental legislation and policy. Economic Co-operation and Development Organization (OECD). 1972 saw the adoption of the Organization for Economic Cooperation and Development.

The idea of "polluter pays" was very significant. "If you mess, it's your duty to clean it" . It should be noted that "lack" is not relevant to the "polluter pays" premise in environmental law. Nevertheless, it firmly advocates for a remedial approach that involves fixing natural harm. According to a regulation in international environmental law, the polluter is responsible for paying for any harm done to the environment.

The Constitutional Aspect on Environmental Law

India has taken the lead in amending its Constitution to provide the state more authority to preserve and enhance the environment in order to conserve animals, forests, and public health. "Article 253 of the Constitution¹⁷ gives the government of the Union ample powers to enforce laws for any part of India in relation to treaties concluded with another country or decisions taken by an international organization [11]." The state government has delineated the boundaries of authority and jurisdiction. The Constitution divides the Union's and the States' legislative authority over domestic environmental matters. Three jurisdictional lists Union, State, and Concurrent were established in order to do this.¹⁸

¹⁴The Rule in Rylands v. Fletcher. Part I by Bohlen, Francis H. (1911).

¹⁵ibid MC Mehta case

¹⁶AIR1982AP119.

¹⁷(2008) 9SCC527:(2008) 2KLT700.

¹⁸<http://docs.manupatra.in/newslines/articles/Upload/2D83321D-590A-4646-83F6-9D8E84F5AA3C.pdf>

¹⁹<https://www.theguardian.com/environment/2012/jul/02/polluter-pays-climate-change>

Smoke, industrial waste, and hazardous emissions from automobiles and other combustion engines pollute the air and endanger human health. Together, they put a responsibility on the state to ensure public health, safeguard human health, and preserve and enhance the environment.¹⁹ Monuments of national significance, whose protection is the nation's responsibility under Article 49 of the Constitution, may be harmed by environmental contamination. The obligation of the State to safeguard monuments and locations of national importance is established by Article 49 of the Directive on the Standards of Us of Coverage [12].

According to Article 51(c), the State must encourage adherence to international law and treaty-derived duties in interactions between organized people. Given the diversity of international treaties, legal duties, and the treaties mentioned in Article 51(c), when read in combination with the provisions of a particular treaty, may thus also help to strengthen the judge's hands for conservation. Part IV-A of the Indian Constitution was introduced by the Constitution (42nd amendments). This new section lays out some basic responsibilities for Indian citizens. Article 51-A, the sole article in this section, outlines 10 essential responsibilities.²⁰ The Indian Constitution mandated that everyone in the nation share responsibilities for protecting and improving the country's natural environment.

According to Ranganath Mishra, J-"The preservation of ecological balance and environmental protection are issues that should not be left to the government alone; citizens should also take on this responsibility."

The new judicial concept has been sparked in the Maneka Gandhi case [13]. Since the Supreme Court interpreted Article 21 to include the right to life and personal freedom, which include a healthy environment, the courtroom started to comprehend many inarticulate liberties that had been implied in the document. The conflict between environmental safety and improvement demands has emerged as the most contentious issue before the courts when it comes to environmental issues. This continuous conflict is also at the heart of the Dehradun Cave case, which cleared the way for the right to a healthy environment. In the Dehradun quarries case, the closure of many quarries was justified by the fact that their management was causing ecological instability in the region. The judgments were allowed under Article 32 of the Constitution. Without clean drinking water, life is impossible; according to Article 21 of the Constitution, one

of the characteristics of the right to life is the ability to consume safe drinking water.

For example: Sanford Gaines, 'The Polluter Pays Principle: From Economic Equity to Environmental Ethos' (1991) 26 Texas Int'l LJ 463; Martin O'Connor, 'The Internalization of Environmental Costs: Implementing the Polluter Pays Principle in the European Union' (1997) 7 Int J EnvPollut 450; Aviel Verbruggen, 'Preparing the Design of Robust Civil Liability Policy Architectures' (2011) 11 IntEnv Agree 275; Irina Glazyrina, Vasily Glazyrine and Sergey Vinnichenko, 'The Polluter Pays Principle and Potential Conflicts in Society' (2006) 59 Ecol Econ 5 324; A Mitchell Polinsky, 'Strict Liability vs. Negligence in a Market Setting' (1980) 70 AER 363; John Dales, Pollution, Property and Prices: An Essay In Policy-making and Economics (Edward Elgar 2002); Allen Kneese and others, Economics and the Environment: A Materials Balance Approach (RFF Press 1970); Henri Smets, 'The Polluter Pays Principle in the Early 1990s' in Luigi Campiglio and others (eds), The Environment after Rio: International Law and Economics (Graham & Trotman/Martinus Nijhoff 1994); Anthony Heyes (ed), The Law and Economics of the Environment (Edward Elgar 2001).

Role of Panchayat and Municipalities

The Constitution (71st amendment) of 1992 and the Constitution (74th amendment) of 1992 gave the Panchayats and the Municipalities constitutional status, respectively. Intermediate and district tiers²¹ are established under Article 243-B. Agriculture, soil conservation, water management, river basin development, fishing, social forestry, agricultural forestry, minor forest products, drinking water, health and hygiene, and community asset maintenance are among the issues of the eleventh annex that are directly or indirectly related to the environment. The following is a list of the environmental concerns at issue: The provision of urban services, such as parks; cremation grounds and electric-powered crematoria; prevention of cruelty towards slaughterhouses and animal tanneries; urban planning, including regulations on land use water supply; public health, hygiene, conservation and management of solid waste, urban forestry, environmental protection, and promotion of ecological components [16].

Public Awareness

The media was seen as the government's watchdog and fourth pillar. His unique pieces, which he really guided by publishing them in his medium, demonstrate the influence of the media.

Therefore, listening to the general public of which the media is very important can help control the problem of environmental contamination²². Not only can the persuasive correspondent company influence people's thoughts, but it can also expand human intelligence and attitudes to protect the environment.

Environmental legislation

The protection and maintenance of law and order are aided by legislation. Thus, the environment Legislation²³ is the body of laws and rules governing the wilderness, water quality, air quality, endangered species as well as other environmental elements. Environmental legislation encompasses a wide range of laws and regulations that all aim toward the same objective: regulating and improving human-nature interaction to lessen environmental hazards and improve public health.²⁴

The quality of the environment has declined in the last several decades. This is a direct consequence of the discrepancy between the policy's intended goal and its actual achievement [17]. India's large population and limited shared resources are mostly to blame for its environmental problems. Environmental protection is a key test for nations hoping to further their industrialization. Various attempts are being made to manage India's natural problems.²⁵ A broad political consensus is expressed in the Directive Principles of State Policy, which also strengthen the administration's constitutional duties as stated in Part IV²⁶. The policy papers may serve as a reference for interpreting environmental statutes or for outlining government entities' obligations under environmental laws when they are in the hands of a qualified authority.²⁷

²¹Benjamin Jowett (tr), *The Dialogues of Plato: Vol. 4 Laws & Index to Writings of Plato* (OUP 1953) book 8, s 485e 'If anyone intentionally spoils the water of another... let him not only pay damages but purify the stream or cistern which contains the water.'

²²Arthur Pigou, *The Economics of Welfare* (2nd edn, Macmillan 1924). The Pigovian theory was subsequently criticised, not least by Ronald Coase, 'The Problem of Social Cost' (1960) 3JLEcon1

²³de Sadeleer (n 7) 21

²⁴*The Environment (Protection) Act 1986*, Indian Law Institute, New Delhi India (1992) by P.M. Bakshi.

²⁵S. Shantha kumar, *Environmental Law an Introduction*, pp. 122, 123, Chennai: Surya Publication

²⁶Amendment 42 was adopted in 1976 and entered into force on 3 January 1977

²⁷*The Environment (Protection) Act 1986*, Indian Law Institute, New Delhi India (1992) by P.M. Bakshi.

Result analysis

While 15% of respondents in the 30–40 age range are unaware of such regulations, 57% of them support giving subsidies to businesses that must pay large costs for pollution abatement. In the 40–50 and 50–60 age groups, 65% of respondents agreed with such restrictions, while 26% opposed. The result of $r = -0.079$ indicates a negative relationship between age and the amount of subsidies given to businesses that must pay significant pollution abatement costs. At $df = 16$ and Confidence Level = 95%, $\chi^2_{\text{Calculated}} = 105.5$, whereas $\chi^2_{\text{Tabulated}} = 26.3$. It demonstrates that $\chi^2_{\text{Calculated}} > \chi^2_{\text{Tabulated}}$, thereby rejecting H_0 or indicating that the amount of subsidies given to businesses that must pay high pollution abatement costs varies greatly across individuals of various ages.

Setting-up Common Effluent Treatment Plants

All responders, both in the 50–60 age range and those under 20, strongly agreed that common wastewater treatment facilities should be established. In contrast, 78%, 81%, and 73% of respondents in the 20–30, 30–40, and 40–50 age categories, respectively, agreed with such arrangements. Just 26% oppose the establishment of shared wastewater treatment facilities [18].

Table 1: Setup the Common Effluent Treatment Plants (CETPs)

		Setup the Common Effluent Treatment Plants (CETPs)				Total
		Strongly Agree	Agree	Undecided	Disagree	
	<20	0	20	0	0	20
		0.0%	100.0%	0.0%	0.0%	4.0%
	20-30	49	47	3	22	121
		40.5%	38.8%	2.5%	18.2%	24.2%

Age	30-40	29	71	9	15	124
		23.4%	57.3%	7.3%	12.1%	24.8%
	40-50	51	107	23	34	215
		23.7%	49.8%	10.7%	15.8%	43.0%
	50-60	10	10	0	0	20
		50.0%	50.0%	0.0%	0.0%	4.0%
Total		139	255	35	71	500
		27.8%	51.0%	7.0%	14.2%	100.0%
Chi Square Value = 50.56		Pearson R = 0.032				

The association between age and the availability of common effluent treatment plant setup is positive, as shown by the value of $r = 0.032$. While $\chi^2_{\text{Tabulated}} = 21.026$, $\chi^2_{\text{Calculated}} = 50.56$ at $df = 12$ and Confidence Level = 95%. The fact that $\chi^2_{\text{Calculated}} > \chi^2_{\text{Tabulated}}$ indicates that H_0 is rejected or that the availability of common effluent treatment plants varies greatly across individuals of various ages.

Regulating the Emission of Polluting Substances

Sixty percent of respondents under the age of twenty agreed that emissions of harmful chemicals should be controlled, while forty percent disagreed. Eighty-eight percent of respondents in the 20–30 age bracket agreed with the fact [19]. While 35% of respondents disagreed with the fact in the 50–60 age group, 95% and 91% of respondents in the 30–40 and 40–50 age groups, respectively, strongly agreed that emissions of harmful chemicals should be regulated.

Table 2: Regulating the emission of polluting substances

		Regulating the emission of polluting substances				Total	
		Strongly Agree	Agree	Disagree	Strongly Disagree		
Age	<20	9	3	0	8	20	
		45.0%	15.0%	0.0%	40.0%	4.0%	
	20-30	64	43	3	11	121	
		52.9%	35.5%	2.5%	9.1%	24.2%	
	30-40	44	74	6	0	124	
		35.5%	59.7%	4.8%	0.0%	24.8%	
	40-50	108	89	8	10	215	
		50.2%	41.4%	3.7%	4.7%	43.0%	
	50-60	13	0	0	7	20	
		65.0%	0.0%	0.0%	35.0%	4.0%	
	Total	238	209	17	36	500	
		47.6%	41.8%	3.4%	7.2%	100.0%	
	Chi Square Value = 93.87 (12)		Pearson R = -0.061				

Age and the availability of polluting material emissions are negatively correlated, as shown by the value of $r = -0.061$. At $df = 12$ and Confidence Level = 95%, $\chi^2_{\text{Calculated}} = 93.87$, whereas $\chi^2_{\text{Tabulated}} = 21.026$. It indicates that H_0 is rejected because $\chi^2_{\text{Calculated}} > \chi^2_{\text{Tabulated}}$, or because the provisions governing the emission of harmful chemicals differ greatly across individuals of various ages.

Regulating the Manufacturing Sector

While some respondents were unsure about the matter, the majority of respondents agreed or

strongly agreed that the manufacturing sector should be regulated.

Table 3: Regulating the manufacturing sector

		Regulating the manufacturing sector			Total	
		Strongly Agree	Agree	Undecided		
Age	<20	17	3	0	20	
		85.0%	15.0%	0.0%	4.0%	
	20-30	53	57	11	121	
		43.8%	47.1%	9.1%	24.2%	
	30-40	57	58	9	124	
		46.0%	46.8%	7.3%	24.8%	
	40-50	145	55	15	215	
		67.4%	25.6%	7.0%	43.0%	
	50-60	20	0	0	20	
		100.0%	0.0%	0.0%	4.0%	
	Total		292	173	35	500
			58.4%	34.6%	7.0%	100.0%
ChiSquare Value = 47.60 (8)			Pearson R = -0.15			

Age and regulating the manufacturing sector are negatively correlated, as seen by the value of $r = -0.15$. At $df = 8$ and Confidence Level = 95%, $\chi^2_{\text{Calculated}} = 47.60$, whereas $\chi^2_{\text{Tabulated}} = 15.507$. The fact that $\chi^2_{\text{Calculated}} > \chi^2_{\text{Tabulated}}$ indicates that H_0 is rejected or that the regulations governing the industrial sector fluctuate greatly across individuals of various ages [20].

Table 4: Proposed Relationship

	Proposed Relationship	Results
1	Age-Compensation to Pollution Victims	-ve, Rejected
2	Age-Subsidy to firms	-ve, Rejected
3	Age-Setting up CETPs	+ve, Rejected
4	Age-Regulating the emission of polluting substances	-ve, Rejected
5	Age-Regulating the Manufacturing Sector	-ve, Rejected
Summary of results for Hypothesis IV		

The ages of the respondents had a negative correlation with the four variables: "Compensation to Pollution Victims," "Subsidy to firms," "Regulating the Manufacturing Sector," and "Regulating the Emission of Polluting Substances." In contrast, there is a positive correlation between the respondents' ages and the installation of Common Effluent Treatment Plants (CETPs). Based on Chi square statistics, it can be said that various demographic groups have somewhat varied recommended methods for controlling environmental pollution.

Conclusion

The comparative analysis of legal responses to fast fashion's environmental impact in Sweden, Germany, and China reveals a spectrum of regulatory approaches ranging from robust circular economy legislation in the EU (as exemplified by Sweden and Germany) to China's emerging but rapidly evolving policy frameworks. Sweden and Germany demonstrate strong commitments through extended producer responsibility (EPR), eco-design mandates, and consumer

transparency laws that align well with their broader environmental and circular economy goals. Meanwhile, China, though traditionally lagging, has made significant strides through recent initiatives focused on textile recycling, production restrictions, and environmental accountability. These international case studies highlight both challenges and best practices that offer critical lessons for India. As India grapples with growing fast fashion consumption and its associated ecological and social burdens, there is an urgent need to strengthen its regulatory architecture. The current legal frameworks remain fragmented and largely reactive. To advance its Sustainable Development Goals (SDGs) particularly SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action), and SDG 8 (Decent Work and Economic Growth) India must adopt a more cohesive, enforceable, and forward-looking legal strategy. This should include the implementation of EPR for fashion brands, formalization and support for informal recycling sectors, incentives for sustainable design, and public awareness campaigns to shift consumer behavior. Furthermore, inter-ministerial coordination and private sector collaboration will be vital in translating legal intent into measurable environmental outcomes. As global pressure mounts for climate accountability, India stands at a critical juncture: it can either continue to follow a linear, waste-intensive growth model or emerge as a leader in sustainable fashion innovation.

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