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REGULATING THE ENVIRONMENTAL IMPACTS OF FAST FASHION IN EGYPT: COMPARATIVE LESSONS FROM EUROPEAN, POST-SOCIALIST AND GLOBAL SOUTH MODELS

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ABSTRACT

Background: *The fast fashion industry has become a defining feature of modern consumer culture, yet it is one of the most environmentally harmful sectors worldwide, contributing to water pollution, textile waste, and greenhouse gas emissions. As one of the largest textile and garment producers in the Middle East and Africa, Egypt faces serious challenges in reconciling the industry's economic importance with the urgent need for environmental protection and sustainable development. This article examines the environmental risks associated with fast fashion production and consumption in Egypt and evaluates whether the existing legal regime adequately addresses these challenges.*

Method: *The article adopts a doctrinal and comparative legal methodology. It analyses Egypt's Environmental Law No. 4 of 1994 and Waste Management Law No. 202 of 2020, alongside relevant executive regulations, national strategies, and policy instruments. It addresses these laws within broader sustainability frameworks, including the Sustainable*

Development Strategy: Egypt Vision 2030 and the United Nations Sustainable Development Goals (SDGs). It draws comparative insights from the European Union, Poland, and Bangladesh. The analysis focuses on regulatory mechanisms such as extended producer responsibility (EPR), circular economy policies, and environmental transparency requirements.

Results and Conclusions: *The analysis reveals that although Egypt has established a comprehensive environmental legal regime, significant gaps persist in enforcement, industrial compliance, corporate accountability, and consumer awareness. Existing laws do not sufficiently address the environmental impacts of the fast fashion industry, nor do they impose effective obligations on manufacturers regarding waste reduction or sustainable practices. The comparative analysis informs several reform proposals for Egypt's environmental regulation of the fashion sector. This includes strengthening sector-specific environmental regulation for textile production, enhancing institutional enforcement capacity, introducing extended producer responsibility mechanisms, and expanding international cooperation in sustainable textile production. These measures could significantly reduce the environmental footprint of Egypt's fashion industry while improving compliance with international environmental sustainability standards.*

1 INTRODUCTION

To keep pace with rapidly changing fashion trends and provide affordable apparel for all consumer categories, fast fashion companies rely on extremely low cost production methods and materials. This results in the production of modest-quality products. These companies know such garments will be worn only a limited number of times, which directly influences their decisions about quality standards at every stage of production.[1]

This approach by fast fashion companies has caused severe environmental damage on multiple levels. One of the biggest problems is the use of harmful synthetic textiles, especially polyester, because of its low cost; it is a major source of microplastic pollution, harms oceans and marine life, and contaminates drinking water. These companies also dispose of unsold surplus products by incineration, leading to massive air pollution that contributes to climate change. Furthermore, thousands of tonnes of fabrics are wasted during the design and production phases before the clothes ever reach consumers.[2]

As a result, the fashion industry is one of the largest contributors to environmental degradation, and its harmful impact is further exacerbated by the rise of fast fashion companies that rely on accelerated production methods and encourage excessive

1 Alexandra L Bernard, 'The Hidden Costs Behind Cheap Clothing: Addressing Fast Fashion's Environmental and Humanitarian Impact' (2023) 25(3) Vanderbilt Journal of Entertainment and Technology Law 542.

2 ibid 544-5. See also Katrina L Wilkinson, 'A Legal Solution to the Fast Fashion Problem' (2021) 11(2) Arizona Journal of Environmental Law and Policy 186-7.

consumption. Consequently, this industry plays a pivotal role in climate change, crop endangerment, and the increasing frequency of natural disasters.[3]

Because the textile and garment industry is one of Egypt's most prominent industrial sectors, it faces considerable challenges in balancing industrial growth, environmental preservation, and sustainable development. This study examines the legal framework governing environmental protection in Egypt and assesses its effectiveness in achieving this balance. It also explores mechanisms to align Egypt's fashion sector with national and international environmental sustainability standards.

This article aims to evaluate the effectiveness of Egypt's environmental legislative framework in regulating the environmental impacts of the fast fashion industry, to identify the main gaps in law and enforcement, and to develop reform proposals informed by comparative experience and sustainability standards. It addresses the following questions:

1. Which comparative international models and legal mechanisms, such as extended producer responsibility (EPR), circular economy measures and transparency obligations, can guide Egyptian legal reform in this sector?
2. To what extent does Egypt's current legal framework adequately regulate the environmental impacts of the fast fashion and textile industry? Adequacy shall be assessed by four criteria: the existence of sector-specific pollution control rules, the effectiveness of enforcement institutions, the presence of producer responsibility mechanisms, and the availability of transparency and access-to-information guarantees.
3. What gaps exist in enforcement, institutional capacity, and regulatory tools, and what legal and policy reforms can address these gaps?

This article argues that although Egypt has developed a relatively broad environmental legal regime, its ability to regulate the environmental impacts of fast fashion remains limited by weak enforcement capacity, the absence of producer responsibility mechanisms, and insufficient transparency obligations. The comparative analysis suggests that Egypt should adopt a more sector-specific regulatory approach combining pollution control, EPR, stronger monitoring, and transparency-based accountability.

Existing scholarship has examined the environmental impacts of fast fashion, greenwashing, circular economy regulation, and sustainable textile governance. However, these debates intersect less with Egyptian environmental law and the regulatory challenges facing textile-producing economies. This article contributes to the literature by connecting fast fashion regulation, comparative environmental governance, and Egyptian

3 Emma Sammons, '"Green" is the New Black: Enforcing Consumer Protection Laws Against Greenwashing in the Fashion Industry' (2024) 38(1) Emory International Law Review 200.

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environmental law, and by demonstrating how comparative regulatory analysis can inform national reform strategies in textile-producing economies.

Methodologically, this article relies primarily on doctrinal legal analysis supported by a comparative approach. The doctrinal component examines Egyptian environmental protection legislation, including statutory provisions, regulatory instruments, and the institutional structures responsible for environmental protection.

The comparative analysis focuses on three jurisdictions with distinct regulatory approaches in the global textile and fashion industry: the European Union, Poland as a post-socialist EU Member State, and Bangladesh as a major Global South textile manufacturing hub. The European Union was selected because it has developed one of the most advanced regulatory frameworks addressing the environmental impacts of textile production, particularly through circular economy legislation and EPR schemes. Poland illustrates how EU environmental law operates in a post-socialist governance context, where implementation capacity and institutional structures may differ from those of older Member States. Bangladesh was selected as a comparator because it is one of the world's largest textile manufacturing countries and faces significant environmental challenges related to industrial wastewater and pollution control in textile production. The article also refers to France, India, Turkey, Sweden, China, and South Korea as illustrative examples relevant to specific reform proposals for Egypt. These jurisdictions are not treated as full comparators but as policy illustrations supporting several proposed reforms. Examining these jurisdictions alongside Egypt allows the study to compare regulatory approaches across advanced regulatory systems, transitional legal environments, and manufacturing-oriented developing economies.

The comparative analysis focuses in particular on four analytical dimensions: regulatory frameworks governing textile-related environmental impacts, institutional enforcement capacity, mechanisms of corporate environmental accountability, and transparency and access to environmental information. In addition, the study includes a normative component that evaluates the effectiveness of existing legal frameworks and proposes regulatory reforms to strengthen environmental sustainability in Egypt's fashion industry.

In this article, "fast fashion" refers to an accelerated production and consumption model characterised by low-cost garments, short product lifecycles, and rapid turnover. The terms "textile industry" and "garment industry" are used when discussing production processes, industrial pollution, and statutory regulation, since most environmental laws regulate textile production generally rather than fast fashion. The term "fashion sector" is used more broadly to capture the commercial and regulatory context in which fast fashion operates.

The remainder of this article is structured as follows. Section 2 examines the global rise of fast fashion and its environmental impacts. Section 3 provides a comparative analysis of regulatory approaches in the European Union, Poland, and Bangladesh, focusing on regulatory frameworks, enforcement capacity, corporate accountability, and transparency

mechanisms. Section 4 then analyses Egypt's textile sector, evaluates the existing legal and institutional framework governing environmental protection, and proposes reform strategies to strengthen environmental sustainability within Egypt's fashion industry. Section 5 concludes by summarising the key findings and discussing their implications for environmental governance of Egypt's fast fashion industry.

2 FAST FASHION AND ENVIRONMENTAL SUSTAINABILITY FROM A GLOBAL PERSPECTIVE

The growing and accelerating demand for fast fashion is a global phenomenon that has negatively affected several important legal aspects, most notably environmental protection and sustainability. In this section, we introduce this modern phenomenon and the environmental harm it causes.

2.1. Background of fast fashion as a global industry

The term fast fashion industry refers to a modern trend in clothing production that relies on imitating the latest fashion styles launched by famous brands and manufacturing them in massive quantities at a rapid pace and at low cost to meet the needs of consumers across all categories. Social media plays a pivotal role in driving this industry, as it intensifies consumers' desire to adopt new trends immediately upon release to emulate their favourite influencers. From another perspective, this trend provides producers with an enormous opportunity to achieve quick profits.[4]

Demand in this industry continues to grow, with global clothing consumption expected to increase by 63% by 2030,[5] especially as the latest fashion lines become more accessible to middle-class populations. This drives fast fashion companies to double production efforts. To do so, these companies relocate most manufacturing to less-developed countries, where goods are produced at maximum speed. At the same time, workers are paid low wages and work in unsafe, unhealthy, and hazardous conditions. Statistics show that the clothing and textile industry employs about 300 million people worldwide, most of whom are women.[6] These jobs are often at the lowest levels of the production chain, exposing female workers to dangerous conditions and near-negligible wages.

4 Colson Montgomery, 'International Fast Fashion: How China, Bangladesh and Brazil Can Be Held Accountable for Allowing Slave-Like Labour Conditions' (2024) 32 Michigan State International Law Review 366.

5 Alexa Maratos, 'The Fast Fashion Industry: Formulating the Future of Environmental Change' (2023) 40(2) Pace Environmental Law Review 395, doi:10.58948/0738-6206.1873.

6 ibid 394.

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As a result of this vast expansion and complexity of fast fashion supply chains, the original producing company often lacks knowledge of the true sources of its products. It typically has no visibility beyond its first-tier suppliers, which renders the manufacturing system more vulnerable to fraud and error.[7]

This approach relies on lower-quality raw materials, and the manufactured garments are not designed for long-term use or reuse. They are often disposed of in harmful ways.[8] This trend has undoubtedly led to many environmentally damaging practices.

Accordingly, there have been strong calls to encourage a shift toward "sustainable fashion". This term refers to a system of clothing production and consumption that seeks to mitigate negative environmental impacts at every stage, from fibre production to final disposal. This approach aims to reduce resource consumption at all stages by limiting excessive use and promoting recycling, without compromising these resources for future generations.[9]

As consumers become more aware of the environmental consequences of their clothing choices, and as demand for eco-friendly products rises, fast fashion companies face increasing pressure to adopt sustainable supply chain practices. These pressures have prompted many actors in the field to adopt sustainable supply chain practices, comply with international environmental regulations, and develop strategies that enhance the industry's long-term economic viability and competitiveness.[10]

2.2. Key environmental impacts of fast fashion and textile production

This subsection focuses on the environmental impacts of fast fashion, while referring to the broader textile and fashion industry where the relevant harms arise from production processes such as dyeing, finishing, washing, manufacturing, and waste disposal. This is because fast fashion is not usually regulated as a separate industrial category; instead, its environmental harms stem from textile production and are intensified by rapid production cycles, short product lifecycles, and high disposal rates.

Fast fashion has become one of the most environmentally harmful industries. The most prominent environmental damage from this industry includes water pollution, air pollution, wasteful resource use, and unsafe waste disposal.

7 ibid 396.

8 Montgomery (n 4) 3-4.

9 'Fashion', *Merriam-Webster.com Dictionary* (2026) <https://www.merriam-webster.com/dictionary/fashion> accessed 10 March 2026.

10 Muhammad Mamoon Shaikh and others, 'Sustainable Transformation in Pakistan's Textile Industry: A Holistic Approach to Supply Chain Management' (2023) 17(2) Journal of Business Strategies 2-3, doi:10.29270/JBS.17.2(23).01.

2.2.1. The Impact of Textile Production on Water Pollution

Studies indicate that the textile industry is responsible for nearly 20% of global industrial water pollution,[11] largely because chemical dyes used in fabric colouring leak into rivers and groundwater. However, one of the most dangerous pollutants in this context is microplastic. Synthetic fibres such as polyester, nylon, and acrylic account for about 69% of total clothing production, and they release microplastic particles into water each time they are washed, ultimately reaching the oceans. These particles have been detected in salt, seafood, and even drinking water, with proven harmful effects on the human body.[12]

2.2.2. Greenhouse Gas Emissions from the Clothing Industry

Fast fashion practices release vast amounts of harmful gases that pollute the air, alter the climate, and accelerate global warming. Foremost among these is the "carbon footprint", which refers to the total amount of gases emitted throughout all stages of clothing production, from cultivating raw materials such as cotton through manufacturing, transportation, and distribution to consumption and disposal.[13] Studies show that the fast fashion industry accounts for about 10% of total global greenhouse gas emissions and, if left unregulated, will account for over a quarter of global carbon pollution by 2050.[14]

2.2.3. Resource Depletion and Poor Waste Management in the Industry

The fast fashion industry encourages consumers to shop continuously to keep up with weekly changing trends, treating clothing as rapidly consumable goods. This approach leads to the excessive use of resources such as water, oil, and others. It also creates massive surpluses of unsold garments, and even purchased clothes are often discarded after a short period, especially when they cannot be recycled. In both cases, these clothes typically end up in landfills, posing additional health risks, particularly in developing countries that lack effective waste management systems.[15]

Between 4% and 9% of all textile products placed on the European market are destroyed without ever being used, while approximately 87% of used textiles are either burned or

11 Directorate General for Communication, 'Fast Fashion: EU Laws for Sustainable Textile Consumption' (*European Parliament*, 12 September 2025) <https://www.europarl.europa.eu/topics/en/article/20201208STO93327> accessed 10 March 2026.

12 Zoe Tsicalos, 'The Fashion Industry, the Environment & Sustainability: A Call for an International Treaty and What This Means for the Future of the Fashion Industry' (2024) 23(1) Journal of International Business and Law 137.

13 Directorate General for Communication (n 11) 4-5.

14 Maratos (n 5) 4.

15 Sammons (n 3) 8.

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buried.[16] In contrast, recycling rates remain extremely low, as the technologies capable of recycling clothes back into original fibres are still insufficiently advanced.[17]

These environmental impacts matter for legal regulation because they involve different regulatory tools. Water pollution and chemical discharge require sector-specific effluent standards, wastewater treatment obligations, and effective inspection systems. Greenhouse gas emissions require monitoring, reporting, and cleaner production measures. Resource depletion and textile waste require lifecycle regulation, including circular economy measures and extended producer responsibility. Accordingly, these environmental impacts of fast fashion are not merely descriptive background. They provide the basis for assessing whether Egypt's legal regime is adequate and for identifying the reforms proposed later in this article.

3 COMPARATIVE REGULATORY APPROACHES TO ADDRESSING THE ENVIRONMENTAL IMPACTS OF THE FASHION INDUSTRY

The environmental impacts of the fast fashion industry outlined in the previous section have prompted increasing legislative attention across different jurisdictions. Because fast fashion relies heavily on accelerated textile production, short product lifecycles, and large volumes of textile waste, most legislation focuses on the broader environmental governance of the textile industry rather than on fast fashion as a distinct legal category. Legislators and decision makers have begun to develop legal regimes aimed at reducing the environmental footprint of textile production, improving waste management, and strengthening corporate responsibility. However, the design and effectiveness of these regimes vary substantially depending on institutional capacity, regulatory traditions, and economic structures. The following comparative analysis examines regulatory responses in three jurisdictions: the European Union, Poland as a post-socialist EU Member State, and Bangladesh as a major Global South textile manufacturing hub.

The comparison uses four criteria: the regulatory design used to address textile-related environmental impacts, institutional enforcement capacity, corporate accountability through producer responsibility, and transparency and access to environmental information. These criteria evaluate not only the formal content of legal instruments, but also their capacity to support effective environmental governance in practice.

16 Directorate General for Communication (n 11) 3-4.
17 ibid 4.

3.1. The European Union: Circular Economy and Regulatory Leadership

In the European Union, circular economy principles dominate regulation of the textile industry's environmental impacts. This is evident in the European Green Deal and the Circular Economy Action Plan (CEAP), which promotes a lifecycle approach to products, meaning that environmental regulation should address not only waste disposal, but also product design, production, consumption, reuse, recycling, and resource recovery.[18] The CEAP provides the broader policy foundation for regulating the environmental impacts of textile production and consumption.

The EU Strategy for Sustainable and Circular Textiles applies these broader circular economy principles into a textile-specific policy framework.[19] It reinforces this approach by calling for mandatory durability and recyclability standards for textile products placed on the EU market.[20] The Strategy seeks to ensure that textile products placed on the EU market become more durable, repairable, reusable, and recyclable, while also addressing fast fashion, textile waste, greenwashing, hazardous substances, and weak transparency across textile supply chains. It serves as a critical policy instrument that informs subsequent regulatory developments on sustainable product design, producer responsibility, waste management, transparency, and disclosure of environmental information.[21]

This policy direction is reflected in the Waste Framework Directive. Article 8 of the Waste Framework Directive requires Member States to establish EPR schemes under which producers bear financial and organisational responsibility for collecting, recycling, and treating waste generated by their products.[22] These obligations aim to ensure that producers bear responsibility for the environmental impacts associated with manufacturing their

18 European Commission, 'The European Green Deal' (COM(2019) 640 final, 11 December 2019) <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52019DC0640> accessed 10 March 2026; European Commission, 'A New Circular Economy Action Plan: For a Cleaner and More Competitive Europe' (COM(2020) 98 final, 11 March 2020) <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52020DC0098> accessed 10 March 2026.

19 European Commission, 'EU Strategy for Sustainable and Circular Textiles' (COM(2022) 141 final, 30 March 2022) <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52022DC0141> accessed 10 March 2026.

20 Mayra Lucía Montoya Flores and Stefan Salhofer, 'Environmental Assessment of Cotton Textile Production in Peru: A Case Study for a Cotton T-Shirt' (2025) 970 Science of the Total Environment 10**,** doi:10.1016/j.scitotenv.2025.179031.

21 Liene Siliņa, Inga Dāboliņa and Eva Lapkovska, 'Sustainable Textile Industry – Wishful Thinking or the New Norm: A Review' (2024) 19 Journal of Engineered Fibers and Fabrics 4-7, doi:10.1177/15589250231220359.

22 Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives [2008] OJ L 312/3; Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste [2018] OJ L 150/109.

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products and create incentives for more sustainable products.[23] The Waste Framework Directive was further amended in 2025 to introduce common EU rules on extended producer responsibility for textiles, reinforcing the shift from general waste-management obligations toward sector-specific responsibility for textile waste.[24]

These regulatory instruments also strengthen corporate accountability by requiring producers to assume financial and organisational responsibility for the environmental impacts of textile products throughout their lifecycle. Several EU Member States have also adopted national circular economy legislation reinforcing these principles. For example, France's law on the Fight Against Waste and the Circular Economy (2020) prohibits destroying unsold goods and promotes reusing and recycling textile products.

Concerns about misleading environmental marketing practices, often referred to as *greenwashing*,[25] have further strengthened the importance of transparency and access to environmental information regulating the fashion industry.[26] Therefore, EU environmental governance adopts strong transparency mechanisms.[27] This includes legally guaranteed public access to environmental information under Articles 3 and 7 of Directive 2003/4/EC, which require public authorities to provide environmental information upon request and actively disseminate key environmental data. These transparency guarantees are supported by broader rights stipulated in Articles 4-6 of the Aarhus Convention, which establish rights of access to environmental information and public participation in environmental decision-making.

Monitoring and enforcement mechanisms at both the EU and national levels support these obligations, including administrative oversight and compliance systems, as well as judicial review and access-to-justice mechanisms under EU environmental directives and the Aarhus Convention.[28]

23 Thomas Lindhqvist, 'Extended Producer Responsibility in Cleaner Production: Policy Principle to Promote Environmental Improvements of Product Systems' (PhD thesis, International Institute for Industrial Environmental Economics, Lund University 2000) 144.

24 Directive (EU) 2025/1892 of the European Parliament and of the Council of 10 September 2025 amending Directive 2008/98/EC on Waste [2025] OJ L 2025/1892.

25 Abo El-Wafa Mohammad Abo El-Wafa, 'Climate Change Within the Halls of Justice: An Analytical Study of Climate Litigation to Ensure Climate Action and Promote Climate Justice' (2025) 39(3) UAEU Law Journal 129, doi:10.65088/2025.39.3.3 [in Arabic].

26 Siliņa (n 21) 7.

27 Marjan Peeters, 'Judicial Enforcement of Environmental Democracy: A Critical Analysis of Case Law on Access to Environmental Information in the European Union' (2020) 4(1) Chinese Journal of Environmental Law 13, doi:10.1163/24686042-12340048.

28 Directive (EU) 2018/851 (n 22); Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention, 25 June 1998) [2003] UNTS 2161/447, art 9.

3.2. Poland: Implementation Challenges in a Post-Socialist Jurisdiction

In contrast, post-socialist legal systems such as Poland apply the relevant EU legal regime but still face implementation and enforcement challenges. As a Member State, Poland must transpose EU environmental directives into national law, including obligations on EPR and environmental transparency.[29] However, the implementation of these requirements varies in practice. Poland has delayed implementing the EPR obligations, although the legislative deadline expired on 5 January 2023. Poland is introducing a comprehensive EPR system through a draft law on packaging and packaging waste published in 2025.[30] As a result, municipal waste management costs fall largely on residents rather than producers until now,[31] indicating limited application of producer responsibility mechanisms.

Moreover, administrative capacity constraints, fragmented institutional responsibilities, and limited monitoring resources weaken the effectiveness of regulatory oversight and environmental inspection systems. Poland enforces EU waste directives through administrative, civil, and criminal mechanisms, including inspections, permitting requirements, and administrative sanctions.[32] However, despite these measures, the practical management of textile waste remains limited, with most textile waste still disposed of through municipal systems and only a small proportion is recycled.[33]

The European Commission plays an important monitoring role through instruments such as the Environmental Implementation Review, which assesses Member States' implementation of EU environmental law. As noted in the 2019 Environmental Implementation Review, Poland continues to face difficulties ensuring full compliance with EU environmental legislation, particularly in areas requiring complex monitoring and enforcement mechanisms.[34] Consequently, although the formal regulatory framework governing producer responsibility and environmental transparency largely mirrors EU standards, enforcement capacity and institutional coordination remain challenging in practice.

29 Wojciech Piontek, 'Implementacja Rozszerzonej Odpowiedzialności Producenta do Systemu Gospodarowania Odpadami w Polsce' (2018) 20(2) Rocznik Ochrona Środowiska 1597.

30 'EPR in Poland: Draft Law on Packaging and Packaging Waste – A New Model of Extended Producer Responsibility' (*Andersen*, 27 August 2025) <https://pl.andersen.com/en/newsletter/epr-in-poland-draft-law-on-packaging-and-packaging-waste-a-new-model-of-extended-producer-responsibility/> accessed 10 March 2026.

31 Ewa Woźniak-Gientka, 'Integration of Bioeconomy within Regional Policy Frameworks: a Case Study of the Wielkopolska Voivodeship' (2025) 106(2) BioTechnologia 195, doi:10.5114/bta/205149.

32 Marcin Wielec, 'Legal Regulations and Sanctions Related to the Illegal Dumping of Waste in Polish Environmental Law' (2024) 19(36) Journal of Agricultural and Environmental Law 308-14, doi:10.21029/jael.2024.36.30.

33 Irena Wojnowska-Baryła and others, 'The Growing Problem of Textile Waste Generation—The Current State of Textile Waste Management' (2024) 17 Energies 1528, doi:10.3390/en17071528.

34 European Commission, 'Environmental Implementation Review 2019 Country Report – Poland' (SWD(2019) 128 final, 4 April 2019) <https://op.europa.eu/hu/publication-detail/-/publication/5cf0cf1f-0ac2-11ea-8c1f-01aa75ed71a1/> accessed 10 March 2026.

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3.3. Bangladesh: Environmental Regulation in a Global Manufacturing Hub

A different regulatory context emerges in Global South manufacturing hubs such as Bangladesh. Bangladesh's textile sector is governed by the Environmental Conservation Act 1995 and the Environmental Conservation Rules 1997. Section 12 of the Act requires industrial facilities to obtain an Environmental Clearance Certificate from the Department of Environment before establishment or operation. The Environmental Conservation Rules implement this requirement through Rule 7, which establishes the procedure for issuing environmental clearance certificates. Under Rule 7 and Schedule 1, the Rules classify industries by environmental risk into Green, Orange-A, Orange-B, and Red categories. Schedule 1 lists textile dyeing and finishing operations as Red category industries, requiring the highest level of environmental scrutiny before approval. This classification reflects the significant environmental risks of textile processing, as dyeing and finishing plants are a major source of industrial water pollution.[35]

This permit-based structure shows that Bangladesh regulates textile-related environmental risks primarily through ex ante administrative clearance and facility-level risk classification. Its strength lies in identifying high-risk industrial activities before establishment or operation, but its limitation is that it does not establish lifecycle regulation, producer responsibility, or transparency-based accountability mechanisms comparable to those found in the EU model.

Studies of the Bangladeshi textile sector confirm that dyeing industries generate large volumes of wastewater containing dyes, salts and other chemical pollutants that pose serious risks to aquatic ecosystems.[36] In addition, Schedule 10 of the Rules establishes effluent discharge standards that regulate pollutants commonly generated in textile production processes. However, enforcement capacity is a problem,[37] as many textile factories either lack effluent treatment plants or fail to operate them effectively, contributing to ongoing industrial water pollution.[38]

To conclude, approaches across jurisdictions show how regulation of the fashion industry's environmental impacts varies with regulatory design, enforcement capacity, corporate accountability, and transparency mechanisms. The European Union represents the most developed model, combining lifecycle regulation, producer responsibility, circular economy

35 Rita Kant, 'Textile Dyeing Industry an Environmental Hazard' (2012) 4(1) Natural Science 22-3, doi:10.4236/NS.2012.41004.

36 Laila Hossain, Sumit Kanti Sarker, and Mohidus Samad Khan, 'Evaluation of Present and Future Wastewater Impacts of Textile Dyeing Industries in Bangladesh' (2018) 26 Environmental Development 23, doi:10.1016/j.envdev.2018.03.005.

37 Siliņa, Dāboliņa and Lapkovska (n 21) 13.

38 Sayeda Ummeh Masrura and Kazi Shafayet Haider, 'Case Study on Effluent Treatment Plant of ACS Textiles (Bangladesh) Limited' (2017) 6(1) UITS Journal of Science & Engineering 95.

policies, and transparency guarantees. Poland illustrates that formal alignment with EU standards does not necessarily ensure effective implementation where institutional coordination and enforcement capacity remain limited. Bangladesh demonstrates the limits of a permit-based model that relies primarily on environmental clearance and effluent discharge standards, particularly where enforcement remains uneven, and lifecycle accountability mechanisms are weak. These comparative insights provide a useful basis for evaluating the effectiveness of environmental regulation in Egypt's fashion sector and identifying potential pathways for legal and institutional reform.

4 THE FASHION INDUSTRY IN EGYPT: BETWEEN ENVIRONMENTAL REALITY AND LEGAL REFORM

The Arab Republic of Egypt is renowned for cultivating some of the world's finest cotton. As a result, the textile and clothing industry is considered a central pillar of the national economy. However, the industry also contributes significantly to environmental pollution from textile production. This section explores the economic importance of Egypt's textile industry. It then examines the industry's environmental impacts. Finally, it also provides policy recommendations regarding how Egypt can balance industrial development with environmental sustainability in the fashion sector.

4.1. Economic Significance and Environmental Impacts of Egypt's Textile Industry

Egypt is one of the world's leading producers of high-quality cotton, renowned for its exceptional quality. Because cotton is the most widely used raw material, Egypt has been known for its textile industry since the Pharaonic era thousands of years ago. This sector's prominence grew further with the invention of the cotton gin in the 18th century.[39]

The textile and clothing industry has long played a pivotal role in Egypt's national economy because of the country's fully integrated production system, from cultivating premium-quality raw cotton to spinning, weaving, dyeing, and manufacturing ready-made garments and fabrics. The textile industry is Egypt's second-largest industrial sector after the food industry and continues to grow steadily. The fashion and apparel sector accounted for 56.7% of total industry revenues in 2024.[40] It is also one of Egypt's most important export sectors. Raw cotton exports reached approximately USD 156 million during the 2021–2022 fiscal

39 'Textile Sector in Egypt: Case Study' (*ElSewedy Industrial Development*, May 2025) <https://elsewedydevelopment.com/textile-sector-in-egypt-case-study-may-2025> accessed 10 March 2026.

40 'Egypt Textile Manufacturing Market Size & Share Analysis – Growth Trends and Forecast (2025–2030)' (*Mordor Intelligence*, 11 January 2026) <https://www.mordorintelligence.com/industry-reports/egypt-textile-manufacturing-industry-study-market> accessed 10 March 2026.

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year, while ready-made garment exports increased by 42% in the same period.[41] In 2024, the value of Egypt's textile exports rose to USD 1.11 billion, with Turkey, Algeria, Italy, and China ranking among the top importing countries.[42]

The Egyptian government is making tremendous efforts to maintain the country's leading position in textile production and exports. It aims to strengthen the textile industry's competitiveness by using national resources optimally. To achieve this, the government follows a strategy focused on enhancing cotton crop quality, providing favourable conditions for farmers to boost productivity, developing cotton ginning facilities, improving all stages of production, and integrating modern technologies to meet global standards.

Despite the textile industry's significance in Egypt, it has negative environmental effects at every stage of production. The Egyptian environment suffers from the emissions, industrial wastewater, and solid waste generated by textile activities.[43] The main sources of pollution in the textile sector include cotton dust and fibres, chemical vapours and gases, and sulphur and nitrogen oxides emitted from steam boilers, as well as the discharge of contaminated effluents into surface waters or sewage systems.[44] These Egypt-specific impacts provide the factual basis for assessing whether the existing legal and institutional framework can regulate the environmental consequences of textile and fashion production.

4.2. Analysis of the Legal and Institutional Framework for Environmental Protection in Egypt

4.2.1. Egyptian Environmental Law No. 4 of 1994

The principal legislation governing environmental protection in Egypt is Law No. 4 of 1994.[45] At the outset, the law provides fundamental definitions in environmental protection, clarifying sources and factors of pollution such as hazardous waste, water pollutants, and oil mixtures, as well as different areas of environmental pollution, including air and water pollution, among other basic concepts.

One key aspect of the second chapter of the Egyptian Environmental Law concerns the institutional body responsible for environmental protection: the Egyptian Environmental Affairs Agency (EEAA), a public legal entity affiliated with the Ministry of Environment. The law details the Agency's structure, powers, and functions, as well as the authorities

41 'Textile Sector in Egypt (n 39).

42 Egypt's Exports of Textiles Exceeded One Billion Dollars in Eleven Months' (*AlArabiya*, 30 December 2024) [in Arabic] <https://www.alarabiya.net/aswaq/exclusive/2024/12/30> accessed 10 March 2026.

43 Ministry of State for Environmental Affairs, *Self-Monitoring Manual: Textile Industry* (Egyptian Environmental Affairs Agency, Egyptian Pollution Abatement Project 2003) 9 [in Arabic].

44 ibid 45-6.

45 Law of the Arab Republic of Egypt no 4 of 1994 'On Environmental' [1994] Official Gazette 5 [in Arabic].

vested in it to enable it to perform its duties effectively.[46] The law also establishes the Environmental Protection Fund, affiliated with the EEAA, into which financial allocations are deposited from several sources detailed in Article 14 of the Law.

Most provisions of the law set out rules to protect the terrestrial, aquatic, and atmospheric environments from all types of pollutants that may cause harm,[47] the administrative and judicial measures that follow in the event of violations,[48] and the penalties applicable to offenders.[49] While the law provides a comprehensive framework for environmental regulation, its effectiveness depends largely on the institutional capacity of enforcement authorities, a challenge that remains significant in practice.

4.2.2. Law No. 202 of 2020 on Waste Management Regulation50

This law is among the most significant pieces of legislation enacted to protect the Egyptian environment from the adverse impacts of various types of waste by organising their management and establishing sound disposal mechanisms. A key feature of this law is the establishment of a specialised public authority responsible for regulating, monitoring, evaluating, and developing all aspects of integrated waste management to achieve sustainable environmental development: the Waste Management Regulatory Authority.

The Authority oversees the implementation of waste management plans in coordination with state institutions, local administrations, the private sector, civil society, and international organisations.[51] The law also sets out in detail the Authority's structure, mandates, the powers conferred on it to fulfil its duties, and its financial resources.[52]

Furthermore, the law regulates general policies, obligations, and prohibitions that licensed entities engaged in waste management activities must observe.[53] It distinguishes between various categories of waste: non-hazardous waste, municipal waste, construction and demolition waste, agricultural waste, industrial waste, and hazardous waste. It specifies the mechanisms and rules governing each type.[54] The final chapter sets out the penalties for violating the obligations imposed by its provisions.[55] However, the law does not yet incorporate EPR mechanisms comparable to those adopted in EU circular economy legislation, which limits its effectiveness in addressing textile waste generated by the fashion industry.

46 ibid, arts 2–13.
47 ibid, arts 19–77.
48 ibid, arts 78–83.
49 ibid, arts 84–104.
50 Law of the Arab Republic of Egypt no 202 of 2020 'On Waste Management' [2020] Official Gazette 41 [in Arabic].
51 ibid, arts 3–4.
52 ibid, arts 5–14.
53 ibid, arts 15–28.
54 ibid, arts 29–64.
55 ibid, arts 65–80.

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4.2.3. Other Relevant Legislation and Policies

In addition to the principal laws regulating environmental protection and waste management, Egypt has adopted several laws and policies that strengthen the legal and institutional framework for environmental protection and promote the transition toward sustainable production and consumption patterns.

The new Labor Law No. 14 of 2025, which entered into force in September 2025, introduced several provisions that reinforce sustainable production in workplaces. Book Four of the Law, titled "Occupational Safety, Health, and Work Environment Protection", mandates industrial establishments to adopt all necessary preventive measures to protect workers from environmental hazards resulting from production processes, including gaseous emissions, industrial pollutants, noise, and hazardous chemicals. It also requires employers to provide a safe work environment in line with international safety standards and to train workers in pollution prevention and waste management arising from production activities.[56] Through these provisions, the law clearly aligns with environmental sustainability goals and supports the national transition toward a greener economy.

At the strategic level, Egypt Vision 2030 serves as the overarching framework guiding state policies toward sustainable development. The Vision's seventh pillar, "Environment", sets a strategic objective of "achieving world-class levels of environmental performance", focusing on three main areas: pollution reduction, ecosystem protection, and improved natural resource management. The Vision also establishes quantitative targets, such as increasing the recycling rate to 50% by 2030 and reducing carbon emissions by 10% of total national emissions during the same period.[57]

International commitments also influence Egypt's environmental policy. It is a party to the Paris Agreement on Climate Change (2015)[58] and has committed, through its Nationally Determined Contributions (NDCs), to reducing emissions in the energy, transport, and industrial sectors. Egypt is also pursuing the United Nations Sustainable Development Goals (SDGs), particularly Goal 13 (Climate Action) and Goal 12 (Responsible Consumption and Production).[59] These international commitments reflect Egypt's determination to align its national policies and legislation with global environmental standards, thereby ensuring comprehensive and sustainable development.

56 Law of the Arab Republic of Egypt No 14 of 2025 'On Labor' [2025] Official Gazette 18(supp), arts 255, 256 [in Arabic].

57 Government of the Arab Republic of Egypt, *Egypt Vision 2030: The National Agenda for Sustainable Development: Egypt's Updated Vision 2030* (Ministry of Planning and Economic Development 2023) 88; 'Environmental Axis' (*Egypt Vision 2030*, 2026) <http://sdsegypt2030.com/environmental-dimension/environment-axis/?lang=en> accessed 10 March 2026.

58 Paris Agreement 'Framework Convention on Climate Change' (adopted 12 December 2015) [2023] UNTS 3156/79.

59 Transforming Our World: The 2030 Agenda for Sustainable Development (adopted 25 September 2015 UNGA Res 70/1) <https://docs.un.org/en/A/res/70/1> accessed 10 March 2026.

Despite notable progress in Egypt's legal framework for environmental protection and waste management, several gaps continue to limit its effectiveness in achieving environmental sustainability in the fashion sector. Compared with the regulatory approaches discussed in the previous section, the most prominent challenges are limited enforcement and monitoring of existing laws, whether due to a lack of human and technical resources within the competent authorities or weak coordination among relevant entities.[60]

Moreover, Egypt lacks an EPR system that holds manufacturers accountable for the entire lifecycle of their products, even after they enter the market. This mechanism is considered a cornerstone of modern circular economies. Egyptian legislation also lacks clear provisions protecting consumers from greenwashing practices, the misleading claims made by some companies regarding the sustainability of their products.

In addition, the economic and legislative incentives designed to encourage circular economy practices, such as recycling and reuse, remain limited. This weakness undermines the sector's ability to transition to production processes more aligned with global environmental standards.[61]

In addition, the effectiveness of environmental regulation depends on access-to-justice mechanisms. Procedurally, this includes access to environmental information and transparency in decision-making. Institutionally, it requires well-established authorities that can monitor and enforce compliance. From a remedial perspective, effective environmental governance also depends on the availability of judicial review and legal remedies that allow individuals and civil society organisations to challenge violations and ensure the enforcement of environmental standards.[62]

4.3. Legal Reform Proposals for Regulating the Environmental Impacts of Egypt's Fashion Sector

As noted before, while the fast fashion industry plays a major role in Egypt's economy, it also has serious negative environmental impacts due to its high consumption of water and energy, its use of chemical substances, and the generation of large amounts of industrial waste. Addressing these challenges requires strengthening the legal and institutional framework governing the sector. Building on the comparative regulatory approaches

60 Roushdi Eid, Irene Shenouda and Maggy Atalla, 'Sustainable Development and its Relation to Environmental Policies in Ready-Made Garment Factories in the Arab Republic of Egypt' (2023) 33(1) Journal of Home Economics 170, doi:10.21608/mkas.2022.155802.1157 [in Arabic].

61 Medhat Abo Hashima and Sara Mahran, 'Sustainability in the Ready-Made Garment Industry Using Unconventional Eco-Friendly Materials' (2023) 33(1) Journal of Home Economics 218-9, doi:10.21608/mkas.2022.160379.1173 [in Arabic].

62 Gururaj Devarhubli and Alaukik Shrivastava, 'The Advancement of Environmental Procedural Rights in India: An Analysis of Issues, Problems and Prospects' (2024) 10(1) Cogent Social Sciences 3-5, doi:10.1080/23311886.2024.2312949.

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examined in the previous section, several reforms could enhance environmental sustainability within Egypt's fashion industry.

4.3.1. Strengthening Sector-Specific Environmental Regulation and Producer Responsibility

The existing environmental legislative framework should be expanded to include explicit provisions regulating the fashion industry's environmental impacts. Although Environmental Law No. 4 of 1994 is comprehensive, it lacks detailed provisions addressing pollutants specific to the textile and garment industries, such as synthetic dyes and wastewater. It is therefore recommended to add a specific section on the textile and ready-made garment industries, establishing maximum permissible emissions limits and setting standards for wastewater treatment before discharge.

Egypt can benefit from India's and Turkey's experience. Since 2016, India has classified the textile sector as a "Red Category" industry under the Central Pollution Control Board (CPCB) classification.[63] It has required factories to establish Common Effluent Treatment Plants (CETPs) in textile industrial zones[64]. Turkey also introduced a new regulation at the beginning of 2025 establishing an inspection and control system for certain textiles, clothing, and leather products to ensure safety and compliance with restrictions on hazardous chemicals.[65]

Additionally, introducing an EPR system is among the most critical reforms needed in Egyptian legislation. An EPR system obliges companies to take responsibility for their products throughout their entire lifecycle, even after consumption. Experiences from other jurisdictions show the potential effectiveness of these mechanisms. As shown in the comparative analysis of the European Union in Section 3, modern environmental governance increasingly relies on lifecycle regulation that assigns waste-management responsibility to producers rather than public authorities. The European Union has incorporated EPR into its waste governance framework through the Waste Framework Directive, which requires Member States to establish producer responsibility schemes to reduce waste generation and promote recycling across product lifecycles. Likewise, South Korea has implemented the EPR system since 2003 under the Act on the Promotion of Saving and Recycling of Resources, which led to a 46% increase in textile recycling rates within five years.[66] In Egypt, this could be implemented by requiring fashion brands and

63 Central Pollution Control Board (CPCB), *Classification of Industries – Red, Orange, Green, White* (Government of India 2016, updated 2025) 73.

64 ibid 77.

65 Communiqué Ministry of Trade of the Republic of Turkey no 18/2025 'On Inspection of Certain Textile, Apparel and Leather Products (Product Safety and Inspection)' [2025] Official Gazette 32769.

66 Republic of Korea, 'The Republic of Korea's EPR System for Packaging: An Asian Role Model' (*PREVENT Waste Alliance*, 2023) <https://prevent-waste.net/wp-content/uploads/2023/06/Republic-of-Korea.pdf> accessed 10 March 2026.

large manufacturers to establish systems to collect, sort, and recycle post-consumer textile products, or to donate and reuse them as raw materials.

Moreover, governments could introduce mandatory minimum quotas for using recycled materials in production. Similarly, tax incentives for companies that meet specific targets in waste reduction or emissions control can be useful in this regard. Such mechanisms would encourage the transition toward a circular economy model, which has become a cornerstone of modern environmental policies.

To implement these reforms in Egyptian law, Environmental Law No. 4 of 1994 and its executive regulations could be amended to introduce textile-specific pollution standards. Also, Waste Management Law No. 202 of 2020 could be amended to establish EPR obligations for textile products. Such amendments could require large fashion brands and manufacturers to register with the competent authority, so that the authority can identify which companies are subject to EPR, reporting, disclosure, and fee obligations. The amendments could also require manufacturers to finance or participate in post-consumer textile collection and recycling schemes, report on textile waste and recycling rates, and disclose key environmental impact data. The disclosure obligation would also help address greenwashing by requiring verifiable environmental claims and subjecting them to administrative oversight.

4.3.2. Enhancing Institutional Enforcement Capacity

Institutional and regulatory capacities must be strengthened to enforce environmental legislation effectively. As the comparative analysis in the previous section demonstrated, the effectiveness of environmental regulation depends not only on the existence of legislation but also on the institutional capacity of enforcement authorities. While the European Union has developed robust monitoring and transparency mechanisms for environmental governance, Poland and Bangladesh show how administrative capacity constraints and limited monitoring resources can weaken the implementation of environmental legislation in practice.

Similar challenges exist in Egypt, where the EEAA continues to face challenges due to shortages of technical staff and weak mechanisms for monitoring industrial pollution. To address this, it is recommended that specialised environmental monitoring units be established in major industrial zones such as Sadat City, 10th of Ramadan City, and the Suez Canal Economic Zone, equipped with advanced digital technologies to monitor industrial emissions and assess air and water quality.

Comparative experiences show how stronger monitoring systems and transparency mechanisms can significantly improve environmental enforcement. Several European countries have strengthened environmental accountability through transparency-based monitoring mechanisms. For instance, Sweden implemented an industrial environmental

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transparency policy that requires companies to publish annual reports on their emissions and energy consumption, thereby strengthening public accountability.[67] These policies are also linked to broader international initiatives such as the United Nations Environment Programme's Climate Transparency Initiative, which seeks to enhance global climate performance, help countries improve national systems for monitoring environmental violations, and modernise accountability mechanisms.[68]

In addition, China's experience shows how technological innovation can support environmental enforcement. In 2018, China's Ministry of Ecology and Environment launched an intelligent environmental monitoring system using satellites and sensors to track emissions in real time and impose immediate sanctions on polluting facilities.[69] These experiences demonstrate how improved monitoring systems and transparency mechanisms can significantly strengthen the enforcement of environmental legislation in industrial sectors such as textile manufacturing.

4.3.3. Strengthening Policy Coordination, International Cooperation, and Industry Partnerships

In addition to legislative amendments, Egypt could adopt a National Strategy for Sustainable and Circular Textiles. Such a policy initiative could provide a basis for future legal reforms. It could set targets to reduce textile waste, improve wastewater treatment, expand recycling, strengthen producer responsibility, and enhance environmental disclosure. It could also clarify the roles of the EEAA, the Waste Management Regulatory Authority, industrial zone authorities, manufacturers, and private-sector actors.

To align with environmental sustainability standards, Egypt must strengthen public-private partnerships and cooperate with international initiatives. This could include collaboration with the United Nations Environment Programme (UNEP) and the European Bank for Reconstruction and Development (EBRD) to provide technical assistance and green financing to upgrade production technologies in the textile and fashion industry.

The Bangladeshi experience, as discussed in section 3 above, stands out in this regard. In 2013, the government of Bangladesh, in cooperation with the World Bank and the United Nations Industrial Development Organization (UNIDO), launched the Green

67 Ministry of Climate and Enterprise, *Sweden's First Biennial Transparency Report under the Paris Agreement* (Government Offices of Sweden 2024) 71.

68 'What is Climate Transparency and Why is it Important' (*UN Environment Programme*, 29 August 2025) <https://www.unep.org/news-and-stories/story/what-climate-transparency-and-why-it-important> accessed 10 March 2026.

69 Ministry of Ecology and Environment of the People's Republic of China, *2018 Report on the State of the Ecology and Environment in China* (PRC 2019) 17.

Garment Factories Initiative, through which the country now hosts more than 150 LEED-certified garment factories.[70]

Moreover, integrating environmental sustainability into Egypt's industrial education curricula and vocational training programmes would help prepare a new generation of engineers and workers in the fashion industry with environmental awareness and the ability to innovate in sustainable design and resource management.

However, implementing these reforms in Egypt may face practical challenges. Strengthening wastewater treatment obligations, establishing EPR schemes, introducing environmental disclosure duties, and developing monitoring systems would impose financial and technical burdens on both the government and industry actors. Smaller manufacturers may struggle to meet new compliance costs. Larger producers and fashion brands may also resist additional reporting, collection, recycling, or fee obligations. Therefore, reform should be introduced progressively, supported by tax incentives and stakeholder consultation.

In short, achieving environmental sustainability in Egypt's fashion sector thus requires a structural transformation of the legal and institutional system, one that extends beyond the mere enactment of laws to the cultivation of a societal culture grounded in environmental awareness and responsible production. Implementing these reforms progressively and strategically, while drawing upon successful international experiences, will strengthen Egypt's competitiveness in the global fashion market and position it as a leading model for sustainable fashion production in the Arab world and across Africa.

5 CONCLUSION

This article shows that the fast fashion industry, despite its growing economic importance, poses significant environmental challenges through intensive resource consumption, chemical pollution, and large volumes of textile waste. These impacts are particularly relevant for countries with expanding textile sectors such as Egypt, where industrial development must increasingly be reconciled with environmental sustainability objectives.

This article has examined whether Egypt's current environmental legal regime adequately regulates the environmental impacts of the fast fashion and textile industry. The analysis shows that Egypt's legal regime is only partially adequate. Although Egypt has enacted important environmental and waste-management legislation, including

70 THM Kaizer, 'Green Garment Factories in Bangladesh: Motivation and Challenges' (Master thesis, School of Business and Economics, University of Jyväskylä 2020) 56-7; 'Bangladesh: Circularity Opportunities in the Textile Value Chain' (*UNIDO United Nations Industrial Development Organization*, 28 February 2023) <https://www.unido.org/news/bangladesh-circularity-opportunities-textile-value-chain> accessed 10 March 2026.

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Environmental Law No. 4 of 1994 and Waste Management Law No. 202 of 2020, these laws are general and do not sufficiently address the specific environmental harms associated with textile production and fast fashion consumption, such as wastewater discharge and textile waste.

The study has also identified several key regulatory gaps. The most important gaps include weak enforcement capacity, limited institutional coordination, the absence of an extended producer responsibility system, insufficient transparency and access-to-information obligations, and a lack of sector-specific rules governing pollutants generated by textile and garment production. These gaps limit the effectiveness of existing legislation and reduce its capacity to support a transition toward circular and sustainable production models. They also show that environmental regulation cannot be assessed only by reference to the existence of legal rules. Instead, its adequacy depends also on implementation, monitoring, corporate accountability, and available procedural and remedial mechanisms.

The comparative analysis provides useful lessons for Egyptian legal reform. The European Union demonstrates the importance of circular economy policies, EPR mechanisms, product lifecycle regulation, transparency obligations, and stronger corporate accountability. Poland illustrates that formal transposition of environmental rules is not sufficient where implementation capacity and institutional coordination remain weak. Bangladesh shows the limitations of permit-based regulation and effluent standards when enforcement is uneven and industrial compliance remains inconsistent. This comparative analysis suggests that Egypt should adopt a more integrated regulatory approach.

In particular, strengthening sector-specific environmental regulation for textile production would help address pollutants such as synthetic dyes and industrial wastewater that existing legislation does not sufficiently regulate. Strengthening the institutional capacity of environmental authorities, particularly through improved monitoring systems and specialised inspection units, would significantly improve enforcement effectiveness. Introducing an EPR scheme could also encourage lifecycle management of textile waste and promote circular economy practices. Finally, expanding international cooperation and partnerships in sustainable textile production would support technological upgrading and strengthen environmental governance within the sector. These reforms could enable Egypt to reduce the environmental footprint of its fast fashion industry while maintaining its competitiveness in global textile markets.

At the same time, implementing these reforms will require careful attention to practical constraints, including regulatory authorities' financial capacity, manufacturers' compliance costs, and potential resistance from industry actors.

Future research could build on this analysis by examining how emerging legal and technological developments may affect textile-producing economies such as Egypt. These include digital product passports for garment traceability, legal approaches that treat

textile waste as a recoverable resource, regulation of ultra-fast production models, microplastic pollution from synthetic fabrics, and digital tools to verify environmental claims and prevent greenwashing.

By examining Egypt's regulation of fast fashion's environmental impacts from a comparative perspective, the article contributes to emerging legal scholarship on the environmental governance of the fast fashion industry by showing how comparative regulatory analysis can inform national reform strategies in textile-producing economies.

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АНОТАЦІЯ УКРАЇНСЬКОЮ МОВОЮ

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РЕГУЛЮВАННЯ ЕКОЛОГІЧНОГО ВПЛИВУ ІНДУСТРІЇ ШВИДКОЇ МОДИ В ЄГИПТІ: ПОРІВНЯЛЬНИЙ ДОСВІД ЄВРОПЕЙСЬКОЇ, ПОСТСОЦІАЛІСТИЧНОЇ МОДЕЛЕЙ ТА МОДЕЛІ ГЛОБАЛЬНОГО ПІВДНЯ

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АНОТАЦІЯ

Передумови. *Індустрія швидкої моди стала визначальною рисою сучасної споживчої культури, проте вона залишається одним із найбільш екологічно шкідливих секторів у світі, спричиняючи забруднення водних ресурсів, утворення текстильних відходів і викиди парникових газів. Як один із найбільших виробників текстилю та одягу на Близькому Сході та в Африці, Єгипет стикається із серйозними викликами, намагаючись узгодити економічне значення цієї галузі з нагальною потребою в охороні довкілля та сталому розвитку. У цій статті досліджуються екологічні ризики, пов'язані з виробництвом і споживанням продукції швидкої моди в Єгипті, а також оцінюється відповідність чинного правового режиму масштабам зазначених викликів.*

Методи. *У статті застосовано доктринальний і порівняльно-правовий методи дослідження. Проаналізовано Закон Єгипту про охорону навколишнього середовища № 4 від 1994 року та Закон про управління відходами № 202 від 2020 року разом із відповідними виконавчими регламентами, національними стратегіями та програмно-політичними документами. Ці акти розглядаються крізь призму ширших концепцій сталого розвитку, зокрема Стратегії сталого розвитку «Бачення Єгипту 2030» (Egypt Vision 2030) та Цілей сталого розвитку Організації Об'єднаних Націй (ЦСР ООН). У дослідженні використано порівняльний досвід Європейського Союзу, Польщі та Бангладеш. Основну увагу зосереджено на таких регуляторних механізмах, як розширена відповідальність виробника (РВВ), засади циркулярної економіки та вимоги щодо екологічної прозорості.*

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Результати та висновки. *Проведений аналіз засвідчує, що, попри сформований у Єгипті комплексний еколого-правовий режим, зберігаються значні прогалини у сферах правозастосування, дотримання регуляторних вимог суб'єктами промисловості, корпоративної підзвітності та правосвідомості споживачів. Чинне законодавство недостатньо охоплює екологічні наслідки функціонування індустрії швидкої моди, а також не покладає на виробників дієвих зобов'язань щодо зменшення обсягу відходів або запровадження сталих виробничих практик.*

На основі порівняльно-правового аналізу сформульовано низку пропозицій щодо реформування системи екологічного регулювання індустрії моди в Єгипті. Зокрема, йдеться про посилення секторального природоохоронного регулювання текстильного виробництва, нарощування інституційної спроможності органів правозастосування, запровадження інструментів розширеної відповідальності виробника та розширення міжнародного співробітництва у сфері сталого текстильного виробництва. Зазначені заходи сприятимуть відчутному зменшенню екологічного сліду модної індустрії Єгипту за одночасного покращення рівня її відповідності міжнародним стандартам екологічної сталості.

Ключові слова. *Швидка мода; екологічне право; сталий розвиток; текстильна промисловість; циркулярна економіка; розширена відповідальність виробника (РВВ); Бачення Єгипту 2030 (Egypt Vision 2030).*