

Examining Ultra-Fast Fashion's Impact on the Energy Crisis and Environmental Challenges in Malaysia, China, Bangladesh

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ABSTRACT

This article assesses the readiness of Malaysia, China, and Bangladesh to handle the environmental and labour challenges posed by ultra-fast fashion. Driven by consumer demand and e-commerce, ultra-fast fashion presents significant regulatory issues, including environmental degradation and labour exploitation. While Malaysia's economic policies support industry growth, its environmental and labour regulations are insufficient. Current laws primarily focus on certain pollutants, overlooking harmful chemicals commonly used in garment production. Also, labour laws offer basic protections, but weak enforcement allows exploitation. Similarly, China faces severe environmental impacts from textile production, while Bangladesh struggles with unsafe working conditions and environmental harm. The rapid production cycles of ultra-fast fashion surpass regulatory capabilities in all three countries. Stronger legal frameworks, more apparent environmental monitoring, and better enforcement of labour protections are necessary to mitigate the adverse effects and promote sustainable fashion practices.

Keywords: Ultra-fast fashion; Energy crisis; Sustainable fashion; Environmental degradation; Regulatory frameworks

INTRODUCTION

Fast fashion, a term referring to the rapid production of inexpensive clothing to meet the latest trends, dates back to the 18th century when skilled artisans primarily produced clothing accessible only to the wealthy (Rominger, 2023). The Industrial Revolution, particularly with the advent of mass production technologies like the sewing machine, transformed this industry, leading to the rise of ready-to-wear garments. By the late 20th century, fast fashion had become a dominant business model driven by globalisation and evolving consumer behaviour. Brands began adopting quick production cycles to replicate runway trends at low costs and fast turnarounds.

The theoretical framework adopted in this paper is taking the basis of The Triple Bottom Line Framework introduced by John Elkington in 1994, where he raises concerns about the sustainability promoted by the Sustainable Development Goals (SDGs) that relate to business practices, which often prioritise short-term profits over long-term societal and environmental health. This framework is crucial in analysing ultra-fast fashion's economic, social, and environmental aspects. By merging the three interconnected pillars of profit, people, and planet, the framework would offer a more comprehensive understanding of the global impact of industry activities on communities, ecosystems, and economic systems. It highlights the imperative for industry to implement sustainable and ethical practices to reconcile financial growth with societal welfare and environmental conservation. Thus, the Triple Bottom Line will provide a guide for examining the difficulties presented by ultra-fast fashion and suggesting practical solutions consistent with sustainable development.

The rapid growth of ultra-fast fashion has been fuelled by increasing consumer demand, driven by factors such as social media influence, evolving lifestyle trends, and the affordability of fast fashion products. In China and Bangladesh, the rise of e-commerce platforms and the adoption of digital technologies have significantly

contributed to the sector's growth. In China, for example, e-commerce sales have grown at an annual rate of 11.2% between 2018 and 2022, with projections indicating that sales will reach 23.5 trillion yuan by 2027 (Cheng, 2023). Similarly, in Bangladesh, the local fashion industry benefits from the expanding middle class and changing consumer preferences, providing opportunities for growth within the domestic market (Rahman, 2019).

Social commerce, particularly the role of influencers and micro-influencers, has become an integral part of this growth. Influencer marketing has been increasingly important in driving consumer behaviour, with spending on this form of marketing expected to reach \$6 billion by 2023 (Zeng, 2024). The rise of mobile shopping has also made ultra-fast fashion more accessible, especially among younger consumers. With their integration of “buy now” buttons and personalised recommendations, social media platforms have capitalised on these trends, making it easier for consumers to make spontaneous purchases. With more than 90% of social media users accessing these platforms via mobile devices, brands are optimising their strategies to cater to mobile shoppers (Zeng, 2024).

While fast fashion has made clothing more affordable and accessible, it also presents significant legal and regulatory challenges. These challenges would be prevalent in major production countries like China and Bangladesh, where famous brands like, for example, Shein, H&M, and Tommy Hilfiger tend to dominate the market (Brydges, 2024; The Environmental Defense Initiative, 2023). Both countries are criticised for having inadequate regulations that protect garment workers from exploitative practices, such as low wages, unsafe working conditions, and excessive hours (Bynum, 2021). Women, as forming the majority of the workforce, are particularly vulnerable to gender-based discrimination and both sexual and non-sexual harassment in these regions. Inadequate labour laws and enforcement can worsen social inequality and undermine workers' rights. They have faced criticism for insufficient regulations which fail to protect garment workers from exploitative practices such as low wages, unsafe working conditions, and excessive hours (Islam & Khan, 2018; Zhu & Pickles, 2014; Ashraf & Prentice, 2019; Ngai & Chan, 2012; Huq, Stevenson, & Zorzini, 2014; Chan & Siu, 2010). Furthermore, the lack of strong labour laws and enforcement exacerbates social inequalities.

LITERATURE REVIEW

The reliance on fast fashion based on synthetic fibres and its resource-intensive manufacturing processes raises significant environmental concerns. China, for example, generates 26 million tonnes of clothing waste each year, adding significantly to global microplastic pollution. In Bangladesh, 85% of textiles are in landfills (Bloomberg News, 2020; Clingham-David, 2022). Despite existing environmental laws in both countries, enforcement is frequently insufficient, allowing the fashion industry to avoid regulations to reduce pollution and resource depletion. International conventions, such as the Basel Convention, which governs the transboundary movement of hazardous waste, are frequently ignored, exacerbating the environmental crisis (Basel Convention Secretariat, 2024).

The Ministry of Ecology and Environment of China is primarily responsible for enforcing China's environmental regulations, and it has implemented measures to control pollution from the textile industry. These regulations seek to reduce water and air pollution by limiting wastewater discharge and emissions. However, due to the fast-paced nature of the industry and the desire to cut costs, companies frequently find ways to avoid these regulations. The lack of adequate waste management systems and weak enforcement mechanisms allows harmful practices to continue, especially in rural areas with little oversight (Javed, 2024).

The ultra-fast fashion business model exploits legal loopholes within international trade agreements to maximise profits, complicating regulatory oversight. Free trade zones and favourable tax structures in developing countries like China and Bangladesh enable brands to manufacture garments at minimal cost while avoiding stringent regulations (Fashion Law Journal, 2024). These practices raise critical concerns regarding corporate accountability and the role of international law in overseeing transnational business activities (Retail TouchPoints, 2024).

Labour laws in many fast fashion production hubs, including China's Labour Contract Law and Occupational Disease Prevention Law, are designed to protect workers' rights but are often poorly enforced (Acclime China,

2023). For example, Shein workers reportedly endure excessive hours and low wages, and such exploitative practices are standard across the industry (Brydges, 2024). These low labour costs allow fast fashion companies to continue producing cheap, disposable clothing for consumers while workers are vulnerable to harsh working conditions.

The Bangladesh Fire & Safety Accord, introduced after the Rana Plaza disaster in 2013, has attempted to improve safety standards for garment workers. At the same time, the accord has led to improvements, such as better building safety protocols; many issues persist, including wage disparities and unsafe working environments. Although brands must meet specific labour standards, weak enforcement and prioritising profits over worker welfare continue to drive exploitative labour practices (Ross, 2021).

Ultra-fast fashion, a more accelerated form of traditional fast fashion, has further intensified the issues surrounding labour exploitation and environmental degradation. Brands like Shein, Boohoo, and Cider have taken production speed to new extremes, operating on a model that thrives on micro-trends and low-cost production (Brydges, 2024). This model increases the volume of waste the fashion industry generates and pushes workers into even more exploitative conditions to meet the constant demand for new styles.

Shein, for example, has been reported to engage workers for long shifts, sometimes exceeding 75 hours per week, with little regard for labour protections. The rapid turnaround in fashion trends encourages overconsumption, resulting in significant textile waste. Despite introducing environmental regulations in countries like China and Bangladesh, ultra-fast fashion companies often find ways to sidestep compliance, thus continuing to pollute water sources and overuse natural resources (Vara, 2022).

Despite various legal mechanisms, enforcement remains a significant challenge in regulating the fast fashion industry. Many countries, particularly developing nations, lack the resources or political will to enforce environmental and labour laws effectively. This weak enforcement creates an environment where corporations can exploit workers and natural resources with relative impunity. For instance, the Bangladesh Fire & Safety Accord has improved safety conditions in some garment factories, but its scope remains limited, and many factories continue to operate outside its jurisdiction (Ross, 2021).

The Ministry of Ecology and Environment in China has tried implementing policies to reduce environmental harm from the textile industry, such as mandatory wastewater treatment and emission restrictions. However, the sheer scale of the industry and the number of factories involved make enforcement difficult, particularly in regions with limited regulatory oversight (Javed, 2024).

While international conventions like the Basel Convention tried to attempt to regulate waste and environmental harm, fast fashion companies often exploited loopholes in global trade laws to circumvent these regulations. Free trade zones and favourable export conditions in countries like China and Bangladesh allow companies to produce garments cheaply while avoiding more stringent environmental and labour standards (Herbst, 2022).

Ultra-Fast Fashion in China

It is well known that China is one of the primary hubs of the fast fashion industry. Consequently, there is a need to examine the protocols within China's ultra-fast fashion production landscape, particularly regarding sourcing raw materials and compliance with environmental regulations.

One example is China's Ministry of Ecology and Environment, which enforces environmental regulations to curb pollution within the textile manufacturing sector. These regulations include limits on wastewater discharge and air emissions. Companies operating within the fast fashion industry must procure permits and adhere to these regulatory stipulations (Javed, 2024). Regulatory agencies conduct periodic inspections to verify compliance, and environmental impact assessments (EIAs) are conducted for textile manufacturing facilities to provide data on environmental ramifications (Australian Wool Innovation Limited, 2023). Workers' unions, local communities, and non-governmental organisations (NGOs) also access these assessments, allowing stakeholders to voice concerns about pollution, energy consumption, and other environmental impacts of fast fashion production (Writix, 2024).

In addition to environmental regulations, fair and ethical sourcing practices have become essential for raw materials management. Chinese clothing manufacturers may implement supply chain transparency initiatives, providing information about suppliers and subcontractors. This transparency helps ensure the production processes align with environmental and social standards (Fraser, 2022). Furthermore, companies must adhere to Chinese government regulations that safeguard workers' rights, ensure workplace safety, and mitigate environmental impacts. The Ministry of Human Resources and Social Security and the State Administration of Work Safety enforce these regulations (Speed, 2021).

Addressing the concerns about fast fashion in China necessitates a more in-depth examination of its environmental and human welfare implications. Assessing the ethical integrity of China's regulations and procedures governing environmental and human welfare is critical. China, the world's leading textile producer, with the fast fashion industry contributing significantly to textile pollution, is exposed to critical textile issues. For example, the dyeing and finishing processes emit harmful chemicals into water bodies, exacerbating water pollution. A notable example is the contamination of the Pearl River Delta in southern China, where numerous textile factories discharge untreated wastewater containing dyes and pollutants (You, 2009). Moreover, textile manufacturing processes such as spinning, weaving, knitting, dyeing, and finishing require substantial electricity consumption. This stresses the growing burden on energy resources to meet this rising demand, which places increased strain on the environment to generate the necessary supply.

China's reliance on coal as a primary energy source for textile production results in significant greenhouse gas emissions and air pollution (Herbst, 2022). Coal-fired power plants are major contributors to carbon dioxide emissions, sulphur dioxide, nitrogen oxides, and particulate matter, exacerbating local and global environmental issues. The fast fashion industry's dependence on inexpensive, disposable clothing has also driven a surge in textile waste. China generates significant clothing waste annually, ending in landfills or incinerators. For example, vast quantities of clothing are sold during China's Singles' Day shopping event (November 11th), further contributing to waste accumulation (Li, 2020).

Despite these obstacles, China implemented measures to tackle the issues. The government limits pollutant emissions from textile dyeing and finishing operations, including wastewater treatment criteria and environmentally friendly chemicals in textile production (Lee, 2022). The implementation hoped to reduce the environmental impact of textile manufacturing. China is also committed to providing resources to improve its wastewater treatment infrastructure. Many textile industrial parks nowadays have centralised wastewater treatment facilities which serve multiple factories, thus improving water quality in the surrounding areas (International Trade Administration, 2023).

China also heavily invests in R&D and innovative efforts to create environmentally friendly textile materials and production processes. Researchers investigating using natural dyes derived from plants and microorganisms as an alternative to synthetic dyes, known to be environmentally harmful, have increased significantly. Furthermore, ongoing research into biodegradable textiles and recycling technologies suggests possible solutions to textile waste and pollution (Newton, 2023).

Although China has tried to reduce its environmental impact, labour issues remain a primary concern. Migrant workers in China's fast fashion industry face long working hours, low wages, and inadequate safety measures. Many workers face barriers to accessing legal remedies, making it more challenging to protect their rights legally. Advocacy groups urged better transparency and accountability throughout the fast fashion supply chains (Cheng, 2023).

Workers in fast fashion factories are also subjected to hazardous chemicals used in textile production and inadequate ventilation and working conditions. Prolonged exposure to toxic chemicals can cause serious health problems, including respiratory problems, skin disorders, and reproductive health complications. Improving occupational health and safety standards is critical to ensuring the well-being of fast fashion workers (Zhang, 2010).

Despite the negative impacts of fast fashion, the industry has created numerous job opportunities, particularly in manufacturing hubs like Guangdong and Zhejiang provinces. These jobs provide income for millions of workers,

including migrant labourers from rural areas seeking employment in urban centres.

It is fair to state that China has introduced several measures to safeguard workers' rights in the textile and garment industry. These include the Labour Contract Law, which outlines employment contracts, working hours, and termination procedures, and the Labour Law Inspection Regulations, which guide labour inspections and enforcement actions (Acclime China, 2023). China's Occupational Disease Prevention Law also outlines measures to prevent and manage occupational diseases, including those resulting from exposure to hazardous chemicals in textile production. The Work Safety Law, established in 2021, mandates workplace safety management, accident prevention strategies, and emergency response protocols (International Labour Organization, 2021). Nevertheless, despite these efforts, exploitation still takes place.

Ultra-Fast Fashion in Bangladesh

The apparel sector in Bangladesh, which emerged in the late 1980s, has since become the world's second-largest garment exporter, driven by rapid production capabilities and extremely low prices. However, the global demand for fast fashion has significantly impacted the country's environment and workforce, particularly affecting poor and uneducated workers at the lower end of the supply chain.

In Bangladesh, the existing environmental regulations provide crucial safeguards over the country's natural resources. The Bangladesh Environmental Conservation Act is the foundation for regulating ultra-fast fashion. Companies throughout the industry are mandated to adhere to strict sustainable resource usage guidelines, waste management, and pollution control. Section 5 mainly ensures that ultra-fast fashion companies must obtain the necessary Environmental Clearance Certificates (ECCs) from the Department of Environment (DoE) before commencing operations. This added process ensures that all proposed projects meet national environmental standards.

This is increased through section 6, allowing the government to develop protection measures for specific industries like the textile sector. This enables addressing concerns like waste management, resource conservation and emission control. Furthermore, section 8 explicitly mandated that untreated pollutants be released without pollution control measures. Companies must ensure that wastewater and solid waste are first treated before release. Those projects with possible impacts must conduct an EIA to verify all possible environmental effects and ensure that their mitigation measures are correctly laid out.

The requirement put forward by section 11 increases environmental protection by establishing an Environmental Conservation Fund where these companies can be required for their contribution, especially when their projects involve sustainable resource management and pollution control. However, it is yet to be seen that with the current established legal framework, the effects of enforcement implementation are successful. Thus, ensuring compliance across ultra-fast fashion's complex supply chains, which involve numerous subcontractors and suppliers, is challenging. Transparency within the industry is also limited, with many companies hesitant to disclose detailed information about their environmental practices (Fraser, 2022). The lack of transparency impedes regulatory oversight and accountability. Furthermore, many companies in the sector face financial and technical challenges in implementing necessary pollution control measures, such as wastewater treatment plants and solid waste management infrastructure.

Aside from environmental concerns, Bangladesh's Labour Act of 2006, amended in 2013 and 2018, regulates working conditions, wages, and workers' rights in the garment industry. This law establishes specific guidelines for working hours, rest breaks, overtime pay, and wages. Section 100 of the Act establishes a maximum workday of eight hours and a maximum workweek of 48 hours, with overtime provisions outlined in Section 108. Minimum wage requirements are enforced to ensure that workers are fairly compensated, which is critical in the ultra-fast fashion sector, where the push to meet rapid production deadlines often leads to exploitative practices.

The Act also includes special protections for women and young workers. Section 103 prohibits pregnant and nursing women from working night shifts between 10 PM and 6 AM to protect maternal and child health. This provision is particularly significant in the ultra-fast fashion industry, where irregular and long working hours are standard. The law also prohibits the employment of children under 14, with specific regulations in place to

govern the working conditions of adolescents aged 14 to 18, as outlined in Sections 34 and 37.

Despite these legal protections, enforcement in the fast fashion industry remains weak. The intense production schedules of ultra-fast fashion have led to widespread labour exploitation. Major international brands like Zara, H&M, and GAP have faced repeated allegations of labour exploitation in Bangladesh, where suppliers are often paid below production costs, forcing factories to cut corners on wages and worker safety (Al-Jazeera, 2023). Garment workers in Bangladesh regularly endure excessively long hours, with some reports suggesting they work up to 16 hours a day, seven days a week (Al-Jazeera, 2023).

Although Bangladesh has established a strong legal framework to protect workers and the environment, its implementation is far from flawless. The complexity of the supply chains, combined with the lack of transparency and inadequate investments in pollution control infrastructure, makes it difficult to enforce the environmental standards outlined in the Bangladesh Environmental Conservation Act. Similarly, while the Labour Act of 2006 includes explicit provisions to safeguard workers' rights, the sheer volume of production in the ultra-fast fashion industry often leads to violations, especially concerning forced overtime, low wages, and unsafe working conditions (Monay, 2021).

Consequences of Ultra-Fast Fashion

As presented, the ultra-fast fashion industry has significantly impacted both China and Bangladesh, causing widespread environmental degradation and labour exploitation. Despite efforts by both countries to establish regulatory frameworks, these efforts are insufficient to address the environmental and labour challenges the fast fashion industry poses. The continued pollution of natural resources and worker exploitation demonstrates this lack of regulatory effectiveness. Outlined below are key highlights and an extended discussion of these impacts

In China, the textile industry has a negative environmental impact, particularly regarding water pollution. The People's Republic of China's Water Pollution Prevention and Control Law, enacted in 1984 and amended in 2018, establishes a legal framework for preventing and controlling water pollution. However, the textile industry's use of hazardous chemicals during dyeing processes continues releasing 72 toxic substances into the country's rivers, depleting safe water resources and endangering the environment and public health. This violation of environmental regulations points to weak enforcement mechanisms that allow the industry to bypass crucial laws intended to protect water quality (Environmental Defense Initiative, 2023).

Additionally, the textile sector significantly contributes to China's greenhouse gas emissions. According to the Air Pollution Prevention and Control Action Plan of 2013, the Chinese government set goals for reducing emissions, mainly from industries like manufacturing. However, 43% of the country's textile-related greenhouse gas emissions are linked to exports, demonstrating the textile industry's continued impact on air quality and its substantial carbon footprint (Environmental Defense Initiative, 2023). The industry's focus on profit, coupled with the increase in online orders, particularly during major sales events, leads to further increases in carbon emissions. The Environmental Protection Law of the People's Republic of China, passed in 1989 and revised in 2015, mandates companies to mitigate their environmental impact. However, the enforcement of this law has proven insufficient in controlling the fast fashion sector's environmental degradation.

The unsustainable overproduction of clothing, driven by fast fashion, leads to an estimated 53 million tons of garments being produced annually, with 85% ending up in landfills. China's Solid Waste Pollution Prevention and Control Law of 2020 aims to regulate waste management and promote recycling. However, the sheer volume of textile waste generated by the fast fashion industry shows that these regulations are either inadequately enforced or insufficient in scope to deal with the growing problem. The environmental damage caused by fast fashion underscores the need for more substantial and comprehensive environmental laws and more effective enforcement strategies (Environmental Defense Initiative, 2023).

Labour exploitation is when weak labour laws allow companies to exploit vulnerable workers. Fair wages, reasonable working hours, and safe working conditions are mandated by the People's Republic of China Labour Law (1995) and the Labour Contract Law (2008). Despite these legal frameworks, workers in ultra-fast fashion factories frequently work 18-hour days, seven days a week, for as little as two cents per clothing item produced.

These factories are notorious for withholding the first month's wages as employee control, violating Chinese labour laws (Environmental Defence Initiative, 2023). Furthermore, weak trade unions and insufficient oversight exacerbate exploitative practices.

Chinese workers are exposed to hazardous chemicals such as silica dust and carcinogens used in textile production without adequate safety precautions. The People's Republic of China's Work Safety Law (2002) was intended to protect workers from hazardous working conditions. However, weak enforcement in fast fashion factories means workers face significant health risks (Herbst, 2022). Workers have little recourse to improve their working conditions or demand better protections because workplace safety laws are not effectively implemented, and there are no strong trade unions.

Similarly, the ultra-fast fashion industry in Bangladesh has caused severe environmental harm. The Bangladesh Environmental Conservation Act of 1995 provides the primary legal framework for environmental protection. However, the garment industry continues discharging harmful chemicals and dyes into critical water sources, such as the Buriganga River. This violation of environmental standards has resulted in high levels of toxic pollutants in water sources, including chromium and cadmium, severely affecting public health and local ecosystems (Jani, 2022). Despite legal requirements for wastewater treatment under the Bangladesh Water Pollution Control Ordinance of 1973, many garment factories fail to treat their wastewater before discharging it, leading to widespread contamination.

Labour exploitation in Bangladesh's garment industry is well-documented, with workers facing low wages, long working hours, and unsafe working conditions. The Bangladesh Labour Act of 2006, amended in 2013 and 2018, sets out provisions for minimum wage requirements, working hours, and safety standards. As mentioned, section 100 of the Act limits working hours to eight per day and 48 per week, but reports indicate that garment workers are often required to work far beyond these limits, with many labouring for 16 hours a day, seven days a week (Al-Jazeera, 2023).

The tragic collapse of Rana Plaza in 2013, which resulted in the deaths of over 1,100 workers, highlighted the widespread non-compliance with building and safety standards in Bangladesh's garment sector. Following this disaster, the Bangladesh Accord on Fire and Building Safety was established to improve factory conditions. While the Accord has improved some factories, many workers still face unsafe conditions, and child labour remains a significant issue in the sector (Jani, 2022). The Child Labour (Prohibition and Regulation) Act of 2006 prohibits employing children under 14. However, enforcement of this law remains weak, particularly in subcontracting arrangements where child labour is more prevalent.

The failure to pay garment workers during the COVID-19 pandemic further exposed the systemic exploitation within the industry. Many brands cancelled their orders without making payments for produced goods, leaving employees without pay for months. This blatant violation of workers' rights shows a need for stronger labour protections and enforcement by the existing laws, particularly the Bangladesh Labour Act (Jani, 2022). In addition to the lack of union representation, plus the suppression of workers' rights to unionise, the situation worsens, putting pressure on workers to achieve better working conditions.

The continued exploitation of labour and environmental degradation in China and Bangladesh highlights the importance of a comprehensive approach to fast fashion regulation. Strengthening the enforcement of existing environmental and labour laws is critical, but more measures are required to hold the ultra-fast fashion model accountable for its negative consequences. Collaboration among governments, international organisations, manufacturers, and consumers is required to build a more sustainable and ethical industry.

International conventions may also play an important role in increasing compliance in both countries. The International Labour Organization's (ILO) conventions on Labour Rights (ILO Convention No. 87) and Occupational Safety and Health (ILO Convention No. 155) provide a framework for improving working conditions and protecting workers' rights to organise. However, adherence to these conventions is inconsistent, with many fast fashion companies exploiting loopholes and lax enforcement.

As a result, the ultra-fast fashion industry continues to erode both environmental sustainability and labour rights.

While laws exist in China and Bangladesh to address these issues, enforcement remains a significant challenge, and additional reforms are required. Stronger international collaboration, combined with stricter enforcement of national laws, is critical for addressing the consequences of fast fashion and protecting the environment and the workers who keep the industry going.

METHODOLOGY

This analysis adopts a doctrinal approach by reviewing the European Union's key regulatory frameworks for the textile industry, including the EU Strategy for Sustainable and Circular Textiles, the REACH Regulation, the Corporate Sustainability Due Diligence Directive, and the Eco-Design for Sustainable Products Regulation. Policy documents, regulatory texts, and relevant literature were examined to understand how these initiatives address environmental and social challenges.

FINDINGS

Malaysian Position on Ultra-Fast Fashion

The rapid expansion of e-commerce and a digitally savvy population are fuelling Malaysia's rise in ultra-fast fashion. With rising internet penetration and smartphone usage, the country has become a hotbed for online retail, including fast fashion. According to Masters (2023), the convenience of online shopping, particularly among younger demographics, has made Malaysia an ideal market for brands that rely on short production cycles and digital platforms. Malaysia has a high percentage of digital consumers; approximately 83% of the population aged 15 and up actively engages in online activities, with nearly half of these consumers shifting primarily to online purchasing in recent years (Poovenraj, 2020). This tech-savvy consumer base aligns seamlessly with the business model of ultra-fast fashion, contributing to the growing presence of such brands in the Malaysian market.

Given that the economic and social aspects of ultra-fast fashion are thriving in Malaysia, concerns remain high over the country's legislative framework and whether they are adequately prepared to address this trend's environmental and labour implications.

Malaysia's regulatory landscape includes several laws and policies influencing the fashion industry. The Law and Regulations Concerning the Importation, Exportation, Transit, Transshipment, and Storage of Goods governs customs duties, tariffs, and other charges. Approximately 84.3% of Malaysia's import tariff lines are bound, meaning that tariff changes require renegotiation of trade agreements (Oogsa, 2023). This stability allows fashion companies to strategise imports effectively. The Malaysian Free Zone Act 1990 also provides Free Commercial Zones (FCZs) and Free Industrial Zones (FIZs), where international trade can be facilitated without imposing certain taxes and duties. Under Section 3 of the Act, the government can establish these zones to promote industrial development and attract foreign investment. Section 11 further grants the Minister of Finance the power to exempt certain taxes and duties on goods entering or leaving these zones, making Malaysia an attractive destination for fashion businesses seeking to reduce operating costs.

From an economic standpoint, these regulations establish Malaysia as a competitive player in the ultra-fast fashion industry. However, the Environmental Quality Act 1974 paints a more complicated picture of Malaysia's readiness to address the environmental consequences of ultra-fast fashion. Unlike Chinese and Bangladeshi regulations, Malaysia's Environmental Quality Act strongly emphasises waste management and includes specific provisions to address environmental concerns. Section 2 defines "waste" and "scheduled waste," and Section 3(1) gives the Department of Environment (DOE) the authority to enact pollution control measures. Section 22 addresses hazardous waste management, and Section 34B requires environmental impact assessments (EIAs) for projects that may have significant environmental consequences. These provisions aim to protect public health and encourage sustainable development practices.

While Malaysia's environmental laws are relatively strong, questions about waste categorisation remain. For example, the Environmental Quality (Scheduled Wastes) Regulations 2005 classify certain metals, including chromium and cadmium, as hazardous materials under SW104, SW107, and SW204. However, these metals are

not commonly associated with garment production, raising concerns about whether the release of certain chemicals, such as those used in textile manufacturing, is adequately regulated. Furthermore, the scheduled waste categories do not explicitly cover chemicals commonly emitted during ultra-fast fashion production, such as sulphur dioxide and nitrogen oxides, potentially leaving gaps in Malaysia's regulatory framework. These gaps may allow harmful environmental practices to continue unchecked, as observed in China and Bangladesh.

Sections 17 and 18 of the Environmental Quality Act 1974 authorise the Minister to issue licenses for pollution-causing activities. The Environmental Quality (Clean Air) Regulations 2014 limit air pollution by requiring businesses to implement pollution control systems and follow emission standards. However, issues arise with the prescribed limits for pollutants such as sulphur dioxide and nitrogen oxide. The regulations do not specify how frequently and rigorously pollutants must be monitored, raising concerns about whether the fast fashion industry's continuous 24-hour production cycles, as seen in countries such as China, will be appropriately regulated.

Malaysia's legislative framework differs significantly from that of China and Bangladesh, particularly regarding waste management. While Malaysia appears well prepared to manage waste under the Environmental Quality Act, questions remain about the adequacy of specific regulations governing chemicals used in garment production. Pollutant emissions such as sulphur dioxide and nitrogen acid may not be fully addressed under current legislation, implying that Malaysia's preparedness to deal with the environmental consequences of ultra-fast fashion is inadequate. Without comprehensive regulatory revisions, Malaysia may face environmental challenges similar to those faced by China and Bangladesh, where waste management and emissions control have proven insufficient.

Malaysia has not received the same level of scrutiny as Bangladesh regarding garment worker exploitation. However, the rise of ultra-fast fashion could introduce new labour challenges. Malaysia's Employment Act 1955, which governs working conditions, wages, and hours, provides basic protections for workers, including minimum wage requirements and regulations on working hours. Nevertheless, as the demand for faster production grows, there is potential for the emergence of exploitative labour practices. The Occupational Safety and Health Act 1994 mandates safe working environments, but in other countries, enforcement of these laws is often lacking in fast-paced industries like fashion.

The rise of e-commerce in Malaysia has significantly impacted consumer behaviour, especially in the fashion industry. Reports indicate that 19.9 million Malaysians were active online shoppers in 2019, increasing this number due to the COVID-19 pandemic and subsequent lockdowns (Leong, 2023). Platforms like Shopee saw a 24% increase in the average online basket size during the first half of 2020, reflecting the growing demand for online retail. Malaysian consumers, particularly Generation Z and Millennials, have embraced digital platforms for purchasing apparel and footwear, contributing to the growth of ultra-fast fashion brands.

Leong (2023) reported an account which states that 29% of Malaysians continued to buy clothes online during the movement control order (MCO), with 61% of consumers aged 24-34 actively shopping for fashion items during this period. The Statista Fashion Outlook report highlights that Millennials (aged 25-34) are Malaysia's largest demographic of fashion shoppers, with women comprising 54.1% of all fashion buyers. Women also account for 87% of luxury fashion shoppers, demonstrating Malaysian women's significant purchasing power, which drives demand for fast fashion and high-end apparel.

The growing trend of online shopping, combined with Malaysia's digital infrastructure, positions the country as a key market for ultra-fast fashion. However, with this growth comes the need for stronger environmental and labour regulations to prevent the industry from causing harm, similar to what has been observed in other countries. Malaysia is embracing the wave of ultra-fast fashion development both economically and socially. This is due to the country's make-up, where the digital fundamentals, the increased consumer interest, and the relatively cheap labour allow for such activities to prosper and become a heaven for fashion brands in terms of growth, marketability and investment. Malaysian laws, like the regulations on importation and exportation, which were mixed with the Free Zone Act 1990, have made it attractive for fashion companies. However, there are valid concerns over its impact on the environment and labour practises generated by the development. Indeed, the Environmental Quality Act of 1974 has provisions for all aspects of waste management, but issues related to

chemical emissions and workers' exploitation are ongoing concerns. Significant changes are needed to ensure the ultra-fast fashion sector is run sustainably and ethically. There is a need to balance economic growth and protect workers' rights and the environment. Updating these laws and the enforcement ensuing can be a game changer towards wastage, pollution, and exploitation that is genuinely 'sustainable' in its intended definition.

Comparative Regulatory Framework Malaysia, China and Bangladesh

The rise of ultra-fast fashion has brought significant economic opportunities to production hubs like Malaysia, China, and Bangladesh. Still, it has raised critical concerns regarding environmental sustainability and labour rights. A closer examination of the regulatory frameworks governing these countries highlights similarities, differences, and enforcement challenges. This essay evaluates their environmental and labour laws, as well as the effectiveness of enforcement, providing insights into their strengths and weaknesses while suggesting potential improvements.

Environmental laws play a critical role in mitigating the adverse effects of ultra-fast fashion, including pollution and resource depletion. However, the effectiveness of these regulations varies significantly across Malaysia, China, and Bangladesh.

In Malaysia, the Environmental Quality Act 1974 is the cornerstone of environmental governance, supported by regulations such as the Scheduled Wastes Regulations 2005 and the Clean Air Regulations 2014. These laws aim to control hazardous waste, air pollution, and other environmental harms. Despite these frameworks, Malaysia struggles with implementation challenges specific to the textile industry. Issues like the discharge of untreated textile dyes and air pollutants, such as sulfur dioxide, are inadequately addressed due to weak monitoring and enforcement mechanisms. Moreover, the lack of textile-specific provisions in existing laws hampers efforts to tackle industry-specific environmental issues.

As the largest textile producer globally, China has implemented stringent environmental regulations, including the Environmental Protection Law (1989, revised 2015) and the Water Pollution Prevention and Control Law (1984, amended 2018). These laws focus on pollution reduction, wastewater treatment, and sustainable resource management. Recent initiatives include adopting centralised wastewater treatment systems and restricting harmful chemicals. However, the sheer scale of China's textile industry presents enforcement challenges. Many factories bypass regulations, particularly in rural areas with limited oversight. The reliance on coal-based energy further exacerbates the environmental impact, making enforcement a daunting task.

In contrast, Bangladesh's environmental framework, governed by the Bangladesh Environmental Conservation Act (1995), is relatively nascent. The act requires industries to conduct Environmental Impact Assessments (EIAs) and obtain Environmental Clearance Certificates (ECCs). However, enforcement remains limited due to a lack of technical capacity and resources. The unchecked discharge of untreated wastewater by garment factories into rivers highlights the inefficacy of current regulations. Consequently, Bangladesh faces severe environmental degradation, with 85% of its textiles ending in landfills.

The ultra-fast fashion industry has been criticised for exploitative labour practices, including low wages, long working hours, and unsafe working conditions. Each country's labour laws attempt to address these issues but differ in scope and enforcement.

Malaysia's labour framework is built on the Employment Act of 1955 and the Occupational Safety and Health Act of 1994, which regulate working conditions, wages, and workplace safety. While these laws provide a robust legal foundation, enforcement is inconsistent. The rise of ultra-fast fashion in Malaysia risks exacerbating labour exploitation, especially for vulnerable migrant workers who often face substandard conditions and inadequate protections.

China's labour laws, including the Labor Contract Law (2008) and the Occupational Disease Prevention Law (2002), aim to safeguard workers' rights and ensure safe workplaces. However, enforcement remains uneven, with many factories operating under exploitative practices. Migrant workers are particularly vulnerable, often subjected to long hours and insufficient pay. These issues persist despite the formal protections offered by Chinese labour laws, reflecting gaps in enforcement and accountability.

Bangladesh's Labor Act (2006, amended 2013 and 2018) incorporates minimum wages, maximum working hours, and occupational safety provisions. Following the Rana Plaza disaster in 2013, Bangladesh introduced the Fire & Safety Accord, which improved building safety and labour standards. However, enforcement remains a significant challenge. Forced overtime, wage disparities and unsafe working conditions continue to plague the garment industry. Limited resources and corruption further hinder the effectiveness of labour laws.

While all three countries have established legal frameworks to address environmental and labour challenges, enforcement remains a persistent issue. In Malaysia, enforcement agencies lack the resources and technical expertise to monitor compliance effectively. Factories often evade penalties, taking advantage of weak regulatory oversight. Similarly, environmental monitoring is constrained by inadequate categorisation of textile-specific pollutants, leaving critical gaps in enforcement.

China's enforcement challenges stem from the vast scale of its textile industry. The central government has introduced policies to improve compliance, such as centralised wastewater treatment facilities and stricter penalties for violations. However, local governments, particularly in rural areas, cannot often enforce these regulations consistently. Transparency issues further complicate enforcement, with many factories operating without proper oversight.

Bangladesh's lack of financial and technical resources severely limits enforcement efforts. Regulatory agencies struggle to monitor compliance across thousands of garment factories, many of which operate informally. Corruption and political interference exacerbate the problem, allowing factories to bypass safety and environmental standards. The Fire & Safety Accord has improved safety conditions in some factories, but its scope remains limited, with many factories continuing to operate outside its jurisdiction.

Each country must strengthen its regulatory frameworks and enforcement mechanisms to address these challenges. In Malaysia, the Environmental Quality Act should be expanded to include provisions specific to the textile industry, such as the regulation of dyes and hazardous chemicals. Enhanced monitoring systems and stricter penalties for non-compliance could improve enforcement. Labour laws should be updated to address the vulnerabilities of migrant workers, ensuring equitable protections for all employees.

China should prioritise transparency and accountability in its regulatory systems. Increasing penalties for violations and expanding centralised treatment facilities could improve compliance. Empowering local governments with the resources and authority to enforce regulations would also enhance effectiveness. Promoting renewable energy in the textile industry could also mitigate its environmental impact.

Investments in pollution control infrastructure and worker safety programs are crucial in Bangladesh. Strengthening the capacity of regulatory agencies through technical training and financial support would improve enforcement. Greater transparency in supply chains, achieved through mandatory compliance reporting, could hold factories accountable. Expanding the scope of initiatives like the Fire & Safety Accord would also enhance safety standards across the industry.

The regulatory frameworks of Malaysia, China, and Bangladesh illustrate the complexities of addressing ultra-fast fashion's environmental and labour challenges. While each country has established laws to govern these issues, enforcement remains a significant obstacle. Strengthened regulations, increased transparency, and robust enforcement mechanisms are essential to mitigate the industry's negative impacts and promote sustainable practices. A comparative understanding of these frameworks provides valuable insights for policymakers and industry stakeholders seeking to balance economic growth with social equity and environmental sustainability.

In comparison, the European Union (EU) has emerged as a global leader in regulating the textile industry, addressing fast and ultra-fast fashion's environmental and social challenges. Its comprehensive framework emphasises sustainability, corporate accountability, and the reduction of environmental and social harm throughout the textile supply chain. This essay explores the EU's approach, highlighting its core initiatives and their role in creating a more sustainable fashion industry.

The EU's regulatory framework is anchored in several critical initiatives that balance economic growth with sustainability. One of the key components is the EU Strategy for Sustainable and Circular Textiles, introduced

in 2022. This strategy promotes a circular economy by ensuring that textiles placed on the EU market are durable, repairable, and recyclable. This initiative aims to minimise the fashion industry's environmental footprint while fostering resource efficiency by prioritising the reduction of textile waste and encouraging the reuse of materials.

Another cornerstone of the EU's approach is the REACH Regulation (Registration, Evaluation, Authorisation, and Restriction of Chemicals). This regulation governs the use of hazardous chemicals in the production of textiles, ensuring transparency and protecting both human health and the environment. Manufacturers must disclose detailed chemical usage and safety data, promoting accountability and encouraging the adoption of safer alternatives. REACH exemplifies the EU's commitment to high safety standards, which extend beyond its borders to influence global supply chains.

Corporate accountability is further reinforced through the Corporate Sustainability Due Diligence Directive, which mandates companies to identify, prevent, and mitigate risks related to human rights violations and environmental harm throughout their supply chains. The directive ensures that sustainability is integrated into business operations by holding companies accountable for their practices. This initiative encourages transparency, empowering consumers to make informed choices and driving systemic change within the industry.

The Eco-Design for Sustainable Products Regulation complements these efforts by focusing on improving the environmental performance of textiles through better design. The regulation reduces resource consumption and minimises waste by setting durability, reparability, and recyclability standards. This aligns with the EU's broader vision under the European Green Deal, a comprehensive strategy targeting carbon neutrality by 2050. The Green Deal incorporates specific measures for the textile sector, such as promoting renewable energy in production processes and encouraging innovations in sustainable materials.

The EU's regulatory approach reflects its recognition of the interconnectedness between environmental sustainability, social equity, and economic growth. By addressing the root causes of environmental harm and labour exploitation in the textile industry, these initiatives aim to create a system that is both sustainable and socially responsible. The emphasis on circular economy principles, chemical safety, corporate accountability, and eco-design demonstrates the EU's commitment to leading global efforts in transforming the fashion industry.

Therefore, observing the EU's comprehensive regulatory framework for the textile industry offers a model for sustainable and equitable practices. Its initiatives prioritise reducing environmental harm, promoting transparency, and fostering innovation in sustainable design. As the global fashion industry grapples with the challenges of ultra-fast fashion, the EU's approach provides a clear roadmap for achieving sustainability and accountability, setting a high standard for other regions to follow.

Practical Solutions

The fast fashion industry has been a significant driver of economic growth in many developing countries. However, it has also brought severe challenges related to labour rights violations and environmental degradation. To address these issues, practical solutions must be implemented to strengthen international collaboration, increase supply chain transparency, and establish a global framework for regulating the industry's environmental and social impact. These measures aim to create a more sustainable and equitable global fashion industry.

Strengthening international collaboration is an essential first step in tackling the labour and environmental issues in the fast fashion industry. The inherently global nature of fast fashion supply chains means that countries must work together to harmonise labour and environmental standards to prevent exploitation and regulatory arbitrage. Multilateral organisations such as the United Nations and the International Labour Organization (ILO) can play a pivotal role in facilitating agreements that hold all participating nations to the same standards. For example, expanding the ILO's Decent Work Agenda to include specific guidelines for the garment industry would ensure consistent labour protections across borders. Similarly, regional trade agreements could consist of enforceable labour rights and environmental sustainability provisions, incentivising compliance through access to preferential trade terms.

Increasing transparency in fast fashion supply chains is another critical measure to improve labour and

environmental standards. The fast fashion industry supply chains are often opaque, making tracking and addressing exploitative practices or environmental harm difficult. Governments and industry stakeholders should mandate the disclosure of detailed supply chain information, including supplier working conditions, wages, and environmental compliance. Initiatives like the Fashion Transparency Index, which assesses companies' transparency regarding social and environmental practices, can provide a blueprint for global adoption. Furthermore, leveraging technologies like blockchain could enable real-time tracking of supply chain data, allowing consumers and regulators to verify compliance with ethical and sustainable practices. Such transparency fosters accountability and empowers consumers to make informed decisions that align with their values.

Establishing a comprehensive global framework for regulating the fast fashion industry's environmental and social impact would provide a unified standard to guide nations and companies. This framework could be modelled after successful international agreements like the Paris Agreement, setting binding targets for reducing carbon emissions, minimising textile waste, and improving water management. For labour protections, the framework could establish minimum wage standards, workplace safety, and anti-discrimination policies applicable across all production hubs. Such a framework would require collaboration among governments, international organisations, and private sector stakeholders, with clear penalties for non-compliance and incentives for companies that adopt sustainable and ethical practices.

Corporate accountability is also a cornerstone of meaningful reform in the fast fashion industry. Governments and international organisations must impose stricter regulations on corporations to ensure their operations align with ethical and environmental standards. The European Union's Corporate Sustainability Due Diligence Directive provides a valuable example, requiring companies to identify, prevent, and mitigate human rights violations and environmental harm throughout their supply chains. Adopting similar measures globally would ensure that corporations are held accountable for their actions. Significant financial penalties for non-compliance and public campaigns exposing unethical practices could further pressure companies to adopt responsible policies.

Promoting sustainable production practices is another vital aspect of improving labour and environmental regulations in the fast fashion industry. Governments can incentivise eco-friendly production methods through tax breaks, grants, and subsidies for companies adopting renewable energy technologies or sustainable fabrics. Policies could also require brands to adhere to eco-design principles, ensuring their products are durable, repairable, and recyclable. These measures would reduce textile waste and encourage more sustainable use of resources while fostering innovation in the fashion industry.

Lastly, enhancing worker protections is essential for addressing labour exploitation in the fast fashion industry. Governments must enforce stricter regulations on working hours, wages, and workplace safety. Collaboration between countries and international organisations could establish a certification system for ethical labour practices, similar to existing fair-trade certifications, providing clear indicators for consumers about a brand's commitment to worker welfare. Improved monitoring mechanisms and robust enforcement of labour laws would safeguard workers' rights across the supply chain.

Therefore, addressing the fast fashion industry's labour and environmental challenges requires a multifaceted approach that includes international collaboration, supply chain transparency, corporate accountability, and sustainable production practices. By implementing these practical solutions, governments, organisations, and brands can transform the industry into a model of sustainability and equity. These measures address the immediate issues of exploitation and pollution and pave the way for a more ethical and environmentally conscious future for the global fashion industry.

The Path Forward for Malaysia

Therefore, following the experience of countries like China and Bangladesh, we could forecast the upcoming trends and emergence of ultra-fast fashion in Malaysia. If Malaysia is unprepared to handle such an increase in its development through a robust regulatory framework, it would jeopardise the environment and labour position. Not to state that the current level is perfect, but drawing on what is currently happening in those countries questions the ability of countries like Malaysia to overcome the environmental and labour impact of the ultra-

fast fashion industry.

Malaysia's legal framework for the fashion industry includes several trade regulations and policies that influence the sector. The Law and Regulations Concerning the Importation, Exportation, Transit, Transshipment, and Storage of Goods establishes a stable import tariff structure, with 84.3% of import tariff lines bound, providing consistency for fashion companies planning import strategies (Oogsa, 2023). Furthermore, under the Malaysian Free Zone Act of 1990, Malaysia established Free Commercial Zones (FCZs) and Free Industrial Zones (FIZs), which promote international trade and industrial development by providing tax breaks and incentives to companies operating in these zones. These incentives have made Malaysia a viable competitor within the ultra-fast fashion industry.

Despite this economic readiness, Malaysia's environmental regulatory framework, as governed by the Environmental Quality Act 1974, reveals flaws in managing the environmental impacts of fast fashion. The Environmental Quality Act's key provisions include waste definitions, pollution control measures, and Environmental Impact Assessment (EIA) such as the Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 2015 requirements for projects with significant environmental consequences which primarily address metal pollutants, while chemicals commonly used in garment manufacturing, such as sulphur dioxide and nitrogen oxides, are not explicitly regulated since it does not expressly list garment manufacturing as a prescribed activity requiring an EIA. This oversight implies that Malaysia, like China and Bangladesh, may allow the discharge of these harmful pollutants, resulting in environmental degradation similar to that seen in those countries.

Drawing on the Environmental Quality (Clean Air) Regulations 2014, which aims to reduce all possible pollution by requiring businesses to implement pollution control systems. However, the ambiguities over the monitoring processes and the prescribed limits for specific pollutants like sulphur dioxide and nitrogen oxides raise concern over the effectiveness of such regulation or similar regulations in ensuring continuous monitoring management of ultra-fast fashion productions. Malaysia would then be exposed to the same environmental challenges unless a better and stronger monitoring system and more precise guidelines are implemented.

Malaysia's labour laws, primarily governed by the Employment Act of 1955 and the Occupational Safety and Health Act of 1994, provide basic worker protections such as minimum wage requirements, working hours regulations, and workplace safety standards. However, the ultra-fast fashion industry's short production cycles and high demand for quick and cheap clothing raise concerns about labour exploitation. The Employment Act of 1955 establishes working hours and a minimum wage, but enforcing these protections is often tricky in industries prioritising speed and low costs.

In reflection, China's environmental and labour regulations did present significant challenges. The country's textile industry, highly driven by ultra-fast fashion, contributes significantly to pollution, particularly water contamination. Textile dyeing processes introduce toxic chemicals into water bodies, severely depleting safe water resources. China's high volume of textile exports accounts for 43% of the country's greenhouse gas emissions, with online shopping events contributing to increased carbon emissions (Environmental Defense Initiative, 2023). Labour exploitation is also prevalent, with companies operating sweatshops where workers face long hours, unsafe conditions, and low wages. The lack of effective government oversight and trade union representation further exacerbates these issues.

Similarly, Bangladesh grapples with environmental and labour concerns in its fast fashion sector. The garment industry relies heavily on harmful dyes and chemicals, which pollute water sources such as the Buriganga River, posing significant risks to public health and the environment (Jani, 2022). Labour exploitation in Bangladesh's garment industry is well-documented, with tragedies like the Rana Plaza collapse highlighting the dangerous working conditions and insufficient enforcement of building and safety regulations.

When considering Malaysia's readiness to handle ultra-fast fashion, it is clear that while the country's economic framework promotes the industry's growth, its environmental and labour laws are insufficient to address the sector's specific challenges. Malaysia's Environmental Quality Act and Clean Air Regulations are inadequate for managing the chemical pollutants and emissions associated with fast fashion production. Furthermore, the Employment Act may not provide adequate protection for workers in the face of the rapid production demands

associated with ultra-fast fashion.

To adequately prepare for the challenges of ultra-fast fashion, Malaysia's environmental and labour regulations must be strengthened. This includes broadening the scope of the Environmental Quality Act to cover chemicals commonly used in garment production and ensuring more stringent monitoring of air and water pollutants. Regarding labour law, more vigorous enforcement of the Employment Act is required to prevent worker exploitation in the fast fashion industry. Furthermore, Malaysia must address consumer demand for ultra-fast fashion by encouraging sustainable purchasing habits and raising awareness about the industry's environmental and human rights implications.

As a result, Malaysia's legislative framework is not fully prepared to address the environmental and labour issues associated with ultra-fast fashion. While the country's economic policies enable the growth of this industry, current regulations are insufficient to mitigate its adverse effects. Malaysia's environmental and labour laws must be strengthened to ensure that the country can effectively manage fast fashion's environmental and social consequences.

CONCLUSION

According to the analysis, China, Bangladesh, and Malaysia are not adequately prepared to face the challenges of ultra-fast fashion, particularly regarding environmental and labour impacts. Each country's legislative frameworks have significant deficiencies, reflecting their inability to regulate the industry's rapid production cycles and extensive resource demands. Malaysia's legislative framework includes several trade policies and import regulations that provide economic incentives for fashion businesses, such as the Law and Regulations Concerning the Importation, Exportation, Transit, Transshipment, and Storage of Goods and the Malaysian Free Zone Act of 1990. While these policies help to prepare the economy for ultra-fast fashion, they do little to address the environmental and labour concerns that come with it.

Malaysia's Environmental Quality Act 1974 establishes pollution control and waste management regulations and Environmental Impact Assessments (EIAs) provisions for projects with significant environmental consequences. However, these regulations focus primarily on metal pollutants and do not cover chemicals commonly used in garment production, such as sulphur dioxide and nitrogen oxides. This regulatory oversight indicates that Malaysia, like China and Bangladesh, allows the discharge of these pollutants into the environment, which could have serious consequences for air and water quality. The Environmental Quality (Clean Air) Regulations 2014 are intended to control air pollution. However, the lack of clear guidelines and monitoring processes for specific pollutants raises concerns about the effectiveness of these regulations in dealing with continuous production cycles.

Malaysia's labour laws, primarily governed by the Employment Act of 1955 and the Occupational Safety and Health Act of 1994, provide basic worker protections such as minimum wage requirements, working hours regulations, and workplace safety standards. However, the speed and intensity of ultra-fast fashion production pose significant risks to labour conditions, including the possibility of exploitative practices such as forced overtime and hazardous working conditions. Without strong enforcement mechanisms, these laws may be insufficient to protect workers in the fast fashion industry, particularly in a sector that prioritises speed and cost-effectiveness.

Consumer demand continues to drive ultra-fast fashion, which legislative bodies struggle to regulate directly. This high demand puts enormous pressure on manufacturers to produce goods quickly and cheaply, often at the expense of environmental sustainability and labour rights. Regulatory gaps persist throughout the ultra-fast fashion production process, from raw material extraction to distribution, as governments in Malaysia, China, and Bangladesh have failed to keep up with the industry's rapid growth. As a result, environmental degradation, poor working conditions, and other negative consequences are becoming more common.

In conclusion, Malaysia is still unprepared to address fast fashion's environmental and social challenges. Although existing regulations were created to support the industry's economic growth, its environmental and labour frameworks are insufficient to manage the complexities of ultra-fast fashion production. The lesson of

China and Bangladesh facing a more significant global challenge in which ultra-fast fashion's rapid production cycles outpace regulatory measures should be a lesson for Malaysia to strengthen its environmental and labour laws to be fully prepared for future energy-efficient fashion and sustainable production practices.

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