

The Role and Scope of Corporate Social Responsibility (CSR) in Pakistan for Preventing Environmental Degradation with Special Reference to Climate Change

Ali Nawaz Khan

alinawaz@uosahiwal.edu.pk

PhD Scholar, Lahore School of Accounting and Finance, University of Lahore

Shahbaz Makhdoom

mshahbaz@iba-suk.edu.pk

PhD Scholar, Lahore School of Accounting and Finance, University of Lahore

Jehangir Khan

jehangirkhan@brains.edu.pk

Lecturer, Department of Business Administration and Management Studies, BRAINS Institute Peshawar

Corresponding Author: Ali Nawaz Khan alinawaz@uosahiwal.edu.pk

Received: 06-01-2026

Revised: 20-01-2026

Accepted: 04-02-2026

Published: 19-02-2026

ABSTRACT

The study examined the impact of corporate social responsibility (CSR) and corporate environmental responsibility (CER) on reducing environmental degradation and climate change in Pakistan from 2010 to 2025. The research analyzed key factors, including CSR spending, environmental initiatives, regulatory compliance, and corporate environmental performance, with a focus on the investments of large corporations in renewable energy, waste management, water conservation, and climate adaptation. A qualitative doctrinal and analytical approach was used, combining legal analysis of environmental and corporate governance frameworks with secondary data from corporate reports, regulatory guidelines, and policy documents. The spending of major companies like Pakistan State Oil, Engro Corporation, Lucky Cement, and Unilever Pakistan demonstrated how substantial and eco-friendly these efforts can be. The results showed that CSR in Pakistan has shifted from charitable acts to more organized projects aimed at protecting the environment. However, companies often still opt to participate and report on their contributions, meaning that the actual effort may not always be equitable. People's responsibility has increased due to regulatory compliance, judicial enforcement, and SECP guidelines, but there is no mandatory spending requirement. Some policy suggestions to promote consistent environmental protection include standardized ESG reporting, incentives for green investments, and a hybrid CSR model. The study indicates that CSR and CER can significantly benefit Pakistan's long-term social and economic development, climate resilience, and sustainable growth.

Keyword: Climate change, Corporate Social Responsibility (CSR), Corporate Environmental Responsibility (CER), Pakistan, Environmental Sustainability, ESG Reporting, Climate Resilience, Judicial activism, sustainable development, green finance

INTRODUCTION

“Climate change poses a serious threat to the right of both current and future generations to live on a healthy and sustainable planet. If we cross this limit, the consequences will affect all of humanity.”

Mr. Kofi Annan, who used to be the Secretary-General of the United Nations.

The Industrial Revolution has depended on the widespread use of fossil fuels to support large-scale industrial production since the beginning of the 19th century. Because of this, unchecked use of fossil fuels, widespread deforestation, and overuse of natural resources for business growth have all led to a

big rise in greenhouse gas (GHG) emissions. Over time, these kinds of actions have caused serious damage to the environment, such as higher global temperatures, glaciers melting, rising sea levels, more non-biodegradable waste, plastic pollution in the ocean, coral ecosystems being destroyed, biodiversity loss, and more air, water, soil, and noise pollution. As a result, these activities caused by people are now one of the main reasons for climate change. The fourth industrial revolution (Industry 4.0) is also quickly changing industrial systems all over the world by using new technologies like artificial intelligence, robotics, human-machine interfaces, and advanced digital production systems. In this context, it is imperative to critically evaluate the environmental ramifications of this technological transformation and to confront the emerging environmental challenges in conjunction with the escalating urgency of the climate change crisis.

As Pakistan nears the midpoint of its 75th year of independence, it is essential to evaluate the efficacy of its democratic system through the dimensions of economic, social, political, and environmental welfare, particularly regarding sustainable development and climate resilience. Pakistan is one of the world's lower-middle-income economies. It only makes up less than 1% of global GDP, but it loses a lot of money because of climate change and environmental degradation. If climate action isn't taken, the combined risks of extreme weather events, environmental degradation, and air pollution are expected to cut Pakistan's GDP by at least 18 to 20 percent by 2050. (World Bank) The economic cost of environmental damage and climate disasters has been very high. For example, the floods in 2022 and 2025 caused damage worth tens of billions of dollars and hurt millions of people. Due to its geography, economy, and infrastructure, Pakistan consistently ranks among the countries most at risk from climate change. This increases the risks to food security, water supply, and livelihoods, even though it doesn't contribute much to global greenhouse gas emissions. (Independent News Pakistan) In response, the Government of Pakistan has created a National Climate Change Policy and a National Adaptation Plan (NAP) to make the country more resilient to climate change, include adaptation and mitigation in national development, and coordinate climate action across sectors such as water, agriculture, disaster risk management, and urban resilience. (Ministry of Climate Change) Some of the most important things Pakistan is doing to deal with climate change are big tree-planting campaigns like the Billion Tree Tsunami and Plant for Pakistan initiatives, efforts to make protected areas bigger, and umbrella ecosystem restoration projects like the Living Indus Initiative to protect and restore important river and land ecosystems. Pakistan stressed the need for climate finance, technology transfer, and support for adaptation and resilience in developing countries during international climate talks like COP26. They also pointed out that limited access to affordable climate finance is still a major problem for carrying out effective climate actions at home. (reuters.com)

No one country or government can solve this problem on its own. For climate action to work in Pakistan, everyone, including individuals, businesses, and the government, must share the responsibility (UNFCCC, 2022). In Pakistan, the Constitution (Article 9 and Article 14) and the Pakistan Climate Change Act, 2017, set out constitutional and legal goals for protecting the environment. Recognizing and enforcing corporate social and environmental responsibility can strengthen these goals (Government of Pakistan, 2017). Companies in Pakistan are in a favorable position to make a real difference in efforts to reduce and adapt to climate change because they have the money, management skills, and technology to do so. This is especially true in areas like clean energy, sustainable production, and infrastructure that can withstand climate change (State Bank of Pakistan, 2022). In this light, corporate responsibility in Pakistan is not only a legal requirement but also a moral obligation. Companies that actively protect society and the environment benefit in return by having a healthier, more productive, and more skilled workforce, which helps the economy stay strong in the long run (Porter & Kramer, 2011; UNDP Pakistan, 2023).

INTERFACE BETWEEN THE RESPONSIBILITY OF BUSINESS TOWARDS CLIMATE CHANGE

Climate change is a global problem that crosses national borders, so the international community must work together and take action. Industrialization has been a major factor in speeding up economic growth, but it has also put a lot of stress on social systems and the environment. In this context, the role of businesses has grown considerably, which means that companies have more responsibility to protect the environment and participate in efforts to slow down climate change.

Since Pakistan became independent in 1947, the government's role has slowly changed from one that focused mostly on law and order to one that focuses more on welfare. The Pakistani Constitution, which emphasizes social justice and meeting citizens' basic needs, demonstrates this (Government of Pakistan, 1973). In this context, a welfare state is expected to protect and improve the social and economic well-being of its citizens by making sure they have access to food, shelter, education, healthcare, and social protection (Jafar et al., 2020). Pakistan is still a developing country, so it still has to confront problems like poverty, food insecurity, rapid population growth, low per capita income, and limited government funds, which make it challenging for the government to address climate change and environmental degradation (World Bank, 2022). Because of this, business groups need to step in and help Pakistan address the growing problem of climate change (Ministry of Climate Change, 2021). Dr. Arif Alvi, who was then the President of Pakistan, made it clear in his speeches to business and industrial groups that companies should not only be focused on making money but also on helping the country and its people (President of Pakistan, 2021). He also said that he was very worried about how vulnerable Pakistan is to disasters caused by climate change. He told businesses to not only cut down on pollution and carbon emissions but also to invest in and promote environmentally friendly and sustainable industries all over the country (President of Pakistan, 2022).

Business operations always use up natural resources, either directly or indirectly, because they are trying to meet human needs. However, pursuing these demands without limits due to unchecked corporate profit motives and strong competition leads to unfair and excessive environmental exploitation. These kinds of actions have long-lasting and wide-ranging effects on social, economic, and environmental levels. But for long-term economic growth to happen, businesses need to continue growing in a way that doesn't harm the environment. As a result, companies have two responsibilities: first, they need to take on the costs of harming the environment, and second, they need to take action to restore and prevent environmental damage and make themselves less vulnerable to the risks of climate change getting worse.

In addition to the economic and political aspects, Pakistani communities have a long history of helping the public through religious and cultural practices like Zakat, Sadaqah, Waqf, and community-based philanthropy. These practices have historically supported education, health, and poverty reduction efforts across the country (Hassan & Ashraf, 2010). Businesses in Pakistan are no longer solely concerned with making as much money as possible in today's globalized economy. Instead, they are putting more emphasis on social, economic, and environmental sustainability because of pressure from stakeholders and regulators (Waheed et al., 2020). Pakistani companies' commitment to society and the environment has also become a strategic marketing tool that helps businesses build customer loyalty, improve their reputation, and stand out from the competition (Ali et al., 2010). Evidence from Pakistan indicates that people are more likely to buy from companies that help people and the environment, which affects their trust in corporate brands (Fatma et al., 2015). The idea of Corporate Social Responsibility (CSR), which was formally defined in the middle of the 20th century, broadened the responsibility of businesses from a narrow focus on shareholders to a wider focus on all stakeholders. This is becoming more important in the Pakistani corporate sector (Bowen, 1953; Jamali & Mirshak, 2007). Initially, CSR practices in Pakistan centered on philanthropic endeavors, including donations, charity drives, and disaster relief initiatives. However, their contemporary focus now encompasses labor

rights, environmental stewardship, ethical governance, and community development (Khan et al., 2013). Moreover, CSR efforts by Small and Medium-sized Enterprises (SMEs) in Pakistan have been considered a worthwhile way to promote social inclusion, environmental responsibility, and sustainable development in a developing economy (Yunis et al., 2017). Lastly, we can look at corporate responsibility for climate change in Pakistan through frameworks like the Triple Bottom Line (Profit, People, and Planet), which evaluates a company's commitment to economic, social, and environmental performance, as well as green performance indicators, corporate citizenship, strategic philanthropy, sustainable development goals, and the business and human rights agenda. These are all becoming more important in the country's corporate sustainability discussions (Elkington, 1997; UNDP Pakistan, 2022).

LEGAL OBLIGATION OF BUSINESS TO MITIGATE CLIMATE CHANGE

In Pakistan, businesses are becoming more aware of their duty to protect the environment and fight climate change. This is mostly due to environmental laws like the Pakistan Environmental Protection Act, 1997, rather than mandatory corporate spending requirements. (Pakistan Environmental Protection Act, 1997). The Companies Act of 2017 in Pakistan says that businesses should do social and environmental good things, but they don't have to. This is mostly voluntary. (Companies Act, 2017). On the other hand, Pakistan's Corporate Environmental Responsibility (CER) is based on rules that require businesses to follow environmental laws, such as Environmental Impact Assessments (EIA), National Environmental Quality Standards (NEQS), and rules set by provincial Environmental Protection Agencies. (2023) The Government of Pakistan. Judicial activism has also made corporations responsible for more than just what the law says they should be. This is especially true when higher courts have stepped in to protect environmental rights as part of the constitutional right to life under Article 9 of the Constitution of Pakistan. (Shehla Zia v. WAPDA, 1994). However, evidence from Pakistan's pharmaceutical sector indicates that CSR disclosure is inadequate and primarily influenced by particular governance characteristics, underscoring the necessity for more robust regulatory guidance and governance reforms to improve transparency and accountability in social responsibility reporting. (Shamsi et al., 2025). In Pakistan's cement industry, Corporate Social Responsibility (CSR) is becoming increasingly seen as a strategic driver of business performance instead of a way to avoid following the rules. There is evidence from the real world that CSR investments improve financial outcomes. This shows that policymakers should promote CSR as a complement to, not a replacement for, environmental and governance regulations. Mehmood et al. (2023). Consequently, this discourse conducts a comparative analysis of CSR in the UK and Pakistan by scrutinizing the disparities and similarities in their legal and regulatory frameworks, enforcement mechanisms, state participation, and institutional contexts that influence CSR practices. (Amjad et al., 2024).

Responsibility of Businesses to Society

In Pakistan, the concept of Corporate Social Responsibility (CSR) originated primarily as voluntary and philanthropic corporate conduct without a binding statutory mandate, with early voluntary guidelines being promoted by the Securities and Exchange Commission of Pakistan (SECP) to encourage socially responsible initiatives by companies long before formal regulation was proposed (SECP, 2013) (Akhtar & Zia, 2022); currently, there is no specific provision in the Companies Act, 2017 that imposes a mandatory CSR obligation on all companies, although listed companies are required to disclose environmental, social, and governance (ESG) matters in their annual reports under Section 227 of the Companies Act, 2017, and SECP's governance code and regulations emphasize board oversight of CSR/ESG policies and reporting as part of corporate governance requirements (SECP Code of Corporate Governance, 2023) (TerraLex); in the absence of a comprehensive CSR statute, the Board of Directors of listed companies in Pakistan is expected to integrate CSR and sustainability policies into corporate strategy and report such activities, with a focus on environmental protection, community development, and ethical business practices as encouraged by SECP's ESG disclosure guidelines and corporate governance regulations (SECP ESG Disclosure Guidelines, 2024) (KPMG Assets); legislative

efforts such as the proposed Corporate Social Responsibility Bill 2025 seek to formalize CSR practices by requiring companies above a specified turnover threshold to allocate at least one percent of net profits toward CSR projects, encompassing environmental sustainability and community welfare, with board accountability for implementation and reporting (Business Recorder, 2025) (Business Recorder); in practice, CSR activities in Pakistan now often include environmental sustainability, natural resource conservation, community education, and clean water initiatives carried out by individual corporations as part of their voluntary CSR strategies (inDrive/WWF partnership; Khushali Bank environmental actions) (Daily Pakistan); importantly, CSR under current Pakistani law remains predominantly voluntary for most companies, with enforcement tied primarily to disclosure requirements for listed firms rather than mandatory expenditure or statutory penalties akin to those in India, yet evolving governance and proposed legislation reflect a trend toward greater CSR regulation and environmental accountability by corporate directors (Akhtar & Zia, 2022; SECP Companies Bill, 2025).

Also, under Pakistani law, if a company or officer breaks the Companies Act, 2017, more than once or after being convicted of the same crime, they may face harsher penalties, such as a higher monetary fine or prison time, as the law intends to discourage repeated violations (Companies Act, 2017). It is important to note that corporate social responsibility (CSR) is not required by law in Pakistan. However, the Securities and Exchange Commission of Pakistan (SECP) and the Government of Pakistan actively promote socially responsible corporate behavior through programs like the Pakistan Corporate Social Responsibility Awards and the Prime Minister's CSR Award, which honor businesses that make positive contributions to society through sustainable and creative CSR practices (Securities and Exchange Commission of Pakistan, 2022; Government of Pakistan, 2021).

Responsibility for the Environment in Business

The Environmental Protection Act of 1997 and the Pakistan Environmental Protection Agency (Review of IEE and EIA) Regulations of 2000 set out a full process for public and private companies in Pakistan to obtain environmental approval through Initial Environmental Examination (IEE) and Environmental Impact Assessment (EIA) before starting development projects (Pakistan Environmental Protection Agency, 2000). However, because natural resources are being used up too quickly and the environment is getting worse, there is a growing need for better and faster enforcement of environmental protections, especially in areas like energy, mining, infrastructure, and manufacturing (Government of Pakistan, 1997). Corporate Social Responsibility (CSR) practices in Pakistan are mostly voluntary and are usually done by companies after they have made a profit or a lot of money, which means that CSR is more of a post-profit or post-liability mechanism than a preventive one (Securities and Exchange Commission of Pakistan, 2013). To close the gap between voluntary CSR efforts and new environmental problems like deforestation, loss of biodiversity, climate change, and wildlife conservation, environmental regulators stress the need for Environmental Management Plans (EMPs), mitigation measures, and project-based environmental expenditures as mandatory pre-approval requirements. This is like "prepaid environmental responsibility" before profits are made (Pak-EPA, 2000).

Table 1 shows a structured way to divide up Corporate Social Responsibility (CSR) and environmental costs based on how much money is put into industrial and infrastructure projects. The table indicates a correlation between CSR spending and factors such as investment size, project type, and potential environmental impact. This framework gives policymakers and businesses a useful way to measure how well they are doing when it comes to planning big investments with sustainability in mind. For small industrial projects with investments of up to PKR 20 billion, the recommended range for CSR and environmental spending is between 1.0% and 1.5% of the total investment. At this level, projects usually happen in small groups of people, so CSR efforts usually focus on community-based welfare programs like water filtration plants, help for local schools, and health services for the community. These programs directly meet social needs and help businesses build good relationships with the people who live nearby.

For medium-sized manufacturing projects that cost between PKR 20 billion and PKR 100 billion, the suggested amount of money to spend on CSR goes down somewhat, to 0.75% to 1.0%. Even though the relative percentage goes down, the absolute amount of CSR investment usually goes up because the project is bigger. Environmental projects at this level are often better organized and include programs for planting trees and managing waste. These projects help the environment stay healthy while reducing the environmental impact of industrial activities.

For big industrial projects that cost between PKR 100 billion and PKR 200 billion, the recommended CSR allocation is between 0.5% and 0.75%. Projects of this size require more strategic sustainability initiatives because they typically have greater environmental effects. Because of this, companies are encouraged to put money into programs for integrating renewable energy and restoring the environment. These programs are meant to protect the environment in the long term and help industries grow in a way that is good for the environment.

For massive infrastructure or industrial projects worth between PKR 200 billion and PKR 500 billion, the recommended amount of CSR spending is between 0.25% and 0.5% of the total capital investment. At this scale, projects often have an impact on whole regions. CSR efforts often go from local projects to regional development programs, such as building hospitals, setting up environmental monitoring systems, and starting big community support programs.

Lastly, for infrastructure or energy projects on a national scale that cost more than PKR 500 billion, the suggested CSR allocation drops even more, to 0.1%–0.25%. Even though the percentage is lower, these projects still require a lot of CSR spending because they are so big. At this level, CSR programs focus on long-term sustainability and climate resilience. These include programs for protecting biodiversity and strategies for adapting to climate change. These kinds of projects help protect the environment on a national level and ensure that corporate investments are in line with larger goals for sustainable development.

The table shows a percentage structure that gets smaller over time. This means that as the size of a project grows, the amount spent on CSR also goes down. This approach takes advantage of the economies of scale that come with big investments while making sure that all projects, no matter how big or small, make a real difference in protecting the environment and helping the community grow. So, the framework gives large-scale investment projects a balanced way to include sustainability, corporate responsibility, and economic growth.

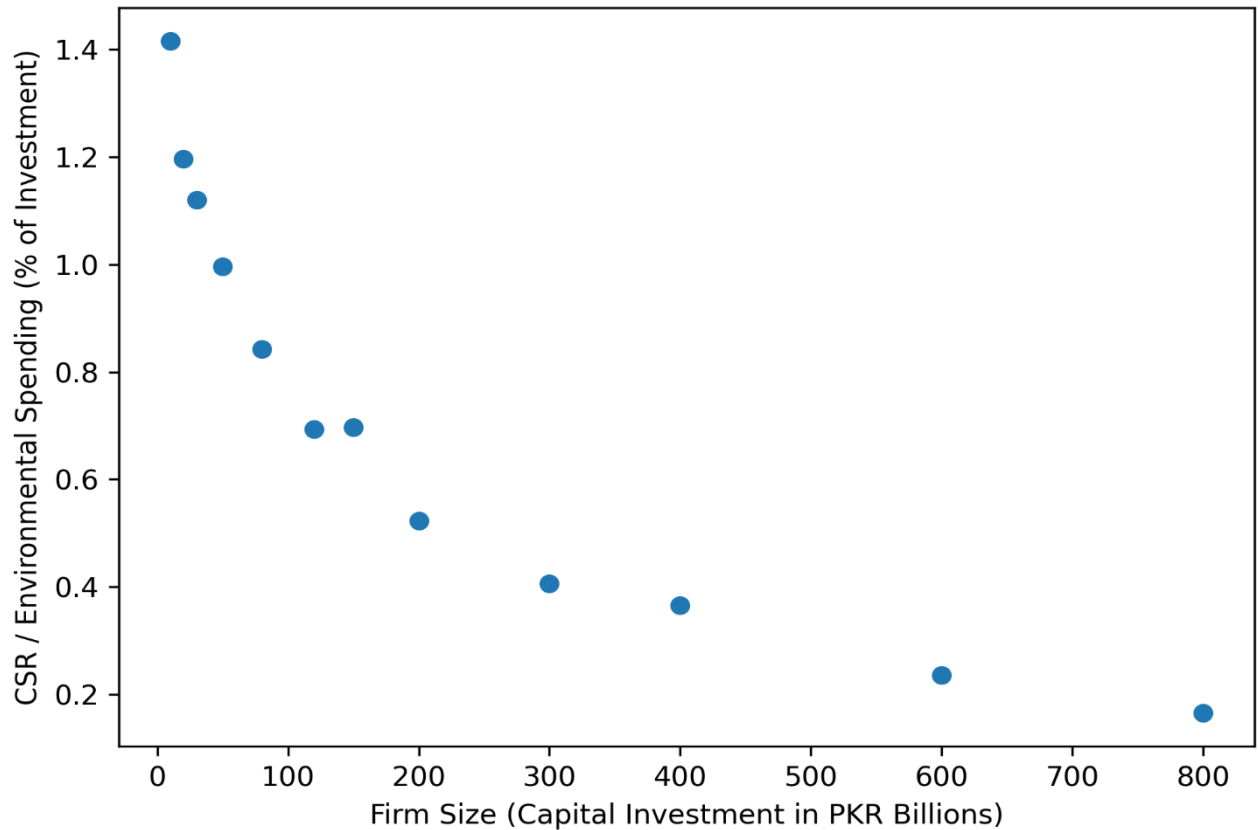
The figure illustrates the relationship between project capital investment and suggested CSR or environmental spending in Pakistan. The pattern shows that smaller projects put a higher percentage of their investment into environmental and community initiatives, while larger projects put a lower percentage but a higher absolute amount. This pattern shows how big Pakistani companies practice corporate social responsibility (CSR) by including sustainability investments in their plans for managing the environment, building communities, and reporting on environmental, social, and governance (ESG) issues.

Table 1: Suggested Environmental/CSR Spending Relative to Project Capital Investment

Capital Investment (PKR)	Project Category	Suggested CSR / Environmental Spending (% of Investment)	Typical Environmental / Community Initiatives
≤ 20 billion	Small-scale industrial projects	1.0 – 1.5%	Water filtration plants, local schools,

			community health programs
20 – 100 billion	Medium manufacturing projects	0.75 – 1.0%	Tree plantation, waste management systems
100 – 200 billion	Large industrial projects	0.5 – 0.75%	Renewable energy adoption, environmental restoration
200 – 500 billion	Mega industrial/infrastructure projects	0.25 – 0.5%	Regional development programs, hospitals, environmental monitoring
> 500 billion	National-scale infrastructure or energy projects	0.1 – 0.25%	Climate resilience initiatives, biodiversity conservation

CSR Spending vs Firm Size: Conceptual Empirical Relationship



Judicial Activism

Judicial activism in Pakistan has significantly contributed to environmental protection, especially following the proliferation of public interest litigation under Article 184(3) of the Constitution. The superior judiciary has proactively intervened to uphold environmental rights as integral to the fundamental right to life under Article 9 (Constitution of the Islamic Republic of Pakistan, 1973). The Supreme Court of Pakistan has consistently ruled that environmental degradation poses a direct threat to human life and dignity, thereby necessitating judicial intervention to regulate industrial and

governmental activities that inflict ecological harm (Shehla Zia v. WAPDA, 1994). Pakistani courts have stressed that current economic activities should not infringe upon the environmental rights of future generations by adhering to principles like sustainable development, the precautionary principle, and intergenerational equity (Shehla Zia v. WAPDA, 1994). Judicial activism has thus become a vital instrument for regulating corporate behavior in contexts where environmental concerns are implicated, particularly in instances of pollution, deforestation, and water scarcity. *Asghar Leghari v. Federation of Pakistan* is a famous example of this approach. In this case, the Lahore High Court said that climate change is a serious threat to the environment and held the state responsible for not following climate policies. This strengthened the role of the judiciary in making sure that Pakistan has sustainable development and good environmental governance (Leghari v. Federation of Pakistan, 2015).

The Supreme Court of Pakistan made history by connecting environmental protection to the right to life under Article 9 of the Constitution. It also stopped the building of a high-voltage grid station in a residential area until the health and environmental risks were fully understood. This strengthened judicial oversight over projects that could harm the environment (Shehla Zia v. WAPDA, 1994). In *General Secretary, West Pakistan Salt Miners Labour Union v. Director, Industries and Mineral Development*, the Court told the government to take steps to stop mining activities from harming the environment and to protect the health of workers and local communities. This strengthened the State's duty to protect natural resources (West Pakistan Salt Miners Labour Union v. Director, Industries, 1994). In *Pakistan Fisherfolk Forum v. Federation of Pakistan*, the Supreme Court stressed the need for strict monitoring of industrial activities that release pollutants into water bodies. It also said that industries that harm the environment must pay to restore damaged ecosystems. This shows how the Polluter Pays Principle is used in Pakistan's environmental law (Pakistan Fisherfolk Forum v. Port Authorities, 2012). These judicial pronouncements collectively illustrate that Pakistani courts have actively adopted principles similar to the Precautionary Principle and Polluter Pays Principle as fundamental elements of national environmental law, thereby promoting sustainable development through judicial activism (Supreme Court of Pakistan, 1994; 2012).

ANALYZING CSR EXPENDITURES AS ADDRESSING ENVIRONMENTAL DEGRADATION AND CLIMATE CHANGE

The Companies Act, 2017, and the CSR Guidelines from the Securities and Exchange Commission of Pakistan (SECP) are the main laws that govern disclosures related to corporate social responsibility (CSR) in Pakistan. These guidelines encourage listed and large unlisted companies to report their social and environmental contributions through annual reports instead of a centralized national portal (Securities and Exchange Commission of Pakistan, 2013). Pakistani companies do a lot of different things for corporate social responsibility (CSR), but this study only looks at the money they spend on projects that help the environment and fight climate change (Securities and Exchange Commission of Pakistan, 2013).

The table shows the size and focus of corporate social responsibility (CSR) contributions made by major companies in Pakistan. Pakistan State Oil spends about PKR 0.35 billion a year, with a strong focus on projects that help the environment, like recycling plastic to build roads. Engro Corporation has the biggest CSR budget of the companies listed, at PKR 0.60 billion. It uses this money to help Pakistan deal with climate change and manage its water resources, which are essential because the country is so vulnerable to environmental stressors. Lucky Cement gives about PKR 0.45 billion, mostly for energy efficiency through waste heat recovery and investments in renewable energy solutions. At the same time, Unilever Pakistan is spending PKR 0.30 billion to cut down on plastic waste and encourage sustainable sourcing practices. This is in line with the company's global sustainability goals.

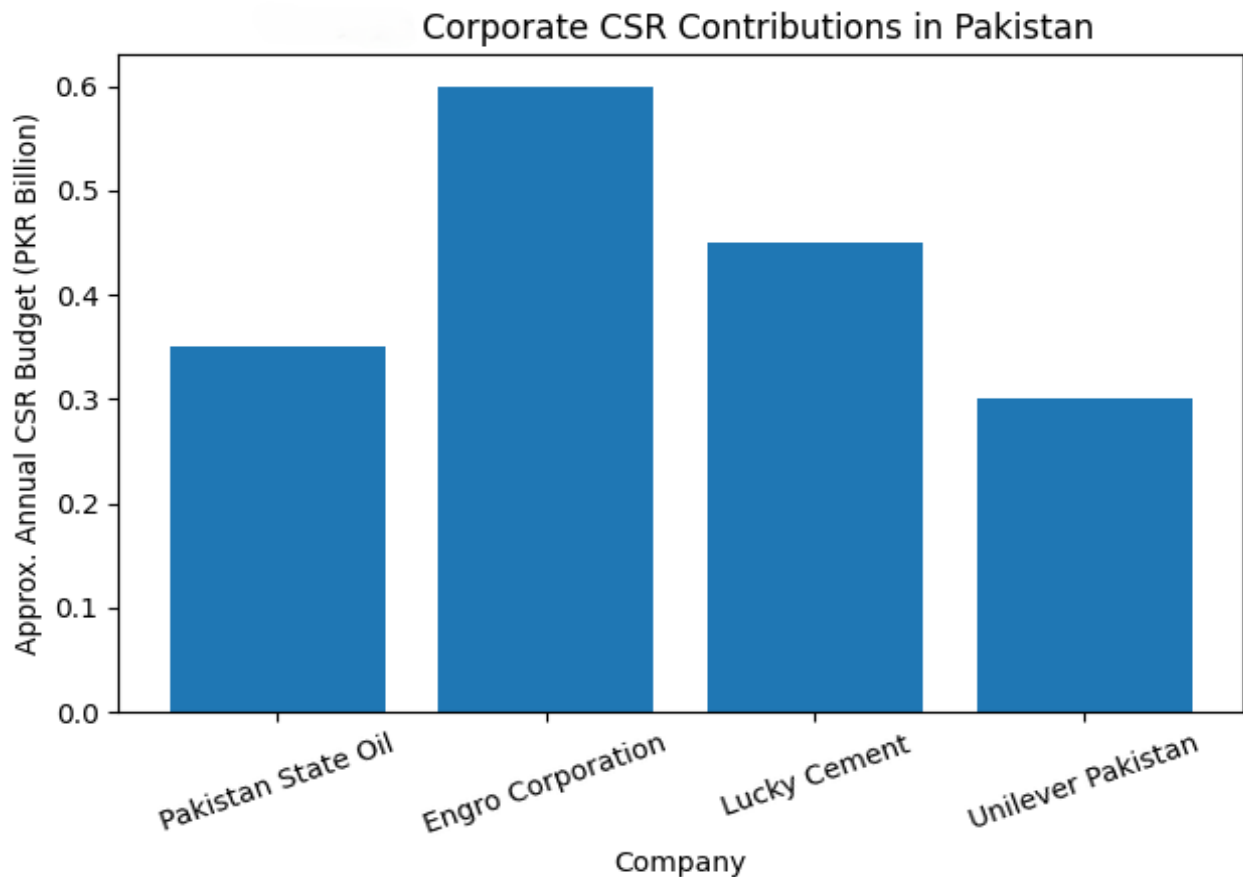
Overall, these numbers indicate that big companies in Pakistan are not only putting a lot of money into CSR, but they are also making sure that their efforts are in line with important environmental issues.

The different areas of focus, such as energy recovery and renewable energy, water management, and reducing plastic, indicate that more and more people are realizing that businesses have a duty to confront sustainability issues. This joint effort indicates how important private businesses are in helping to reach national and global environmental goals. It also indicates that Pakistan is moving toward more structured and impact-driven CSR practices.

These guidelines encourage listed and large unlisted companies to report their social and environmental contributions through annual reports instead of a centralized national portal (Securities and Exchange Commission of Pakistan, 2013). Pakistani companies do a lot of different things for corporate social responsibility (CSR), but this study only looks at the money they spend on projects that help the environment and fight climate change (Securities and Exchange Commission of Pakistan, 2013).

Table 2: Corporate Contributions in Pakistan

<i>Company</i>	<i>Approx. Annual CSR Budget</i>	<i>Environmental Focus</i>
<i>Pakistan State Oil</i>	PKR 0.35 billion	Plastic recycling roads, sustainability initiatives
<i>Engro Corporation</i>	PKR 0.60 billion	Climate resilience, water management
<i>Lucky Cement</i>	PKR 0.45 billion	Waste heat recovery, renewable energy
<i>Unilever Pakistan</i>	PKR 0.30 billion	Plastic waste reduction, sustainable sourcing



CONCLUSION

The results of this study show that CSR practices in Pakistan have slowly changed from conventional charitable work to more organized efforts to protect the environment. In the past, CSR was mostly about giving money to charities and running social welfare programs. Today, however, companies are more likely to think about the environment when they do business. For example, they might use renewable energy, manage waste, save water, and make their businesses more resilient to climate change. Major companies like Pakistan State Oil, Engro Corporation, Lucky Cement, and Unilever Pakistan show that businesses are starting to link their CSR spending to goals for environmental sustainability. These projects show how business investment could help national environmental policy and support reaching climate-related goals.

Even if these are positive signs, CSR in Pakistan is still mostly voluntary and relies on disclosure under the Companies Act 2017 and the rules set by the Securities and Exchange Commission of Pakistan. Because of this, businesses' environmental spending varies a lot between industries and companies. Also, the lack of obligatory CSR spending levels makes it challenging for businesses to make consistent and large contributions. The Pakistan Environmental Protection Act of 1997 and landmark cases like *Shehla Zia v. WAPDA* show that protecting the environment is becoming more of a legal and constitutional issue in Pakistan. The combination of corporate responsibility and environmental legislation is an important strategy for institutions to improve climate governance.

The study emphasizes that corporate social responsibility might function as a supplementary mechanism for mitigating environmental degradation and climate change in Pakistan. Corporate investments in sustainability can have positive effects on society when they are in line with national climate strategies.

At the same time, they can improve the company's reputation, build trust with stakeholders, and improve long-term business performance. The increasing focus on ESG reporting and sustainability frameworks indicates that businesses in Pakistan are slowly realizing how important it is to be environmentally responsible in today's economic world. But to fully realize the potential of CSR in fighting climate change, we need tighter rules, more openness, and a deeper integration of sustainability principles into how companies are run.

POLICY IMPLICATIONS

The results of this study have significant policy implications for policymakers, regulators, and corporate leaders aiming to enhance the role of CSR in combating environmental degradation and climate change in Pakistan. First, we need to create a more complete and consistent set of rules for CSR and ESG disclosure. Even though companies on the stock market are encouraged to report on their sustainability efforts, the lack of consistent reporting rules makes it difficult to compare and see through them. Regulatory bodies like the State Bank of Pakistan and the Securities and Exchange Commission of Pakistan can make a big difference by creating standardized ESG reporting frameworks that follow international standards like the Global Reporting Initiative (GRI) or the Sustainability Accounting Standards Board (SASB). Better disclosure would help investors, legislators, and other interested parties better judge how well companies are doing when it comes to the environment.

Second, policymakers should contemplate using structured incentives to encourage businesses to invest in protecting the environment and slowing down climate change. Tax breaks, green finance options, and credit facilities connected to sustainability might all encourage businesses to put more money into projects that help the environment. In this way, banks and other financial institutions can encourage green investment through things like green bonds, climate funds, and financing programs that are tied to sustainability. Making green finance infrastructure stronger would help Pakistan's overall climate policy goals and make it easier for businesses to include environmental investments in their business plans.

Third, the government might contemplate moving away from a solely voluntary CSR framework and toward a hybrid model that includes both voluntary activities and specific regulatory guidelines. For example, legislative recommendations like possible CSR allocation criteria for big companies, similar to policy models used in other places, might help ensure that corporate funding for environmental and social development projects flows more consistently. These kinds of policies should be properly planned so that businesses may stay flexible while making sure that corporate donations really help the country's sustainability goals.

Fourth, to make businesses more environmentally responsible, there has to be better cooperation between environmental regulation and corporate governance. Corporate sustainability reporting frameworks should include obligations for environmental impact assessments, environmental management plans, and following national environmental standards. This would help ensure that environmental protection measures are not just seen as things that companies have to do to follow the law but are also built into how they run their businesses and manage risk. Finally, for Pakistan to have a long-lasting system of environmental governance, state institutions, businesses, and civil society groups must work together. When businesses work with government agencies and environmental groups on projects like planting trees, using renewable energy, conserving water, and reducing waste, they can make a big difference in reaching national climate targets. Pakistan could become more resilient to climate change, support long-term economic growth, and make sure that businesses are doing their part to protect the environment throughout the world if they worked together like this.

In conclusion, corporate social responsibility could be a strong tool for fighting climate change and environmental damage in Pakistan. Pakistan can use corporate resources and new ideas to help the environment last longer and be more resilient to climate change by making rules stronger, encouraging businesses to make long-term investments, and increasing cooperation between the public and private sectors.

REFERENCES

- Ahmad, H., Yaqub, M., & Lee, S. H. (2024). Linking the industrial revolutions and environmental impacts: a review of global trends, strategies, and future recommendations.
- Albahouth, A. A., & Tahir, M. (2025). Institutional quality and climate vulnerability: Empirical evidence from GCC economies. *Sustainability*, 17(5), 2047.
- Ali, I., Rehman, K. U., Ali, S. I., Yousaf, J., & Zia, M. (2010). Corporate social responsibility influences employee commitment and organizational performance. *African Journal of Business Management*, 4(13), 2796.
- Beal, B. D. (2013). Corporate social responsibility: definition, core issues, and recent developments.
- Campbell-Mohn, C. I., et al. (2026). *Sustainable development*. In Encyclopedia Britannica. Retrieved March 9, 2026, from <https://www.britannica.com/topic/environmental-law/Sustainable-development>
- Corporate Watch. (2006). *What's wrong with corporate social responsibility?* Corporate Watch.
- Government of Pakistan. (2017). *Companies Act, 2017*. Pakistan.
- Elkington, J. (1997). The triple bottom line. *Environmental management: Readings and cases*, 2(1997), 49-66.
- Fatma, M., Rahman, Z., & Khan, I. (2015). The role of CSR as a determinant of consumer responses in financial sector. *Decision*, 42(4), 393-401.
- Giglio, S., Rillo, J., & Stroebel, J. (2025). The Economics of Biodiversity Loss and Climate Change: Implications for Asia and the Pacific. *Background paper for the Asia-Pacific Climate Report*.
- Government of Pakistan. (1973). *Constitution of the Islamic Republic of Pakistan, 1973*. Government of Pakistan.
- Government of Pakistan. (1997). *Pakistan Environmental Protection Act, 1997*. Ministry of Environment.
- Government of Pakistan. (2012). *National climate change policy*. Ministry of Climate Change.
- Government of Pakistan. (2013). *National environmental quality standards (NEQS)*. Ministry of Climate Change.
- Hassan, M. K., & Ashraf, A. (2010, January). An integrated poverty alleviation model combining zakat, awqaf and microfinance. In *Seventh International Conference—The Tawhidic Epistemology: Zakat and Waqf Economy, Bangi, Malaysia* (pp. 261-281).

- INP News. (2025). *Climate crisis poses existential threat to Pakistan: Economic survey*. <https://www.inp.net.pk/article-detail/inp-wealthpk/climate-crisis-poses-existential-threat-to-pakistan-economic-survey>
- International Union for Conservation of Nature. (2019). *Environmental governance and compliance mechanisms in Pakistan*. IUCN Pakistan Country Office.
- Jamali, D., & Mirshak, R. (2007). Corporate social responsibility (CSR): Theory and practice in a developing country context. *Journal of Business Ethics*, 72(3), 243-262.
- Mahaseth, H., & Goyal, S. (2021). Asghar Leghari and environmental justice: Transformative climate change litigation judgements one step at a time. *Chanakya Law Review*, 1(1), 124-129.
- Ministry of Climate Change. (2021). *Pakistan climate change policy*. Government of Pakistan.
- Montiel, I. (2008). Corporate social responsibility and corporate sustainability: Separate pasts, common futures. *Organization & environment*, 21(3), 245-269.
- Nazir, M. A., & Javed, M. T. (2025). The Law and Corporate Environmental Responsibility: An Analysis of Pakistani Listed Oil Refineries. *Pakistan Social Sciences Review*, 9(2), 219-228.
- Of, M. (2012). National Climate Change Policy, Government of Pakistan.
- Pakistan's climate crisis demands collective action. (2025, June 6). *The Nation*. <https://www.nation.com.pk/06-Jun-2025/pakistan-s-climate-crisis-demands-collective-action>
- Pakistan Environmental Lawyers Association v. Federation of Pakistan, 2015 SCMR 1740. (2015).
- Pakistan Environmental Protection Agency. (2000). *Review of initial environmental examination and environmental impact assessment regulations, 2000*. Ministry of Environment.
- Pakistan Environmental Protection Agency. (2018). *Guidelines for environmental impact assessment and environmental management plans*. Ministry of Climate Change.
- Pakistan Stock Exchange. (2021). *Listed companies' annual reports*. <https://www.psx.com.pk>
- Pak Brunei Investment Company Limited. (2024). *Corporate social responsibility: Plantation drive*. <https://pakbrunei.com.pk/en/corporate-social-responsibility.php>
- Planning Commission of Pakistan. (2014). *Pakistan Vision 2025*. Government of Pakistan.
- Securities and Exchange Commission of Pakistan. (2013). *Corporate social responsibility voluntary guidelines*. SECP.
- Securities and Exchange Commission of Pakistan. (2019). *Annual report*. SECP.
- Securities and Exchange Commission of Pakistan. (2024). *ESG Sustain: ESG performance and disclosures*. <https://esgsustain.secp.gov.pk/>
- Shehla Zia v. WAPDA*, PLD 1994 SC 693 (Supreme Court of Pakistan).
- State Bank of Pakistan. (2025). *Regulatory framework for effective management of climate-related financial risks*. <https://www.sbp.org.pk>

U.N. General Assembly. (2022). *The impacts of climate change on the human rights of people in vulnerable situations* (A/HRC/50/57). United Nations.

Waheed, A., Zhang, Q., Rashid, Y., Tahir, M. S., & Zafar, M. W. (2020). Impact of green manufacturing on consumer ecological behavior: Stakeholder engagement through green production and innovation. *Sustainable Development*, 28(5), 1395–1403.

World Bank. (2022, November 10). *Pakistan urgently needs significant investments in climate resilience to secure its economy and reduce poverty*. <https://www.worldbank.org/en/news/press-release/2022/11/10/pakistan-urgently-needs-significant-investments-in-climate-resilience-to-secure-its-economy-and-reduce-poverty>

World Bank. (2022). *Pakistan: Climate risk country profile*. World Bank.