

Climate Injustice: The legal analysis of the Human Rights Impact in Pakistan and Lessons from Germany

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Abstract

The study explores the unmitigated impacts of climate change on human rights in Pakistan, highlighting the need for rights-based climate governance. It highlights the potential to undermine key human rights, such as life, health, water, food, and shelter, particularly for Pakistan's vulnerable populations. Despite the country's protections under the constitution and domestic legislation, such as the Pakistan Climate Change Act 2017, the state response is reactive, ineffective, and weakly enforced. Pakistan is a party to international agreements like the United Nations Framework Convention on Climate Change (UNFCCC), Paris Agreement, and human rights treaties, but there are gaps in protection between these commitments and domestic implementation. The study further compares Germany's approach which has increasingly come to term climate action as a human rights obligation with powerful legal mechanisms, environmental litigation, and conformity to international climate conventions and directives. The experience of Germany with the international environmental model shows that how a nation can incorporate international obligations into its domestic legal systems that can contribute to the protection of country's environment as well as its human rights. The policy recommendations that follow from this comparison include integrating international standards into legally binding local legislation, enhancing the ability of institutional stakeholders, and for the first time recognizing the impact of change as a human rights concern. The conclusion of the study is that bridging the gap between Pakistan's international climate and human rights obligations and national legal framework is a prerequisite for climate justice and protecting the dignity of the present and the future generations.

Keywords: Climate Change, Human Rights, Judicial Role, Intergenerational Equity, Climate Justice, Emission Reduction.

Introduction

Climate change is a multifaceted threat that impacts human rights, including food, water, shelter, healthcare, and life rather than only being an environmental crisis. Germany, a developed country with a long history of upholding the rule of law, has created a legally sound response to climate change, integrating environmental preservation and human rights. Germany's framework includes mandatory emissions objectives and government accountability through monitoring and corrective measures. By actively participating in international climate governance, Germany balances domestic actions with international solidarity and national duty. In contrast, Pakistan, a developing nation among the most climate-vulnerable, has made significant legal progress through judicial activism but faces gaps in policy execution, insufficient funding, and poor institutional capacity. Systemic issues still impede long-term progress. This chapter examines Germany's institutional and rights-based legal response to climate change, comparing it to Pakistan to show the differences in their experiences, abilities, and legal interpretations in their struggle for climate justice.

Legal and Institutional Approach of Germany Towards Climate Change as Human Right Concern

Constitutional Guarantees

The constitution of Germany is known as the Basic Law (Grundgesetz) is the foundation of its environmental responsibilities. Article 20a of its constitution specifically states that, “*Mindful also of its responsibility toward future generations, the state shall protect the natural foundations of life and animals by legislation and, in accordance with law and justice, by executive and judicial action, all within the framework of the constitutional order.*” Sustainability and intergenerational equity are enshrined as constitutional values in this clause. Courts have interpreted this provision in conjunction with Articles 1 (Human Dignity) and 2 (Right to Life) to provide a human rights-based framework for environmental preservation.¹

Climate Protection Act (Klimaschutzgesetz)

The Federal Climate Change Act of Germany, which was passed in 2019 and revised in 2021, offers a legally obligatory framework for eliminating greenhouse gas emissions in all significant industries. Ambitious goals are established under the revised Act: a decrease of 65% by 2030, an 88% reduction by 2040, and climate neutrality by 2045 in comparison to 1990 levels.² In *Neubauer et al. v. Germany (2021)*, the Federal Constitutional Court ruled that inadequate planning for post-2030 emission reductions violated the constitutional rights of younger generations under Articles 2 and 20a of the Basic Law. This legislative update was a direct response to that decision. The Court stressed the need for climate policy to preserve future population freedoms and promote intergenerational justice.³ In case of *Friends of the Earth Germany (BUND) v. Germany (2021)*, the Berlin-Brandenburg Higher Administrative Court examined the suitability of the government's Climate Protection Programme 2030, providing additional judicial scrutiny of Germany's climate policies. The court confirmed that climate policy must adhere to constitutional and international commitments, and that environmental organizations have the legal standing to contest inadequate measures, even though the case was rejected on procedural grounds. Collectively, these judgments demonstrate that Germany's climate commitments are legally enforceable, and that the judiciary plays a crucial role in coordinating climate action with human rights safeguards.⁴

Germany's Alignment of National Interests with European Union Climate Goals

The European Union's climate governance framework provides a comprehensive structure for member states, including Germany, to develop and implement effective climate policies. As one of the EU's largest economies and a significant greenhouse gas emitter, Germany plays a crucial role in shaping and advancing EU climate policy. A key example is Germany's Energiewende (Energy Transition) program, which aims to significantly reduce greenhouse gas emissions and increase the share of renewable energy. This national initiative closely aligns with the EU's broader climate objectives.⁵ Germany also benefits from EU-wide initiatives such as the EU Emissions Trading System (EU ETS) and the European Green Deal. These coordinated efforts offer a unified approach to climate action, enabling Germany and other member states to achieve more substantial and efficient reductions in greenhouse gas emissions.

¹ Basic Law for the Federal Republic of Germany (Grundgesetz) promulgated on 23 May 1949 as amended in 2014

² Federal Climate Change Act (KGS) formed on 12 December 2019 as amended on 18 August 2021 <<https://www.bmuv.de/en/law/federal-climate-change-act>> accessed 23 April 2025.

³ *Neubauer et al. v. Germany* BVerfG, 1 BvR 2656/18, 24 March 2021 <<https://www.escribnet.org/caselaw/2023/neubauer-et-al-v-germany/>> accessed 23 April 2025.

⁴ *DUH and BUND v. Germany* Higher Administrative Court Berlin-Brandenburg, 30 November 2023 <<https://climatecasechart.com/non-us-case/bund-v-germany/>> accessed 23 April 2025.

⁵ Germany's Energiewende – The Easy Guide. <<https://www.cleanenergywire.org/easyguide>> accessed 23 April 2025.

Through collective action, the EU and its members can amplify their impact and more effectively address the global climate crisis.⁶ Looking ahead, COP30 will be held in Belém, Brazil, from 10 to 21 November 2025. At this critical conference, the EU will continue to advocate for keeping the aim of limiting global warming to 1.5°C within specific reach. Additionally, it will support enhanced efforts to adapt to the impacts of climate change, reaffirming its commitment to global climate leadership.⁷

Germany's Global Climate and Human Rights Commitments

a. Paris Agreement

As a signatory to the Paris Agreement, Germany seeks to maintain the decrease in global temperatures far below 2°C, ideally to 1.5°C, over pre-industrial levels. The necessity to "respect, promote and consider their respective obligations on human rights" when addressing climate change is specifically acknowledged in the agreement's preamble. Germany's domestic policies exhibit great uniformity between treaty requirements and national implementation, closely reflecting its international commitments.

b. European Convention on Human Rights (ECHR)

Although there are no explicit environmental provisions in the European Convention on Human Rights (ECHR), the European Court of Human Rights (ECtHR) has interpreted Articles 2 (Right to life) and 8 (Right to private and family life) to include environmental harms, particularly when state inaction poses a serious risk to one's health or life. Germany's adherence to ECHR requirements further demonstrates how closely it aligns with environmental human rights protections.⁸

Other Conventions and Resolutions

Germany is a strong supporter of UN Human Rights Council resolutions that acknowledge the connection between human rights and climate change, such as the 2021 resolution that created the Special Rapporteur on Human Rights and Climate Change.⁹ In addition, Germany has ratified the International Covenant on Economic, Social and Cultural Rights and the International Covenant on Civil and Political Rights, which provide excellent legal frameworks for the rights jeopardized by climate change.

Governance and Institutional Mechanism in Germany

Germany has established a strong institutional framework to guarantee that climate action complies with human rights norms. The German Institute for Human Rights (DIMR), which conducts evaluations on the effects of environmental policy on human rights, serves as a monitor and advisor.¹⁰ Sustainability plans, policy proposals, and environmental statistics fall within the purview of the Federal Environment Agency (UBA). Furthermore, the Federal Ministry for Economic Cooperation and Development (BMZ) promotes a rights-based approach worldwide by

⁶ About the EU ETS. <https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets/about-eu-ets_en> accessed 23 April 2025.

⁷ Global climate action. <https://climate.ec.europa.eu/eu-action/international-action-climate-change/global-climate-action_en> accessed 23 April 2025.

⁸ European Convention on Human Rights, art 2 and art 8. <https://www.echr.coe.int/documents/d/echr/Convention_ENG> accessed 23 April 2025.

⁹ "Human rights and climate change," UN Human Rights Council, July 12, 2019, Doc A/HRC/RES/41/21 UN<<https://docs.un.org/en/A/HRC/RES/41/21>> accessed 23 April 2025.

¹⁰ German Institute for Human Rights – Home' (Institut für Menschenrechte, 2025) <<https://www.institut-fuer-menschenrechte.de/en/>> accessed 23 April 2025.

integrating climate justice into foreign aid and development initiatives.¹¹

Case Study: Neubauer et al. v. Germany (2021)

This case is the landmark case brought by a group of young climate activists and environmental groups including Fridays for Future and Greenpeace before the Federal Constitutional Court. The claimants contended that the Federal Climate Change Act of 2019 fell short of adequately safeguarding their basic rights under the German Basic Law, especially after 2030. They argued that by not establishing sufficient long-term goals for reducing greenhouse gas emissions, the law essentially gave younger and future generations more responsibility for mitigating impacts. They argued that this violated the state's obligation to protect the environment under Article 20a of the Basic Law as well as their rights to integrity and life under Article 2.

The Federal Constitutional Court held that the German Climate Change Act is in breach of fundamental rights because it lacked sufficient specific requirements for emissions reductions after 2030. The court concluded that the existing legislation placed undue prospective restrictions on the liberties of younger generations, underscoring the fundamental need to safeguard natural life-support systems. The legislature was directed by the court to amend the Act in order to add more precise goals after 2030.

Since it was the first time a national court acknowledged intergenerational fairness as a constitutional right in climate change situations, this ruling is regarded as a turning point in environmental and constitutional law. The decision strengthened government obligations to present and future generations and established a precedent for future climate lawsuits in Germany and elsewhere.¹²

Comparative Analysis: Pakistan and Germany

Climate change is simultaneously a challenge to human rights that varies according to countries past emissions, institutional capacities, socio-economic status, and political will. This section makes a detailed comparative analysis of high-income country Germany, which has a well formulated and proactive climate regime, and low-income country Pakistan, which is vulnerable to climate both in terms of increasing degree and having a reactive, but emerging rights based legal response.

Legal and Constitutional Framework

While both Germany and Pakistan acknowledge protection in their constitutions, the extent, enforceability, and maturity of such protection differ considerably.

In Germany, Article 20a of Basic Law expressly requires the government to "protect the natural foundations of life, mindful of its responsibility toward future generations." Through judicial scrutiny, this provision has successfully implemented intergenerational justice and environmental protection as part of constitutional doctrine. Germany's Federal Climate Change Act (2019, amended in 2021) adds legally binding emission reduction targets, annual sectoral budgets, and accountability mechanisms for federal ministries to this constitutional provision, making environmental governance enforceable and justiciable.¹³

While in Pakistan, Article 9A, which guarantees the right to a clean and healthy environment, was added in 2024 by 26th Constitutional Amendment. With a concrete, enforceable

¹¹ Federal Ministry for Economic Cooperation and Development (BMZ), 'Home' (BMZ, 2025) <<https://www.bmz.de/de>> accessed 23 April 2025.

¹² Neubauer and others v Germany (2021) 1 BvR 2656/18 (Federal Constitutional Court) <<https://onlineacademiccommunity.uvic.ca/climatechangelitigation/2021/08/03/german-klimaklage-neubauer-et-al-v-germany>> accessed 23 April 2025.

¹³ Federal Climate Change Act (Bundes-Klimaschutzgesetz) (BMUV, 2021) <https://www.bmuv.de/fileadmin/Daten_BMU/Download_PDF/Gesetze/ksg_final_en_bf.pdf> accessed 23 April 2025.

constitutional guarantee in place of depending on judicial interpretation, this represents a substantial change. Environmental rights were previously interpreted by courts under Articles 9 and 14, but their long-term effects were constrained by a lack of legally binding support and a lack of institutional strength. A more comprehensive strategy to environmental rights is now ensured by the insertion of Article 9A, which strengthens the legal basis for climate and environmental-related litigation and policy creation in Pakistan.¹⁴

Judicial Role

Both states have landmark judicial interventions but with different levels of implementation impact. In Germany, Federal Constitutional Court's decision in *Neubauer et al. v. Germany* 2021 case was a turning point. The Court found that Article 14 in conjunction with Article 20a of the Basic Law had been violated because the Federal Climate Change Act does not provide sufficient provisions for emission reductions after 2030. This is a case where German courts played an important role in interpreting rights expansively while demonstrating how they can compel legislative reform, by allowing the decision to produce an amended law with strengthened targets and timelines.¹⁵ However, in Pakistan, pioneering contributions in recognizing climate change as a human rights issue have been made by Pakistan's judiciary more specifically with the *Asghar Leghari v. Federation of Pakistan* 2015 case. The constitutional rights of inaction on the National Climate Change Policy 2012 were violated, with the Lahore High Court rendering a judgment that set a judicial oversight mechanism (the Climate Change Commission). Nevertheless, the implementation of court directions has been haphazard, while the court's recommendations have had difficulty enduring in structuring changes without statutory framework and integration into the institutions.¹⁶

Implementation of Policies and Legislative Enforcement

The main strength of Germany is that it is being able to enforce climate legislation through a strong legal, regulatory regime and institutional capacity. Its Federal Climate Change Act includes sectoral annual carbon budgets (energy, transport, buildings, electricity generation and supply, agriculture, land use change, industry, waste, etc.), monitoring and reporting mechanisms by Federal Environment Agency (UBA) and mandatory corrective measures by the responsible ministries.¹⁷

However, even though Pakistan's climate policy is well conceived like the National Climate Change Policy [2012 as amended in 2021] but it lacks the implementation. The policy is aspirational without being legally compelled. In addition, implementation is divided across jurisdictional overlaps between provincial and federal governments and lack of major expertise as well as insufficient funding.¹⁸

¹⁴ Noorulain Shaikh, 'Article 9A of the Constitution of Pakistan: A Step in the Right Direction' (Paradigm Shift, 1 November 2024) <<https://www.paradigmshift.com.pk/article-9a-constitution/>> accessed 23 April 2025.

¹⁵ *Neubauer et al. v. Germany* BVerfG, 1 BvR 2656/18, 24 March 2021 <<https://www.escri-net.org/caselaw/2023/neubauer-et-al-v-germany/>> accessed 23 April 2025.

¹⁶ *Asghar Leghari v. Federation of Pakistan* (W.P. No. 25501/2015) <https://elaw.org/resource/pk_asgharleghari_v_pakistan_2015> accessed 24 April 2025.

¹⁷ Federal Climate Change Act (Bundes-Klimaschutzgesetz) (BMUV, 2021) <https://www.bmuv.de/fileadmin/Daten_BMU/Download_PDF/Gesetze/ksg_final_en_bf.pdf> accessed 24 April 2025.

¹⁸ Climate Change (Pakistan) <https://www.finance.gov.pk/survey/chapter_22/PES16-CLIMATE.pdf> accessed 24 April 2025.

International Commitments and Funding

The Paris Agreement (2015) and Nationally Determined Contributions (NDCs) are commitments to which both the countries are signatories, but their roles may differ in governance of international climate. Historically Germany is one of the leading emitters, but it makes a top international climate financier, with over €6 billion of international climate finance provided to developing countries annually through bilateral and multilateral programs. It actively promotes the Green Climate Fund (GCF) and other mechanisms for funding in the interested countries. Germany has a balanced approach between climate justice globally and domestic mitigation.¹⁹ However, Pakistan's contribution to global greenhouse gas emissions is less than 1% while it is ranked among the top 10 most climate threatened countries²⁰ Its NDC targets are contingent on international financial and technical assistance, and it keeps pushing for 'loss and damage' financing at global climate forums. But access to climate finance is slow and its ability to take full advantage of international support is constrained by capacity.²¹

Institutional Working and Participation of Public

There is a strong institutional ecosystem with regards to climate and human rights governance in Germany. Key bodies include DIMR, which watches the human rights impact of German policies. Scientific data and the evaluation of policy, by the Federal Environment Agency (UBA) and combining human rights into climate related development aid: overview by the Federal Ministry for Economic Cooperation and Development (BMZ). On the other hand, there are institutional mechanisms like Ministry of Climate Change (MoCC) in Pakistan, but it has shortfall of funding and has frequent leader's changes. Very often, provincial level environmental departments lack the capacity and autonomy necessary to implement climate plans. Secondly, there is very little public participation in climate making decisions, due to weak civil society, little access to data, low awareness more specifically in disaster prone and rural sides.

Conclusion

Since global climate change poses a direct threat of violation of elementary human rights, such as life, health, water, food, housing and a healthy environment, the relation between climate change and human rights has been a major issue of global concern, being taken as a subject of international law. Although climate change started as environment harm, it has grown into one of the greatest threats to the dignity and very survival of populations throughout the world, with the UN Human Rights Council and the Office of the High Commissioner of Human Rights restating that climate governance is required to be rights based. An analysis of Pakistan shows that; Pakistan is very vulnerable to the impacts of climate change on its human rights. Frequent flooding, drought, and food insecurity warps the daily lives of millions of Pakistanis. Pakistan Climate Change Act 2017 has been a legal advancement; however, the implementation is weak and fragmented. Government authorities lack poor coordination, insufficient funding, technical capacity, and insufficient human rights principles integration in the government's climate actions plans. The compliance of Pakistan with the international treaties such as the UNFCCC and the Paris Agreement is partial yet procedural. The lack of clear enforcement mechanisms, intersectional jurisdiction and little public participation in climate related decision-making processes have made the legal system weak to

¹⁹ Federal Climate Change Act (Bundes-Klimaschutzgesetz) (BMUV, 2021) <https://www.bmuv.de/fileadmin/Daten_BMU/Download_PDF/Gesetze/ksg_final_en_bf.pdf> accessed 24 April 2025.

²⁰ *Global Climate Risk Index 2021* <<https://www.germanwatch.org/en/19777>> accessed 22 April 2025.

²¹ Review of Pakistan's climate finance landscape <<https://adamsmithinternational.com/projects/review-of-pakistans-climate-finance-landscape/>> accessed 24 April 2025.

develop a right based coherent climate governance system. The comparative research of Germany showed that human rights have been lodged into Germany's climate policy, following the National Constitutional Court in landmark constitutional judgment of Neubauer et. al. case, strengthening the legal precedent referring to climate obligations as a constitutional right. The binding emission reduction targets are outlined in Germany's Climate Protection Act and citizens have the right to seek a remedy through the courts for failures in the climate action. In contrast, in Pakistan even though there is constitutional basis to protect environmental rights but there is no cohesive structure. The jurisprudence from the Court of Pakistan in Leghari v. Federation of Pakistan case realization of positive judicial recognition is impeded by systemic weaknesses in legislative drafting, policy execution and access to justice. To protect human rights from climate risks, Pakistan should transform its climate governance system. Implementing laws that are enforceable, giving Environmental Tribunals more authority to question official silence, and fully incorporating international treaty obligations into domestic law are all ways to operationalize environmental rights. Capacity building, institutionalization of public participation in climate policymaking and monitoring of climate action should be given preeminence by the government such that they conform to human rights principles. This will also avoid the creation of any other forms of inequality or injustice that may be produced by the adaptation and mitigation measures. Intergenerational equity must be given special priority in Pakistan's legal framework to protect the fundamental rights by guaranteeing protection of future generations from climate change impacts. These protections are constitutionally based in Pakistani courts and have strong support within them, but a systemic support and institutional backing for climate justice is necessary. Climate justice should focus on impacts of climate change on basis of socio- economic status, gender, location and factor in special protection of climate migrants, indigenous communities and those in the climate vulnerable areas. Doing so will not only be a fulfillment of constitutional and international obligations, but it will also help build a more resilient society. Finally, in the course of climate change it is not only an environmental problem for Pakistan, but also a direct threat to the enjoyment of fundamental human rights. To address this issue, Pakistan government has to do holistic transformation in legal, social and institutional reforms rather than making fragmented policy initiatives. By learning from international best practices while tailoring the solutions to national realities. Pakistan is at a crossroads in its history, the law has to evolve, policy must innovate, and judgements must align in order to guarantee the rights and dignity of the people today and tomorrow facing the climate emergency.

Recommendations

1. Recently through 26th Amendment, Article 9A has been added in Constitution of Pakistan which is the first formal recognition of the right to a clean and healthy environment in Constitution. This is a significant step which is subject to follow up that needs to be detailed into legislation that will define the government's duties, enforcement mechanisms, and remedies for violations. To ensure the right is not symbolic but is actually protected, there must be strengthening of access to justice for vulnerable communities. Moreover, Pakistan must also comply its laws with the international human rights and environmental standards to fully implement Article 9A. To ensure that environmental protection becomes an integral part of national governance and human rights practice, emphasis should be laid on prioritizing judicial interpretation, public participation, and stronger institutional coordination.
2. Existing institutions like the Pakistan Climate Change Council must be empowered with greater autonomy, resources, and technical expertise. Inter-agency coordination between climate, human rights, disaster management, and planning departments must be institutionalized to avoid fragmented and duplicative responses. The creation of a specialized

Human Rights and Climate Change Commission could help monitor, report, and recommend actions specifically on the human rights impact of climate change. This body should have representation from vulnerable communities, civil society, academia, and private sector stakeholders.

3. The effectiveness of Pakistan's Environmental Tribunals needs substantial improvement to function properly as a forum for climate justice under the Environmental Protection Act. The tribunals need expansion throughout Pakistan's provinces while receiving sufficient funding support for judges who possess training in environmental law combined with human rights law expertise. The courts should receive extended authority to address all disputes related to climate change directly. The methods to overcome barriers including high litigation expenses and delayed case processing and insufficient public understanding should receive coordinated solutions. Vulnerable communities need special outreach programs that will teach them how to access tribunals. The empowerment of Environmental Tribunals will create essential forums that protect the constitutional environmental rights stated in Article 9A.
4. The government of Pakistan needs to fully comply with its international climate change and human rights agreements including the Paris Agreement and UNFCCC amongst others and its core human rights treaties. The nation's policies and laws need to obey the mentioned international frameworks which would create better defenses for populations facing climate changes. The implementation of international standards through domestic law along with treaty-monitoring mechanisms and human rights obligation integration in sectoral policies would improve accountability and support both climate justice and Pakistan's international obligations.
5. The adaptation projects must be implemented which needs local direction together with sensitivity to cultural traditions and the inclusion of diverse groups. Native approaches to knowledge systems should form part of resilience enhancements and focus specifically on gender-responsive tactics. Capacity-building initiatives need to provide increased authority to local communities whose focus should particularly include women who must have participation rights in deciding adaptation and mitigation programs. Local early warning systems for floods, droughts, heat waves and other environmental crisis need stronger development to provide instant accessible alerts to all people including remote locations.
6. Under a human rights-based approach policy initiatives need to focus on assisting the groups who face the greatest impact. The first distribution of national climate finance should go to populations who face the highest vulnerability. The expansion of social protection programs needs to include coverage for climate refugees together with internally displaced persons and individuals whose occupations became destroyed through environmental disasters. Loss and Damage requirements should be integrated into national policies to establish adequate support programs for climate-related disaster victims.
7. The development programs on education at every level should teach climate change and human rights to help create environmentally aware citizens. Localized public awareness initiatives should be developed to display the human rights and climate change nexus by using easily accessible media platforms. Programs for capacity development must focus on officials from all sectors of governance to demonstrate the relationship between environmental damage and human rights abuse.
8. The energy, agriculture and construction sector companies need to be held properly accountable for their environmental impacts. All significant companies need to meet Environmental, Social and Governance (ESG) standards which should include penalties for any violations. Environmental entrepreneurship should benefit from financial initiatives of tax

discounts combined with funding opportunities and low-cost contributions to boost responsible business frameworks respecting human rights standards.

9. The cities of Pakistan especially Karachi, Lahore and Islamabad need to incorporate climate resilience within their urban planning strategies. The highest priority must be given to the implementation of green belts together with sustainable drainage systems, solar energy promotion and heat-resistant urban infrastructure. The preference should be the development of climate-resistant affordable housing projects which protect low-income families exposed to climate disasters.
10. Independent oversight bodies are needed for climate-related policies and projects to conduct thorough human rights impact assessments. They should track climate actions to prevent abuse, including forced evictions and livelihood loss. Transparent climate finance and project implementation practices should include public disclosure protocols and citizen involvement. Collection and publishing detailed human rights data should be a formal practice, and research institutions should receive financial support for interdisciplinary studies and geo-spatial assessments.

Bibliography

1. *Asghar Leghari v. Federation of Pakistan* (W.P. No. 25501/2015) Lahore High Court Para.7. & 8.
2. *Asghar Leghari v. Federation of Pakistan* (W.P. No. 25501/2015). .(n.d.) Retrieved from <https://elaw.org/resource/pk_asgharleghari_v_pakistan_2015> accessed 24 April 2025.
3. Afifa Kiran, 'Climate Change: Implications for Pakistan and Way Forward'. .(n.d.) Retrieved from<https://www.academia.edu/80079338/Climate_Change_Implications_for_Pakistan_and_Way_Foward> accessed 2 April 2025.
4. *About the EU ETS*. .(n.d.) Retrieved from <https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets/about-eu-ets_en> accessed 23 April 2025.
5. 'Brundtland Report 1987' (Federal Office for Spatial Development ARE) . (n.d.). Retrieved from<<https://www.are.admin.ch/are/en/home/media/publications/sustainable/development/brundtland-report.html>> accessed 17 April 2025.
6. *Basic Law for the Federal Republic of Germany (Grundgesetz) promulgated on 23 May 1949 as amended in 2014*. .(n.d.) Retrieved from <https://www.constituteproject.org/constitution/German_Federal_Republic_2014> accessed 23 April 2025.
7. 'Climate change is a matter of justice – here's why' (United Nations Development Programme). . (n.d.). Retrieved from <<https://climatepromise.undp.org/news-and-stories/climate-change-matter-justice-heres-why>> accessed 18 April 2025.
8. *Convention on the Rights of the Child (OHCHR)*. . (n.d.). Retrieved from <<https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child>> accessed 21 April 2025.
9. *Climate Change (Pakistan)*. .(n.d.) Retrieved from <https://www.finance.gov.pk/survey/chapter_22/PES16-CLIMATE.pdf> accessed 24 April 2025.
10. *DUH and BUND v. Germany Higher Administrative Court Berlin-Brandenburg, 30 November 2023*. .(n.d.) Retrieved from <<https://climatecasechart.com/non-us-case/bund-v-germany/>> accessed 23 April 2025.
11. *European Convention on Human Rights*. .(n.d.) Retrieved from <https://www.echr.coe.int/documents/d/echr/Convention_ENG> accessed 23 April 2025.

12. *Federal Climate Change Act (KGS) formed on 12 December 2019 as amended on 18 August 2021*. .(n.d.) Retrieved from <<https://www.bmuv.de/en/law/federal-climate-change-act>> accessed 23 April 2025.
13. *Federal Ministry for Economic Cooperation and Development (BMZ), 'Home' (BMZ, 2025)*. .(n.d.) Retrieved from <<https://www.bmz.de/de>> accessed 23 April 2025.
14. *Federal Climate Change Act (Bundes-Klimaschutzgesetz) (BMUV, 2021)*. .(n.d.) Retrieved from <https://www.bmuv.de/fileadmin/Daten_BMU/Download_PDF/Gesetze/ks_g_final_en_bf.pdf> accessed 23 April 2025.
15. *'Global Climate Agreements: Successes and Failure's' (Council on Foreign Relations)* . (n.d.). Retrieved from <<https://www.cfr.org/background/paris-global-climate-change-agreements>> accessed 18 April 2025.
16. *'German Institute for Human Rights – Home' (Institut für Menschenrechte, 2025)*. .(n.d.) Retrieved from <<https://www.institut-fuer-menschenrechte.de/en/>> accessed 23 April 2025.
17. *Global Climate Risk Index 2021*. .(n.d.) Retrieved from <<https://www.germanwatch.org/en/19777>> accessed 22 April 2025.
18. *Germany's Energiewende – The Easy Guide*. .(n.d.) Retrieved from <<https://www.cleanenergywire.org/easyguide>> accessed 23 April 2025.
19. *Global climate action*. .(n.d.) Retrieved from <https://climate.ec.europa.eu/eu-action/international-action-climate-change/global-climate-action_en> accessed 23 April 2025
20. *General comment No. 36 - Article 6: right to life*. .(n.d.) Retrieved from <<https://www.ohchr.org/en/documents/general-comments-and-recommendations/general-comment-no-36-article-6-right-life>> accessed 19 April 2025.
21. *General comment No. 26 (2023) on the right of the child to the enjoyment of the highest attainable standard of health (art. 24)*. .(n.d.) Retrieved from <<https://www.ohchr.org/en/documents/general-comments-and-recommendations/crcgc26-general-comment-no-26-2023-childrens-rights>> accessed 19 April 2025.
22. *"Human rights and climate change," UN Human Rights Council, July 12, 2019, Doc A/HRC/RES/41/21UN*. .(n.d.) Retrieved from <<https://docs.un.org/en/A/HRC/RES/41/21>> accessed 23 April 2025.
23. *Human Rights Council resolutions on human rights and climate change*. .(n.d.) Retrieved from <<https://www.ohchr.org/en/climate-change/human-rights-council-resolutions-human-rights-and-climate-change>> accessed 19 April 2025.
24. *'Inuit Human Rights Petition Filed over Climate Change.'* *Earthjustice*. . . (n.d.). Retrieved from <<https://earthjustice.org/press/2005/inuit-human-rights-petition-filed-over-climate-change>> Accessed 18 Apr. 2025.
25. *'International Covenant on Civil and Political Rights' (OHCHR)*. . (n.d.). Retrieved from <<https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-civil-and-political-rights>> accessed 21 April 2025.
26. *'International Covenant on Economic, Social and Cultural Rights' (OHCHR)*. .(n.d.) Retrieved from <<https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-economic-social-and-cultural-rights>> accessed 21 April 2025
27. Juan D. Barón, Saher Asad, *"Turning Concern into Action: Understanding Climate Change Attitudes in Pakistan," Environmental Challenges*. . (n.d.). Retrieved from <<https://blogs.worldbank.org/en/endpovertyinsouthasia/turning-concern-action-understanding-climate-change-attitudes-pakistan>> accessed 5 January 2025.
28. *Kyoto Protocol (2005)*. . (n.d.). Retrieved from <https://unfccc.int/kyoto_protocol>

accessed 21 April 2025.

29. *Litigating the climate crisis: is the international human rights system the answer to the climate emergency?* .(n.d.) Retrieved from <<https://odihpn.org/publication/litigating-the-climate-crisis-is-the-international-human-rights-system-the-answer-to-the-climate-emergency/>> accessed 19 April 2025.
30. Muhammad Adnan and others, 'Addressing Current Climate Issues in Pakistan: An Opportunity for a Sustainable Future', (2024) *Environmental Challenges*. . (n.d.). Retrieved from <<https://doi.org/10.1016/j.envc.2024.100887>> accessed 3 January 2025.
31. 'Male' Declaration on the Human Dimension of Global Climate Change' Centre for International Environmental Law. . (n.d.). Retrieved from <https://www.ciel.org/Publications/Male_Declaration_Nov07.pdf> accessed 18 April 2025.
32. *Mehar Badshah v. Government of Khyber Pakhtunkhwa* [PLR 2025 SC 5] = [PLD 2025 SC 36] = [2024 SCP 372]
33. *National Climate Change Policy*, 2022. .(n.d.) Retrieved from <<https://www.mocc.gov.pk/SiteImage/Policy/NCCP%20Report.pdf>> accessed 21 April 2025
34. *National Clean Air Policy (NCAP)* 2023. .(n.d.) Retrieved from <[https://www.mocc.gov.pk/SiteImage/Misc/files/NCAP%20\(28-02-2023\)%20v1.pdf](https://www.mocc.gov.pk/SiteImage/Misc/files/NCAP%20(28-02-2023)%20v1.pdf)> accessed 21 April 2025.
35. *Neubauer and others v Germany* (2021) 1 BvR 2656/18 (Federal Constitutional Court). .(n.d.).Retrieved from <<https://onlineacademiccommunity.uvic.ca/climatechangelitigation/2021/08/03/german-klimaklage-neubauer-et-al-v-germany>> accessed 23 April 2025.
36. Noorulain Shaikh, 'Article 9A of the Constitution of Pakistan: A Step in the Right Direction' (Paradigm Shift, 1 November 2024). .(n.d.) Retrieved from <<https://www.paradigmshift.com.pk/article-9a-constitution/>> accessed 23 April 2025.
37. *Neubauer et al. v. Germany* BVerfG, 1 BvR 2656/18, 24 March 2021. .(n.d.) Retrieved from <<https://www.escri-net.org/caselaw/2023/neubauer-et-al-v-germany/>> accessed 23 April 2025.
38. *Pakistan Ministry of Climate Change*. (2021). *National Climate Change Policy*. . (n.d.). Retrieved from <<https://ndrmf.pk/programs/climate-change/climate-policies>> accessed 3 January 2025.
39. "Pakistan's Environmental Laws: Enforcement and Effectiveness," *Pakistan Lawyer Articles*. (n.d.). Retrieved from <<https://articles.pakistanlawyer.com/2024/09/23/pakistans-environmental-laws-enforcement-and-effectiveness/>> accessed 5 January 2025.
40. Pakistan Environmental Protection Act, 1997.
41. Pakistan Climate Change Act, 2017.
42. 'Pakistan Floods 2022 Impact Assessment'. .(n.d.) Retrieved from <https://www.finance.gov.pk/survey/chapters_23/Annex_III_Pakistan_Floods_2022.pdf> accessed 21 April 2025.
43. *Paris Agreement* (2015). .(n.d.) Retrieved from <<https://unfccc.int/process-and-meetings/the-paris-agreement>> accessed 21 April 2025.
44. Ramirez, R., & Dewan, A., 'Pakistan emits less than 1% of the world's planet-warming gases. It's now drowning' *CNN*. . (n.d.). Retrieved from <<https://www.cnn.climate-change-in-pakistan.com/>> accessed 3 January 2025.
45. Rasul, G., Mahmood, A., Sadiq, A., & Khan, S. (2012). *Vulnerability of the Indus Delta to Climate Change in Pakistan*". . (n.d.). Retrieved from <<https://www.pmd.gov.pk/>> accessed 5 January 2025.
46. *Review of Pakistan's climate finance landscape*. .(n.d.) Retrieved from

- <<https://adamsmithinternational.com/projects/review-of-pakistans-climate-finance-landscape/>> accessed 24 April 2025.
47. '*Stockholm Conference 1972*' (*International Environment Forum*). . (n.d.). Retrieved from <<https://iefworld.org/Stockholm1972>> accessed 17 April 2025.
48. *Shehla Zia v. WAPDA* [1994] PLD Supreme Court 693 Para.712. & 713.
49. The Constitution of Islamic Republic of Pakistan, 1973.
50. '*Understanding Human Rights and Climate Change*' (*Office of the United Nations High Commissioner for Human Rights*). . (n.d.). Retrieved from <<https://www.ohchr.org/sites/default/files/Documents/Issues/ClimateChange/COP21.pdf>> accessed 17 April 2025.
51. *United Nations Framework Convention on Climate Change (UNFCCC)*. . (n.d.) Retrieved from <<https://unfccc.int/resource/docs/convkp/conveng.pdf>> accessed 21 April 2025.
52. *What Is Climate Change?*' (*United Nations*). . (n.d.). Retrieved from <<https://www.un.org/en/climatechange/what-is-climate-change>> accessed 17 April 2025.
53. *United Nations, 'Universal Declaration of Human Rights'* (*United Nations*). . (n.d.) Retrieved from <<https://www.un.org/en/aboutus/universal-declaration-of-human-rights>> accessed 21 April 2025.
54. '*What are human rights?*' (*Office of the United Nations High Commissioner for Human Rights*). . (n.d.). Retrieved from <<https://www.ohchr.org/en/what-are-human-rights>> accessed 17 April 2025