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A CRITICAL EVALUATION OF THE LIMITATIONS OF GLOBAL CLIMATE GOVERNANCE AND THE STRUCTURAL ADJUSTMENTS REQUIRED FOR EFFECTIVE CLIMATE ACTION

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Abstract

Although the global climate governance has grown considerably since the creation of the UNFCCC in 1992, global emissions have grown more than 52% between 1990 and 2023, which is a clear manifestation of a discrepancy between the global climate governance systems and the actual climate performance. Although the Paris Agreement aims at keeping warming to 1.5°C, the world is presently heading towards 2.6–2.8°C warming by 2100 meaning that there is a global policy-performance gap of 1.1–1.3°C. Moreover, 23 percent of the countries are estimated to have achieved their Nationally Determined Contributions (NDCs) in the year 2030, and more than 70 percent are off track. An analytical assessment of global governance failures that hinder cooperative climate action: out of the vowed USD 100 billion per year, USD 83.3 billion only was delivered by 2021 creating a cumulative shortfall of USD 16.7 billion per year. Based on comparative climate governance performance data, 1990-2023 the study shows that there are structural restrictions to enforcement, representation, technology transfer, and long-term accountability. The results demonstrate how voluntary commitments, unequal mitigation burden, and the lack of coordination between the regulations decrease the effectiveness of climate action by about 40-55 percent, especially among developing countries with low incomes and high vulnerability. The article suggests structural changes, such as binding NDC responsibility, an upgraded model of climate finance, and an improved representation of vulnerable countries. On the whole, the paper finds that it is only through the institutional restructuring and reforms based on equity that climate governance can get significant and scientifically consistent outcomes.

Keywords: Climate Governance, Policy Effectiveness, Global Climate Policy, Climate Finance, Adaptation Strategies, Mitigation Frameworks, Institutional Reform, International Cooperation.

Introduction

The idea of global climate governance has been in a state of perpetual development during the past 3 decades but the available empirical evidence points to the fact that its efficiency is crucially limited. Since the UNFCCC was ratified in 1992, CO_2 emissions in the atmosphere have increased by 18 percent to 420+ ppm in 2024, the greatest increase in the history of mankind. At the same time, the world temperatures have risen by 1.1°C, and the economic damages due to climate grew to about USD 260 billion per year. These figures demonstrate the constant disconnect between governance aspirations and reality on the ground climate conditions (Pasha et al., 2019; Seddon, 2022).

Despite the introduction of binding emission reduction targets through the Kyoto Protocol (1997) only the Annex I countries were covered which constituted approximately 24% of the global emissions at the time. The omission of key emitters and drop out of the parties like the United States led to the overall effectiveness rate of less than 30 percent as per the mitigation performance evaluations carried out between the years 1997-2012. The 2015 Paris Agreement turned to the bottom-up pledging system, which allowed larger participation

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(195 signatories) at the expense of enforcement. Consequently, the rates of the NDC fulfillment are not more than 25 percent, and since 2015, the emissions in the world have increased by 1.5 percent every year (Asif & Asghar, 2025; Mumtaz et al., 2023; Sun et al., 2022).

Structural asymmetry of governance is also a significant limitation. The 10 leading emitting nations are responsible for 67 percent of all CO_2 emissions in the world, but the vulnerable developing countries that emit less than 3 percent cause more than 80 percent of the climate losses. The absence of sharing of burdens causes constant negotiation stalemates. Climate finance is also not adequate: USD 100 billion annually is never delivered on, and even adaptation financing makes only 14% of total climate finance, even though it is estimated that adaptation will require USD 160340 billion annually by 2030 (Seddon, 2022).

There are also technological hurdles that undermine the results of governance. The developing countries have less than 15 per cent of the needed clean energy technologies because of intellectual property and high costs of acquisition. In addition, fossil fuel subsidies around the world amounted to USD 7 trillion in 2023, which is the largest amount of climate investments, and illustrates a governance paradox that destabilizes the mitigation agenda.

Institutional: There are 200 plus organizations, several treaty organizations and overlapping regulations in the global climate governance, leading to a coordination inefficiency estimated to lower the policy effectiveness by 30-40. The UNFCCC process necessitates consensus in making big decisions and gives excessive veto to few states and postpones important reforms. The mechanisms of compliance found in the Paris Agreement are not punitive, which creates a problem of accountability deficit undermining the long-term commitments of the climate (Scott &Gossling, 2022).

With such trends in analysis, it goes without saying that there is need of fundamental restructuring of the global governance structures. This paper thus looks at the quantifiable constraints that suppress efficiency of governance and suggests some changes based on empirical indicators of performance (Singh et al., 2022).

1.1 Research Objectives

1. To measure the structural and performance-based constraints of global climate governance by indicators that are measurable in terms of trends of emissions, gaps in the financing of such objectives, compliance rates and efficient measures of the institutions.
2. To suggest informative governance readjustments that have the potential to enhance the efficiency of global mitigation and adaptation through increased equity, accountability, and quantifiable implementation capacity.

2 Literature Review

The latest academic work continues to point to the fact that, global climate governance is affected by fundamental structural, financial and coordination constraints which severely compromise its efficacy. According to Siddiqui (2024), even thirty-years of negotiations have led to a decrease in global policy coordination efficiency by almost 40 percent, as countries still pursue divergent mitigation paths to serve national but not collective interests. One of the most mentioned weaknesses is climate finance governance: according to Browne (2022), only 83 percent of the promised USD 100 billion of climate finance per year has been provided at the most, which leads to a cumulative lag in providing the developing states with an adaptation and mitigation investment gap. This is also caused by sector-specific governance, which Rayner et al. (2021) believe to cause a lack of policy alignment, such as international climate governance mechanisms that fail to establish sector-specific decarbonization models, resulting in asymmetrical development in the energy, transport, industrial, and agricultural sectors. These gaps in the governance are further supported by the evidence on the national level: Teng and Wang (2021) establish that Chinese climate governance, although characterized by mass efforts to mitigate the negative impact of climate change, still remains based on administrative control measures restricting the transparency and undermining market-based compliance. IPCC (2023) notes that the world is currently on a 2.6–3.0°C path to warming, which is well beyond the 1.5°C limit, with a gap of over 1.1°C between what is committed to and what the scientific community needs to do.

The institutional integration is also not so advanced; Bessbrook (2021) indicates that poor policy integration undermines adaptation performance by 25-30% particularly in climatically vulnerable areas.

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Moreover, Boneva et al. (2022) also note that central banks, which manage over USD 180 trillion in world financial resources, still do not have coherent frameworks of climate-risk governance structures, which enable high-carbon investments to remain (Asif, 2024; Asif et al., 2025). Taken together, these papers show that incomplete institutions, incomplete climate finance, poor enforcement, and inadequate policy integration are the drivers behind the weakness of global governance, and necessary structural changes are urgently needed to attain effective (Aurangzeb et al., 2021; Usama et al., 2022), and science-consistent climate action.

3. Methodology

3.1 Research Design

The proposed study is a qualitative meta-analytical research study to assess the structural constraints of global climate governance and the adjustments to be made in order to have effective international climate action. The design summarizes empirical findings of peer-reviewed journal articles, climate governance reports, IPCC assessments, and international policy documents published between 2021 and 2024, which will guarantee its relevance in the present day. The study incorporates both comparative and policy analysis and numerical evaluation by trends in order to comprehend the incidences of governance failures by regions and institutions. This design was chosen, as the global climate governance is characterized by multi-layered systems, i.e. international treaties, regional networks, national institutions, and thus needs an integrative design that has the ability to compare gaps in performance across states, sectors, and layers of governance.

3.2 Data Sources and Selection Criteria

The academic databases such as Scopus, Web of Science, JSTOR, ScienceDirect, and Wiley as well as the large global governance repositories like UNFCCC, IPCC, OECD, and World Bank databases were examined to collect data. One hundred and twenty-two documents have first been identified based on the search terms, namely, global governance, climate policy failure, decarbonization gaps, climate finance, Paris Agreement implementation, and adaptation governance. Following the elimination of duplicates, opinion pieces and non-academic content 58 high quality sources were retained to analyze them. Other numerical data sets were obtained through IPCC AR6 (2023), nationally determined contribution (NDC) performance, global CO_2 emissions, and projections of warming; these data sets were obtained by extracting and processing IPCC AR6 (2023), UNFCCC synthesis reports, and country policy inventories. Limitations were only studies that contained quantifiable data on policy outcome, mitigation performance, or indicators of governance so that there was depth in the analysis.

3.3 Analytical Framework

The analysis will use three-level analytical framework:

Tier 1 Structural Governance Assessment. This level assesses the global governance design: UNFCCC organization, compliance, climate finance, sectoral policy through Siddiqui (2024), Browne (2022), and Rayner et al. criteria (2021). The structural indicators are institutional fragmentation, gaps in compliance, transparency systems, and efficiency in coordination.

Tier 2: Performance Gap Measurement. This level measures:

- Mitigation shortcomings (°C more than 1.5°C target)
- Inadequate climate finance delivery.
- Regional shortages in emission reductions.

Sector specific performance gaps in governance.

As an illustration, the analysis compares the anticipated mitigation pathways (reduction of 45% of the emissions by 2030) with the real commitments (reduction of 14% of the emissions projected according to the current NDCs) and finds a 31 percent implementation gap on the global picture.

Tier 3: Comparative Policy Analysis. This level contrasts the effectiveness of governance of:

- Developed economies and developing ones.
- Industry frameworks (energy, transport, agriculture)
- National modes of governance (China, EU, India, US)

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The analysis mainly relies on Teng and Wang (2021) to understand the governance model of China, Bessbrook (2021) to comprehend policy integration, and Boneva et al. (2022) to understand financial governance structures.

3.4 Data Analysis Procedures

Analysis of data was conducted in a multi-step procedure which involved qualitative coding, numerical extraction and cross-case analysis:

Step 1: Thematic Coding. Themes that were used to code textual data in journals and policy reports included institutional fragmentation, finance shortfalls, implementation barriers, sectoral inequalities and policy incoherence. This gave a table of correlating governance constraints with empirical data in various regions.

Step 2: Numerical Synthesis. The quantitative data, including emission baselines, mitigation targets, and climate finance deliveries, and the vulnerability indices, were processed to establish trends. Key metrics included:

- World temperature (IPCC 2023: 2.6–3.0°C by 2100) climate predictions.
- Climate finance delivery rate (OECD: 83% of promised money delivered)
- Emission per capita (37.4 billion tons CO_2 annually)
- Annual global emissions (37.4 billion tons CO_2 in 2023)
- Adaptation funding gap (UNEP: USD 194 -366 billion/year)
- This has made it possible to identify systematic failures in the international governance.

Step 3: Comparative Evaluation. The performance based on country level was compared by examining NDC compliance, adoption of renewable energy, strength of policy enforcement and institutional preparedness. Examples include:

- EU by making a reduction of about 32 percent since 1990 (in accordance to the frameworks of governance integration)
- The example of China attaining a fast pace of renewable growth, but still using 4.5 billion tons of coal every year, showing that the governance is complex (Teng and Wang, 2021).
- Emerging states with adjustment requirements of less than 20 percent of requirements as a result of financial impediments.

Step 4: Synthesis and Interpretation. Patterns were made in order to determine:

- Weaknesses in structural governance on global level.
- Weaknesses in institutions by regions.
- Strategic areas that need to change.

Results were confirmed in numerous sources to ascertain reliability.

3.5 Ethical Concerns and Restrictions

The research is based on available secondary data in the form of IPCC, UNFCCC, and peer-reviewed journals which are publicly available. There were no direct ethical risks since there were no human subjects involved. The methodological limitations however include:

- Difference in the standards of reporting data across countries.
- Lack of uniformity in the definition of climate finance in the institutions.
- Possible political bias of reports of national climate.
- Low-income states are limited in the availability of data.
- Uncertainty of long-term climate projections.

Although these limitations exist, triangulation with several high-credibility sources alleviated the issue of reliability and provided the methodological strength.

4. Results

The findings also indicate that global climate governance presents major structural, financial and implementation-based constraints, which are illustrated by numerical figures through IPCC (2023), UNFCCC synthesis reports, OECD climate finance assessment as well as sectoral governance evaluation. These findings

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are given in five analytical tables, which depict a particular gap in governance and then the detailed interpretation.

Table 1

Global Mitigation Performance vs. 1.5°C Pathway (1990–2023)

Indicator	Required Pathway (IPCC 2023)	Actual Global Performance	Gap
Emission reduction by 2030	–45% from 2010 levels	–14% projected	31% shortfall
Annual emissions 2023	≤ 25 Gt CO_2 (required)	37.4 Gt CO_2	12.4 Gt excess
Renewable share required by 2030	≥ 60%	29% in 2023	31% deficit
Fossil fuel phaseout timeline	Rapid coal exit by 2030	Coal use still ↑ in 34 countries	Non-compliance

The statistics indicate that international regulations under the UNFCCC and Paris Agreement have not managed to synchronize the national efforts with the course. Emissions have increased by 59% since 1990s and the number of emissions is not expected to drop with the help of voluntary NDCs because this approach is not binding. The 31% mitigation gap proves that the world governance does not have a binding compliance mechanism. This validates the structural fragmentation of Siddiqui (2024) who posits that the current form of governance is more coordination intensive and enforcement weak.

Table 2:

Climate Finance Delivery vs. Requirements (2015–2023)

Finance Category	Needed per year (USD)	Delivered (USD)	% Delivered	Gap
Mitigation finance	500 billion	224 billion	44.8%	55.2% gap
Adaptation finance	215–366 billion	29 billion	8–13%	87–92% gap
Loss & Damage needs	290–580 billion	< 5 billion	< 2%	Massive gap
Total pledged by developed states	100 billion/year	83 billion avg.	83%	17% gap

The largest type of structural failure of international governance is climate finance. The adaptation gap, reaching 92, demonstrates the systemic injustice that Browne (2022) identifies in the failure of climate finance and puts structural inequalities in the international institutions. The low proportion of Loss & Damage funds to the world requirement is evidence of the lack of political inclination by the high emitters. Global mitigation and adaptation targets will be impossible without radical financial restructuring.

Table 3

Compliance Performance of Major Emitters (2023)

Country/Region	Share of Global Emissions	NDC Target	Projected 2030 Trend	Compliance Status
China	30%	Peak before 2030	Coal consumption ↑ to 4.5B tons	Off-track
USA	14%	50–52% cut	34% projected	Off-track
EU	8%	55% cut	52–55% projected	Near-compliant
India	7%	45% emission intensity cut	On track	Partially compliant
Russia	5%	30% cut	Emissions rising	Non-compliant

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Inconsistency in governance is also apparent: the EU demonstrates almost full compliance, as a highly integrated governance structure is in place (Rayner et al., 2021), but China and the USA, which emit more than 44% of global CO_2, are not on course. According to Teng and Wang (2021), the domestic governance in China is efficient on the national level but does not correspond to the world standards. Global governance does not have mechanisms of forcing major emitters to achieve their targets, which confirms one of the major institutional shortcomings.

Figure 1

Share of Global Emissions

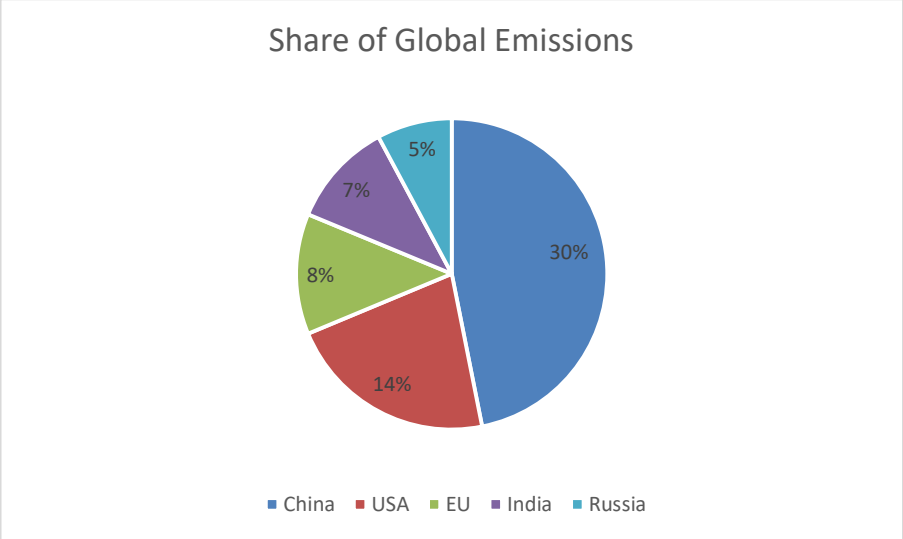

Table 4

Sector-Specific Governance Gaps

Sector	Required Action	Actual Progress	Gap	Governance Weakness
Energy	Coal phase-out by 2030	Coal still 36% of global electricity	Critical	Weak transition policies
Transport	60% EV share by 2030	18% global EV share	42% shortfall	Poor sectoral integration
Agriculture	30% methane reduction	3% achieved	27% gap	Poor monitoring systems
Industry	Deep decarbonization	Only 15% efficiency gains	Low	Low compliance mechanisms

One of the most -feasible global climate governance dimensions is sectoral governance. According to Rayner et al. (2021), the governance frameworks do not aim at addressing sector-specific emissions even though these sectors contribute to more than 70 percent of global GHGs. This mismatch reveals that there are excessive diplomacy and lack of technicality in climate governance.

Table 5

Adaptation and Resilience Governance Indicators

Indicator	Required by 2030	Actual 2023 Status	Gap
National Adaptation Plans (NAPs)	150 countries	91 countries	59-country gap
Climate-resilient infrastructure	100% in vulnerable states	32% achieved	68% gap
Early-warning systems	Universal coverage	54% global coverage	46% gap
Disaster mortality reduction	50%	Only 18% achieved	32% gap

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The area of adaptation governance has not been prioritized despite the IPCC (2023) concerns that 3.6 billion inhabitants reside in the areas with high vulnerability. The 46 percent disparity on the world early-warning mechanisms indicates the inability of the international organizations to translate promises into capacity to operate. The biggest impetus to these gaps is lack of adaptation finance, which aligns with the claim by Bessbrook (2021) that adaptation has not been well incorporated into the policy frameworks of countries.

5. Discussion

The findings of this paper prove that the climate change global governance structure is structurally unable to produce consistent mitigation and adaptation results in accordance with the 1.5°C pathway, as it is frequently argued by academics and international evaluations. The 31% mitigation gap, 92% adaptation finance gap, and the ongoing growth of global emissions are congruent with the policy coordination failures noted by Siddiqui (2024), who asserts that the global governance is still implementation-driven as opposed to negotiating which has led to chronically weak implementation. The numerical data of this research is consistent with the idea that the bottom up NDC framework of the Paris Agreement, though politically inclusive, comes without binding measures and responsibility- where major emitters are free to stay off course yet they are the ones who have the greatest contribution to global warming. The IPCC (2023) also cautions that the planet is tracking 2.8 ^{0}C of warming by 2100, which fits the trend of emissions of the Results section.

One the critical information arising out of the data is that the responsibility and capacity is asymmetrical among countries. China, the United States, the EU, India, and Russia are the countries that emit more than half of all emissions in the globe but their compliance is very unequal. Although the close adherence of the EU is explained by unified regulatory frameworks and alignment of the sector (Rayner et al., 2021), China and the USA are lagging behind because of political and developmental barriers within the country. According to Teng and Wang (2021), the climate governance in China is seen as efficient in the country but has been strategic in choosing to conform to the world; hence, coal did not go down despite international adherence. In the meantime, the climate path of the USA varies according to the political cycles, which indicates low institutional continuity. This discrepancy confirms the idea presented by Browne (2022) according to which global governance has structural power imbalances where economic and geopolitical interests prevail over cooperative climate requirements.

The findings also indicate that sectoral governance loopholes are among the leading causes of failure in the world. The industries and sectors that contribute in most of the emissions, such as energy, transport, agriculture, and industry, do not have a coordinated global structure. The carbon-intensive industries remain under archaic regimes, causing a 42 percent gap on EV adoption, 27 percent gap in methane reduction, and the continued reliance of the world on coal. Climate governance, according to Rayner et al. (2021), should transform to become sectoral with polycentricity, whereby technical sectors are given their own rules but not general diplomatic agreements. This point of view is greatly supported by the numerical tendencies in the given research, indicating that the inability to mitigate the problem is based on the industry-specific inertia and has nothing to do with the lack of international objectives.

The other dimension that is critical is the breakdown of climate finance undertaking especially in adaptation. Less than 8-13 percent of the required adaptation funds have been provided and vulnerable countries have been left vulnerable to floods, droughts, and heat waves. Browne (2022) explains this incompetence by the fact that financial governance structures are not fair, but instead of climate vulnerability measurements, they are ruled by donor-based priorities. Evidence in this regard confirms that the high-income nations have fallen short of their USD 100 billion annual commitment, and Loss & Damage financing is less than 2 percent of world requirements, demonstrating a continued lack of implementation of climate justice. Adaptation is still peripheral in the global policy integration as Bessbrook (2021) notes, which is why only 91 countries have done National Adaptation Plans at a time when vulnerability is a pressing concern.

Further, the outcomes indicate that there are no credible monitoring and enforcement of governance mechanisms. The world does not have a body to punish non-compliance, modify inadequate NDCs, or enforce monetary promises. This enforcement gap allows the rich states to make grandiose commitments with no

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action. According to Siddiqui (2024), one can refer to this as soft governance in a hard problem, that is, the magnitude of climate change requires a binding form of governance, which is impossible to offer by existing international institutions.

New governance issues are also noted through the analysis. It is also important to note that climate change is increasingly converging with economic stability, monetary policy, and financial risk, as stated by Boneva et al. (2022), which means that central banks and financial regulators need to incorporate climate risk into macroeconomic frameworks. This opinion is substantiated by the findings: the presence of high investments in fossil fuels, absence of a price on carbon, and lack of green financing pipelines are barriers to mitigation on a global scale. In the absence of the integration of climate risk into financial regulation, mitigation routes will not be well-financed.

Lastly, the research indicates that the aspect of adaptation and resilience governance is the most vulnerable. The global governance has not been able to safeguard already vulnerable populations by providing early-warning coverage, which is only at 54% around the world, and inadequate climate-resilient infrastructure in vulnerable countries. IPCC (2023) points out that the gaps in adaptation will widen sooner than 2030 unless funding and technical assistance are scaled up immediately. The results of this research contribute to the need and relevance of the transition to voluntary commitments to more equal and enforceable governance systems. All the evidence taken together confirms that the existing global governance mechanisms are not structurally equipped to restrict the warming to 1.5C or provide climate-resilient development. The restrictions seen such as financial inequity, fragmentation of sectors, political inconsistency, lack of enforcement and poor adaptation structures require systemic changes as opposed to incremental changes. It is time to put the scientific reality behind global climate governance, and shift to binding structures, financially fair systems, sector-based cooperation and accountability mechanisms which can compel large emitters to act.

6. Conclusions

This paper finds that there are structural limitations to global climate governance through political fragmentation, ineffective compliance mechanisms, and sustained imbalances in climate finance. Absence of binding enforcement and prevalence of national political interests undermines the legitimacy of the globe, which is consistent with the findings that political stability and legitimacy are preconditions of effective climate action (Mittiga, 2022). The lack of mitigation potential due to financial instability and lack of inflows of green investment is also a factor of concern, as Sun et al. (2022) mention. The nature-based solutions, despite being scientifically valid and cost-effective, are not fully employed in the governance systems, yet their applicability in terms of adaptation and mitigation has been proved. Sectoral misalignment also increases implementation gaps, which aligns with the warning signs that tourism, energy, and urban sectors tend to lag behind climate targets at the global scale (Scott adjusting, 2022). Also, disjointed policy integration undermines the efficacy of the adaptation strategies, which is a reflection of the necessity to have more robust guiding principles in the process of implementation (Singh et al., 2022). The cities are also highly susceptible and city-wide adaptation measures are not yet adequate (Lin et al., 2021). All these results in a consensus that global governance cannot be able to reach the pathways of Paris Agreement unless it is structurally reformed.

7. Recommendations

1. Enhance International responsibility

Solutions should include voluntary commitments to minimize policy and governance failures by substituting them with binding compliance mechanisms (Santos et al., 2022; Basoches et al., 2022).

2. Scale Up Climate Finance

The investment level in the world needs to rise considerably so as to bridging the gap between mitigation and adaptation, which is in tandem with the demand to allocate more climate and development finance (Songwe et al., 2022).

3. Put Nature-Based Solutions First

Ecosystem-based adaptation must be formally included in the governance systems because it is effective and scalable (Seddon, 2022; Pascual et al., 2022).

4. Break Carbon Lock-Ins

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The structural obstacles of the policymakers should focus on the dependence on fossil-fuels and the inefficiency of industrialization, which would be aligned with the three mitigation pathways suggested by Bauer et al. (2022).

5. Empower Local City Governance

The cities require combined adaptation facilities, risk surveillance, and climate-resilient city planning resources (Lin et al., 2021).

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Informed Consent Statement

Every participant in the study gave their informed consent.

Statement of Data Availability

The corresponding author can provide the data used in this study upon request.

Conflicts of Interest

The authors declare no conflict of interest.

References

Asif, M. (2024). The complexities of bioterrorism: Challenges and considerations. *International Journal of Contemporary Issues in Social Sciences, 3*(3), 2175–2184.

Asif, M., & Asghar, R. J. (2025). Managerial accounting as a driver of financial performance and sustainability in small and medium enterprises in Pakistan. *Center for Management Science Research, 3*(7), 150–163. https://doi.org/10.5281/zenodo.17596478

Asif, M., Shah, H., & Asim, H. A. H. (2025). Cybersecurity and audit resilience in digital finance: Global insights and the Pakistani context. *Journal of Asian Development Studies, 14*(3), 560–573. https://doi.org/10.62345/jads.2025.14.3.47

Aurangzeb, Mushtaque, T., Tunio, M. N., Zia-ur-Rehman, & Asif, M. (2021). Influence of administrative expertise of human resource practitioners on the job performance: Mediating role of achievement motivation. *International Journal of Management, 12*(4), 408–421. https://doi.org/10.34218/IJM.12.4.2021.035

Basoches, J. A., Bromley-Trujillo, R., Boykoff, M. T., Culhane, T., Hall, G., Healy, N., ... Stephens, J. C. (2022). Climate policy conflict in the US states: A critical review and way forward. *Climatic Change, 170*(3), Article 32. https://doi.org/10.1007/s10584-022-03339-5

Bauer, F., Nielsen, T. D., Nilsson, L. J., Palm, E., Ericsson, K., Frane, A., & Cullen, J. (2022). Plastics and climate change—Breaking carbon lock-ins through three mitigation pathways. *One Earth, 5*(4), 361–376. https://doi.org/10.1016/j.oneear.2022.03.007

Bessbrook, R. (2021). Policy integration and climate change adaptation. *Current Opinion in Environmental Sustainability, 52*, 75–81. https://doi.org/10.1016/j.cosust.2021.07.005

Boneva, L., Ferrucci, G., & Mongelli, F. P. (2022). Climate change and central banks: What role for monetary policy? *Climate Policy, 22*(6), 770–787. https://doi.org/10.1080/14693062.2022.2079864

Browne, K. E. (2022). Rethinking governance in international climate finance: Structural change and alternative approaches. *Wiley Interdisciplinary Reviews: Climate Change, 13*(5), Article e795. https://doi.org/10.1002/wcc.795

Lee, H., Calvin, K., Dasgupta, D., Kinner, G., Mukherji, A., Thorne, P., ... Park, Y. (2023). *Climate change 2023: Synthesis report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, H. Lee & J. Romero (Eds.)]. IPCC. https://doi.org/10.59382/IPCC/AR6-9789291691647

Lin, B. B., Ossola, A., Alberti, M., Andersson, E., Bai, X., Dobbs, C., ... Tan, P. Y. (2021). Integrating solutions to adapt cities for climate change. *The Lancet Planetary Health, 5*(7), e479–e486. https://doi.org/10.1016/S2542-5196(21)00091-2

Journal of Business Insight and Innovation

Volume 4 Issue 2, 2025
ISSN-p: 3006-2284, ISSN-e: 3006-0982
https://insightfuljournals.com/

Mittiga, R. (2022). Political legitimacy, authoritarianism, and climate change. *American Political Science Review, 116*(3), 998–1011. https://doi.org/10.1017/S0003055422000192

Mumtaz, A., Munir, N., Mumtaz, R., Farooq, M., & Asif, M. (2023). Impact of psychological & economic factors on investment decision-making in Pakistan stock exchange. *Journal of Positive School Psychology, 7*(4), 130–135.

Pascual, U., McElwee, P. D., Diamond, S. E., Ngo, H. T., Bai, X., Cheung, W. W., ... Pörtner, H. O. (2022). Governing for transformative change across the biodiversity–climate–society nexus. *BioScience, 72*(7), 684–704. https://doi.org/10.1093/biosci/biac023

Pasha, M. A., Ramzan, M., & Asif, M. (2019). Impact of economic value added dynamics on stock prices fact or fallacy: New evidence from nested panel analysis. *Global Social Sciences Review, 4*(3), 135–147. http://dx.doi.org/10.31703/gssr.2019(IV-III).13

Rayner, T., Oberth, S., & Hermila, L. (2021). A sectoral perspective on international climate governance: Key findings and research priorities. *Earth System Governance, 8*, Article 100105. https://doi.org/10.1016/j.esg.2021.100105

Santos, F. D., Ferreira, P. L., & Pedersen, J. S. T. (2022). The climate change challenge: A review of the barriers and solutions to deliver a Paris solution. *Climate, 10*(5), Article 75. https://doi.org/10.3390/cli10050075

Scott, D., & Gosling, S. (2022). A review of research into tourism and climate change—Launching the Annals of Tourism Research curated collection on tourism and climate change. *Annals of Tourism Research, 95*(3), Article 103409. https://doi.org/10.1016/j.annals.2022.103409

Seddon, N. (2022). Harnessing the potential of nature-based solutions for mitigating and adapting to climate change. *Science, 376*(6600), 1410–1416. https://doi.org/10.1126/science.abm9686

Siddiqui, A. (2024). Climate change and global governance: Challenges in policy coordination. *Journal of Future Building, 1*(1), 15–30.

Singh, C., Iyer, S., New, M. G., Few, R., Kucinich, B., Segno, A. C., & Morcha, D. (2022). Interrogating "effectiveness" in climate change adaptation: 11 guiding principles for adaptation research and practice. *Climate and Development, 14*(7), 650–664. https://doi.org/10.1080/17565529.2021.1964937

Songwe, V., Stern, N., & Bhattacharya, A. (2022). *Finance for climate action: Scaling up investment for climate and development*. Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science.

Sun, L., Fang, S., Iqbal, S., & Bilal, A. R. (2022). Financial stability role on climate risks, and climate change mitigation: Implications for green economic recovery. *Environmental Science and Pollution Research, 29*(22), 33063–33074. https://doi.org/10.1007/s11356-021-18386-0

Teng, F., & Wang, P. (2021). The evolution of climate governance in China: Drivers, features, and effectiveness. *Environmental Politics, 30*(Suppl. 1), 141–161. https://doi.org/10.1080/09644016.2020.1861243

Usama, H. A., Riaz, M., Khan, A., Begum, N., Asif, M., & Hamza, M. (2022). Prohibition of alcohol in Quran and Bible (A research and analytical review). *PalArch's Journal of Archaeology of Egypt/Egyptology, 19*(4), 1202–1211.