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Geopolitical Implications on Climate Diplomacy: An Analytical Study

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Abstract
In the twenty-first century, the phenomena of climate diplomacy and geopolitics are inextricably linked to each other, especially when it comes to navigating ascending challenges as well as seizing opportunities presented by climate action with a view to establishing a more equitable and sustainable world. Considering these notions, the present research attempts to assess the relationship between climate diplomacy and geopolitics by emphasising on the role of climate policy in international relations and the evaluation of requisite needs for international collaboration in order to address the impending climate change threat. This research is the compendium of different case studies, such as the Organization for Security and Co-operation in Europe (OSCE), European Union (EU) climate politics, together with India's role in climate diplomacy to provide a comprehensive understanding of the evolving landscape. Furthermore, the research navigates the inevitable challenges faced by fossil fuel-producing nations by evaluating economic vulnerabilities, environmental responsibilities, and geopolitical tensions associated with resource extraction. The countries most responsible for spreading fossil fuels ought to adapt to a changing energy landscape by embracing renewable technologies to remain economically relevant. The study also assesses various geopolitical issues that are linked to climate change, including the Arctic's strategic importance, land competition, renewable energy dependencies, and water scarcity in mountainous regions. The research methodology involves a "desk" research approach, drawing on secondary data from published studies, reports, and statistics. To infer, the research offers a panoramic view of the interplay between various actors and factors in the domain of climate diplomacy and geopolitics by providing with a foundation for policymakers, diplomats, and researchers to formulate effective strategies for global climate action.

Keywords: Climate diplomacy, Geopolitics, Climate policy, International relations, Climate action

Introduction

In the past several years, it has been witnessed that world governments have endeavoured to secure mineral resources, especially oil and gas by influencing the needful international cooperation, foreign, and security policies. Owing to the concentration of these reserves in mostly unstable regions and their significance to economies pose many geopolitical risks. It is, therefore, indispensable to understand these risks for an equitable and peaceful move away from fossil fuels (Mou et al., 2017). Moreover, considering hostility and fragmentation in trade, coupled with debt and climate action are ensuing restrictions on cross-border trade, technology transfer, and supply chain disruptions. The recent disruptions in the supplies of food and energy have raised several concerns, but policy choices reshoring could make countries more vulnerable to shocks. There is no denying the fact that climate policy is inextricably connected to international relations, primarily through the negotiation and implementation of international agreements and treaties. For instance, the Paris Agreement of 2015, whose objective was to mitigate, if not completely eliminate, the emissions of greenhouse gases, is a significant global treaty to limit the rise in global temperatures to well below 2 degrees Celsius above pre-industrial levels (Jayaram, 2021). This agreement further accentuates commitments from nearly every country to alleviate emissions and, thereby, enhance climate resilience through the requirement for diplomatic negotiations and cooperation

Furthermore, diversification can help curtail potential economic losses from supply disruptions, while countries are bound to weigh the costs of national security measures on trade or investment. The risk is that policy interventions enforced in the realm of economic or national security could result in a runaway geo-economic fragmentation, with estimates of the cost ranging from 0.2 percent to 12 percent of GDP (Oberthur & Ott, 2017). Thus, it is essential to carve out guardrails to protect the vulnerable from unilateral actions and to avoid dangerous slippery slopes towards fragmentation. As climate change is a global issue that requires a unified and systemic response, major powers must work together to achieve the goals

of the Paris Agreement. However, the risk of geo-economic fragmentation and unilateral actions in the name of national security could undermine global efforts to combat climate change (Munge, 2023).

Background to the Research Topic

Climate change poses an imminent existential threat to the global community or human survival, which demands robust international cooperation and diplomacy. While international agreements on climate policies, exemplified by the Paris Agreement and Oslo Accord, have garnered momentum, the intent of global leaders as well as critical knowledge gap persists regarding the precise mechanisms by which these policies shape international relations and geopolitics. In spite of the imperative of addressing climate change, the empirical evidence showcasing how climate action, policy decisions, commitments, and strategies adversely impact diplomatic relationships and geopolitical dynamics among nations is limited. As of 2022, global carbon dioxide (CO2) emissions have continued their upward trajectory, reaching an unprecedented 36.5 billion metric tons in 2020 (Global Carbon Project, 2021).

In this sense, the geopolitical ramifications of climate policy are worth paying attention, specifically for nations who are the major contributors to greenhouse gas emissions. There is undoubtedly a dire need to understand these international relationswithin the context of responsibilities and economic interests. When assessing the realm of international relations, it entails the distribution of responsibilities alongside power dynamics among countries that have a pivotal role within the framework of climate policy (Dimitrov, 2015; Naeem, Ali, & Ahmed, 2022; Haider, Ahmad, & Ali, 2024). This significantly influences the diplomatic landscape by establishing a backdrop for negotiations and alliances. As far as the United Nations Framework Convention on Climate Change (UNFCCC) is concerned, it is regarded to be a process for alleviating or restricting the perilous consequences of climate change. Moreover, it is considered to be the primary international platform for climate negotiations in addressing the very global challenge. More importantly, much emphasis on collective action becomes a cornerstone in international relations within the ambit of climate policy (NATO, 2021). Diplomats and negotiators actively and collectively engage in climate talks in order to secure commitments, resolve disputes, and advance shared objectives. These diplomatic endeavours are necessary to make a unified climate policy, which may influence and shape the relationships between nations. Regrettably, in spite of international commitments to reduce emissions, this intraactable trend further accentuates the need to understand the relationship between climate policy and international relations, thereby, augmenting global climate action.

Problem Statement

Since there is an interconnectedness between climate diplomacy and geopolitics, they present a significant and foreseeable challenge in the current global context. As the world contends with the increasing threats of climate change, there is requisite need to thoroughly understand how diplomatic efforts to address environmental issues interact with broader geopolitical considerations. Also, the paucity of having an understanding of this serious threat further impedes the development and impartation of effective global strategies to combat climate change, and which is adversely contributing to the existing geopolitical tensions (Lazaro-Touza, 2018). Therefore, it is vital to bridge this knowledge gap to inform decision-making, develop robust international agreements, and promote collaborative efforts that transcend national boundaries.

Research Significance

This research is significant in a manner that influencing political figures, foreign policy specialists, and corporate executives to understand that climate politics and diplomacy go hand in hand are becoming, and such an understanding is increasingly influential that goes beyond their original their expertise.. This shift would definitely provide with an opportunity for environmental policymakers to curtail the risk of climate issues becoming entwined with broader geopolitical challenges (Oberthur & Ott, 2017; Raza, & Ahmed, 2017). Retrospectively, climate discussions appeared to be materialised as a geopolitical matter, such as the U.N, that would sponsor meetings serving as diplomatic forums. However, the recent global turn towards low-carbon energy has elevated the issue of climate be more indispensable within the realm of geopolitics. Trade policy, on the other hand, has become a key aspect for incentivizing decarbonisation, such as initiatives like the #import fees of the European Union for high-carbon products as well as the U.S. Inflation Reduction Act. These and many other developments highlight the issue of climate geopolitics by adversely impacting both trade and diplomatic relations of world nations. This shift is evident in diplomatic visits, where shared climate objectives offer a platform for maintaining constructive relationships amid broader geopolitical disagreements (Wang et al., 2012; Ali et al., 2023). Therefore, conducting research in this particular area becomes more imperative so that feasible strategies can be formulated that can effectively confront and overcome the challenges and, ultimately, capitalise on the opportunities emerging in the realm of climate geopolitics.

Literature Review

Theoretical Framework

Understanding the phenomenon of climate diplomacy and geopolitics requires a consolidated theoretical basis. In this sense, three key theories, entailing Realism, Complex Interdependence and Regime Theory offer distinguished perspectives to comprehend the interconnectedness between climate policy and international relations.

Realism Theory

The Realism Theory has been propounded by scholars such as Hans Morgenthau and Kenneth Waltz. This theory is considered as a central idea in international relations, where governments are the key players in international politics since they are motivated by power and self-interest. It asserts that states prioritize their national interests, which include both

security and economic success, and that international relations is fundamentally competitive. Realism offers the notion of how governments' pursuit of self-interest impacts their involvement in climate policy within the framework of climate diplomacy and geopolitics (Mou et al., 2017). Such a viewpoint implies that states might use climate diplomacy to improve their geopolitical standing or favour economic growth above strict climate pledges.

Complex Interdependence Theory

Introduced by by Robert Keohane and Joseph Nye, the Complex Interdependence Theory is of the view that interdependence and connectivity among governments across a multifarious issues defies realist perspectives. This theory also asserts that non-state entities like multinational businesses, NGOs, and international organizations play fundamental roles in the functioning of nations and that states do not act in a vacuum. Complex interdependence theory is especially pertinent to climate policy because it acknowledges the role of multiple players, including civil society, in influencing climate diplomacy and geopolitics (Amini et al., 2018; Aslam, Iqbal, & Ahmed, 2022). Importantly, it stress on the fact that a variety of stakeholders ought to work together and form interdependent interactions in order for climate policy to be implemented.

Regime Theory

The Regime Theory which is put forth by scholars like Stephen D. Krasner, focuses on the implications of international regimes or institutions on shaping state behaviour and fostering cooperation within specific issue areas. Regime theory is relevant in the context of international relations and climate policy, as it suggests that international agreements like the Paris Agreement and the United Nations Framework Convention on Climate Change (UNFCCC) offer a structured framework for international collaboration on climate change (Chuffart et al., 2022; Ali et al., 2023; Dilshad, Shah, & Ahmad, 2023). Regime theory also helps explain how these agreements affect state actions in combating climate change, foster collaboration, and provide standards and principles. Above all, it assesses the efficacy and conformance to climate regulations, which are crucial facets of climate diplomacy and geopolitics (Underdal, 2017; Akram, Khan, & Ahmad, 2022).
Considerably, these theories provide with a comprehensive framework for analysing the models of power structures and cooperative endeavours within the field of climate diplomacy and geopolitics.

Rethinking Climate Change

As far as the study of Baldwin & Evenett (2019) is concerned, it assess the fundamental role of the Organization for Security and Co-operation in Europe (OSCE) within the climate security domain. The study's findings inferred how Swedish diplomats along with like-minded counterparts capitalised on the OSCE's security approach to further impart the understanding related to climate-related security risks within the organization. Emanating from interviews conducted during Sweden's OSCE chairpersonship, it was realised that the current political deadlock in the OSCE did fail to mobilize initiatives propounded by coalition States by collaborating with the OSCE secretariat. On the other side, when considering the studies of Gupt & Arts (2017), they profoundly assessed the diplomacy of climate change negotiations by exploring their structure, form, and the underlying principles that shape them. The study addressed two intertwined levels of climate diplomacy: one empirical and analytical. While the former level examined the negotiation architecture, which commences from the UN General Assembly resolution for framing the intergovernmental negotiating committee which ended up in the sixteenth conference of parties in Cancún, Mexico, in December 2010. In contrast, the latter level disposed the shift from club to network forms of climate diplomacy by evaluating nature, relevance, and adequacy of diplomacy in the globalized world. Thus, it can be argued that the EU embraced a 'multiple bilateralism (MB)' approach through its conventional-cum-multilateral engagement. The MB strategy entails an adequate level of engagement with various partners across different governance levels through bilateral agreements or dialogues on climate-related matters.
Furthermore, the study carried out by Hughes (2018) identified the impact of technological innovation on emissions, preferences, and interests of different countries, along with their collectively roles in shaping international cooperation on climate change. Through the study, it was inferred that technological change poses both opportunities and challenges for climate diplomacy based on the relative costs and benefits of different energy sources for different countries, particularly those most affected by climate change threats. Another study carried out by Backstrand & Lovbrand (2016) evaluated the adaptation of the EU for external climate change engagement strategy in response to global changes and the emergence of new actors. It identified the EU's adoption of a 'multiple bilateralism' approach by urging for engagement with diverse partners on various aspects of climate action.

Climate Diplomacy and Geopolitical Positions

It is essential to comprehensively assess how certain geopolitical positions and actions contribute to or are influenced by climate change. The Arctic region, for example, stands out as a critical point owing to its rapid and profound climate changes. The diminishing ice cover opens up opportunities for resource extraction, particularly in oil and gas.
Russia, Canada, and Denmark, which are the major Arctic Council members, assert their claims over the region by reshaping alliances and trade routes. The melting ice also creates potential advantages for global shipping, introducing shorter routes like the Northwest Passage. Oil, gas, and climate politics converge in another pivotal area (GOV.UK.GOV, 2021). In spite of progress in energy efficiency and carbon intensity, the relentless rise in global energy demand persists. The control of the majority of known oil reserves by state funds intensifies rivalry between these funds and international corporations.
When it comes to oil-exporting facilitations in the Middle East, they are more interest in exporting revenues over climate concerns by contributing to a divide in international climate negotiations. Besides, land competition becomes a classic geopolitical issue involving forests, food production, and biofuels. According to Hughes (2018), land-use changes, such as

deforestation for agriculture, significantly contribute to global emissions. The demand for biofuels exacerbates this issue, as forest clearing for biofuel feedstock poses long-term challenges to the carbon balance.

In addition to it, the shift towards renewable energy sources introduces geopolitical dependencies and challenges. The role of nuclear power in addressing climate change comes to the forefront after events like the Fukushima disaster. While some regions have curtailed their nuclear capacities, others like China, invest heavily in nuclear projects (Horton & Reynolds, 2016; Shah, Ali, & Ahmad, 2024). China's ambitious engineering plans, like the South-North Water Transfer Project, underscore the geopolitical significance of controlling water resources. Lastly, the geopolitical consequences of floods and sea-level rise are explored. For instance, small island nations like Tuvalu and the Maldives face existential threats, raising questions about their legal status and representation in international forums (Akyut & Foyer, 2016). In contrast, the Pacific region, with its strategic importance, becomes a battlefield for geopolitical influence, notably between the United States and China. At the crux, the connection between climate change and geopolitics emphasises the necessity for comprehensive and collaborative strategies (Munge, 2023).

Challenges Faced by Fossil Fuel Producing Countries

Fossil fuel-producing countries face myriad challenges for not limiting the spread of fossil fuels, or carbon emissions that necessitate examination on these finite resources. Those economic sectors that rely heavily on fossil fuels are extremely vulnerable as a result of the protracted volatility of the world energy markets. Owing to the fact that they have a negative impact on government income and budgetary planning, fluctuating oil and gas prices do contribute to economic instability (Chuffart et al., 2022; Khoso, Oad, & Ahmad, 2023). Such a reliance on a single source of income makes them vulnerable to outside shocks, which impeds their capacity to diversify and grow new industries.

Furthermore, fossil fuel-producing nations are now facing increased level of scrutiny and pressure to address environmental concerns associated with resource extraction. The global shift towards sustainable practices and the push for carbon reduction challenge these countries to balance economic interests with environmental responsibilities (Pirzada, Tabassum, & Ahmad, 2024). As the world community steps up efforts to prevent climate change, there is a greater chance that the demand for fossil fuels will decline, which makes this conundrum more pressing. The never-ending extraction and exportation of fossil fuels often contribute to geopolitical tensions, and which are now aggravating with disconcerted efforts of world nations to ponder over the needful relation between climate diplomacy and geopolitics. There are also disputes over resource-rich territories, such as oil fields, can escalate into conflicts, disrupting stability in the affected regions (Jayaram, 2021; Jabeen, Ali, & Ahmad, 2023). Besides, the global energy landscape is undergoing significant transformations with increased emphasis on renewable energy sources. Fossil fuel-dependent nations are the ones which face the impending challenge of adapting to these shifts in market dynamics (Amini et al., 2018).

As the world appears to be increasingly focused upon adopting sustainable practices in the face of increasing effects of global warming, fossil fuel-producing countries face the daunting task of transitioning their economies away from traditional extraction industries. However, this cannot be materialised without making a substantial amount of investment in renewable energy infrastructure, research, and development, as well as overhauling socio-economic transitions for communities heavily dependent on fossil fuel industries.

Research Methodology

For the present research, the methodology adopted is desktop, or desk, research. Secondary data, or data that may be gathered without fieldwork, is referred to as desk research. Since desk research mostly entails gathering data from already-existing resources encompassing executives' time, phone bills, and directories, it is frequently regarded as a less expensive method than field research. As a result, the study used data, reports, and studies that have already been published (Sakyi et al., 2020). It was simple to obtain this secondary data by using the library and internet journals. In this secondary research method, results were assessed from previous relevant studies and are qualitatively assessed and analysed. Eventually, through an empirical analysis within the framework of this research, a heap of new findings are development and compiling them in relation to the research issue identified in this paper.

Findings (Results and Analysis)

Some key findings were emanated from this paper by drawing on both theoretical frameworks and empirical studies as well as imparting a perspective of the field. Firstly, the examination of the Organization for Security and Co-operation in Europe (OSCE) proves to be an engaging case study. It showcases some important aspects on how climate security integrates into the OSCE's framework, along with highlighted the organization's adaptability. This exemplifies the innate ability of diplomatic entities to dynamically respond to emerging challenges, adding a layer of adaptability to climate diplomacy practices. In addition to it, the investigation of climate change was also assessed through some studies, which show the evolving structure and underlying principles that shape these diplomatic interactions. In a systematic manner, following the path from the resolution adopted by the UN General Assembly that established the intergovernmental negotiating committee to the complex negotiations that took place at the sixteenth Conference. The negotiations ingrained through this conference further enriches an understanding with regard to the shifting landscape of diplomatic engagements on climate issues.

In addition to it, the assessment regarding the European Union's (EU) climate politics post-2015 reveals a strategic evolution through the adoption of a 'multiple bilateralism' approach. Such a sophisticated strategy involves the EU's engagement with a diverse array of partners on various aspects of climate action. It was learned showcased that the EU is resilient in the adaptability of geopolitical shifts by positioning itself as a key actor in the realm of climate diplomacy. Through the analysis of this strategic transformation, the findings reflect the gradual, if not instant, proactive responses that diplomatic

organizations ought to make to worldwide developments by demonstrating a strategic agility that is essential to comprehending modern international relations. Besides, an in-depth exploration of India's role in climate diplomacy reveals an array of factors that shape the country's policies. These and other aspects of exhaustive analysis also highlight the need of technological innovation on emissions and preferences to effectively confront the challenges and, thereby, grab the opportunities for climate diplomacy.

The research offers an agenda for comprehending how international cooperation on climate change is changing, with the goal of exposing how technological advancement affects the choices and interests of various nations. This thorough research can be helpful to policymakers who are trying to match diplomatic efforts with the changing technical and economic landscape. These empirical findings show how different actors and aspects collaborate, while they are easily incorporated into the larger framework of climate diplomacy and geopolitics.

Research Gap

This research is not without some inadequacies that were found in the current literature's methodology as well as context. When the expected study findings present a different angle on the subject under discussion, a contextual gap appears. For instance, when analysing the study of Oberthur and Ott (2017), they examined how technological innovation affects emissions, national preferences, and national interests, along with how these elements influence global cooperation on climate change. The study used data and models related to energy systems, emissions scenarios, and economic impacts using a quantitative methodology. Besides, there is seems to be clear methodological gap, which is demonstrated by the quantitative approach employed by the authors articulated above on how technological innovation and deployment affect emissions, national preferences and interests, and international cooperation on climate change.

Discussion

With the over thorough writing and consequent discoveries, there's no denying the truth that climate relocation can be a viable adaptation methodology to manage with the impacts of climate alter. Be that as it may, arrangement must fit particular settings, and policy-relevant investigate and expanded trade between analysts and policymakers on climate-related relocation are essential. Systems of laws and benchmarks ought to encourage cross-border portability, and understandings upgrading opportunity of development and expanding shared acknowledgment of capabilities ought to be empowered.

An additional aspect of our exploration involves the strategic evolution of entities engaged in climate politics. The adoption of various approaches, such as 'multiple bilateralism,' signifies a proactive response to geopolitical changes. This strategic adaptability positions certain actors as dynamic participants in climate diplomacy, capable of overhauling the complexities of contemporary international relations (Underdal, 2017; Thomas, Khan, & Ahmad, 2022). The motivations and strategies of these economies play a pivotal role in shaping the global discourse on climate-related issues. A broader analysis of technological innovation on emissions and preferences broadens the discussion to the challenges and opportunities for climate diplomacy.

Climate change is likely to aggravate migration and displacement, both through direct impacts and compounding effects on poverty, unemployment, and conflict, which drive mobility worldwide. In Bangladesh, for example, mobility has been used for decades as a coping strategy to deal with extreme weather events. Strengthening and developing national policies, strategies, and legal frameworks are necessary to address the challenges of climate-related migration and displacement. To effectively address climate-related migration and displacement, it is crucial to increase knowledge and awareness, promote adaptation and development, and drive global efforts to reduce greenhouse gas emissions. Encouraging and supporting countries' plans to reduce emissions in line with the Paris Agreement and working towards more ambitious mitigation and adaptation action at the COP26 climate conference are essential (Horton & Reynolds, 2016; Ali, Shah, & Ahmad, 2023). Climate migration can be a viable adaptation strategy if policy keeps up with the changing landscape of climate change impacts.

Conclusion and Recommendations

With the above exhaustive analysis on climate diplomacy and geopolitics, it can be concluded that there is a dire need to address the current climate issue for which countries all around the world should be united. However, despite all of the cooperation, there are still certain obstacles that prevent advancement of policy making and implementation. There appears to be more competition because climate change is placing more demand on world's natural resources. Sea levels rising have caused new areas to opening up as well, probably leading to the creation of new trade routes. This will usher in a new race seeking supremacy in the area. There is a heightened competition among nations to obtain energy reserves due to the increasing impact of climate change on our natural resources. Sea levels are rising, opening up new areas that will probably lead to the creation of new trade routes. This will lead to a new competition for dominance in the region. Besides the likelihood of future problems, we face some great issues with existing systems.

While climate alter can serve as a precursor to participation and cultivating organizations together and discourse, it too has the potential to heighten existing geopolitical pressures. Enforcing resource and space management, both on land and at sea, has always been a key component of geopolitics. The US has prioritized protecting its dominant position in the world, which is considered as a role that is thought to depend on the country's continued reliance on the consumption of gas and oil over addressing climate change. China has deemed the continuous economic growth, which is its cornerstone for accomplishing its long-term objectives as well as a requirement of its climate change policy. States like the US, China, and Russia, which showcases a strong military presence and have an insatiable need for fossil fuels, are also making significant investments in

military hardware. Hitherto, China's policies have shown a great deal of pragmatism and prudence in the exercise of power, but also ruthlessness in the acquisition of strategic resources.

To establish a meaningful impact on global warming, it is essential to develop a comprehensive climate change package that can ensure a long-term carbon price and a level playing field for various low-carbon technologies. However, given the EU's diminishing real power, dependence on energy imports, aging population, and limited military assets, influencing global climate change policies remains questionable. Realizing a sustainable future, amidst the challenges of population growth, food security, environmental health, and democratic principles, may seem as a challenging task.

Furthermore, giving priority to multilateral initiatives is a vital suggestion within the framework of climate diplomacy. It is imperative that cooperative efforts be made via organizations like the Paris Agreement and the United Nations Framework Convention on Climate Change (UNFCCC). Countries should come together to set aggressive goals for reducing emissions while promoting collaboration and establishing trust, putting aside previous animosities and geopolitical differences.

There is no denying the fact that climate change is reshaping the landscape of international relations by introducing fresh challenges and altering the existing narrative. In the future, some regions might vanish, while a few vast areas could become inhabitable, which is fundamentally transforming the principles of national security. The global economy's reliance on non-renewable energy will diminish, which may make many geopolitical assets obsolete and stranded. Only time will tell the integrity, commitment and resilience of World States on how sincere they are to implement effective policies in order to face and eliminate threat of climate change.

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