

Discussion on How Climate Change is Disproportionately Affecting the Global South

Yueqi Shan^{1,*}

¹The University of Hong Kong, Hong Kong, 999077, China

*Corresponding author

Abstract: Climate change is a global challenge that poses a serious threat to human well-being. However, the impact of climate change is not evenly distributed around the world. The global South is composed of developing countries mainly located in Africa, Asia, and Latin America. Although they have the least impact on climate change, they bear a disproportionate burden of climate change. This article critically discusses how climate change has a disproportionate impact on the global South from the perspectives of climate justice, realism, liberalism, and constructivism. It also analyzed the obstacles in international climate policies that hinder effective mitigation of climate change in the global South. Moreover, it has put forward some suggestions for improving the international climate governance system, including strengthening judicial accountability, developing appropriate sanctions, and promoting the legalization of "common but differentiated responsibilities". The conclusion of this paper is that climate change is not only an environmental issue, but also a political, economic, and moral issue that requires global cooperation.

Keywords: Climate Change, Global South, Environmental issue

1. Introduction

Climate change is a global challenge that affects everyone, but not equally. The Global North mainly consists of the developed countries of North America and Europe. The Global South, largely composed of developing countries in Asia, Africa, and Latin America, faces more severe and disproportionate climate change impacts than the Global North. Because they are in low latitudes. These areas experience higher temperatures, less precipitation and more frequent droughts. They are often developing or underdeveloped. Simultaneously, they depend on natural resources. This makes them more sensitive to ecosystems and less resistant to climate change.

Therefore, this article provides a critical analysis of the disproportionate impact of climate change on development in the Global South. The research question for this paper are: Why climate changes disproportionately affecting the Global South? How are current climate policies and regulations hindering mitigation of climate change impacts in the Global South? Firstly, the relevance of climate justice principle, realism, liberalism and constructivism theory to this paper is explained. Secondly, the drivers and history background of climate change, as well as the challenges climate change poses to the Global South are analyzed. Next, the paper assesses the obstacles in the international climate regime, including the low binding force of current climate policy, the low cost of non-compliance, and the unfair distribution of tasks. Meanwhile, policy recommendations for mitigating the impact of climate change on the Global South are put forward, including improving the international court system, promoting appropriate sanctions, and promoting the legalization of "common but differentiated responsibilities". Lastly, the main arguments of the paper are summarized, recommendations for future climate stakeholders are highlighted and limitations of the study are identified.

2. Theoretical Framework

2.1. Principles of Climate Justice

One of the crucial principles of climate justice is the recognition of the disproportionate impacts of climate change around the world (Center for Climate Justice, 2023)^[1]. Climate justice is concerned about the inequitable outcomes for climate-vulnerable people or regions and the fairness of policies or practices to address climate change. It requires consideration of existing vulnerabilities, resources and

capacities to ensure that both collective and individual capacities are available to tackle climate change impacts (Climate Just, 2022)^[2]. Climate justice seeks to uncover the root causes of climate change and solve these systemic problems in a different way (Low, 2022)^[3].

2.2. Realism

Realism may consider climate change to be the result of the pursuit of national interests by the major emitters (the Global North). It argues that the Global South is disproportionately affected by climate change because they lack the power to protect themselves from its effects. In the realist view, the international system is anarchic and competitive (Johnson & Thayer, 2016)^[4]. States are rational actors seeking to maximise their survival. As such, they are sceptical about the prospects for cooperation on climate action, especially at the expense of economic growth (Manuel, 2010)^[5]. For instance, realism may interpret the low binding nature of the Paris Agreement as an unwillingness on the part of powerful states to limit their sovereign aims. It could also explain the low cost of non-compliance, which reflects the lack of sanctions for default in the international climate regime.

2.3. Liberalism

Liberals may argue that the Global South is entitled to justice from the global North, which is historically responsible for exacerbating climate change. From a liberal perspective, the international system is interdependent (McMillan, 1997)^[6]. States are not the only players in shaping international relations. Therefore, it is optimistic about cooperation for climate action, particularly when it is driven by international institutions, norms and values. Libertarians support the principle of climate justice, which helps to identify the 'common but differentiated responsibilities' of states to address climate change.

2.4. Constructivism

Constructivists may regard climate change as a socially constructed phenomenon, depending on how it is interpreted by actors. In terms of constructivism, the Global South is not a homogeneous entity, but a diverse group of participants. They should have different identities, interests and authorities in relation to climate change. For constructivism, the international system is not fixed, but shaped by information exchange (Adler, 2005)^[7]. The state is not the only actor in constructing international relations. Constructivism will be used to analyse how climate change policies and regulations affect the effectiveness of climate action.

3. Climate Change and the Global South: Disproportionate Burden

3.1. Driving Factors and History Background of Climate Change

Climate change is one of the most pressing challenges facing humanity in the 21st century. It is caused by the accumulation of greenhouse gases (GHG) in the atmosphere, mainly due to human activities. This includes burning fossil fuels, deforestation and industrial processes. These greenhouse gases absorb heat and warm the earth, thereby altering natural circulation. However, the causes of climate change are not evenly distributed around the world. In fact, there is a clear connection between the history of global inequality and the driving factors of climate change. Although the impact on climate change is minimal, the Global South countries, representing the majority of the world's population and the least developed countries, bear a disproportionate burden of climate change.

On the one hand, the causes of climate change are largely rooted in the history of greenhouse gas emissions in the industrialized Global North. According to the European Commission (2022)^[8], in 1990, the total carbon dioxide emissions (Mton) of the 27 EU countries located in the Global North, including the United States, Russia, Germany, China, and Japan, accounted for 70% of the global carbon dioxide emissions, respectively at 3819.23, 5067.48, 2395.84, 1019.08, 2425.64 and 1171.76. Countries with carbon emissions exceeding four digits (Mton) are located in the north of the world. This indicates that the Global North bears greater responsibility for climate change historically than the Global South.

On the other hand, compared to the developed industrialized North, the South is more sensitive to climate change. According to United Nations (2023a)^[9], low-lying coastal cities account for 10% of the global population. Although low-lying coastal areas are not entirely distributed in the Global South,

compared to the Global North, the Global South has poorer resilience to the impacts of climate change. Since 1900, the current rate of global average sea level rise has exceeded the previous 3000 years. If the temperature rises by 2 ° C, this level may increase double. For example, floods in West Africa are damaging infrastructure and agriculture. In North Africa, saltwater intrusion is reducing freshwater resources. Meanwhile, by 2050, another extreme weather event, the drought, opposite to sea level rise, is expected to force up to 216 million people to migrate.

3.2. Challenges of Climate Change to Global South

The consequences of climate change are also unevenly distributed around the world. The Global South is more vulnerable to the effects of climate change due to its high dependence on natural resources, low adaptive capacity, weak governance systems and limited financial resources. Firstly, food insecurity. Climate change affects food availability by altering rainfall patterns, increasing droughts and floods, reducing soil fertility, damaging biodiversity and spreading pests and diseases. According to a study by Ali et al. (2017)^[10], climate change is damaging the Global South, destroying wheat harvests in India and Pakistan. Meanwhile, it has contributed to prolonged droughts in Kenya and Ethiopia as well as the flooding of large parts of Bangladesh. These impacts threaten the livelihoods of millions of people who depend on agriculture. Secondly, water resources are in short supply. Climate change is exacerbating water conflicts by reducing glacial melt, increasing evaporation and contaminating groundwater, affecting water quantity and quality. According to a report by Mekonnen and Hoekstra (2016)^[11], 4 billion people around the world suffer from water scarcity for at least one month of the year due to climate change. Thirdly, health risks. Climate change will increase heat-related deaths, spread water-mediated diseases and exacerbate air pollution (Huang et al., 2011)^[12]. It can also exacerbate human mental health problems such as anxiety and depression (Hayes et al., 2018)^[13]. It is also because the Global South has less access to healthcare (Majra & Gur, 2009)^[14]. Fourthly, displacement and migration. Climate change is forcing people out of their homes due to environmental degradation, natural disasters or conflicts over scarce resources. According to the US News, climate change is expected to displace 62 million South Asians by 2050 (Wazir, 2022)^[15]. The report also notes that climate-induced migration could create social and economic challenges that include overcrowding, unemployment, poverty and violence at the destination.

4. Obstacles in the International Climate Policies and Regulations

4.1. Low Binding Force

While there will be a partial overlap in the domestic bases and interests of countries' needs on global climate governance issues, this overlap will not affect the divergence of positions arising from the pursuit of national interests. In the broader context of the international community, states interact in an environment that is fundamental to anarchic international relations. This environment gives the state primacy in the international legal system, premised on the power, will and interests of the state. However, unlike the traditional economic sphere, climate change is an emerging field. Some climate regimes are not binding. For example, the Kyoto Protocol has gained the support of developing country stakeholders due to the fact that no specific emission reduction targets have been set for developing countries (United Nations, 2023b)^[16]. This was the result of a mutual compromise between the various stakeholders in the game. Moreover, the Paris Agreement makes extensive use of almost non-binding language such as 'urges' and 'encourages', and removes most of the mandatory language. In treaty terminology, the expression 'should' is used in procedural provisions, while the word 'wish' is used for obligatory mandatory expressions (Lawrence & Wong, 2017)^[17]. As a result, although the Paris Agreement has been generally accepted by the parties, this pattern of negotiated outcomes has resulted in many of its provisions being formal in their practical meaning and providing little guidance in practice.

4.2. Low Default Cost

In climate change governance, whether in climate negotiations or in the development of climate treaties, the focus has always been on 'governing' climate change rather than on 'sanctioning' those who do not actively implement their commitments in climate governance. As international law and the climate governance system have evolved, the potential for damaging outcomes exists even where there is no explicit prohibition. This has resulted in low costs for non-compliance or non-compliant countries.

With low thresholds for accession and withdrawal from the treaty, parties to the treaty may engage in irrational withdrawal while their own national interests demand change. For instance, Canada announced its withdrawal from the Kyoto Protocol in December 2011, expressing its incompatibility with the development of national circumstances (Fjellvang, 2015)^[18]. After withdrawing from the Kyoto Protocol in 2001, the United States announced its withdrawal from the Paris Agreement in 2017 (Urpelainen & Van de Graaf, 2017)^[19]. A party cannot formally request a withdrawal until three years have elapsed since the agreement entered into force. However, it does not affect its decision to announce its withdrawal, suspend its compliance and otherwise obstructive behaviour. The Paris Agreement represents effective progress in the response to climate change through the combined efforts of all parties, and the arduous nature of the negotiations has made this outcome particularly cherished by the parties. The United States has attempted to reopen the negotiations of the Paris Agreement after its withdrawal by including provisions that are more beneficial to the United States and its internal businesses and people. The approach is undoubtedly a flouting of international rules. It undermines the orderly progress of global climate governance and friendly international climate cooperation.

4.3. Unfair Climate Tasks

Although the transparency framework is specified in some detail in the Paris Agreement, most of it is a procedural obligation and is not legally binding. As a result, different countries' views on the Paris Agreement have been more controversial. Some countries consider the Paris Agreement to be legally binding. Other countries do not regard it as having the force of law. As mentioned earlier, it is true that many of the provisions of the Paris Agreement do not require any autonomous contribution from any country in the form of a law. In the disclosure of information, most countries will inevitably place their economic development at the forefront when committing to emissions reductions. This means pledging to reduce emissions without compromising their economic development process. It has also caused many countries to conceal or misrepresent their carbon emissions information. The developed countries of the Global North have a strong opinion about the disclosure of carbon emissions in developing countries of the Global South. They accuse developing countries of having inadequate disclosure systems. However, in fact, developed countries have contributed to the global warming problem in the past decades by emitting large amounts of carbon dioxide and other pollutants due to economic development without regard to climate issues. In contrast, developing countries have emitted far less carbon in their development process than developed countries over the past decades due to a comparative lack of finance and technology. This is why developed and developing countries do not have equal tasks in the reduction of emissions. This is because developed countries have released more carbon dioxide in the past and are obliged to take on a greater share of the responsibility for reducing emissions (European Commission, 2022)^[8].

5. Suggestions for Climate Policies and Regulations

5.1. Improve the International Court System

Currently, the arbitral tribunal for the resolution of global climate disputes is the Permanent Court of Arbitration in The Hague. This tribunal is primarily dedicated to disputes between states (Sussman, 2007)^[20]. However, according to the available data and case statistics, international arbitration is mainly concentrated in the commercial field (ICSID, 2021)^[21]. This raises a demand for the universal application of international tribunals. It means getting more countries and regions to accept the jurisdiction of international tribunals. International tribunals need to deal effectively with legal disputes involving different cultures and interests in order to preserve the universality of international law. International tribunals can enhance mutual trust by strengthening communication with governments, judiciaries and societies. This would encourage more states to sign, ratify or accede to relevant international agreements, which would recognise the jurisdiction of international tribunals. In the process of enforcement, international tribunals need to respect the sovereignty of states and avoid abuse of power or politicisation. In this way, the neutrality of international tribunals can be maintained. Meanwhile, some of the more influential arbitration cases can be used to promote climate change legislation from the sidelines and enhance the compliance capacity of their countries.

5.2. Developing Appropriate Sanctions Measures

Diplomatic sanctions can be used wisely. In the process of global climate governance, the most

widespread means of communication between countries is through diplomacy. Diplomacy is not only a means of communicating, but also a way of expressing a country's attitude to the outside world. For example, economic sanctions, including restrictions on exports, imports, trade and aid, can be imposed on non-compliant countries through the UN Security Council or other multilateral organisations. Additional taxes could be imposed on high-carbon products through carbon tariff adjustments to offset the underestimation of the cost of carbon emissions. Alternatively, diplomatic negotiations can monitor the renewed commitment of defaulting countries to their emissions reduction targets and actions. However, excessive sanctions are also undesirable. The initiation of military sanctions needs to be severely limited in a clear document to prevent countries from using them as a pretext to wage war. Even if the damage caused by countries not actively fulfilling their obligations to act on climate governance is by no means comparable to the damage caused by the use of destructive weapons in all areas of the globe. Criminal law emphasises the "proportionality of crime, responsibility and punishment" (Deigh, 2014)^[22]. The use of military sanctions is clearly inconsistent with the requirement of proportionality. The problems caused by climate change should be solved as far as possible by moderate and smooth means. Even with coercive effects, they must not undermine the order of world peace.

5.3. Promote the Legalization of 'Common but Differentiated Responsibilities'

The principle of "common but differentiated responsibilities" is a principle established by the Parties to the Framework Convention after careful consideration of the interests and needs of each entity. As the climate negotiations continue, most countries in the world have come to understand the significance of this principle and have consciously complied with it and fulfilled the obligations set out in it. Nevertheless, it has to be acknowledged that there are still some developed countries that are stubbornly questioning the fairness of the principle. Meanwhile, they attack developing countries on the grounds of "lack of fairness" at the various climate negotiations they are able to attend, in an attempt to get them to join in the fight to reduce emissions (Frischmann et al., 2022)^[23]. The fundamental reason why developed countries can use the "lack of equity" excuse to argue with developing countries in the negotiations is the lack of an effective system to regulate them. As a result, developed countries have often chosen to ignore the existence of this principle when it comes to allocating GHG emissions reduction obligations to the Parties to the Framework Convention through climate negotiations. This forced evasion of responsibility has caused multiple setbacks in the climate change negotiations process. In such an international negotiation environment, it is highly relevant to translate the principle of "common but differentiated responsibilities" from jurisprudence to international law. Therefore, it is necessary for the international community to provide practical legal guarantees for this principle. Various actors need to be bound by it to promote the transformation of this principle into international law.

6. Conclusion

This paper has critically discussed how climate change disproportionately affects the Global South, providing some examples as evidence. After analyzing the theories, to response the research questions, the Global South is disproportionately affected by climate change because of the Global North's historical excess emissions and the Global South's own lack of capacity to adapt to climate change. Meanwhile, there are many barriers in the current international climate regime, resulting in current climate policies lacking binding force, low costs of non-compliance and inequitable distribution of tasks. In order to effectively mitigate the impact of climate change on the Global South, there is a need to improve the system of international tribunals, enhance appropriate sanctions, and promote the legalisation of "common but differentiated responsibilities".

However, there are some limitations to the paper. For instance, it does not sufficiently consider the variability within the Global South. Therefore, the climate needs of specific countries or regions may have been overlooked. Future research should analyse the current climate situation and challenges in the Global South in more detail in order to provide more targeted solutions. In the future, policymakers should strengthen their support for the Global South. This is not only out of moral obligation, but also out of interest to help the Global South address climate change and promote international peace. Furthermore, climate practitioners should actively engage in international cooperation and use multiple forms, involving South-South cooperation, to share experiences. Meanwhile, the Global North should also monitor and promote the fulfilment of its commitments and provide reliable support to the Global South. In addition, researchers should continue to explore the complex relationship between climate

change and the Global South, uncovering its impact mechanisms, assessing the extent of its risks and proposing feasible strategies.

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