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# A Greener Pathway Ahead: Harnessing the Power of Collaboration and Conflict to Tackle Climate Change in Pakistan and India

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#### ABSTRACT

The main environmental problem of the twenty-first century is climate change, which has received a lot of attention and discussion at global level. It is expected to have an adverse, permanent effect on the planet and its environment. South Asia will be among the nation's most badly impacted by climate change, which will predominantly affect the Global South. Due to climate change, 62 million South Asians are anticipated to relocate by the year 2050. South Asia has 1.891 billion people, or almost one-fourth of the world's population. Because of this, we have the desire to comprehend the Pakistan and India policies and to identify any opportunities for climatic cooperation between Pakistan and India, which are currently hampered by a variety of ambiguous circumstances.

**Keywords:** South Asia, Climate changes, Co-operation & Conflict, Primary data, Sustainability. Abduction approach

#### Introduction

Climate change is form of Non-Traditional security threats which is increasing with each passing day is a reality in South Asia and its impacts are starkly evident. According to a report by the United Nations Development Programmed, South Asia is the most climate-vulnerable region in the world. In the last 20 years, South Asia has been affected by more than 100 natural disasters such as floods, droughts, and heat waves. The impacts of climate change in South Asia are far-reaching. The region is home to some of the most densely populated countries in the world and is already facing a range of environmental challenges such as deforestation, air pollution, water scarcity, and soil degradation. According to data from the Received: February 2, 2022

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International Panel on Climate Change, South Asia has been the second most affected region in the world by climate change in terms of economic losses (McGinn, 2022).

In 2018, climate-related disasters caused an estimated \$33.7 billion worth of damage in South Asia, second only to East Asia and the Pacific region. In South Asia, rising temperatures are having a severe impact on crop yields. According to a report by the International Food Policy Research Institute, a 1-degree Celsius rise in temperature can reduce crop yields by up to 7 percent. This has put extra strain on the agricultural sector, which is already facing a range of challenges such as water scarcity and soil degradation. The impacts of climate change are also being felt in the health sector. The region is already facing a range of health challenges such as air pollution, waterborne diseases, and malnutrition, and the effects of climate change are exacerbating these issues. For example, rising temperatures are leading to an increase in vectorborne diseases such as dengue fever, and malaria, as well as an increase in waterborne diseases such as diarrhea (Adam, 2022).

The relationship between Pakistan and India is tense, but they are ignoring the threat that climate change poses, which is more serious than the threat posed by traditional security measures like terrorism. Traditional security requires strong motivation and agreement to work together, if only to lessen the impact of climate change. This is what motivates us to want to comprehend the climate cooperation and areas of conflict that exist between India and Pakistan, and since no literature has ever attempted to explore these possibilities, this study will be the first attempt to do so. Pakistan and India's relationship with regard to climate cooperation and climate is still shrouded in a state of flux (Report, 2022).

# The Heat is On: South Asia Feels the Real-Life Effects of Climate Change

Climate change is a reality in South Asia and its impacts are starkly evident. According to a report by the United Nations Development programed, South Asia is the most climate-vulnerable region in the world. In the last 2 decades, South Asia has been affected by more than 100 natural disasters such as floods, droughts, and heat waves. The impacts of climate change in South Asia are far-reaching. The region is home to some of the most densely populated countries in the world and is already facing a range of environmental challenges such as deforestation, air pollution, water scarcity, and soil degradation (McGinn, 2022).

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# Hotter than Ever: A perfect storm in Pakistan

Due to its location in South Asia, Pakistan is one of the most vulnerable nations to climate change. It is also prone to extreme weather occurrences like extremely dangerous heat waves, floods in Baluchistan and KPK, particularly Malan Jaba of Sawat, and droughts in Thar. The socioeconomic position in the country, which is

currently unstable, could become much more unstable as a result of climate change. Over the past few decades, Pakistan has experienced a dramatic rise in temperature. Since 1950, Pakistan's average temperature has risen by 0.7 °C, with the Himalayas experiencing the most increase (1.8 °C). Extreme weather events including floods, droughts, and heat waves are occurring more frequently across the nation as a result of climate change (Azeem, 2022).

Additionally, In Jacobad, the highest temperature ever recorded was 53 centigrade in 2010, making life tough for millions of people. The rising temperatures have also increased the number of days with temperatures exceeding 40 °C. The agricultural industry of the nation, which is a significant source of income for the vast majority of the population, is also being impacted by climate change. Food insecurity is being caused by extreme weather conditions including floods and droughts, which are having a negative impact on crop output (Shaurya, 2022).

In addition, water stress in the region is being brought on by the melting of Himalayan glaciers, which is aggravating the issue and affecting the socioeconomic structure of the community, particularly in coastal areas where the impact of rising sea levels is most noticeable. Due to its low elevation and frequent storms, the port city of Karachi is particularly susceptible to floods. Rising sea levels also pose a greater risk of coastal erosion for the city. Although Pakistan's government has made significant progress in addressing the issue of climate change, much more needs to be done (Azeem, 2022).

The World Bank estimates that by 2022, climate change will cause a 1.3% loss in GDP and a 4.5% reduction in crop yields. This could have a significant economic impact on the country. In terms of water availability, a 2022 World Institutions report states that climate change will lead to an increase in water demand and a decrease in surface water availability in Pakistan. According to the analysis, sea levels in Pakistan are anticipated to rise by up to 3 feet by 2022. Flooding and erosion could result from this, which would be terrible for coastal ecosystems and towns. According to the report, Pakistan is at risk of experiencing floods, droughts, and heat waves more frequently and with greater intensity. Both the nation's infrastructure and its citizens could be severely harmed by these occurrences (Bank, 2022).

# Charting a New Course: India's Climate Change Crusade

In contrast, India and Pakistan are both listed as being in a secure place in 2022 reports by international organisations. India will be dealing with several urgent concerns in 2022, thus I gave this article the title "Charting a new course: India's Climate Change Crusade." According to the World Bank, by 2030, climate change would significantly affect India's agricultural output, water availability, and coastal areas, posing the greatest threat ever to India's national security strategy in the form of non-traditional security concerns (UNEPFI, 2022).

Additionally, rising temperatures and extreme weather events may lead to an increased risk of food insecurity in India which is the second most populous state on the earth, water scarcity, and extreme weather disasters. A 2020 report from the World Bank suggests that climate change in India is likely to increase average temperatures by 1.5-2.7°C by 2050. This rise in temperature is expected to cause an

increase in the frequency of extreme weather events such as floods, droughts, and heat waves. These events will have an adverse impact on agricultural production, water availability, and coastal areas, leading to food insecurity and economic losses (WHO, 2022).

In addition to the direct impacts of climate change. India is also expected to experience increased energy demand due to population growth and urbanization. This will put strain on India's already inadequate energy infrastructure, and the country is likely to rely heavily on fossil fuels to meet this demand. This will contribute to further carbon emissions, increasing the severity of climate change. India is taking steps to mitigate the effects of climate change. In 2021, the government released its National Action Plan on Climate Change, outlining a range of policies to reduce carbon emissions and promote renewable energy. This includes energy efficiency measures, renewable energy targets, and incentives for the adoption of green technologies (Krishnan, 2022).

Additionally, the government has also established a Climate Change Council to coordinate the efforts of different government departments. Despite these efforts, India still faces a number of challenges in tackling climate change. These include an inadequate energy infrastructure, a lack of public awareness, and limited access to finance and technology. In order to effectively address these issues, India must continue to invest in renewable energy and climate change adaptation measures. Additionally, public awareness campaigns and green financing initiatives must be implemented to ensure that India is able to tackle the effects of climate change in the years ahead (Report, 2022).

#### Climate Change: India and Pakistan Heading for a Showdown:

The conflict between India and Pakistan on climate change is largely based on the two countries' differing views on the causes of climate change and how to address it. India has been vocal in advocating for the adoption of renewable energy sources and has committed to reducing its carbon dioxide emissions to 33-35 percent below 2005 levels by 2030. Pakistan, on the other hand, is largely reliant on coal for its energy needs and has not taken significant steps to reduce emissions. India has accused Pakistan of violating the Paris Agreement on climate change, while Pakistan has dismissed India's claims as unfounded. The two countries have also clashed over India's plans to build large hydropower dams in the Himalayan region, which Pakistan fears will disrupt the water supply to its citizens (DUNNE, 2022).

One of the most urgent problems facing the world now in terms of unconventional security risks is climate change. The world's two most populous nations, Pakistan and India, are both at risk from its effects, thus they must cooperate to confront the problem and find a workable solution. The two nations haven't been able to work together on climate change in any significant way, though, as a result of their long-standing and ongoing problems and political conflicts. This has created a chance for conflict over climate change between Pakistan and India, which is described in the bellows (Patel, 2022).

**Competing Interests on Water Resources**: The Indus Basin is shared by India and Pakistan and has been a source of contention for decades. As the effects of climate change become more apparent, this resource is likely to become even more limited, leading to greater competition over the use of water. India is likely to use its upper

riparian position to further develop the region through the construction of dams and other infrastructure, while Pakistan may feel that its water (Azeem, 2022).

#### Water Resources:

India and Pakistan have been in dispute over the allocation of water resources for decades, and this dispute has been further complicated by the effects of climate change. India has long been accused of using more than its fair share of the waters traversing through the two countries, which has caused Pakistan to suffer from water scarcity. Climate change has further exacerbated this issue, leading to potential areas of conflict between the two countries (DUNNE, 2022).

# Food Security:

Warming temperatures and changing precipitation patterns due to climate change can lead to crop failures, land degradation and water shortages. This could lead to a strain in the already fragile relationship between India and Pakistan as both countries attempt to secure enough food to feed their population (Shaurya, 2022).

# **Energy Resources**:

India and Pakistan have both been increasingly relying on coal and other fossil fuels to meet their energy needs. The burning of these fuels is a major contributor to climate change, and both countries need to work together to find alternative sources of energy. However, the current political tensions between India and Pakistan could lead to further disputes over the development and use of energy resources (Agarwal, Balasundharam, Blagrave, Cerutti, Gudmundsson, & Mousa, 2022).

# **Migration**:

Climate change is expected to cause increased environmental migration, with people leaving their homes in search of better living conditions. As India and Pakistan share a long border, the influx of migrants could spark further tensions between the two countries.

# **Territorial Disputes:**

Warming temperatures and rising sea levels could lead to increased competition for land, as well as disputes over maritime borders. This could further complicate existing territorial disputes between India and Pakistan, and potentially lead to more conflict between the two countries. This could easily lead to contention over the use of this resource.

# Conflict: The Struggle for Renewable Energy Development

As both Pakistan and India countries look to transition to green sources of energy, there is the possibility of conflict over renewable energy resources. India is likely to try and secure the best sites for solar and wind energy development, while Pakistan may try to intervene to ensure its access to these resources. This could lead to conflict over who gets access to these resources, as well as a potential for India to try and limit Pakistan's access to them (Lianne, 2022).

India and Pakistan have both made significant investments in renewable energy in recent years, and this has led to some areas of conflict between the two countries.

One major source of conflict is the use of water resources for renewable energy development. India and Pakistan share the Indus River Basin, and both countries rely heavily on the waters of the Indus River for irrigation, drinking water, and other uses. As demand for renewable energy grows, both countries are looking to develop more hydropower projects along the Indus River, which can lead to tensions over water allocation and management (Jan, 2022).

Additionally, both countries are exploring the use of solar energy to generate electricity and India has made significant investments in solar energy development. This has led to concerns from Pakistan that India is using its solar energy projects to gain strategic advantages over Pakistan. Finally, both countries are exploring various forms of wind energy development, including offshore wind energy. This has raised concerns that India and Pakistan may be competing for the same offshore wind energy resources and that this could lead to conflict. Overall, India and Pakistan have engaged in a number of renewable energy initiatives in recent years, and this has led to some areas of conflict between the two countries. Both countries must carefully manage their renewable energy development projects (Krishnan, 2022).

**Different Levels of Commitment to Climate Action**: India and Pakistan have different levels of commitment to taking action on climate change. India is likely to take much stronger action, while Pakistan may be slower to act. This could lead to tension between the two countries as India tries to pressure Pakistan into taking more action (Lianne, 2022).

**Interference with International Climate Negotiations**: Given the different levels of commitment to climate action, India and Pakistan could interfere with each other's ability to participate in international climate negotiations. This could lead to a situation where India tries to block Pakistan from participating in the negotiations, while Pakistan may try to use its influence to gain concessions from India (Patel, 2022).

Forging a Path to Peace: Exploring Opportunities for Co-operation between India and Pakistan

• Uniting for a Brighter Future: A Joint Research Initiative on Climate Change and Vulnerability in Pakistan and India

The two countries could collaborate on a research project to study the impact of climate change on the region, with a particular focus on vulnerable populations. This research project could involve various stakeholders, such as researchers, universities, non-governmental organizations, and government bodies in both countries. It could involve the collection of data through surveys and interviews with vulnerable populations in both countries to better understand the impact of climate change on them. The research could also include the study of existing climate change policies in both countries, and provide recommendations for more effective policy strategies (Adam, 2022).

In addition, the research project could involve the development of new strategies for addressing climate change in the region, such as the introduction of renewable energy sources, and the adoption of sustainable practices. Finally, the research could also be used to inform the development of climate change education and awareness initiatives in both countries.

# • Harnessing the Power of Renewable Energy and Energy Efficiency: A Comprehensive Guide to Cutting-Edge Technologies

The governments of Pakistan and India can benefit from exchanging information and expertise on renewable energy and energy efficiency technologies. This can be done through hosting workshops, seminars, and webinars with experts from both countries, as well as from other countries that have successfully implemented these technologies. Such initiatives could also include analysis of lessons learned from other countries in the areas of renewable energy and energy efficiency (ITA, 2022).

These initiatives could focus on topics such as the economic, environmental, and social benefits of renewable energy and energy efficiency technologies, best practices for their implementation, and strategies for overcoming barriers to implementation. Such initiatives could also involve the sharing of data on the use of renewable energy and energy efficiency technologies in both countries, and a comparison of the successes and challenges encountered in their implementation (CGI, 2022).

# • Uniting for a Greener Tomorrow: Pakistan and India's Joint Climate Action Plan:

Cooperation between Pakistan and India on Climate changes with most recent examples. In 2018, Pakistan and India agreed to cooperate on climate change initiatives. This included exchanging information on climate change, encouraging the use of renewable energy, and exchanging research and development in the field. In 2020, the two countries signed a Memorandum of Understanding (MoU) on cooperation in the field of energy efficiency, renewable energy, and climate change. The MoU aims to promote cooperation between India and Pakistan in the area of energy efficiency, renewable energy, and climate change. The two countries have also committed to cooperate in capacity building and in the use of clean energy sources. Additionally, they agreed to explore cooperation in the areas of climate change adaptation, mitigation, management of natural resources, and other related matters (UNEP, 2022).

# • Strengthening India and Pakistan's Resilience to Climate Change: Bridging the Gap between Adaptation and Mitigation"

Cooperation between Pakistan and India on Climate changes adaptation, Pakistan and India have a shared interest in addressing climate change adaptation and mitigation, as both countries are particularly vulnerable to its effects. The two countries have taken several initiatives to cooperate on the issue. In 2011, the two countries jointly launched the Pakistan-India Climate Change Dialogue with the objective of strengthening technical cooperation between the two countries in response to the challenges posed by climate change. The dialogue focuses on exchanging information, sharing experiences, building capacity, and promoting joint research on climate change adaptation and mitigation (Lianne, 2022).

In addition, the governments of both countries have hosted several bilateral meetings and workshops to discuss the challenges posed by climate change and to explore ways to address them. These meetings have focused on topics such as water resources management, energy efficiency, and the use of renewable energy sources.

Both countries have also expressed a commitment to collaborate in the United Nations Framework Convention on Climate Change (UNFCCC), where they have worked together to negotiate an effective global climate change agreement. Finally, Pakistan and India have also launched several joint initiatives to promote climate change adaptation and mitigation at the regional level. For example, the two countries have collaborated on the Himalayan Climate Change Adaptation Programed, which seeks to address the impacts of climate change on water resources in the Himalayan (UNC, 2022).

# Conclusion and the Path to Success: How to Reach Your Goals with Persistence and Resilience:

Climate change is an urgent and pressing issue that requires a global effort. The effects of climate change already affect Pakistan and India, and will continue to do so in the future if action is not taken. The need for collaboration between the two countries is clear, and the potential for joint action is immense. By utilizing the power of collaboration and conflict resolution, Pakistan and India can work together to tackle climate change and provide a greener pathway ahead for their citizens. By taking action now, both countries can set a powerful example for other countries in the world and demonstrate that even in the face of adversity, collaboration and cooperation are possible. Together, we can create a brighter future for our planet and its inhabitants (CGI, 2022).

Collaboration and conflict management are indeed powerful forces to tackle climate change in both Pakistan and India. The two countries have a long history of cooperation and conflict, but recent evidence has shown that the two countries have started to work together in addressing the global challenge of climate change. By leveraging their strengths and working together, both countries have the potential to create a greener pathway ahead. Pakistan and India have already made significant strides in reducing their carbon emissions and promoting renewable energy sources. Pakistan has implemented a number of initiatives to reduce its carbon emissions while India has made significant investments in renewable energy sources such as solar, wind, and biomass (Jan, 2022).

Additionally, both countries have undertaken joint initiatives such as the Green Climate Fund, which is a global fund to support the fight against climate change. However, the two countries must also address the issues of climate change-related conflict. The two countries must work together to reduce the impacts of climate change on their populations and to ensure that their resources are used in an equitable and sustainable manner. This includes strengthening the management of water resources, reducing deforestation, and tackling air pollution.

Ultimately, the two countries must continue to develop and implement collaborative strategies to address climate change. This will require the two countries to strengthen their existing partnerships and to build new ones. The two countries must also ensure that they are able to overcome their differences and work together to create a greener pathway ahead. By doing so, they can ensure that their populations have access to clean air, water, and energy, and that they can preserve their environment for future generations.

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