

**Journal of Politics and International Studies**

*Vol. 12, No. 1, January–June 2026, pp.110–123*

## **Climate Injustice: Implications for South Asian Countries & a Way Forward**

**Asif Ali** 

PhD Fellow, Department of International Relations Islamia University  
Bahawalpur, Punjab, Pakistan

**Corresponding:** [aasifalimalik36@gmail.com](mailto:aasifalimalik36@gmail.com)

**Sahar Saleem** 

MPhil, School of Journalism and Communication, Wuhan, University, P.R China

**Email:** [saharsaleem197@gmail.com](mailto:saharsaleem197@gmail.com)

**Rahib Ali** 

PhD Fellow, Department of Sociology International Islamic University, Islamabad,  
Pakistan

**Email:** [rbhutto74@gmail.com](mailto:rbhutto74@gmail.com)

**Mehnaz Awan** 

Field Coordinator, Japan International Cooperation Agency, Japan

**Email:** [mehnazawan12@gmail.com](mailto:mehnazawan12@gmail.com)

### **Abstract**

The region is disproportionately affected, this paper examines the climate injustice through a human security perspective and arguing that this region is facing the severe consequences of the climate justice despite contributing very little, the paper analysis the major manifestation of the climate injustice in the region including extreme heatwaves, unprecedented rainfalls, floods, cyclones, sea level rise and glacier melting. Further the study explores that the multidimensional consequence of the disasters which includes loss of human lives, economic losses (agriculture & infrastructure), health hazards, displacements and climate induced migrations. The paper argues that for South Asia climate change has become more than just an environmental issue rather it has emerged as a serious human security, social justice and a regional security threat which need a serious attention regionally and internationally. Finally, the paper stresses on the importance of climate mitigation, climate adaptation, climate resilience, cooperation over conflict at regional level and climate international diplomacy to address the challenges, consequences and growing vulnerabilities of the climate injustice in the region. It concludes that the major responsibility lies on the shoulders of greenhouse gas emitters to fulfill their commitments under international climate agreements and protocols that to reduce the emissions and to provide adequate financial and technical support to the regional countries to protect and to safeguard the future of vulnerable population across the South Asia.

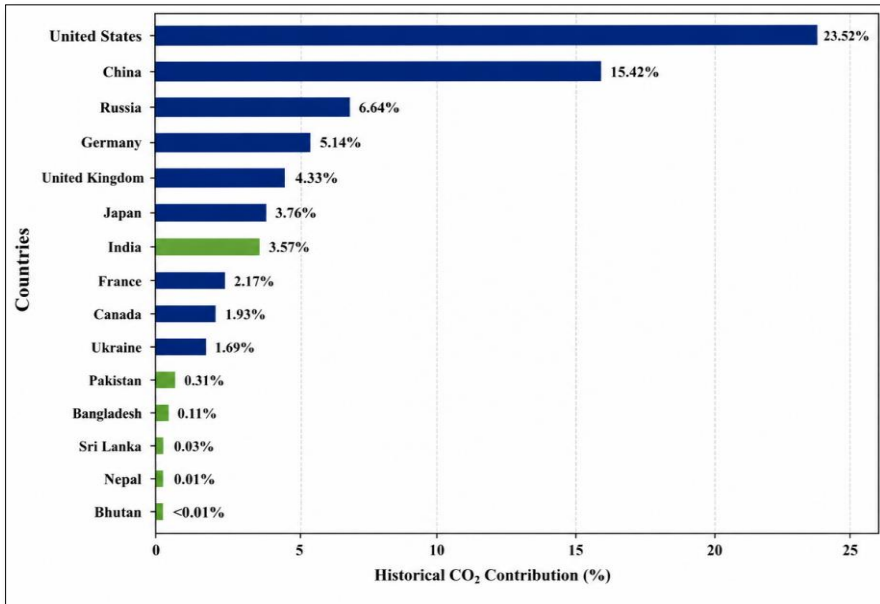
**Key Words:** Climate Injustice, South Asian Countries, Non-Traditional Security Threats, Greenhouse Gas Emissions, Climate Induced Disasters, Regional Cooperation.

### Introduction

In the 21<sup>st</sup> century the climate change has emerged as most severe and dangerous security threat for the Global South especially for South Asian Countries with every passing year the problem of climate change is bringing so much devastation and the destruction for the millions of people in the region. The floods, droughts, unprecedented and unpredictable rainfalls, cyclones and severe heatwaves have affected the region disproportionately. The human security is at highest risk of losing their lives for something which in reality they haven't contributed in a lot. According to 2024 ND-Gain country index Maldives, Bangladesh and Afghanistan are extremely vulnerable, Pakistan and Bhutan on very highly vulnerable and India is moderate vulnerable when it comes to be effects of climate change.

South Asia is extremely at highest risk and exposed against the climate change, one of the world's largest regions is a land of over 1.8 billion people, a region which is having a distinguish status from the world when it comes to its culture, history, geography ethnicity and climate, millions of the people in the region heavily rely on farming for their livelihood and they are bearing the consequences of climate change for doing very little. Throughout the history the region has engaged in traditional security threats, tensions, wars and military buildups and unfortunately gave a very little head to climate change, which has emerged as one of the most severe issue for the millions of the people in the region. The basic rights of the people are being compromised due to political instability, weak institutions and the climate injustice has made the lives of the people at highest risk. On the other hand, the Global North despite of being the biggest polluters of Greenhouse Gases (GHS) emitters have continuously achieved significant economic growth through carbon and intensive industrialization, in contrast the countries in Global South like Bangladesh and Pakistan though have only contributed less than 1% of the world's carbon dioxide have witnessed so much devastation and destruction over the years where the millions of the people were affected (UNDP 2023) not to talk about the financial losses. So through this paper I will try to present the case that despite contributing a very little the region bears a disproportionate burden of climate change impacts including extreme heatwaves, severe floods, natural disasters, unprecedented rainfalls, storms, cyclones, drought, sea level rise, migrations and melting of glaciers. According to 2016 Maplecroft Climate Change Vulnerability Index (CCVI), Bangladesh, Pakistan and Afghanistan are at extreme high-level risk. India, Nepal, Maldives is at high risk and Sri Lanka and Bhutan are at a medium risk due to the changing but dangerous nature of climate change. European Unions (EU) paper in 2008 on climate change and international security argues that climate change is not only an environmental issue but also a security threat they have recognized the latter as a political threat multiplier in the latter part of their paper.

**Figure 1: Historical CO<sub>2</sub> Contributions: Major Emitters vs. South Asian Countries.**



**Source:** Author's illustration based on data from *Our World in Data* (Historical cumulative CO<sub>2</sub> emissions).

### Extreme Events of Climate Injustice on South Asian Countries

The climate injustice has emerged as a very severe human security threat in the region for many years now and the effects are very damaging for the developing countries in the region which are already suffering due to their social, economic and political standings, the region is very prone the way climate change has brought vulnerabilities by making majority of the population in the region very vulnerable and at highest security risk, these climate induced disasters has further triggered the already existing social inequalities in the region and unfortunately the common and the poor people of the region are suffering and further these disasters have destabilized of the region which I doubt in future it may lead to a bigger disasters among the countries within the region. Following are the catastrophes of the climate injustice in the region.

#### 1. Severe Heat Waves

In the summer the region has observing intense, severe and deadly heatwaves that the extreme weather conditions are accelerated by the global warming and climate change. The hottest summer have made the lives of people very miserable and difficult. Recently in May & June 2024 the northern part of the India has observed an unprecedented summer heatwaves where the temperature exceeding 50 °C, Pakistan has also experienced extreme heatwaves in 2022 where in district Jacobabad the temperature reached at 51 °C, and in May 2024 it has again recorded 52.5 °C in the few district of Sindh, in April 2024 the Bangladesh has witness the hottest summer since 1948, this has exposed the high vulnerabilities of the countries due to climate change which has risked the health, education, labor productivity and

the livelihoods of the people around the region. The soaring and scorching heats have scattered the agriculture and power sector of the countries, it has presented an existential threat to the vulnerable countries as per the World Meteorological Organization (WMO) report “Asia is warming nearly twice as fast as the Global average which has risked to women health, agriculture, water security and emergency situation across the region. The report also stated that the region has already experienced the record-breaking heatwaves in 2022. The intense heatwaves in India resulted in more than 450 deaths during 2024. As per the UNESCAP Asia Pacific Disaster report 2023 South Asia has become one of the world’s emerging heatwave hotspots, heatwaves in the region have become more frequent, more intense and longer lasting which are directly affecting the people of the region and it is very unfortunate the heatwaves will continue to hurt very badly in the future as well.

Intergovernmental Panel on Climate Change in their 6th Assessment Report (AR-6) 2021-2023, the report stated that the heatwaves are become regular and common in the region every after 2 to 5 years which earlier taking place ones in 50 years with 1.5 °C, and 2 °C celsius warming heatwaves become frequent in the region which are very deadly in nature and the cities like; Karachi, Lahore, Delhi and Kolkata will face annual deadly heatwaves like 2015 on regular basis which have caused 40,000 deaths.

## **2. Unprecedented Rainfalls**

The increasing but unprecedented in the region has shown over the years that how climate change has transformed traditional environmental hazards in the multidimensional human security challenges despite of being contributing relatively very low to the greenhouse gases emissions, the damages are adversely impacting millions of the people in the region, the region which has already witnessed very devastating and destructive floods due to rainfalls. The recent flooding in Pakistan caused by the monsoon rains has impacted the millions of people and taking away 1700 people and caused a major dent in the economy, agriculture and infrastructure of the country. The 2018 Kerala floods in India during mid-August 2018 the unprecedented and widespread flooding resulted in the death of 400 people and displacement of over million people in the Indian state of Kerala. The World Bank reported that extreme rainfalls during that period was 164% above normal for the relevant period and up to 5.4 million people were affected very badly, there were around 1.4 million displacements. These unprecedented rainfalls in the region have increased the vulnerability and instability in the region and add the burden on the poor people, the 2010 flooding on the Indus River was the worst flood in over 80 years which swept away a fifth of Pakistan, affected more than 20 million people and caused over 2000 deaths. The millions of the people in Bangladesh are exposed due to the increase flooding and severe cyclones which make Bangladesh the most vulnerable country in the world and it is affected by the climate injustice of the world. The melting glaciers and Himalayas to raising flood waters and the monsoon rains have triggered the humanitarian crises throughout the history of Bangladesh, the rainfalls have triggered the deadly flood and landslides across the country which have made Bangladesh very vulnerable and dangerous. Throughout the history of a country the 1988, 1998, 2004 and in 2022 sylhet floods are the evident of devastation and destruction. According to Asian Development Bank 1999 Bangladesh flood

1998 damages and Needs Assessment report the 1998 flooding in Bangladesh has resulted in about 80% of the Bangladesh was flooded for several months, this massive flood has caused more than a 1000 death, damaged more than half a million homes and affected estimated 13 million people and more than 7,00,000 hectares of crop land was damaged, this was one of the most catastrophic floods in the history of Bangladesh, the heavy flood combine with high river flows in the Ganges-Brahmaputra and Meghna river system, almost during every monsoon season most of the areas of the Bangladesh are flooded by rain and river water.

Nepal is another country which illustrates how countries with low emissions face the disproportionately severe climate impacts throughout the years, in 1993 central Nepal has witnessed floods and landslides which killed more than 1000 people, in 2008 the Koshi River embankment breach displaced millions in Nepal and India, in 2017 monsoon rains have caused flooding which went on to affect almost 1.7 million people, the 2021 monsoon rainfalls and the most recent 2024 rainfalls among the worst natural disasters in the region, the wide spread floods and landslides have affected millions of people in the central and eastern Nepal especially in the Kathmandu Valley. The increasing frequency and intensity of extreme rainfalls have made South Asia one of the world's most climate vulnerable region in the world.

### **3. Melting of Glaciers**

The melting of the glaciers in the Hindu Kush - Himalaya range has also affected the region and make this region even more vulnerable for climate induced disasters. The glaciers are natural water resources that facilitate the flow of the rivers during the dry season but unfortunately the rise in temperature has intensified glaciation which has created uncertainty and a serious threat for the downstream states, the states which are heavily dependent on the shared river system in the region such as Indus and Ganges. According to the recent assessment report of International Center for Integrated Mountain Development (ICIMOD) which stated that the ice loss in the Hindu Kush Himalayas has become doubled since 2000, it draws on observations from 38 monitored glaciers and pointed out that accelerating glaciers retreat and increasing risks to the water security and especially for the mountain communities. The glacier melting in the region is posing a great threat for countries which actually is creating risks of flash flood and glacial lake outburst floods in the region, these glaciers melting will make this region will more vulnerable and will also potentially caused water shortage, droughts, agriculture stress and energy insecurity. The glacier melting which impacts on the natural river flow will have significant implications for the populations of the region. Dig Tsho GLOF (1985) in Nepal, the devastating glaciers lake outburst flood in Bhutan and in May 2022 glacial lake outburst flood (GLOF) in Pakistan are the examples of glacier retreat and increasing hazards in the region driven by the global warming which are eventually creating devastation in the Hindu Kush Karakoram Himalaya region.

### **4. Sea Level Rise and Cyclones**

The climate injustice in the region is also causing the sea level rise in the region which eventually making millions of people at highest human security risk, the consequences are so serious that even a 1 meter rise in sea level will result in a huge devastation and destruction in the region, Maldives could be submerged, people living in a low lying cities and small islands state like Dhaka, Karachi and Bombay will be the most affected cities, the entire coastal belt of Srilanka is also vulnerable

to sea level rise, the country which has already lost much of the lands due to the sea erosion. A region where millions of people are living in low lying coastal areas of river deltas are at highest risk of their lives. Bangladesh is also another example and among the 10 most affected countries when it comes to sea level rise according to Climate Risk Index (CRI) it projected that the sea level rise in Bangladesh could affect coastal eco system and biodiversity, agriculture forestry, fisheries and livestock resources, a 1 meter increase in the sea level could inundate about 17% of the Bangladesh and put some 40 million people at high risk, the health conditions of poor and malnourished people are expected to worsen. Due to low lying deltaic geography and the countries which are contributing very small are going to suffer a lot. According to the UNFCCC technical guide on sea level rise (2025) the report highlighted that the impact of the sea level rise in the region is beyond the limits of adaptation and the growing risks associated with sea level rise which includes coastal flooding, permanent land loss, coastal erosion, salt water intrusion, threats to livelihood, displacements and migrations and damages to agriculture and infrastructure. The report clearly advocates that the growing risks are very serious in nature for the region and the sea level rise provides a strong example of climate injustice in the region. The impacts are very severe for the regional countries and for human security, food security, water security and for economics. The sea level rise also contributed a lot when it comes to the impact of cyclones and make them more destructive for the millions of people. The Bay of Bengal and Arabian sea are the most vulnerable and most exposed to the cyclones. Bangladesh, India, Sri Lanka, Pakistan and Maldives are more vulnerable due to their low lying coastal and high population density and among them Bangladesh is one of the world's most cyclone exposed countries, the 2007 Sidr, the 2024 Aphan and 2024 Remel are the evidences of its vulnerability, India is also being affected very badly by the cyclones in 2019, 2021, 2022 and 2023 from eastern coast (Bay of Bengal) and from western coast (Arabian sea)

## **The major implications of the climate induced disasters in the Region**

### **1. Loss of Human lives**

The region which is already exposed due to climate injustice and witnessed frequent climate induced disasters loss of human lives is the most devastating implication that is facing by the region for so many years now. The UN Economic and Social Commission for Asia and Pacific (UNESCAP) has reported in its Asia Pacific Disaster report in 2024 that the region has witnessed more than 1 million disasters related fatalities over the past five decades with Bangladesh recorded over 500,000 deaths and India has recorded more than 190,000 deaths between 1970 to 2024, the figures are so severe and an eye opener for the world community to think and act accordingly to make sure that the region must not face such kind of disasters which are very dangerous and creating serious human security threats in the region, the region which itself is contributing very little for this devastation and destruction. According to the World Bank Climate Adaptation and Resilience for South Asia (CARE) Project 2020 the human cost of climate related disasters in South Asia has been immense between 1990 to 2019 where more than 1000 climate induced disasters affected over 1.68 billion people in the region resulting in an estimated 267,000 deaths.

## **2. Displacements and Climate Induced Migrations**

Displacements and migrations are the most severe and serious human security threats for the region millions of the people are being affected due to these climate induced disasters and unfortunately these disasters are going to be more severe in the future where the region may face millions of migrations and displacements, according to world Bank's Groundswell report (2018) up to 40 million people in South Asia will become internal climate migrants by 2050 if the strong climate and development activities has not been taken by the international community, the report also emphasizes that climate migration is predominantly expected to occur within countries rather than across international borders this will definitely cause a instability in the region in longer run, the climate change is therefore most likely to existing patterns of rural to urban migration and will create new displacements from the disaster prone areas. The 2009 massive floods in India have registered 1.5 million displacements in the state of Assam, more than 1 million people in Bangladesh (2009) and around 20 million people in Pakistan in 2010 floods. According to IBMA Norwegian Refugee Council Report the risks of disaster induced displacements in South Asia (April 2015) since 1970 sudden onset disasters have displaced more than 300 million people in the region, in 2013 alone cyclone Mahasen, cyclone phailin and India's monsoon floods each displaced more than 1 million people, the report also highlights that India, Bangladesh and Pakistan are the among world's most vulnerable countries for disasters induced displacements. The rapid and heavy migrations from the disaster-prone areas are putting heavy and unbearable burden on urban areas of economically vulnerable countries in the region.

## **3. Economic Losses**

### **3.1 Agriculture Losses**

These climate disasters in the region are multidimensional in nature and in affects. Almost 40% of the population in the region is heavily dependent upon the agriculture and the agriculture remain the major source of livelihood and employment but unfortunately throughout the years these disasters caused by greenhouse gases emissions are causing substantial crop and livestock losses in the region, these disasters have broader implications for poverty, social injustice, food security and more importantly for human security. According to ADP-World Bank Damages and Needs Assessments (DNA) report 2010 flood in Pakistan agriculture was the worst affected sector approximately 2.4 million hectors of crop was affected the agriculture and livestock sectors suffered about US \$ 5 billion damages. According to the Food & Agriculture Organization (FAO) of the UN (2011) the 2010 floods in Pakistan have caused US \$ 5.1 billion in agricultural damages and resulted in loss of over two million hectors of crops, irrigation infrastructure was seriously damaged and it contributed in the process of recovery. The losses of have affected millions of people whose households were totally dependent on the agriculture and again the floods of 2022 according to the Pakistan floods 2022 Post Disaster Needs Assessment (PDNA)The floods have caused major dent to the agriculture sector and it was worst affected, the crops, livestock, fisheries and agricultural infrastructure was devastated very badly and the affects were seen for so many years. The repeated distaers in the region are the evidence that how the

region is suffering and will continue to suffer despite of being their relatively limited contribution to the global greenhouse gas emission.

### **3.2 Infrastructure Losses**

South Asian countries which are predominantly developing countries are already facing severe issues like poverty, economic instability, socio-economic inequality and limited opportunities, these disasters further adding a great human security and economic burden on them, the situation has further been intensified due to the heavy human and economic losses. These climates induced disasters caused heavy destruction across South Asia which includes irrigation canals, houses, schools, bridges, railway tracks, power security and telecommunication, the floods wash away roads the region which already have high population densities, widespread poverty and limited financial resources cannot afford these disasters further dent their economies, population and developments. The rebuilding and the reconstruction of these damages takes many years to stabilize which eventually put burden on the common people of the region. the unequal burden of the climate change is proving very devastated for the lower middle-class population of the region. According to world bank report between 1990 to 2019 climate induced disasters has caused US \$ 127 billion in the damages.

### **4. Health Hazards**

The climate injustice through climate disaster in the region is causing a serious complication on the human security especially on the vulnerable population of the region, a population which is already facing socio-economic parity in the region. The health impacts of the climate disasters are very serious and dangerous in nature and are causing a great impact on the local population, the children, women and the elders are the worse example of these affects in the region, these infections and diseases have emerged as a serious non- traditional security threat for the region, these serious but deadly infections and health diseases are proven very devastated and destructive for the population of the region. These extreme heatwaves, floods, cyclones, drought and other climate related hazards are contributing to outbreak of cholera- acute diarrheal diseases, typhoid-hepatitis A & E, mental disorders, trauma stress, malaria, dengue , water borne diseases, cardiovascular and skin diseases etc. according to the Asian Development Bank (2014) report which clearly stated that the region is highly vulnerable due to climate change and climate induced disasters and these disasters are posing severe threat on humans and health security of the people. The World Health Organization (2022) has reported that during the 2022 flood in Pakistan more than 3. 4 million suspected malaria cases and 25,932 confirmed dengue cases and 62 deaths. The 2024 floods in Bangladesh the World Health Organization reported that 160,000 cases of diseases and injuries the reported cases included 23015, diarrheal diseases and 43,137 skin diseases highlighting the severe public health complications of the disaster.

## **Way Forward**

### **1. Climate Mitigation, Climate Adaptation and Climate Resilience**

South Asia exemplifies the unequal Burden of climate change despite contributing only a small fraction of global greenhouse gas emissions, the time has come that the regional countries take climate change as a regional emergency, they need to set



priorities climate change issue is not a future issue it is happening right now with so much devastation and destruction, the South Asian countries should adopt sustainable and low-carbon development pathways and the major emitting countries must fulfil their commitments and support this vulnerable region through technology transfer and capacity building, the fulfilment of financial commitments from international countries will also support a lot. The integrated strategy along with climate mitigation, climate adaptation & climate resilience simultaneously will not only reduce the risk and impact factor but also will help South Asian countries to address both the causes and consequences of climate change while promoting sustainable development as they have tackled the crises of COVID-19 collectively despite of being so many challenges and difficulties the South Asian countries at least went on to address the issue quite successfully.

## **2. Regional Diplomacy: Cooperation over Conflict**

The traditional and geopolitical rivalries in South Asia especially between India and Pakistan has over shadowed the reality of climate change, climate change is presenting a serious threat that transcends national borders the South Asian countries should strengthened their diplomatic engagement by promoting climate dialogue, sharing data, early warning system and enhancing cooperation on transboundary river basins. Cooperation over conflict is the dire need of an hour to avoid the major but very destructive consequences of the climate induced disasters in this regard regional organizations such as South Asian Association for Regional Cooperation (SAARC), The International Centre for Integrated Mountain Development (ICIMOD) and the Bay of Bengal Initiative for Multi-Sectoral Technical & Economic Cooperation (BIMSTEC) are providing excellent platforms for advancing and cooperating regional climate diplomacy. These platforms can facilitate dialogue, cooperation, strengthening early warning systems and support knowledge sharing, to tackle the crises like climate injustice joint and collaborative efforts, policies, statements and joint strategies can make this genuine case very strong. The climate change does not have any political affiliation and nationality it can only be solved by cooperation despite of having a long history of strategic competition and political disputes China and Japan have demonstrated that climate change and environmental challenge can serve as areas of cooperation rather than confrontation both the countries have collaborated on so many environmental and on climate change issues, so the South Asian countries especially Pakistan and India should also learn a lesson and cooperate with each other to prevent future climate catastrophes, this will help South Asian countries to present their concerns and priorities more effectively on international forums a collective regional voice would strengthen their negotiating on the issues such as climate finance, loss and damage, technology transfer and capacity building, the collective voice and diplomacy can help them to highlight the principal of climate justice and to demand greater responsibility from major emitters. It is very much evident that no country can confront the silent but devastating impacts of climate change alone, making alliances, setting priorities, human centric approach and joint efforts can assist the regional countries to present their case more effectively at international forums.

## **3. International Diplomacy**

To confront the global challenge of climate change international diplomacy is a very vital instrument to raise the issue on international forums, through diplomatic efforts

and regional cooperation the countries can develop common strategies' to reduce greenhouse gas emissions, for South Asian countries effective international diplomacy is essential to highlight the principle of climate justice, as the region has a very strong case in their hands by contributing relatively very little to historical greenhouse gas emissions and experienced devastating impacts including floods, heatwaves, glacier melting, monsoon rains, cyclones and water insecurity through collective diplomatic efforts South Asian countries can strengthen their voices and global negotiation and demand greater responsibility and to do so the international forums like United Nations Framework Convention on Climate Change (UNFCCC), Conference of Parties (COP)-UN Climate Submits, United Nations General Assembly (UNGA), G77+ China and others multilateral forums provide an excellent opportunity to collectively not only to raise their concerns regarding climate injustice, environmental vulnerabilities but also more importantly on the devastated impacts of climate disasters, to do so South Asian countries need to develop coordinated policies, strengthen regional cooperation and undertake collective efforts to address the shared challenges of climate change, a unified approach will help them to present their case in international forums. To achieve meaningful climate action, the South Asian countries, have greater role to play when it comes to the realization among major global greenhouse gas emitting countries to avoid future catastrophes in the region.

### **Conclusion**

The climate injustice remains the most serious and pressing challenge for South Asian countries despite of being contributing disproportionately very little to global greenhouses gas emissions. The region which is already vulnerable for numerous socio-economic, political and development challenges further cannot afford the catastrophes of climate change which unfortunately further widening inequalities existing and undermine the regions' efforts towards sustainable development. Rising temperatures extreme heatwaves, floods, drought, cyclones, glacier melting, and sea level rise increasingly posing a serious threat to human lives, agriculture, water resources, public health, livelihoods, economic developments, displacements and migrations and also causing instability between the regional countries. This clear disparity between the countries that have contributed most of the greenhouse gas emissions and those that are suffering some of the devastated and destructive consequences, these outcomes have made this even more vulnerable for the lower-income and marginalized population of the region their livelihoods which are heavily dependent upon the agriculture and fisheries these climate induced disasters are making their lives even more miserable, food & water security, social inequality an economic vulnerabilities are making lives even more worst in the region. The issue of climate change in the region is not merely an environmental challenge but it has become an issue of human security, social justice and regional security, millions of lives across South Asia are increasingly at risk as climate-related disaster intensify in frequency, severity and in scale over the years, the time has come for the regional countries to stand as one to prioritize cooperation over conflict against this major human security threat, collective regional and international diplomacy, strengthening cooperation through regional institutions, developing common positions on climate finance and loss and damage, sharing climate related data and technology and jointly advocate for greater responsibility from major greenhouse

gas emitting countries, at regional level the countries should cooperate with each other on shared rivers, glaciers, forest, coastal eco system and they should place climate justice as their top foreign policy agenda. Collective efforts are the dire need of an hour to address this very severe and threatening challenge. Ultimately, the time has come for the regional countries to stand united, act collectively and raise one strong voice for climate justice, human security, and for a safer but secure future of our generations to come otherwise the region will continue to suffer for so many years to come.

**Conflict of Interest**

The authors showed no conflict of interest.

**Funding**

The authors did not mention any funding for this research.

## References

- [1] Acharya, G.P. (2024) 'Impact of artificial intelligence on new global order: A Nepalese security perspective', *Unity Journal*, 5, pp. 123–140. doi: 10.3126/unityj.v5i1.63189
- [2] Underdal, A. (2017). Climate change and international relations (after Kyoto). *Annual Review of Political Science*, 20, 169–188. <https://doi.org/10.1146/annurev-polisci-052715-111713>
- [3] McDonald, M. (2018). Climate change and security: Towards ecological security? *International Theory*, 10(2), 153–180. <https://doi.org/10.1017/S1752971918000039>
- [4] Hardt, Judith N., Dhanasree Jayaram, Cameron Harrington, Duncan McLaren, Nicholas P. Simpson, Alistair D. B. Cook, Maria Cecilia Oliveira, Franziskus von Lucke, Julia Maria Trombetta, Marwa Daoudy, Rita Floyd, Chinwe Philomina Oramah, Mely Caballero Anthony, and Adrien Estève. “The Challenges of the Increasing Institutionalization of Climate Security.” *PLOS Climate* 3, no. 4 (2024): e0000402.
- [5] Jolly, S., & Mahajana, S. (2014). Climate change and security: Forging a cooperative mechanism in South Asia. *International Journal of Public Policy*, 10(6), 315–332. <https://doi.org/10.1504/IJPP.2014.064959>
- [6] Barrech, D. M., Malik, M., Muneera, M., Baloch, M. S., & Anwar, S. (2023). Regional cooperation on climate change in South Asia. *International Journal of Special Education*, 38(1), 2023–212.
- [7] Maurya, A. T. (2024). The blind nature of the “Nature”: Climate justice and reparations for South Asian countries. SSRN. <https://doi.org/10.2139/ssrn.4949488>
- [8] Scheffran, J., Marmer, E., & Sow, P. (2012). Climate change and security in the face of climate change: Challenges of conflict and cooperation in South Asia and the Himalaya. *Regional Environmental Change*, 12, 627–639.
- [9] Harun, M., Rahman, A., & Ferdous, J. (2025). Vulnerabilities of climate change-induced displacement and migration in South Asia. *Discover Global Society*, 3, 115. <https://doi.org/10.1007/s44282-025-00237>
- [10] Ghazi, T. W., Muniruzzaman, A. N. M., & Singh, A. K. (2016). Climate change & security in South Asia: Cooperating for peace (GMACCC Paper No. 2). *Global Military Advisory Council on Climate Change & Institute for Environmental Security*.
- [11] Ghazi, T. W., Muniruzzaman, A. N. M., & Singh, A. K. (2016). Climate change & security in South Asia: Cooperating for peace (GMACCC Paper No. 2). *Global Military Advisory Council on Climate Change (GMACCC), Institute for Environmental Security*.
- [12] Akram, N., & Hamid, A. (2014). Climate change and human security in South Asia. *Science International (Lahore)*, 26(2), 801–808

- [13] Ojha, H., Rafa, N., Bhattarai, B., Banjade, P., Bartlett, C., Aryal, K., Shrestha, K., Gurung, P., Naushin, N., Zaman, T., Adhikari, B., Sujakhu, N., & Singh, P. M. (2026). Loss and damage financing for climate justice and transformation: Local insights from the climate frontline. *Climatic Change*, 179(3), Article 57. <https://doi.org/10.1007/s10584-026-04146-z>
- [14] Babar, S. I. (2023). Rethinking regional security paradigm: Non-traditional security threats and the role of regional dialogue in South Asia. *IPRI Journal*, 23(2), 25–56. <https://doi.org/10.31945/iprij.230202>
- [15] Kumar, C. (2014). Climate change in South Asia: A framework of sustainable development and human security. *Journal of Environment Pollution and Human Health*, 2(5), 100–109. <https://doi.org/10.12691/jephh-2-5-2>
- [16] Noori, M. A. A. (2025). Climate security as human right in South Asia: A neglected dimension. *Journal of Asian Development Studies*, 14(3), 1377–1385. <https://doi.org/10.62345/jads.2025.14.3.111>
- [17] Munir, S., Waheed, K. Z., & Javaid, S. (2025). Environmental justice interventions and poverty alleviation in climate-vulnerable regions: Evidence from South Asia. *Pakistan Social Sciences Review*, 9(2), 118–137. [https://doi.org/10.35484/pssr.2025\(9-II\)10](https://doi.org/10.35484/pssr.2025(9-II)10)
- [18] Hussain, Z. (2024). Climate change as a non-traditional security threat in South Asia: Implications for water security and regional stability. *Pakistan Social Sciences Review*, 8(3), 1008–s1023. [https://doi.org/10.35484/pssr.2024\(8-III\)82](https://doi.org/10.35484/pssr.2024(8-III)82)
- [19] World Meteorological Organization. (2025). State of the climate in Asia 2024. *World Meteorological Organization*.
- [20] United Nations Economic and Social Commission for Asia and the Pacific. (2023). Asia-Pacific disaster report 2023: Seizing the moment—Targeting transformative disaster risk resilience. *United Nations*.
- [21] IPCC. (2023). Climate Change 2023: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report. Cambridge University Press. *Chapter 10: Asia*.
- [22] UNESCAP – Asia-Pacific Disaster Report 2024: Targeting Transformative Disaster Risk Resilience in South and South-West Asia.
- [23] World Bank. (2020). South Asia—Climate Adaptation and Resilience for South Asia (CARE) Project. *World Bank Group*.
- [24] Intergovernmental Panel on Climate Change. (2022). Climate change 2022: Impacts, adaptation and vulnerability: Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. *Cambridge University Press*. <https://doi.org/10.1017/9781009325844>
- [25] Rigaud, K. K., de Sherbinin, A., Jones, B., Bergmann, J., Clement, V., Ober, K., Schewe, J., Adamo, S., McCusker, B., Heuser, S., & Midgley, A. (2018). Groundswell: Preparing for internal climate migration. *World Bank*.

- [26] Asian Development Bank & World Bank. (2010). Pakistan floods 2010: Preliminary damage and needs assessment. *Islamabad/Washington, DC*.
- [27] Food and Agriculture Organization of the United Nations. (2011). Pakistan floods: One year on. *FAO*.
- [28] Germanwatch. (2025). Climate Risk Index 2026: Who suffers most from extreme weather events? Weather-related loss events in 1995–2024. *Germanwatch*.
- [29] Ahmed, M., & Suphachalasai, S. (2014). Assessing the costs of climate change and adaptation in South Asia. *Asian Development Bank*.
- [30] Ginnetti, J., & Lavell, C. (2015). The risk of disaster-induced displacement in South Asia (Technical Paper). *Norwegian Refugee Council, Internal Displacement Monitoring Centre (IDMC)*. <https://www.internal-displacement.org/publications/the-risk-of-disaster-induced-displacement-in-south-asia>
- [31] United Nations Economic and Social Commission for Asia and the Pacific. (2015). Asia-Pacific disaster report 2015: Disasters without borders—Regional resilience for sustainable development. *United Nations*.
- [32] United Nations Framework Convention on Climate Change. (2025). Technical guide on sea level rise. *Executive Committee of the Warsaw International Mechanism for Loss and Damage*.
- [33] Inter-Cluster Coordination Group–Humanitarian Coordination Task Team. (2024, August 30). Bangladesh: Eastern flash floods 2024 situation report no. 02. *National Disaster Response Coordination Center*.
- [34] Ahmed, M., & Suphachalasai, S. (2014). Assessing the costs of climate change and adaptation in South Asia. *Asian Development Bank*.
- [35] Maplecroft. (2016). Climate Change Vulnerability Index 2016. *Maplecroft*
- [36] High Representative and European Commission. (2008). Climate change and international security (S113/08). *Council of the European Union*.