Regional Cooperation on Climate Change in South Asia

Dost Barrech

Lecturer, Department of International Relations, University of Balochistan (UOB), Quetta

Dr. Maria Malik

Director Research, Balochistan Think Tank Network, Quetta

Dr. Muneera

Assistant professor, Department of Social Work

Federal Urdu University Arts Science and Technology Karachi

Dr. Mir Sadaat Baloch
Assistant Professor, Institute of Management Sciences, University of Balochistan, Quetta, Balochistan, Pakistan

Sohail Anwar
Lecturer, Department of International Relations
Balochistan University of Information Technology, Engineering and Management Sciences

Abstract

Emanating non-traditional threats to South Asia in the near future would be far bigger than those of traditional threats. At the current juncture, climate change, ostensibly,is a bigger threat than terrorism and extremism. India, Pakistan and Bangladesh are the world's 5th, 7th and 10th most vulnerable countries to climate change respectively. By 2050 sea level in India is predicted to rise by around 15–38 centimetres placing its major cities and economic hubs at risk. More than 40 per cent of Indians by 2030 will not have access to clean water. Between 1990 and 2008, 750 million people nearly 50% of South Asia's population were affected by at least one type of disaster, resulting in almost 230,000 deaths. The severe implications of climate change are long-lasting for South Asia. The greater responsibility, thus, lies on regional countries to start regional cooperation to save this crucial region from the foreseen threats of climate change. Climate change is the only issue affecting all members of SAARC, bringing overlapping interests among them to craft regional cooperation to cope with foreseen climate change challenges.This paper, henceforth, will analyze the impacts of climate change on South Asia and will examine regional cooperation to mitigate climate change challenges.

Keywords: Green House Gases, Regional Connectivity, Climate Diplomacy, Heatwaves, Floods, Reforestation.

Introduction

Climate change, no doubt, is one of the biggest challenges to mankind in the 21st century.It poses a bigger threat than terrorism and extremism. The threat of climate change is not confined to one particular part of the world, rather it has engulfed the entire world. The US and China are the largest emitters of carbon gasses. Intriguingly, one of the US states named Taxes is believed to have been emitting more greenhouse gases than the whole African continent. Per individual in the US has been producing 20 tonnes of greenhouse gases polluting the environment overwhelmingly. Apart from the US and China, industrialized countries of the G-20 are also the largest emitter of greenhouse gases. Consequently, the temperature is increasing with the rapid rise due to greenhouse gas

emissions resulting in drying up water sources, rising sea levels, and threatening the life and livelihood of the people(Joshua S. Goldstein and Jon C. Pevehouse, 2013; Khan et al., 2022).

Humans, arguably, are accountable for climate change, producing biosphere and taking unnecessary resources out of the environment.The prevailing neo-liberal world order based on excessive exploitation of resources is not only damaging the environment but also stoking parity in wealth. Industrialized states are the genuine culprit and are becoming richer while poor countries are getting poorer and former also bearing the brunt of climate change. (Yuval Noah Harari, 2018)

The South Asia region connected with the Himalayan peaks of Nepal is endowed with the jewel-like islands of Sri Lanka, the peninsula of India, a fertile delta of Bangladesh, and the Maldives in the Indian Ocean. The South Asian physical landscape, consequently, is exceedingly climate-prone, witnessing glacier melt, rising sea levels, coastal erosion, saline water intrusion and heat waves. In recent years, the region experienced abnormal monsoons and intense storms, stoking damage to nature. South Asia nearly has 600 million absolute poor who are massively dependent on climate-sensitive sectors like agriculture, forestry and traditional fishing. (Asian Development Bank)

South Asia is regarded as one of the most vulnerable regions to climate change. India, Pakistan and Bangladesh are the 5^{th}, 8^{th} and 10^{th} affected countries by climate change respectively. All eight members of the South Asian Association for Regional Cooperation (SAARC) are vulnerable toclimate change. The region's nearly 750 million people, approximately 50 percent population between 1990 and 2008 were severely affected by climate-related incidents resulting in 230,000 death casualties. In 2019, Pakistan was ranked 18 out of 191 countries as far as the Inform Risk Index was concerned. The former has resultantly been experiencing heatwaves and recurrent floods.

Since the inception of Pakistan, the country so far has witnessed 28 floods and more foods are forecasted to occur in the foreseeable future due to climate change. There are a few pertinent queries that ought to be answered. Will regional countries of South Asia only rely on developed countries to solve climate change challenges? What modus operandi do the regional countries have to cope with climate change? What role do SAARC and other regional institutions play to mitigate climate change challenges? Will regional countries reduce their unnecessary obsession with traditional security intending to promote regional cooperation on climate change?(Dost Muhammad Barrech, 2022)

Research Methodology

The proposed research study aims to utilize a mixed methods approach by incorporating both primary and secondary sources. The primary sources will include public statements, interviews with and public officials, government archives, and civil society organizations. The secondary sources will consist of research articles, review articles, and biographies. The study will adopt a historical approach, which involves analyzing objective evidence and the evolution of facts to understand past events and the context surrounding the work's creation. Data collection will rely on documents such as policies, bulletins, newsletters, policy statements, as well as responses obtained through interviews.

Implications of Climate Change on Regional Countries

Climate Change Ramifications for India

India knowingly is the largest country in South Asia, as the saying does "when India sneezes everybody gets cold". The country as mentioned earlier is the 5^{th} climate-prone country in the world. The sea level is prognosticated to rise 15–38 centimetres, affecting major cities and the

economic hub of India. Land erosion in the country augmenting by leaps and bounds. Its more than 26 percent coastline is vulnerable to erosion, losing nearly 450 hectares of land. (World Bank 2009).Extreme heatwaves caused by climate change by 2030 will increase by nearly 15 percent in India. The Mckinsey report opines that extreme heatwaves in the coming years will cause $150 billion to $250bn to India's gross domestic product annually. GauravKedia the Chairman of the Indian Biogas Association states that "The overall impact of climate change on the economy is manifold as it will affect agriculture, infrastructure, as well as human health," (Rebecca Bundhun, 2022)

India has been the largest user of groundwater, presently, has merely four percent world's usable water resources. The growing rise in the heatwaves will further intensify the political and economic worries of the country. Increasing population, climate change, debilitating water mismanagement, urbanization, and greater variability in precipitation are massively contributing to poverty and hunger in India. By 2030 more than 40 percent of Indians will not have access to clean water. Each year 200,000 Indian perish due to contaminated water. Non-traditional threats must be encompassed in the Indian foreign policy to save humanity(Dost Muhammad Barrech, 2020)

Implications of Climate change forPakistan

Pakistan is ranked as the 8th most affected country by climate change. Agriculture contributes massively to the economic growth of the country, contributing 23 percent to GDP and creating nearly 45 percent of jobs. Bear in mind, the agriculture sector is the most vulnerable sectors to natural hazards. Floods of 2022 affected 33 million people and stoked the damage of $35 billion dollars to Pakistan's economy. U.N. Secretary-General, António Guterres when visited affected areas of Pakistan by floods maintained that he in his whole life did not see such devastations and reiterated that Pakistan had been drowning in both floods and debts. He appealed to the world to support Pakistan in a delicate time and urged the international community that today it was Pakistan and tomorrow it would be another country. António Guterres argued that "As we continue to see more and more extreme weather events around the world, it is outrageous that climate action is being put on the back burner as global emissions of greenhouse gases are still rising, putting all of us everywhere in growing danger" (Shannon Osaka, 2022; Shah et al., 2022).

Senator Sherry Rehman, Federal Minister for Climate states that climate change will remain a matter of national security for Pakistan, increasing the risks of vulnerabilities and heading the country towards growing competition over scarce and depleting resources. Pakistan's GDP is predicted to witness losses of 6-8 per cent annually. Production of wheat and mango has reduced to 10 and 20 percent in 2022 due to heatwaves. The country at the current juncture faces a wheat crisis, the wheat requirement of Pakistan is 30 milliontonnes but production is unlikely to exceed 26 million tonnes on account of heatwaves and extreme drought in March 2022(M. Waqar Bhatti, 2022)

Severe Impacts of Climate Change on Bangladesh

Bangladesh the third largest country in South Asia after India and Pakistan is also bearing the brunt of climate change. The country's poor people will remain most vulnerable to climate change. It losses $1 billion dollars annually due to average tropical cyclones. The country is predicted to lose a third of its agricultural GDP by 2050. More worryingly, 13 million people are likely to become internal climate migrants. The country also confronts the dilemma of the high level of air pollution costing nearly 9 percent of the GDP annually(The World Bank, 2022)

The economic losses of Bangladesh from 2000 to 2019 have been recorded at 3.72 billion dollars andthe country experienced 185 extreme weather events. The US government report unveiled in 2018 maintained that nearly 90 million population had been inhabiting high climate exposure areas. The report further stated that its 53 million population was subject to very high exposure. According to the latest estimation among seven Bangladeshis one will have to be displaced by climate change. The rise of sea level has been projected to 19.6 inches resulting in the loss of nearly 11 percent of the land. 18 million people are predicted to be migrated due to sea-level rise alone. Specifically, with a projected 19.6 inch (50 cm) rise in sea level, Bangladesh may lose approximately 11% of its land by then, and up to 18 million people may have to migrate because of sea-level rise alone. Scientific American describes how "climate change in Bangladesh has started what may become the largest mass migration in human history… Some scientists project a five-to-six foot [sea-level] rise by 2100, which would displace perhaps 50 million people." (The Climate Change Project 2021)

United Nations' Intergovernmental Panel on Climate Change (IPCC) describes that Climate change-induced economic losses are intensifying damaging critical infrastructure, decreasing agricultural yields, and increasing commodity prices heralding a path to instability in the country.Bangladesh is likely to lose 31-40 percent of agricultural output in the prevailing century on account of sea-level rise alone.(News Age, 2022).The country will face unbearable heat and humidity if the carbon emissions are not controlled. DrRawshanAra Begum argues that "Bangladesh is one of the countries most vulnerable to climate change and sea level rise with a projected loss of 2-9% in annual GDP, 1-2 million people displaced in the country's southern region and 12-17% decline in rice and 12-61% in wheat production.". She reiterated that climate change would augment Bangladesh's challenges intensifying income inequality, extreme poverty and non-economic losses. (The Business standard, 2022)

Following are the initiatives that are supposed to be taken for regional cooperation on climate change

Cross-Border Action on Climate Disasters

The devastation caused by the floods in 2022 in Pakistan impels the latter to go for cross-border action with India. The flood of 2022 resulted in $ 35 billion dollar losses and perished 1700 people. South Asia in the future will go through further floods and heatwaves. The costs of economic and human casualties stoked by climate change are exceptionally high in South Asia. The region every yearby 2030 will endure losses of $ 215 billion dollars. Climate migrants could reach 40 million by 2050. Non-traditional security such as climate change and Covd-19 require the regional states to ponder over the foreseen security challenges.(Ijaz Nabi, 2023)

For the South Asian region, regional cooperation is more essential than other regional countries as they are connected by rivers, weather systems and ecosystems sharing the Himalayas, Hindu Kush and mountain ranges. Among the eight members of SAARC, five of them face rising sea levels. Climate hazards and weather is unlikely to be stopped at national borders nor can a single country can deal with the magnitude of the challenge. Region nearly 800 million people live in climate hotspots. The cross-border collaboration will prove effective in utilization of technical, financial and human resources to reinforce climate resilience. (Cecile Fruman, SaleemulHuq, 2022).

Making collaboration in the formation of multi-hazard early warning systems will have low-cost preparedness. The innovation of hydrological services, climate and high-quality weather will prove instrumental for early warning, empowering communities to give ample time to individuals to decrease injuries and damages. A study conducted by the National Council of Applied Economic Research (NCAER) in India in 2020 maintained that the investment of every dollar in the

consolidation of Hydrological Services the National Meteorological in livestock owners, former and fishers in India had brought the economic dividends of $ 50 billion dollars. Through collaboration, the regional countries will improve climate information services and high-quality weather they could also make headways in sharing scientific knowledge and data.

Regional counties need to capitalize on the option of hydroment information infrastructure. In the South Asian region, nearly 80 percent of major cities are exposed to rising sea levels and flooding. Against this backdrop, Bangladesh remains a global leader in coastal resilience and invested massively in preventing cyclone shelters flood control structures and embankments. By investing in a chain of coastal resilience, Dhaka has remained successful in the reduction of deaths caused by cyclones and floods since 1971. The regional countries will have to espouse the trajectory of Bangladesh to become coastal resilient. (Cecile Fruman, SaleemulHuq, 2022).

Institutions for Better Cooperation

The representatives of the eight countries of the Hindu Kush Himalaya (HKH) on 15 October 2020 inked a declaration at the Ministerial Mountain Summit by endorsing the imminent threats of climate change and vowed to maintain the environment and livelihood of the people in HKH. The regional countries of HKH are trying to learn from other multilateral cooperation mechanisms established by mountainous counties such as the Arctic, Alps and Carpathians. Intriguinglythe Alpine Convention and the Arctic Council like HKH also consist of eight countries. They have an effective and organized cooperation mechanism that ought to be followed by the HKH. Ostensibly, these institutions enhanced cooperation on climate change and sustainable development. The Carpathian Convention are an example of effective regional cooperation mechanisms and are models the HKH could draw on. These institutional mechanisms were explicitly established to increase cooperation on environmental protection and sustainable development. (PemaGyamtsho, 2022)

The threats emanating from climate change for the HKH countries are akin to those ofthe Arctic, Alps and Carpathians It, accordingly, requires common approaches to address them. Disasters such as floods and glacial lake outbursts will have transboundary implications.Regional cooperation could be effective in this regard. In order to promote transboundary cooperation regional countries will have to work on renewable energy providing economic resources, at the same time, reducing air pollution and carbon emissions. Investments in the transboundary river basin in South Asia will benefit that are 30 times the cost.

The HKH region lacks finance and sophisticated technical resources to tackle the impacts of climate change. The climate mitigation cost of the HKH countries India, Pakistan, Bangladesh, Afghanistan, Bhutan and Nepal is estimated to be at 1,085 billion dollars. Meanwhile, the adaptation cumulative cost of the region is270 billion dollars. The regional experts have frequently been urging the international community for global support and collaboration in financial investment, knowledge generation and technical exchange to augment the resilience of the HKH region. Pondering over the implementation of a broad regional framework of cooperation to identify the opportunities for cooperation will yield fruitful results for regional cooperation (Hamdard, 2022; Khan et al., 2020; PemaGyamtsho, 2022)

Unfortunately, the region has been embroiled in wars and territorial issues. However, climate change at the current juncture is the only unpretentious issue that could bring all regional countries on one platform. Against this backdrop, Jairam Ramesh, a former Indian environment minister maintained that to take start with small and meaningful steps while eschewing ‘conversation-

stoppers' arguably, will create the possibility of collaborative scientific programmes on Himalayan glaciers. (Krittivas Mukherjee, 2018)

South Asian states will have to forge a small climate corpus under the organized institution, having funds promising initiatives and will pave the way for early-warning systems and regional electricity trade. The SAARC heads the government in the 2010 Thimphu Declaration called for a study to examine the way forwards for capital for "projects that promote low-carbon technology and renewable energy". Such a move, by and large, will forge a robust foundation fundalso reducing the trust deficit among the regional countries to go for regional cooperation on climate change. (AdityaValiathanPillai, 2021)

Cooperation Produces Results

It is a fait accompli cooperation yields positive results. To promote research and analysis in climate change the South Asia region will head towards a win-win situation benefiting the entire region. Air pollution is yet another untapped domain which is providing promising ground for the regional countries to cooperate. Cooperation on climate change, possibly, will erode other contentious issues in the region. Meanwhile, regional countries within their borders are supposed to have environmental laws, institutions and standards. It ischild's play to be a part of global meetings without having a good record at home. Implementation of those laws and standards within the borders are prerequisite. It is mandatory to implement environmental laws at home before expecting global meetings. Within a country, there needs to bea collaboration between the federal and provincial governments. Due to growing interdependence in the era of globalization, climate change incidents in the northern part of India will have a spillover effect on Pakistan. New Delhi and Islamabad will have to craft an information-sharing mechanism in a bid to have early warning systems to protect the masses from disaster strikes (The Third Pole, 2022).

Covid-19 brought a radical change in thebehaviour of the states and realized them that a fight against the pandemic cannot be won singlehandedly. It requirescollaboration and cooperation. Like the pandemic, climate change also does have any political affiliation or nationality. It can only be solved by mutual understanding and cooperation. The pandemic and climate change certainly are a nature's wake-up call for us to be united in natural calamities. Regional countries will need to cooperate on clean energy which could be possible through transmission infrastructure and regional trading agreements. The Central Asia-South Asia Power Project also known as CASA-1000 will in the near future export hydropower from Central Asian states to the South Asian region(The Third Pole, 2022)

ICIMOD: Regional Cooperation

The International Centre for Integrated Mountain Development ICIMOD is a very pivotal forum for regional countries to promote cooperation on climate change. The bona fide objectives of the ICMOD are to improve the ecosystem and livelihood of the people in the Himalayas region. The eight members of the Himalayan region-China, India, Pakistan, Bangladesh, Nepal, Bhutan, Sri Lanka and Myanmar 1983 founded the ICIMOD to promote regional cooperation. ICIMOD has been supported by Germany since 1986 in recent years it has been making a great deal of progress and living up to its regional mandate(ICIMOD, 2008)

The organization through expert dialogues and knowledge sharing brought the Himalayan nations innovative ideas to implement joint programs like the Kailash Sacred Landscape Conservation and Development Initiative. The regional countries should not miss the bus and promote ICIMOD for coping with climate change threats in the future. The role of ICIMOD is crucial for the world's most

important ecosystems giving bread and butter to more than 210 million people. The region has the world's major river system providing water supply to one-fifth of the world's population. The role of ecosystems cannot be underestimated in biodiversity and the water reservoir of the Himalayas. If CIMOD is not capitalized, the exacerbation of ecosystems of the Himalayas will cause irreparable damage to the region. (GIZ, 2017)

Climate Diplomacy in Indo-Pak Relations

India and Pakistan are the largest countries in South Asia and are the most affected parties by climate change. It is unfortunate of this region both countries have been embroiled in enduring rivalry for the last seventy-five years. New Delhi and Islamabad are thoroughly preoccupied with conventional warfare and with a theory of realism believing in the maximization of power and overlooking non-traditional threats such as climate change and Covid-19. However, in the coming era, non-traditional security will harm the region more than the imaginary traditional security. Being the largest countries in the region, both parties will have to break the ice and should promote climate diplomacy for regional cooperation. Climate diplomacy is a diplomatic tool playing a considerable role in the reduction of the negative impact of climate change, reducing greenhouse gases, and bringing stability peace, and prosperity in South Asia.(SIPRI, 2021)

New Delhi and Islamabad need to get into introspection and ought to ponder over the following questions. Will they ignore the imminent threats of climate change in the foreseeablefuture which are bigger than the so-called conventional threats? Are India and Pakistan still reluctant to eschew their preoccupation with conventional security? Can't they think that climate diplomacy is a blessing in disguise to end the enduring rivalry? The aforementioned queries, undoubtedly, require reassessment by the policymakers of both countries. Climate change is the only issue that cannot be overlooked and only challenge that will impel both states to go for regional cooperation(Dost Muhammad Barrech, 2022)

Meanwhile, Pakistan has brought anenormous change in its strategic autonomy under its National Security Policy NSP (2022-2026) unveiled on 14 January 2022 by the former Prime Minister of Pakistan Imran Khan. Recognition of non-traditional threats like climate change, bolstering the economy, and citizen well-being, ensuring economic security, regional connectivity, and durable peace with India are the tangible components of NSP. Pakistan's first time under its NSP accentuated the importance of climate change. India should not miss the bus and ought to get maximum dividends from NSP aimed at promoting climate diplomacy. (Rizwan Shehzad, 2021)

NSP could play a pivotal role in regional connectivity that invariably will consolidate climate diplomacy. Ironically,the Sub-Saharan African continent economically is more integrated than South Asia the latter there hasmerely 5 percent interregional trade. The World Bank report unveiled in 2018 states that New Delhi and Islamabad have the potential of increasing their bilateral trade from $2 billion to $ 37 billion which appears to be feasible under NSP. The more India and Pakistan are economically intertwined, the more they will shun their oppression with traditional threats resulting in promoting regional connectivity and climate diplomacy. (Dost Muhammad Barrech, 2023)

Recommendations

- Regional countries should work on clean energy by promoting trading agreements, and regional cooperation.

- The export of non-renewable energyamong the regional countries should be accelerated like the Central Asia-South Asia Power Project exporting hydropower from Central Asia to South Asia.
- Climate change does not have political affiliation and nationality it can only be solved by cooperation.
- The sceptical view of realism theory must be understood by India and Pakistan. Sceptical views ignore economic diplomacy, intra-state warfare and non-traditional threats (climate change) which have halted regional trade, and regional cooperation on climate change.
- Pakistan has brought a paradigm shift in its foreign policy from geo-politics to geo-economics. Admittedly, this approach will yield positive results for cooperation on climate change and regional connectivity. Regional countries should get maximum dividends from Pakistan's NSP.
- South Asia economically is believed to have been the least integrated region of the world. Regional countries ought to enhance economic diplomacy with an effort to reinforce climate diplomacy.
- Research and analysis be promoted to yield win-win results.
- Air pollution offers a promising ground particularly for India and Pakistan to cooperate. New Delhi after Lahore is the 2nd most polluted city in the world.
- Cooperation on the environmental issue will certainly embark on the path to resolution of other contentious and outstanding issues.
- Regional countries will have to strengthen institutions such as the International Centre for Integrated Mountain Development ICIMOD for climate and environmental issues.
- India remains the second largest consumer of energy, mendingties with Pakistan will give India easy land access to the Middle East and Central Asia. The interdependence of both countries is extremely likely to promote regional cooperation on climate change.
- Collective agreements are needed for regional countries, like the Sino-Japanese environmental cooperation, to plan innovative ways to curb climatic challenges.
- It's very easy to be part of global meetings without having a track record at home. Every regional country will have to improve its track record at home.
- The coordinated information-sharing mechanism needs to be promoted with the aim of giving early warning systems to protect people when disaster strikes.
- If partnership on gas pipelines from the Middle East is feasible, why shouldn't regional countries ink partnership on a renewable energy regional grid?
- There is a need for educational institutions among the regional countries to promote research aimed at raising awareness and encouraging debate about climate change.
- To compare South Asia with subregions in the Asia Pacific, the former lags far behind in the mobilization of international financing. Regional countries have to make extra efforts for international financing.
- Climate change cannot only be tackled with international resources. Every regional country has to cope with it within the national framework improving national budgets.
- Regional countries need to learn a lesson from the US and China's cooperation in climate change climate.

Conclusion

Security threats over the last few centuries have undergone rapid changes. Security can never remain unchanged, it changes by leaps and bounds. At the current juncture, climate change seems to be a bigger threat than terrorism, extremism and conventional threats. Climate threats have affected

the entire world. The South Asia cannot remain immune to the threats of climate change. The region is connected with the Himalayan peaks of Nepal endowed with the jewel-like islands of Sri Lanka, the peninsula of India, a fertile delta of Bangladesh, and the Maldives in the Indian Ocean. The South Asian physical landscape is climate-prone, witnessing glacier melt, rising sea levels, coastal erosion, saline water intrusion and heatwaves.

In recent years, the region experienced abnormal monsoons and intense storms. South Asia nearly has 600 million absolute poor massively dependent on climate-sensitive sectors like agriculture, forestry and traditional fishing. India, Pakistan and Bangladesh are the 5th, 8th and 10th most vulnerable countries to climate change. All members of SAARC are affected by climate change. The region's nearly 750 million people, approximately 50 percent population between 1990 and 2008 were severely affected by climate-related incidents resulting in 230,000 death casualties.

Regional countries are supposed to be proactive in their policies and should not expect global powers to mitigate their climate challenges. Climate change does not have a nationality or religious affiliation. It is affecting the whole South Asia region which requires a collective approach. To bear in mind, regional cooperation proves to be a blessing in disguise to end the enduring rivalry between India and Pakistan and other outstanding issues among the other regional countries. In this regard, Ayn Rand articulates that “we can ignore reality, but we cannot ignore the consequences of ignoring reality.The regional countries may ignore climate change, but they cannot ignore the consequences of ignoring the destruction caused by climate change. In short, they have the last resort of cooperation to win the battle against climate change.

References

1. Development, Asian Bank, “Climate Change in South Asia Strong Responses for Building a Sustainable Future” https://www.adb.org/sites/default/files/publication/27475/climate-change-sa.pdf
2. Barrech Muhammad Dost, Why is Climate Diplomacy a Prerequisite in Indo-Pak Ties? 2022, Pakistan Observer, https://pakobserver.net/why-is-climate-diplomacy-a-prerequisite-in-indo-pak-ties-by-dost-muhammad-barrech/
3. Bhatti M. Waqar Bhatti, 2022 “Extreme weather conditions fuel fear of drop in wheat, mango production,” 2022, https://www.geo.tv/latest/416425-extreme-weather-conditions-fuel-fear-of-drop-inwheat-mango-production
4. Barrech, Muhammad Dost, Regional connectivity under NSP, 2023, Pakistan Observer, https://pakobserver.net/regional-connectivity-under-nsp-by-dost-muhammad-barrech/
5. Barrech Muhammad Dost, “Why is climate diplomacy a prerequisite in Indo-Pak ties?” 2022, Pakistan Observer https://pakobserver.net/why-is-climate-diplomacy-a-prerequisite-in-indo-pak-ties-by-dost-muhammad-barrech/
6. Bundhun Rebecca “How India’s economy is feeling the heat from climate change” 2022 https://www.thenationalnews.com/business/economy/2022/05/09/how-indias-economy-is-feeling-the-heat-from-climate-change/
7. Barrech, Dost Muhammad “Post -COVID-19: Indo-Pak Relations” 2020, Modern Diplomacy, https://moderndiplomacy.eu/2020/04/18/post-covid-19-indo-pak-relations/
8. Can South Asia work together to combat climate change?, 2022, The Third Pole, https://www.thethirdpole.net/en/regional-cooperation/south-asia-climate-change-cooperation/
9. Fruman Cecile, HaqSaleemul, “Cross-border action on climate disasters is urgent in South Asia” 2022, The Third Pole
10. Goldstein S. Joshua S and Pevehouse C. Jon, 2013 International Relations, Tenth Edition, 2013

11. GyamtshoPema, "The Hindu Kush Himalayas need institutions for better cooperation" The Third Pole
12. Harari Noah Yuval, 2018 "21 Lessons for the 21st Century" page no 115-116
13. "ICIMOD and the Himalayan Region –Responding to Emerging Challenges" file:///C:/Users/Pro-Tech/Downloads/attachment_547.pdf
14. Hamdard, M. N., (2022). Afghan-China Relations and Economic Development Of Afghanistan .*International Journal of Contemporary Issues in Social Sciences,1(1),* 25-32.
15. Khan, A. M., Ullah, M., Usman, A., Malik, A. H., Khan, K. M. (2020).Impact of covid-19 on global economy.*International Journal of Management, 11(8),* 2020, 956-969.
16. Khan, D., Khan, D., Ahmed, T. (2022). China Pakistan Economic Corridor (CPEC): Vulnerable to Domestic and International Sabotage. *International Journal of Contemporary Issues in Social Sciences,1(1),* 12-17.
17. Mukherjee Krittivas, Jairam Ramesh says India may accept binding CO2 cuts, 2018 REUTERS, https://www.reuters.com/article/idINIndia-53474720101210
18. Nabi Ijaz, "Responding to Pakistan floods" 2023, Brookings, https://www.brookings.edu/blog/future-development/2023/02/10/pakistan-floods/
19. "Climate change to hit Bangladesh food output: IPCC" 2022, News Age, https://www.newagebd.net/article/164062/climate-change-to-hit-bangladesh-food-output-ipcc#:~:text=According%20to%20the%20report%2C%20parts,level%20rise%2C%20the%20report%20said
20. Osaka Shannon, "U.N. chief calls Pakistan floods a 'climate catastrophe" 2022The Washington post, https://obamawhitehouse.archives.gov/the-press-office/2015/09/25/us-china-joint-presidential-statement-climate-change
21. PillaiAdityaValiathan, "Reviving South Asian cooperation, climate first", 2021, The Third Pole, https://www.thethirdpole.net/en/regional-cooperation/climate-south-asian-cooperation-saarc/
22. "Promotion of transboundary management of natural resources in the Himalayas", 2017, GIZ, https://www.giz.de/en/worldwide/14259.html
23. The World Bank, "Urgent Climate Action Crucial for Bangladesh to Sustain Strong Growth" 2022, https://www.worldbank.org/en/news/press-release/2022/10/31/urgent-climate-action-crucial-for-bangladesh-to-sustain-strong-growth#:~:text=Climate%20change%20will%20hit%20poor,as%20much%20as%209%20percent.
24. Shehzad Rizwan, "NSC approves Pakistan's first-ever national security policy" 2021, Tribune, https://tribune.com.pk/story/2335842/nsc-approves-pakistans-first-ever-national-security-policy
25. Stockholm International Peace Research Institute (SIPRI), 2021 https://www.sipri.org/publications/2021/other-publications/climate-change-and-security-south-asia)
26. Shah, H. A. S., Khan. D., Ahmed, Z. (2022). Effects of Currency Devaluation upon Developing Nations: Global Effects of Yuan Devaluation. *International Journal of Contemporary Issues in Social Sciences, 1(1),* 1-11.
27. The Climate Change project, "How the Climate Change Crisis is Impacting Bangladesh" 2021, https://www.climaterealityproject.org/blog/how-climate-crisis-impacting-bangladesh
28. The Business standard, "Climate change likely to shock Bangladesh's economy severely" 2022, https://www.tbsnews.net/bangladesh/environment/climate-change/climate-change-likely-shock-bangladeshs-economy-severely
29. (World Bank, 2009) "Why is South Asia Vulnerable to Climate Change?" http://go.worldbank.org/OJ4FWPUB10