

Fostering Peaceful Coexistence in
South Asia
through Economic Cooperation and Climate Diplomacy



Edited by Dr. Arshad Ali



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Islamabad



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Foreword

South Asia, geopolitically, has been one of the most pivotal regions in the world. Still, it remains the least connected due *inter-alia* to longstanding Jammu & Kashmir dispute between India and Pakistan, territorial disputes of India and Nepal as well as India and China, Afghanistan's precarious security situation, and lack of progress in regional economic integration and connectivity. Since the end of the World War II and decolonization, the South Asian region has largely remained focussed on geo-politics, neglecting the wider impacts of such policy approaches. Among other things, this served to accentuate the faultlines in the region, including hostilities between India and Pakistan. As such, the priority focus of the foreign policies of key actors has been on traditional security that emphasises securing the borders from mischievous adventurism by adversaries. The threats and challenges also resulted in protectionist policies, due to which the South Asian region remained least economically integrated and connected. The South Asian Association for Regional Cooperation (SAARC), the main vehicle for regional economic cooperation, remains stymied because of the troubled India-Pakistan relationship.

As the U.S. and North Atlantic Treaty Organisation (NATO) forces withdrew from Afghanistan in September 2021, and owing to a host of other factors, Pakistan re-oriented its focus from geo-strategic to geo-economics. This was encapsulated in Pakistan's first-ever National Security Policy (NSP) 2022-2026. Recognizing the changing global order and emerging trends and challenges, this was a step in the right direction. The primary motivation for this pivot to geo-economics is to leverage development and prosperity not only in Pakistan but also in the South Asian region. While underscoring a human-centric approach, the policy realises the importance of a symbiotic relationship between human development, economic prosperity and the condition of traditional security. Obviously, these steps require a shared vision and collective measures. Therefore, the NSP envisages mutual co-existence and regional peace through regional connectivity to optimally realize the potential of shared prosperity.

Regional connectivity becomes even more pressing now as the global threats and challenges, including the existential threat of climate change, call for mutual efforts. Similarly, economic integration is the only way to meet the demands of future economic prosperity. As things stand, South Asia is becoming increasingly vulnerable to the impacts of climate change, whereas regional economic cooperation continues to nose-dive. And due to these undesirable trends, states remain unable to realise the true potential of regional interconnectedness.

Undoubtedly, there is great potential for shared development if South Asian countries can realise the full scope of their cooperation. Pakistan is emphasizing the significance of interconnectedness. It has invited other regional countries to benefit from China-Pakistan Economic Corridor (CPEC), as this is about integration and economic development. As and when the states prioritise these interest, South Asia can climb up the ladder of sustained growth and regional prosperity. For this to move forward, these countries have to view issues such as climate change and economic cooperation from a different lens.

I commend the India Study Centre (ISC) at the Institute of Strategic Studies (ISSI) for taking the initiative and putting this book together. More than seeking to explain the problems, it explores how these problems can be effectively addressed and resolved.

The book underscores the importance of finding ways and opportunities to advance the cause of regional economic development and prosperity. The contributing authors have highlighted the opportunities as well as emerging issues that can create a more expansive space for inter-connectedness among South Asian countries. Pakistan is playing its part in converting these opportunities and offering requisite platforms. However, other regional countries must also join in addressing the negative factors so that South Asia can also move forward and take the path of a strong and developed region.

Ambassador Sohail Mahmood
Director General,
Institute of Strategic Studies Islamabad
June, 2023

Section I

Climate Change in South Asia

Chapter 2

Energy, Food and Environment: The Critical Geopolitics of Securitisation in South Asia

Dr. Amrish Dhaka*

Abstract

The proposed chapter focusses on the energy, environment and food security challenges to South Asian peoples. The climatic irregularities have increased the uncertainty of the production of food crops and it also affects the policy perspective on food security as well. The trade in agriculture commodities have varied with the introduction of speculative markets in agriculture commodities. It also sits in the background of South Asia having a vast sea of poverty, malnutrition and hunger. The challenges are not only environmental but political as well. South Asia is a deeply conflict-ridden region. From Afghanistan to India's northeast, and Kashmir to Sri Lanka, the unsettled questions of socio-political nature affect the ability of the South Asian states to address the human security challenges. It is a quest for the South Asian states to look for ways of intra-regional cooperation that can handle these challenges. At the same time, South Asia has been vulnerable to great power politics, which influences the priorities of regional cooperation as well. How far the South Asian states integrate into the regional cooperation framework is a matter of great power interest. Two methodological approaches are put forth in this chapter. The first is to make the debate on the South Asian transition a wider arena of Asian engagement that includes the host of nations beyond South Asia participating in the change. The second is to look into the India-Pakistan relations in a holistic framework to deliver in all areas of the economic and social life of the two nations. The scholars view South Asia as a region missing regionalism and this hampers much of the collective effort to address human misery.

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The chapter also delves into the ways of possible cooperation amid such a deficit.

Keywords: Energy, Food security, Environment, Geopolitics, South Asia

1. Introduction

The three cardinal securities addressing energy, food, and the environment serve as a lighthouse for national security objectives in international politics, where anarchy has performed better than obedience to the standards set forth by international law. Securitisation with military goals can be a source of anarchy and insecurity in the neighbourhood. The traditional sources of insecurity force insecure neighbourhoods into a spiral of military spending. However, in present times, three non-traditional security aspects, energy, food, and environment, weigh down a state's security objectives, making it challenging for the decision-makers. Food and energy are commercial goods with established markets, so it seems unusual to securitise them. Environment, likewise, is a result of climatic conditions but has become a matter of insecurity. This is also unusual as the state policies cannot explain impact of the environment nor can it limit the influence of the environment within the national borders.

This chapter addresses the growing concern about securing energy, food and the environment as a composite challenge for South Asia. Experience shows that the developed world rarely has an inclusive approach; due to this, the developing states have to bear the costs of access to energy, food and the environment. South Asia has had numerous conflicts, which can be commonly clubbed as geo-cultural accommodation crises when viewed from Huntington's thesis. The political space occupied by religion as a geo-cultural phenomenon adds complexity to the South Asian polities oscillating between democracy and authoritarianism that hurts the state's ability to reconcile with the image of the neighbourhood.¹ However, the states have not felt these challenges coming closer to fundamentally securing energy, food and the environment. The

¹ Samuel P. Huntington, "Religion and the Third Wave," *The National Interest*, no. 24 (1991), 29-42.

threat is that if geo-cultural fault lines align with these new crises of securitising energy, food and environment, the South Asian states might slip into existential crises where the great powers might just be waiting to interpolate their interests. This chapter explains the need to keep working towards reducing the inter-state insecurities to handle the impending and unavoidable challenge of energy, food and environmental security.

South Asia seeks to import energy and food globally as the demand for energy and food is bound to remain bullish for many decades until population growth stagnates. As of 2021, India's net energy imports were around 40%² whereas Pakistan's net energy imports were 24%.³ The rising economies of Bangladesh and Nepal would soon catch up with these figures as their purchase power and potential for development increases.⁴ A significant portion of the South Asian population depends on the natural environment for sustenance. Damages to the natural environment would further exaggerate the fear of insecurity.

The agendas of energy, food and environmental security faced stringent tests during the Covid years of 2020 and 2021. The crises exposed the compound effect of the pandemic and the climatic change that has impacted the precipitation and thermal cycles, causing extremes in temperature and rainfall. The South Asian region is home to nearly 3.6 million refugees, with Afghanistan and Myanmar as the leading source of origin and Pakistan and Bangladesh as leading recipients.⁵ Amid this backdrop scenario, the energy and food security situation could

² Peter Zeniewski and Siddharth Singh, *India's Energy Outlook 2021: Implications for India and the world*, report (Paris: International Energy Agency, 2021) <https://www.iea.org/reports/india-energy-outlook-2021/implications-for-india-and-the-world>

³ "Energy: Pakistan Economic Survey 2021-22," Finance Division Government of Pakistan, 2021, https://www.finance.gov.pk/survey/chapter_22/Economic%20Survey%202021-22.pdf.

⁴ "Energy Imports, Net (% of Energy Use) - South Asia," World Bank, 2014; "Bangladesh, Nepal ahead of India as growth in South Asia slows down: World Bank report," *The Economic Times*, October 14, 2019.

⁵ Migrationdataportal.org, 'Migration Data in Southern Asia,' Migration data portal, 14 June 2021, <https://www.migrationdataportal.org/regional-data-overview/southern-asia>.

not have been more challenging than during the pandemic times in South Asia. The migrant population pressure, lack of regional economic integration and vast intra-regional inequality created massive pressure on the South Asian governments to meet the pandemic challenge. The political obstacles to regional cooperation in South Asia exposed the formidable challenge of an integrated regional approach to global calamities.

The energy, food and environmental insecurity crises have been gaining enormous momentum in the last couple of years. The 2010 flood in Pakistan significantly impacted public health and agriculture in Pakistan. According to Pakistan Economic Survey, Pakistan's loss from floods stood at \$19 billion during the floods between 2010 and 2014.⁶ The significant loss occurred at the infrastructure level in urban and rural areas. The lack of electricity assessed after the six months of the 2010 floods increased from 18 percent to 33 percent, and nearly 2.9 million households were damaged.⁷ A not-too-distant disaster happened in 2013 at Kedarnath in India, where about 325 mm of rainfall occurred in 24 hrs leading to flash floods at the holy site thronged by tourists.⁸ The anthropogenic causes have affected the weather in the Himalayas, leading to an increased frequency of natural disasters.⁹ In winter 2022, the land sinking threatened settlements in Himalayan valleys. Thousands of houses in Joshimath, the gateway town to Badrinath's shrine, developed cracks due to uncontrolled quarrying for stone and construction activity. Urbanisation and hydroelectricity plants have created an environmental threat to the Himalayan ecology. The worsening air quality in India and Pakistan adds to the worries. The burning of crop residue has acquired monstrous proportions, such that thick smog envelops entire north-western

⁶ Abdul Rehman, Luan Jingdong, Yuneng Du, RafiaKhatoon, Shoaib Ahmed Wagan and Sehran Khan Nisar, "Flood disaster in Pakistan and its impact on agriculture growth (a review)," *Journal of Economics and Sustainable Development*6, no. 23 (2016): 39-42.

⁷ Thomas D. Thomas D. Kirsch et al., 'Impact of the 2010 Pakistan Floods on Rural and Urban Populations at Six Months', *PLoS Currents* 4 (22 August 2012): e4fdfb212d2432, <https://doi.org/10.1371/4fdfb212d2432>.

⁸ Praful Bidwai, "India floods: a man-made disaster," *Guardian*, June 28, 2013.

⁹ D. P. Dobhal, Anil K. Gupta, Mehta Manish, and D. D. Khandelwal, "Kedarnath disaster: Facts and plausible causes," *Current Science* 105, no. 2 (2013): 171-174.

South Asia almost every year in October. South Asia houses some of the world's worst polluted cities. In October and November 2022, the PM2.5 concentration reached dangerous levels in India and Pakistan at Delhi, Faisalabad, Lahore, Ludhiana and many more.¹⁰

The domestic polity of South Asian states addresses energy, food and environmental security, but there is no neighbourhood approach for further optimising the goals in these sectors. The securitisation of these sectors is also closely linked to traditional security concerns. In the spirit of intra-regional cooperation, there is a lack of drive to de-secure these problems. The dependency on western aid for conventional and non-conventional security challenges also dissuades the states from the collective security approach to energy, food and the environment.¹¹ The quality of governance is a significant factor that has affected the securitisation of these three concerns. The donors have not considered auditing the governance before disbursing the aid. Most of this aid is for strategic and military goals, who consider the South Asian regional security threats inimical for their homeland.

The domestic politics in South Asian states have significantly shaped inter-state relations. Greater strength is shown in the intra-state contestation of identities than in the inter-state contestation of resources. Contrary to how it is viewed as an existential threat within the region, the territorial trap has not impacted the thinking of the South Asian diaspora. South Asian geopolitics essentially has been a historical construction and, as a contemporary practice, finds narrow scope in defining the growing aspirations of the South Asian people. The constitutive relation between the South Asian state and their territory remained well short of filling the giant mosaic of the aspirations of the South Asian region. The size measurements in territory,

¹⁰ "Poor Air Quality from Crop Burning in India and Pakistan," IQAIR, 2022, <https://www.iqair.com/newsroom/wildfires/poor-air-quality-delhi-lahore-crop-burning>.

¹¹ Rahim Quazi and Arshad Alam, 'Foreign Aid and Quality of Governance in Developing Countries: An Econometric Case Study of South Asia and East Asia', *International Business Research* 8, no. 9 (25 August 2015): p16, <https://doi.org/10.5539/ibr.v8n9p16>.

economy, and military became the primary logic in assessing the neighbourhood. Concomitantly, the deterrent behaviour assumed control and scuttled any potential regional collegium of states to address the more significant global concerns like energy, food, and environmental security. The idea of extra-territoriality engendered a threat to sovereignty as it had been typically associated with the great powers, who have ventured into places like Afghanistan and Iraq to defend their homeland.¹²

2. Imagining South Asia Beyond Geopolitics

The encyclopaedic narratives about South Asian geopolitics are succinctly focussed on the geographical region of Kashmir. The numerous confrontations between India and Pakistan and the insecurities bundled around this piece of geography have enormous inertia that is felt by the rest of the South Asian states. The paradox is paramount as the South Asians meeting on a street of any Western town would so amicably gel with each other that it is an iconic rejection of an entire era of hostility between the states. The way South Asian societies internalise territoriality within the region and outside the region demonstrates remarkable adaptation to their spatial fixities. The ontological basis for this adaptation comes from the vast sea of diversity defined through a cultural axiom (*koskos per paanibadle, chaarkos per vaani*) that taste of water changes every 2 miles and dialect changes every 8 miles. The limiting condition within the lebensraum has become the leeway to jump for a higher coalescence of ideas and habits among South Asians abroad. South Asians keep evolving in communities outside the South Asian region. The diaspora studies see people living outside their homeland, a relatively modern phenomenon of scholarship. The South Asian communities have exhibited diasporic behaviour since ancient times as traders, nomads, and artisans moved in groups across South, Central, Southeast and West Asia. Even today, they are known for their sovereign cultural practices and symbols. Modern post-colonial South Asia seeks to reinvent cultural synergies that can fly beyond geopolitical tensions. Music, cinema, food, and fashion thrive in the Middle

¹² Simon Reid-Henry, 'The Territorial Trap Fifteen Years On', *Geopolitics* 15, no. 4 (19 November 2010): 752-56, <https://doi.org/10.1080/14650041003717509>.

Eastern countries where Indians, Pakistanis, Sri Lankans, Nepali or Afghans mingle, avoiding the trapped territoriality of their homeland.

The potential of geo-culture and geoeconomics is far greater than geopolitics in spatial terms. Redfield's conception of little and great traditions provides a bifocal approach to understanding South Asian geopolitics.¹³ The geo-culture of South Asia performs the role of tradition that connects individuals both in the homeland and abroad. This connectivity assures global connectivity among South Asians in various aspects of life. Geoeconomics is a great tradition where the state leads the centre stage by forging global economic connections. The diaspora moves along these economic highways and explores newer socio-cultural spaces. Sometimes the diaspora leads the opportunity for economic relationships, and the states follow the pattern. According to a study, the South Asian diaspora can create investments in the region well above \$100 billion.¹⁴ The diasporic life is highly geopolitical in that the great tradition always infuses a new backdrop where diverse cultures interact at the level of ordinary masses. Sometimes, the common tradition impacts the tectonic shifts in the great tradition. The South Asian diaspora has little interest in the territorial insecurities of South Asian states. It is more interested in songs and their chart number or eagerly waiting for an upcoming movie of their favourite star, regardless of their nationality. These have impacted the South Asian states' capacity to exert pressure on another on a global scale. The South Asian diaspora in the US is a solid electoral constituency that affects the US influence in the South Asian states. As more and more South Asians enter the political leadership in the US, Britain, Australian, and Canadian governments, the economic and political linkages are becoming more significant. Territoriality gets heightened emphasis through implementing protectionist economic policies and requests for liberal immigration policies from these governments. In their eagerness to relocate the

¹³ Robert Redfield, 'The Social Organization of Tradition', *The Far Eastern Quarterly* 15, no. 1 (1955): 13-21, <https://doi.org/10.2307/2942099>.

¹⁴ Tai Yong Tan and Mizanur Rahman, eds., *Diaspora Engagement and Development in South Asia* (Basingstoke: Palgrave Macmillan, 2013).

territoriality of state power, the South Asian republics have grown increasingly bureaucratic. The South Asian regional polity demonstrates an admixture of potential conflict and increasing pressure on economic development. Luttwak was not off the mark when he coined the term geoeconomics to signify the imminent times when energy or trade would be more important than the defence portfolio of a government.¹⁵

The South Asian region is economically one of the least integrated regions, despite its history and geography providing a cogent framework for a unified collective identity. If one draws the methodological analogy of South Asian diasporic behaviour, then the new spatial environment is an essential facilitator for elevating the people from the territorial trap. There is a need for such a geoeconomic space where the South Asian economies can combine or connect under the catalytic effect of the new economic environment loaded with potent economic opportunities. The most impulsive idea that strikes into mind is the extended neighbourhood concept of South Asia. South Asian states must interact beyond their locational trappings in all four directions. Afghanistan, Myanmar and China are the three continental directions, and the fourth one, the Indian Ocean, is the maritime direction. For example, the territorial fixities limit the interaction of Pakistan with Myanmar in a similar fashion, just as India has constraints in its engagement with Afghanistan. China individually engages Pakistan and India on the economic front. Nepal and Bhutan have low incentives to look for economic linkages in the Indian Ocean. Sri Lanka remains an autonomous entity without any continental frontage that neither obstructs nor facilitates. Bangladesh has mono-ocular continental interaction with India in all three directions and a minor linkage with Myanmar but has good maritime frontage to explore Southeast Asian connectivity. The difference between a good and a bad geoeconomic decision is that the former is independent of the foreign policy operations of the concerned governments. The geoeconomic arrangements of a region susceptible to any member state's electoral politics dissuade further growth of the

¹⁵ Edward N. Luttwak, 'From Geopolitics to Geo-Economics: Logic of Conflict, Grammar of Commerce', *The National Interest*, no. 20 (1990): 17-23.

regional structure. The extra-regional stakeholders are also sceptic about investing in the opportunities.

The traditional thought of economic integration of the South Asian economies failed to pick momentum under the South Asian Free Trade Agreements (SAFTA). It has remained a half-baked pudding that betrayed the taste of a few successful bilateral arrangements. The degree of success was under the caveat from the territorial trappings that offered differentiated opportunities and constraints on behaviour. An essential feature of the South Asian economies is their lack of efficiency in higher technology products which keeps them in a bind with trade outside the South Asian region. It has also affected the possibilities of trade exploration in raw materials and agro-based goods as the demand for foreign exchange binds them to export their raw materials to industrially developed countries.¹⁶ South Asia must break this jinx of post-colonial geoeconomic colonialism to develop its intra-regional trade. The South Asian economies have many items under the sensitive list that discourage intra-regional trade. There is also the role of a trade diversion towards non-regional trading partners, which offer more efficient economic relations. Village life is the predominant mode of living in South Asia, and rural consumption is a crucial sector that might serve as a model for trade structuring. The trade in food items has significant potential for enhancing the rural economy in South Asian countries. South Asian agriculture has a varying production scenario. There are big kulaks who can invest large sums in agriculture. In contrast, there is a vast sea of humanity as landless labourers and marginal farmers who can barely manage their consumption needs.

3. Securing Energy, Food and Environment

3.1. Energy Security

The South Asian economies, according to the World Bank estimates, grew at an average rate of 6-7 percent annually during 2015-21, save the Covid year of 2020, when the growth rate was - 5.23 percent. The demand for energy in South Asian states

¹⁶ Antoine Bouët, Simon Mevel, and Marcelle Thomas, 'Is SAFTA Trade Creating or Trade Diverting?', IFPRI Discussion Paper, January 2010.

remains strong. Fossil fuels constitute a significant component in the total final energy consumption by source. Bio fuels and waste form a significant part of energy consumption in Pakistan and Nepal, while crude oil has a significant share in India, Sri Lanka and Bangladesh. The share of combustible renewable in total energy consumption has a high percentage share for Nepal (77), Sri Lanka (45), and Pakistan (35).¹⁷ Their relationship with fossil fuels has a geographical variance. Nepal has high hydroelectric potential but does not have the economic potential to attract huge investments. Sri Lanka does not have a native fossil fuel source and has to offshore significant foreign exchange for buying crude oil. Pakistan's natural gas resource exploitation suffers from opportunity costs due to geographical proximity to West Asia and Central Asia, where substantial energy reserves are available at a cheaper value.

The energy imports in South Asia have seen upward trend. India imported 186.4 million tonnes of coal, while Pakistan imported 14.4 million tonnes. India imported 99.4 million tonnes of petroleum products in 2005, which increased to 220.4 million tonnes in 2017. Similarly, Pakistan's imports for the same period increased from 8.6 million tonnes to 10 million tonnes. Ironically, India's net import of oil products was -33.8 million tonnes, which means India has been buying less than its exports.¹⁸

The regional security fault line of South Asia has affected energy cooperation. The TAPI (Turkmenistan-Afghanistan-Pakistan-India) natural gas pipeline has been on paper since 2008. Pakistan's January 2022 National Security Policy document speaks of translating geopolitics into geoeconomics.¹⁹ It mentions the possible energy linkages within South Asia and neighbouring regions such as West and Central Asia and

¹⁷ World Bank, "Combustible Renewables and Waste (% of Total Energy)", World Development Indicators, 17 January 2023, <https://databank.worldbank.org/source/world-development-indicators>.

¹⁸ IEA, *World Energy Statistics*, 2019th ed. (Paris: International Energy Agency, 2019).

¹⁹ NSP, 'National Security Policy of Pakistan 2022-2026', 2022, 18, <https://www.thenews.com.pk/print/815449-a-rough-start-for-geoeconomics>.

China.²⁰ The electricity from Central Asia under CASA-1000 can significantly boost supplies to Pakistan, Afghanistan and Iran. Pakistan is the least electrified among the South Asian states, as only 75 percent of people have access to electricity.²¹ The South Asian states have a high dependence on fossil fuels for electricity generation, which has high environmental costs. India produces nearly 80 percent of its electricity from coal, oil and gas sources. Bangladesh's almost entire electricity generation comes from the same source, even though it is close to Bhutan, which has high hydroelectric potential for export. Nepal's estimated hydroelectric potential is 83,000 MW, which makes a strong case for clean energy production.²²

3.2. Food Security

Food security is a composite term that points to agriculture on the production side and hunger and malnutrition on the consumption side. Many poor South Asians cannot afford nutritious foods due to which malnutrition remains a prevalent issue across the region.²³ The SAARC Food and Nutrition Security Framework project launched in 2017 aimed at strengthening the inter-institutional framework for capacity building and training programmes.²⁴ The South Asia Right to Food Conference held in May 2015 adopted the Dhaka declaration to ensure food and nutrition security across South Asia.²⁵ The report identified a lack of prioritisation of agriculture, privatisation of natural resources, land grabbing, the

²⁰ Dost Muhammad Barrech, 'Regional Connectivity under NSP', *Pakistan Observer* (blog), 15 January 2023, <https://pakobserver.net/regional-connectivity-under-nsp-by-dost-muhammad-barrech/>.

²¹ World Bank, 'Access to Electricity (% of Population)', World Development Indicators, 17 May 2023, <https://databank.worldbank.org/source/world-development-indicators#>.

²² Gyan Pradhan, 'Exploiting Nepal's Hydropower Potential: Some Prospects', *Asian Perspective* 22, no. 1 (1998): 171-85.

²³ Idah Z. Pswarayi-Riddihough and dhushyanth Raju, "It's time to end malnutrition in South Asia," *World Bank*, June 24, 2018.

²⁴ Food and Agriculture Organization of United Nations, 'FAO, 'Strengthening Food Security and Nutrition in South Asia', Policy Support and Governance Gateway, 2019, <https://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/1195525/>.

²⁵ FAO, 'Report of the South Asian Dialogue on the Right to Food' (Rome, November 2015), <https://www.fao.org/3/i5602e/i5602e.pdf>.

impact of climate change and lack of political will as significant constraints in ensuring food security for all. Yan and Alvi, in their study of the effect of climate change on food crop yield, concluded that a decrease in cereal production and rising prices would be detrimental for India, Pakistan, Bangladesh and Sri Lanka, the four countries under study.²⁶ South Asian agriculture has a typical scenario where the female workforce constitutes a significant portion. At the same time, their income and access to food security remain highly susceptible due to a lack of ownership rights. Women are also the victim of wage differentials and face higher insecurity during seasonal unemployment. The poor households display gender differentials in malnutrition and access to healthy food. Nutrition is also a significant factor in South Asia's high maternal mortality rate.²⁷

The trade statistics in food products indicate the potential to increase intra-regional trade. Bangladesh is a large importer of wheat and rice from around the world. It imported almost 1.8 billion dollars of wheat and 0.7 billion dollars of rice in 2021.²⁸ The torrential floods and Covid took a heavy toll on Pakistan as it imported nearly 0.66 billion dollars of wheat in 2020 and 0.8 billion dollars in 2021. The wheat and rice imports in South Asian countries sharply increased in 2020 and 2021. It underscores the need for a regional framework for food security that can focus on intra-regional trade. Nepal and Sri Lanka import rice and wheat in large quantities. Sri Lanka has been importing more wheat in recent years as compared to rice. Nepal also imports significant quantities of maize as well.²⁹ Mukherji explored the AMAF (Additional Market Access Frontier) for trade in food products for South Asian countries. He identified

²⁶ Sun Yan and Shahzad Alvi, 'Food Security in South Asia under Climate Change and Economic Policies', *International Journal of Climate Change Strategies and Management* 14, no. 3 (1 January 2022): 237-51, <https://doi.org/10.1108/IJCCSM-10-2021-0113>.

²⁷ Nira Ramachandran, 'Women and Food Security in South Asia: Current Issues and Emerging Concerns', in *Food Insecurity, Vulnerability and Human Rights Failure*, ed. Basudeb Guha-Khasnobis, S. S. Acharya, and Benjamin Davis, *Studies in Development Economics and Policy* (Basingstoke, Hampshire; New York: Palgrave Macmillan, 2007), 219-42.

²⁸ UNCTADstat, 'Merchandise Trade Matrix', Merchandise trade matrix in thousands United States dollars, 2023, <https://unctadstat.unctad.org/>.

²⁹ UNCTADstat.

substantial food categories for the South Asian countries as follows, Afghanistan (fruits, vegetables), Bangladesh (meat, fish), India (fruits, vegetables, sugar-related products), Pakistan (cereals, fruits, vegetables), and Maldives (fish, meat). Mukherji found that India had the highest AMAF in cereals and sugar-related products, while for Pakistan and Sri Lanka, the AMAF was highest in grains.³⁰ The major challenge in food security is the domestic distribution of food. The intra-regional disparity in South Asia is high and needs a direct approach to address the problem. The South Asian states must develop a pan-regional framework for some of the worst affected districts in food and nutrition availability. A collective approach to effective implementation would help develop grass-root cooperation for food security. The over-reliance on markets to make food available to the vulnerable sections has weak prospects. Therefore, direct state intervention is more suited to benefit the target groups.

3.3. *Environmental Security*

Sustainable agriculture and food security are related as the environmental costs are incrementally rising due to water and soil resource depletion. South Asia has a unique rice-wheat system, a crucial production cycle for maintaining an adequate supply of cereals. It began with the advent of the Green Revolution and has undergone subsequent development with the innovation and technological up gradation of agro-inputs and tilling practices. The rice-wheat system extends from Kabul valley to the Brahmaputra basin along the Himalayan peripheral plains. The region has nearly 32 percent rice and 42 percent wheat cropping areas of South Asia. The inundation of fields for rice has affected the soil structure and nutrient composition. The Rice-Wheat Consortium (RWC) is a coordinating body of agriculture research systems of Bangladesh, India, Nepal and Pakistan. The consortium has a pivotal role in developing resource-conserving technologies with the help of global agencies such as CIMMYT, IRRI, ICRISAT, CIP and IWMI. The

³⁰ IndraNathMukherji, 'Potential for Intra-regional Trade in Food Products in South Asia', in *Regional Cooperation for Sustainable Food Security in South Asia*, ed. Nagesh Kumar and Joseph George (London; New York: Routledge, Taylor & Francis Group, 2020), 56-84.

current challenges in crop production are energy efficiency, reducing chemicals and pesticides, preventing soil erosion by water run-off, and sustainable consumption of meat and animal products. Lal identified soil erosion as a severe problem in South Asia. According to him, nearly 55 million hectares (MHA) of land are degraded annually by water erosion, 23.6 MHA by wind, and 11 MHA by fertility decline.³¹

The IPCC (Intergovernmental Panel on Climate Change) Assessment Report has underscored the weakening of the Monsoonal patterns in South Asia during the second half of the 20th century. There has been a decrease in the frequency of monsoon depressions, and the number of break days has increased. The variability in precipitation shall rise in the longterm. The oceanic heat shall affect the Indian peninsula considerably as the projected landmass shall face the thermal effect from both sides. South Asia has a significant share of the population living along coastal areas and whose livelihood depends on the sea. The marine environment is equally important in South Asia as the terrestrial environment. The IPCC report warns about the adverse impact of seawater heating on biotic life and depleting the source of livelihood for coastal people.³² The impact of El Nino has affected the fisheries and aquaculture production as the reproductive ecology of marine life depends on water temperature conditions. The shrimp farmers in Bangladesh reported damages in yield due to high temperatures and a rise in colloidal mass in rivers from torrential rains.

The cryosphere regions of the Himalayas are a source of the rice-wheat system of cereals production, which is the backbone of South Asian food security. The weakening surface winds over the Tibetan plateau also affect snowfall intensity over the Himalayan regions. The Sixth IPCC report mentions that the lake bursts in glacier regions have happened more frequently in

³¹ Rattan Lal, 'Soil and Water Resources of South Asia in an Uncertain Climate', in *Sustainable Agriculture and the International Rice-Wheat System*, ed. Rattan Lal et al., Books in Soils, Plants, and the Environment (New York: M. Dekker, 2004), 37-53.

³² IPCC, 'Regional Factsheet- Asia', The Physical Science Basis (IPCC Working Group I, 2021), https://www.ipcc.ch/report/ar6/wg1/downloads/factsheets/IPCC_AR6_WGI_Regional_Fact_Sheet_Asia.pdf.

recent years, and the threat to downstream habitation and settlements shall increase. The increase in CO₂ in the Indo-Gangetic basin shall hurt wheat yields as the intensity of coldness declines in winter. However, the desert regions of South Asia might see an increase in the production of coarse cereals such as millet, barley and maize as the rainfall shall increase in these regions.³³ Rising temperature conditions also favour the growth of invasive flora and fauna species, which create a higher need for chemical inputs for crop protection. Livestock farming in Himalayan regions has increasingly become stressed as forest resources, pastures and rangelands are consumed without any avenues for replenishment. The Sixth IPCC report mentions that South Asian farmers are receptive to environment-friendly choices as their food security and livelihood are interlinked.

The three covenants of energy, food and environment are enmeshed in each other. A composite approach to securing these assets is essential for transferring a sustainable future to the next generations. Rural South Asia houses the world's most significant number of poor, mainly farmers and landless labourers. Securing rural South Asia is the key to securing energy, food and the environment. A shared South Asian market for agricultural products can improve the odds of the poorest of the poor emerging from poverty. According to data analysed between 1984 and 2002, the World Bank's research shows a substantial correlation between the decline in rural poverty and an increase in cereal yields.³⁴ A rise in agricultural productivity helps in the structural transformation of labour. The South Asian economies still employ nearly 42 percent of their labour in agriculture. The percentage of the labour force employed in agriculture is highest in Nepal at 64% and lowest in Sri Lanka at 25%. Only 27 percent of the total labour force is globally employed in agriculture.

³³ IPCC, 'Asia', *Climate Change 2022: Impacts, Adaptation and Vulnerability* (IPCC Working Group II, 2022), https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_Chapter10.pdf.

³⁴ World Bank, *World Development Report 2008: Agriculture for Development* (Washington, D.C. : London: World Bank, 2007).

4. Geopolitics of Pan-Regional Securitisation

Territorial disputes, transnational terrorism, domestic insurgency, the trafficking of small guns and drugs, the interstate conventional arms race, nuclear deterrence, and the struggle for the balance of power are the traditional security issues of South Asia. They make South Asia an arena of intensive power politics where it is always easy to attract the attention of the leading global powers. The Indo-Pakistan bilateral conflict is the region's most extended conflict. The role of non-state actors also significantly leverages the conflict between the two nuclear-armed states. These features limit the possibilities of inter-state cooperation for securing energy, food and the environment.

In this case, the *sui generis* approach to securitisation is the alternative scenario. The South Asian governments now have a geopolitical orientation that ignores the neighbourhood within the region and appeals to the neighbourhood outside South Asia. The geopolitical fragmentation of South Asia has led to the states appending to their neighbouring regions. India's Look East Policy and Pakistan's China Pakistan Economic Corridor (CPEC) are comparative examples of disjunct approaches, where regional cooperation efforts are minus South Asia. The former seeks regional economic cooperation with ASEAN countries, and the latter focuses on China-specific regional integration of transport and industrial infrastructure. The two strategies could complement one another in a perfect world, but the potential for such an attempt has never existed.

Transboundary rivers have been the litmus test of cooperation among the South Asian states. The watershed contains a network of tributaries, and the main river represents a single geographical unit. The relationship between energy, food, environment and people produced cultures and civilisations over thousands of years in the river valleys. The political maps drawn across the watershed regions changed the access and utilisation pattern of natural resources within a watershed region. Mirumachi defined four possible scenarios of

transboundary relationships among states.³⁵ The author believed that river water coerces the conflict and cooperation among the riparian states. Four potential scenarios involving interstate resources can occur based on the intensity of conflict and cooperation: high conflict with low cooperation, low conflict with high cooperation, low conflict with low cooperation, and high conflict with high cooperation.³⁶

The South Asian states generally demonstrate a case of low conflict and low cooperation. The optimum use of watershed principles for increased resource potential utilisation demands low conflict and high cooperation. The escalation of regional fears caused by the securitization of hydro-politics deters investments in hydro and multi-modal river valley development projects. Added to the problem is the instability in domestic politics that often uses transboundary hydro-projects as a flogging horse for political mileage. The link of domestic politics with inter-state insecurities makes transboundary river water sharing arduous. The institutional arrangements for managing transboundary river water utilisation have been primarily concerned with managing flows and resolving frictions in water utilisation. There is a near absence of dialogue on integrated water development of the entire river watershed. This passivity over has a detrimental effect when climate vagaries adversely affect the amount of precipitation and water availability in the whole region. The inability to evolve an incremental approach for better resource utilisation forces the riparian states to contest historical water usage and are less keen to entrust arrangements for prospective water usage.

Scientific and technological growth is essential to address energy, food and environmental challenges. Education in South Asia might appear anachronistic under the geopolitical framework. However, that is not true if one figures out the significance of the socio-political climate for securing energy, food and the environment. The internationalisation of education

³⁵ Naho Mirumachi, *Transboundary Water Politics in the Developing World*, Earthscan Studies in Water Resource Management (London; New York: Routledge, Taylor and Francis Group, 2015), 40–41.

³⁶ Mirumachi, *Transboundary Water Politics in the Developing World*, Earthscan Studies in Water Resource Management.

in South Asia demands meaningful learning to contribute to societies living across borders.³⁷ Human capital is the most important element in achieving rapid economic growth. According to a study by Dreze and Sen, the east Asian nations achieved rapid economic development due to better quality of higher education. The global competitiveness report tells about the dismal state of the South Asian economies, with most ranking below the 50th mark.³⁸ The expenditure on education by South Asian countries is around 4 percent of GDP which remains below the world average of 4.8 percent.³⁹

Additionally, education is considered one of the most critical parameters for the Human Development Index (HDI). With its poor educational infrastructure, South Asia sorely misses the benefits of a demographic dividend. The region houses 25 percent of the world's population, with a significant share of the young generation having poor employability graduates leaving higher education.⁴⁰ The need for good universities is evident, as by 2024, South Asians, especially Indian students, will be spending more than 70 billion dollars to meet tuition fees and living expenses.⁴¹ Education in South Asia has been subject to religious politicisation, creating various problems for identity and peaceful coexistence. The communal partition of the continent haunts the education system as the neighbourhood is always viewed with suspicion while articulating nation-building goals. The theocratic parties demur the idea of pan-South Asian

³⁷ 'Higher Education in South Asia: Rapidly Growing, Diverse, and Unequal', in *Ready to Learn: Before School, in School, and beyond School in South Asia*, by Tara Bêteille et al., South Asia Development Forum (Washington, DC, USA: World Bank Group, 2020), 281–308, <https://doi.org/10.1596/978-1-4648-1327-6>.

³⁸ Nilofer Hussaini, 'Economic Growth and Higher Education in South Asian Countries: Evidence from Econometrics', *International Journal of Higher Education* 9, no. 2 (8 January 2020): 118, <https://doi.org/10.5430/ijhe.v9n2p118>.

³⁹ Carolina Bloch, *Social spending in South Asia: an overview of government expenditure on health, education and social assistance* research, report (International Policy Centre for Inclusive Growth, United Nations Development Programme and the United Nations Children's Fund, 2020).

⁴⁰ EIU, 'Higher Education in South Asia' (Economic Intelligence Unit, June 2013), https://www.britishcouncil.in/sites/default/files/sapd_british_council_south_he_report.pdf.

⁴¹ ICEF Monitor, 'Forecast Projects 1.8 Million Indian Students Abroad by 2024', *ICEF Monitor - Market Intelligence for International Student Recruitment* (blog), 31 August 2022, <https://monitor.icef.com/2022/08/forecast-projects-1-8-million-indian-students-abroad-by-2024/>.

cultural attributes as the building blocks for cognitive behaviour between the South Asian polities.

5. Conclusion

The inter-state policy behaviour has been mindful of the extreme consequence of anarchy, i.e., nuclear annihilation. Nevertheless, at the same time, the South Asian states are unmindful of the surreptitious nature of environmental degradation. The breakdown of environmental capacity to sustain the population can lead to the accentuation of conflicts and insecurities and an increasing tendency to solve collective environmental problems in a dangerous and partisan manner.⁴² A giant footprint of environmental degradation is the rising poverty, infant mortality and overall malnutrition of the population. Access to cultivable land and water is crucial for raising the well-being of rural South Asia. The migration towards cities and lack of employment remain a bottleneck in transforming the occupational structure of the overall population. The region's callous attitude toward the problems of energy, food, and the environment has reached its fiduciary limits due to the strain on interstate ties. There is an urgent need to prioritise inter-state cooperation towards securing these goals for the South Asian peoples. The footprints of climate vagaries are getting bigger as more and more loss of agriculture and settlements happen due to excess precipitation. The loss of topsoil cover is affecting agriculture productivity. Cereal production under the wheat-rice system needs greater cooperation in the Indo-Gangetic basin for optimum utilisation of the resources.

South Asian geopolitics does not involve a resource conflict thus far if one exempts territorial disputes from that category. In perpetuity, the people have remained sceptic of the 'other', and homogenisation has led to internal colonisation by indigenous rulers. The domestic sources of conflict led to the hardening of borders as the territorial securitisation of the state became an existential urgency. The quest for geopolitical ordering in South Asia, both at the academic and strategic level, created an array of partisan narratives where bipolarity has been more of a disorder than a prognostic value in inter-state relations. The political costs

⁴² Norman Myers, *Ultimate Security: The Environmental Basis of Political Stability* (Washington, D.C: Island Press, 1996).

of British colonial occupation resulted in territorial disputes, competition for power parity and claims and counter-claims of political destabilisation by the member states.⁴³

Regional conflict aggravated by the great power competition during the Cold War fed the numerous layers of insecurity that ranged from military challenges to the perceptive insecurities about each other's cultural and social attributes. The geopolitical insecurities in South Asia have never been so close to hurting South Asia's environmental and human security. The militarisation of South Asia siphons a significant amount of economic resources that can help address the issue of poverty and nutrition. Lowering the tensions among the states in South Asia can release plenty of resources beneficial for both its people and the environment.

The great power conflicts are bound to affect the global availability of energy resources and food grains. South Asian economies need to preserve their position as they are home to nearly 25 percent of the world population and cannot afford price escalation of essential food items. The education sector of the South Asian economies needs a strong push as human capital is weak in addressing the multiple challenges concerning better utilisation of natural resources. Mitigating domestic unrest allows the state to engage each other without fear, and transforming rural South Asia is the key to this effect. Rural South Asia is mired in the vast ocean of poverty and deprivation, the powder keg for armed unrest. The current challenges of energy, food and environment need cohesive and cognizant inter-state behaviour for the sustainable future of South Asian peoples.

⁴³ B. Buzan and O. Wæver, *Regions and Powers: The Structure of International Security*, Cambridge Studies in International Relations (Cambridge University Press, 2003), 101-5.

This book sheds light on the crucial role of regional economic cooperation in securing peace and prosperity for South Asia. I commend the India Study Centre (ISC) at the Institute of Strategic Studies Islamabad (ISSI) for spearheading this initiative and bringing together young scholars as well as professional experts to address regional issues. Going beyond problem identification, the book offers actionable solutions, emphasising areas of collaboration in pressing areas such as climate change and regional connectivity. It also underscores the imperative need for mutual efforts among South Asian countries to contribute to regional development and prosperity.

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General, ISSI.