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# The Securitisation of Environmental Sustainability and its Critical Geopolitics

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## Abstract

This paper explores the securitisation geopolitics around environmental sustainability, advocating for regional securitisation as a means to address environmental challenges that otherwise complicate traditional security challenges, which are foundational to a regional security complex approach. The global landscape lacks a unified approach to environmental practices, prompting the examination of regional contexts to influence state behaviour and apply a regional security complex model to symbolise this transformation as “Regional Environmental Sustainability Complexes” (RESC). The paper demonstrates that the South Asian Regional Security Complex (SARSC) concept by Buzan has evolved into the broader South Asian Regional Environmental Sustainability Complex (SARESC).

**Keywords:** Environmental sustainability; Geopolitics; Securitisation; South Asia; Regional Security.

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## Introduction

The issue of environmental security is paramount to all sub-systemic security concerns, which also include energy and food security. This paper examines the nature of securitisation around environmental concerns with a spatial critique of environmental geopolitics. The paper calls for the securitisation of environmental concerns at the regional level, which can facilitate the transformation of a regional complex through the desecuritisation of significant environmental issues. The neighbourhood environment is a lesser concern than global environmentalism for some states that have been the early beneficiaries of development.

This paper proposes a regional systemic approach to environmental issues instead of the targeted policy approach by international agencies, which tends to engender hegemonic

tendencies of global governance. The Global North uses environmental concerns to influence the consumption pattern of the energy resources in the Global South. The Global South has a dual problem of expanding consumption and infrastructure for economic development. At the same time, they are part of local conflicts that define their regional security complexes. These states are under constraints both from the security perspective at the regional level and from the economic development perspective, which has come under the purview of environmental globalism.

The neorealist perspective on environmentalism demonstrates the use of trade laws, policies and sanctions as an instrument of hegemony. This has brought competition among rising powers that contest the inequalities of consumption and accumulation inherited by the leading Western capitalist states, with the help of imperial wars and colonialism. Critical geopolitics uncovers this substratum beneath the so-called level playing field to demonstrate that environmental concerns cannot be perennially securitised to preserve the status quo. Environmental laws have curtailed the effectiveness of free trade and globalisation benefits, which has slowed down the economic transition of the Global South (Meyer 2018).

Rivalries between great powers have exacerbated the conflict in regional security complexes and there is an increasing tendency toward environmental crises within them. This study proposes that adopting a comprehensive approach to transform regional complexes, which encompasses environmental security considerations, can effectively alleviate the impending global-scale environmental challenges. The paper is not intended to chase the texts and propaganda about environmental concerns laced with environmental geopolitics. Critical geopolitics highlights the incorporation of environmental issues into the foundational framework of structural realism, which underpins the core tenets of the regional security complex model. The regional security complex approach embodies these facets of the global order, emphasising the need for a nuanced strategy in addressing both regional insecurities and environmental security through a bimodal solution.

The international society has limitations in guiding the consensus towards uniform environmental practices. The conflicts and environmental crises occurring within a region present an opportunity to influence states' behaviour by reforming the regional security complexes. This paper subsequently introduces a modified abbreviation, RESC (Regional Environmental Security Complexes), to symbolise this transformation. The traditional regional security complex approach displays greater coherence in incorporating environmental sustainability, as the "designification of environmental symbols" contributes to building a case for the desecuritisation of environmental concerns. Another crucial consideration is the inclination of environmental globalism to become entangled with the dynamics of great power politics. Environmental challenges offer regional powers increased room for strategic manoeuvring. This approach lends credence to pluralism that integrates spatial and systemic actions that demand coherence regarding environmental concerns. Buzan has used the term "deep pluralism" to signify the connection between spatial and systemic understanding of the international order, which is much needed for current environmental challenges (Falkner and Buzan 2022, 19–22). The agenda of securitising environmental issues finds mention

in the broader agenda of the security complex model adopted by Buzan and his colleagues in their book *Security: A Framework for Analysis* (Buzan et al. 1998).

Environmental concerns are discernible through policy mechanisms enacted either at the state or regional levels. The state-level response can help determine the delimitation of a regional environmental complex, which can inherit an existing or create a new regional security complex based on non-traditional factors, i.e., environmental sustainability. The regional environmental security complex (RESC) approach better suits the analysis of environmental issues as it allows the participation of international environmental agencies other than member states to interact in securitising environmental concerns. This paper focuses on applying the modified approach to examine South Asia as a potential case study, given the rationale deeply rooted in the principles of regional security complex theory.

Buzan initiated a case study in South Asia when he initially employed the regional security complex approach to analyse the behaviour driven by insecurity among South Asian states and their interactions with great powers. South Asia also serves as an example of unsuccessful regional integration, as the classical regional security complex theory does not account for the presence of a security community in the region. Another motivation is to examine the significant influence of great power dynamics in the region, which plays a pivotal role in shaping and reshaping numerous regional security complexes. The environmental concerns in South Asia pose immense challenges, given that the region is inhabited by over 2 billion people. Their access to resources, energy, and food has global implications for the balance of power.

This paper scrutinises a regional security complex through an environmental lens, aiming to construct the argument for the transformation of the South Asian Regional Security Complex into the South Asian Regional Environmental Sustainability Complex. Such a transformation seeks to foster the development of a security community centred around environmental considerations, ultimately contributing to a sustainable future.

## The Securitisation of Environmental Issues

The critical geopolitics of interpreting national security through the lens of environmental security has given weight to the policy influence of major powers. The concern for global environmental security has gained momentum, with a bipartisan approach anchored firmly in one extreme, advocating for global governance within a unipolar world order. On the opposing end, a diversity of responses based on distinct national interests has emerged, revealing the varying resilience of nations in different climatic regions to environmental shocks. The challenge arises when supply chains become entangled in disputes related to non-compliance, driven by the securitisation of trade agreements based on universal (Western) values and norms.

One illustrative instance is the EU functioning as a central business district (CBD) for the production of fruits and vegetables in third-world countries, facilitated by sectoral trade agreements.

It is worth noting that many environmental regulations governing agricultural practices stem from EU policies. The supply chains are responsible for transforming production and procurement practices related to Phyto-sanitary conditions and trade logistics (Vapa Tankosić et al. 2022). The non-conventional aspects of security, diverging from the traditional concept of national security, encompass environmental security, food security, and energy security. Traditional national security objectives revolve around the prevention of conflicts and the safeguarding of economic interests extending beyond territorial boundaries. Scholars have highlighted how the cyclical nature of political and economic conditions is causing environmental degradation, leading to further repercussions in the form of disease, scarcity, and spiralling violence in areas like West Africa (Matthew 2000).

The importance of environmental security to great powers, such as the United States, is part of their national security goals, and the ability to uphold them is closely related to their economic and military strength (Levy 1995). Major powers may find it appropriate to broaden their conception of national security to encompass energy, food, and environmental concerns. The perceptual nature of national security challenges can lead to security dilemmas, but states do not risk harbouring any such threats regarding energy, food, and the environment. The latter three forms of security are very much quantifiable, unlike national security, where the perception of the neighbourhood drives the need for securitisation. Environmental, food, and energy issues entail multidimensional efforts that depend not only on states but also on societies and intergovernmental agencies responding to the challenges.

Evaluating the sustainable access to food, energy, and environmental capacity is better conducted at the regional level. As a result, the regional integration of state policies provides ample opportunities to securitise these challenges rather than relying on a single global framework. The slogan “one earth, one family” overlooks the fact that there are multiple units of autochthonous environmental entities, notably the biomes, which require specialised attention to ensure the overall health of the Earth’s environment. Environmental sustainability in food production and consumption is as much a geopolitical issue as it is an environmental concern.

The decisive regional groupings, such as the EU, have raised alternate regional trade instruments that render WTO a weak contender. These are softer methods of protectionism by other means, where the environment remains a subject of interpretation for the nature of arrangements and their possible implications for the rest of the world. However, in 1999, the EU integrated the goal of sustainable development in all its trade agreements and created the audit under Sustainable Impact Assessment (SIA) for all its trade agreements (Lombaerde and Schulz 2009, 51-52).

The Global North and Global South do not share much in common in regards global environmental concerns, as the relationship concerning development is different (Redclift and Sage 1998). The environmental challenge faced by the Global South is twofold, as it not only produces for the Global North but also bears the responsibility of providing for the rest of the world’s population. Global food prices are on the rise, and production areas are becoming focal points for emerging conflicts. The question of sustainability presents both an environmental (quantitative) and a geopolitical (qualitative) challenge. Aspirations and demand for better living

standards in the Global South are rising. It demands a reduction in the consumption size of the Global North and the management of the production scenario in the Global South (Minneti 2018).

Another important aspect is the role of markets as the driving force for environmental sustainability. The Voluntary Sustainable Standards (VSS) are beyond the product quality attributes, focussing on the parameters set for production, processing and transportation methods. A social and environmental framework for economic activity may not necessarily be an optimal economic production decision (United Nations Conference on Trade and Development 2020). The third world grapples with the dilemma of human development versus environmental sustainability. Most sustainability norms and regulations emerge from the Global North, and few initiatives come from the Global South (GS).

The GS's primary goals are human development indicators of poverty, income inequality, urbanisation, infrastructure and food security. There is a consumption divide between the Global North and the Global South. The Global North vies for energy security, and the Global South looks for food security. The parallelism between the north-south divide and the environment versus development debate emerged in the 70s and 80s. Studies such as *Limits to the Growth* and the *Brundtland Report* first highlighted the need to address environmental insecurity (Dalby 2022). Dalby points to the dual nature of environmental insecurity, where there is corporate and state connivance over the propaganda. On the other hand, there is community-level polarisation, which hinders progressive solutions towards the green economy.

The market-based solutions that outsource environmental sustainability goals to corporate supply chains are weak in identifying the linkages between human security and environmental sustainability, as the state's role is missing. The dependency of people with low incomes for daily needs and the profit of multinational companies are two diametrically opposite interests that pivot on natural resources. Often, big companies are on the wrong side of the conflict, and the native populations pay for war reparations in a post-conflict recovery of the environment. The result has been the persistent increase of inequality where the poor bear the cost of environmental degradation (Ijang and Ndikumagenge 2013).

Environmental degradation is a problem due to bad governance. The attempt to seek solutions within the state territory fails to underscore the need to emphasise the regional homogeneity of the environmental variables that often cover more than one country. The state suffers environmental damage when it agrees to implement the structural reforms stipulated by the lending agencies that have often allowed natural resource stripping rather than wealth creation. The pressure to reduce subsidies on fuel, food and electricity often hurts the goals of poverty and raising the living standards. Lopez and Toman have argued that failure to adopt the environment-friendly models of growth wherein the state invests richly in public goods has led to environmental degradation (López and Toman 2006). A part of the blame goes to the embedded liberalism that essentially harboured multilateral institutions of global governance. These institutions increasingly fell short of the rising aspirations of the social groups for justice and political autonomy. As a result, the question of legitimacy and systemic transition required for sustainable environment policies comes

under suspicion. The state's role comes under scrutiny as a legitimate actor in issuing the policy apparatus on environmental concerns (Bernstein 2008).

Environmental issues serve as geopolitical instruments, necessitating a regional complex model for a comprehensive perspective. This approach bridges the gap between the daily experiences of billions and the decisions made by state entities, revealing the global impacts of these choices. As Charmaz notes, environmental studies emphasise quantitative data, aiding the precise categorisation of complex relationships between the environment and society. The regional complex model's unbiased flexibility allows us to navigate the intricate web of environmental geopolitics, recognising the transcendent nature of environmental issues across scales. In essence, this approach provides insights into how state decisions influence the environment's costs and the livelihoods of individuals. It avoids preconceived biases, making it ideal for contesting and comparing narratives. By adopting this model, we gain a deeper understanding of the interplay between individual and global factors, aiding the formulation of effective strategies for our planet's well-being (Charmaz 2006).

The variety of discussions on environmental matters has divided social groups, religious communities, and scientists regarding what constitutes a threat and the extent to which it is natural as opposed to cultural. The diversity highlights the uncertainties surrounding environmental threats and the level of vulnerability. Within the intricate cultural and social context, multiple channels of influence respond to environmental pressures, complicating the establishment of a uniform risk model and state response. This is also closely linked with society's historical ability to handle risks and how it has transformed in regards to environmental risks. These considerations emphasise the concept of environmental costs associated with the development model, which vary as widely as societal conditions.

The conceptualisation of risk is a theoretical premise, but whether those conditions factor into the societal response is a matter of uncertainty (Shearer and Liotta 2011). A higher level of uncertainty exists as a North-South divide regarding 1) cleaning up the mess and 2) the right to development. These bipolar issues have also created a problem in allocating resources to tackle environmental degradation. Here, the essential idea is to desecuritize environmental sustainability. Developed countries have shown a keen interest in incorporating it as a component of their national security, whereas developing countries include it as a part of their economic development strategy.

A more alarming situation for the third world is the call for environmental sustainability, as it often accompanies the call for restructuring the global economy, changing human reproductive behaviour and dramatic changes in values and lifestyles (Suzuki, Ueta, and Mori 1996). There is less focus on the diverse nature of these elements and the generic nature of sustainability. The two levels of interpretation of environmental security create a distinct scenario where conflicts can become exceedingly complex. The initial challenge arises from perceiving threats originating from environmental complexes beyond national boundaries. Conversely, the second threat emerges from interpreting the peril through the lens of cultural choices and decisions.

The community's reactions, opinions, and responses form the basis of their relations with their environment and livelihood. It is a blend of psychological and operational milieu, a priori that Sprout and Sprout cherished. The information one gathers about oneself through the relationship between life experiences and things a person values helps create a psychological milieu (Spencer et al. 1997). Various depictions of this environment are contingent on geographic, temporal, and cultural contexts. Self-perception constitutes an integrated portrayal of humanity's connection with its anthropogenic surroundings. Perception also serves as a mechanism for providing feedback to this same anthropogenic environment. A noticeable duality of determinism exists: one aspect is the material or natural environment that constrains human actions, and the other is the self-perceptive response to that environment, which influences human activity. This dual environmental determinism significantly affects the decision-making process that shapes human habitats and distinguishes communities from one another. It works around a core variable whose data generates factual information about the relationships with the surrounding elements in an environment. Its primary goal is defining the foothold through which the influence and change in the system are visible (Linden 2006).

The environmental challenges lie at the intersection of two fundamental principles: sustainability and security. Sustainability represents both a profound and commonplace approach to the narrative, mandating a necessary response. The state's course of action remains vague, as it is primarily prescriptive and contingent upon the severity of environmental issues. In contrast, security introduces a heightened level of concern that is not routine or standard for the state's response. Environmental security requires the state to act in accordance with the demands of an existential challenge. Environmental fear requires action from the state to securitise environmental sustainability (Brauch 2008, 27–44). It produces laws to protect against the referent fear and uses power to mitigate the threat further. The state may use coercion to seek compliance and use it as a mark of distinction to identify the friendly and the enemy states. Environmental security goals have sufficient potential to polarise the states on a referent fear. It would be of serious proportion if the scale of polarity were global, and a matter of securitisation for one state may not be a first-order concern for each state globally. A regional approach to environmental security is appropriate because environmental issues manifest their impact through climatic variables like temperature and precipitation.

The optimal choice model is the environmentally sustainable approach to address these issues, but it is a rarely followed path. The transition from Millennium Development Goals (MDGs) to Sustainable Development Goals (SDGs) has increased the list of goals from eight to seventeen. The 2012 Rio+20 Conference had specific vital aims, such as reducing inter- and intra-country inequalities, but the globalised SDGs fell short of addressing the disparity in consumption as one of the possible directions of action (Sustainable Development Goals Fund 2022). There is a considerable degree of territorialisation of sustainable development goals. The national SDGs are often part of economic planning but vary significantly within the neighbourhood. The environmental damage is not limited to political boundaries. The national plans essentially miss vital linkages between

economic activity and their transnational impact, thus failing to reflect regional environmental sustainability. The universalisation of environmental sustainability objectives overlooks the potential of biome diversity in achieving a shift toward a green economy. The economic expenses associated with sustainable consumption and production vary across different biomes. This also necessitates an appropriate policy framework to address the widening gap between environmental security concerns in the North and South.

Environmental security is also susceptible to the influence of great power politics. The hesitation of major powers to subject their sovereignty to environmental regulations has hindered the momentum for an effective shift towards a green economy. Environmental security presents itself as a dichotomy within the global and national policy framework, with the transition primarily centred on the economy's energy sector and the preservation of the biosphere. The perception of environmental security pertains to the exceptional politicisation of critical sectors of the national economy and natural resources.

Norman Myers's book *Ultimate Security: The Environmental Basis of Political Security* looks at agriculture regions and biomes in the context of US national security interest. The book has perambulatory remarks quoting US Senator Sam Nunn, saying [the US's] "national security objectives must be to reverse the accelerating pace of global environmental destruction" (Myers 1996). The book looks at the devastating effect of wars on developing a country's soil, water and food security. The chief argument of the book has been that environmental degradation is more likely to contribute to socio-political tensions leading to conflict among nations and societies. Environmental security issues in a region are of interest to major powers, serving as a conduit for power dynamics beyond military strength. These problems can foster both amicable and adversarial relationships among neighbouring states, particularly in transboundary issues.

## The Region as an Environmental Complex

Barry Buzan's Regional Security Complex Theory (RSCT) is suitable for comprehending the securitisation of environmental sustainability, arising from the interplay between the global perspective of environmental security and the distinctiveness of the issue at the state level. The RSCT elucidates the intermediate level within the three-tier framework of the world security architecture. The theory exhibits a bifocal disparity in perception, depending on whether one is viewing it from the perspective of the actor or that of the analyst. It mirrors a Derridean approach to security, given that the region may not have existed prior to its conceptualisation. Consequently, a security concern delineates the domain, subsequently shaping the defining narrative of the region. The theory does not dilute the state as the basic unit of analysis but takes the region into prominence with some aterritorial issues, such as terrorism or environmental degradation. Here, the security complex approach provides a method of extrapolating the idea of RSCT to the environmental security affected by the geographically proximate states (Buzan and Wæver 2003).

Environmental challenges such as glacier melting, air quality deterioration, rising sea levels, and agro-climatic issues underscore the importance of institutional practices within Regional Environmental Sustainability Complexes (RESCs). These designated regions facilitate the reporting of issues by states and the development of actionable frameworks. While global practices revolve around sharing remote sensing and meteorological data, the realisation of a regional action system for addressing environmental concerns continues to be a challenging endeavour. The geographical characteristics of a state often influence recurring environmental threats such as floods, water scarcity, droughts, crop losses, and disrupted climatic cycles. Responses to these events reveal shortcomings in integrated hazard management, with attempts at securitisation often provoking similar reactions from neighbouring states.

The nature of resource utilisation and its potential to generate securitisation narratives are crucial factors in determining the configuration of Regional Environmental Sustainability Complexes (RESCs). For instance, in the context of transboundary hydrology, 276 international river basins are shared by 148 sovereign states. However, not all qualify for inclusion in a regional environmental sustainability complex. The concept of Transboundary Water Interaction Nexus (TWINS), as proposed by Mirumachi (2015), assesses the interplay of conflict and cooperation among riparian states, categorising RESCs based on varying degrees of securitisation (Mirumachi 2015). He has defined four levels of securitisation that can exist based on the combination of high versus low cooperation and conflict. A case of low securitisation persists when a low conflict combines with low cooperation. A high degree of securitisation exists with high conflict and low cooperation. A Regional Environmental Sustainability Complex (RESC) becomes stable when the conflict is low and cooperation is high. Unlike soil, minerals, and forest resources, the territorial trap for water is less intense. The degree of intensity of the territorial trap can further indicate the mix of conflict and cooperation at domestic and interstate levels.

The conflict and cooperation scenario can also occur around energy resources as it is also one of the endemic securitisation cases. The natural gas and oil supplies between Russia and NATO member countries stopped briefly due to the Ukrainian war until the exports started re-routing via India, China, Saudi Arabia and other countries (Harper 2022). In this case, the resources define the environmental costs of conflict as oil and natural gas consumption, which increased due to war, and the supply disruption has created more demand for coal in European countries (“Why the war in Ukraine is driving up Europe’s use of coal—and its price.” 2022). Europe’s dependence on Russian energy is a case of environmentally deterministic behaviour. The European response had an enormous influence from the US, the sole superpower, who leveraged the European approach to free-will environmentalism.

The Nord Stream 2 represents a case of heightened securitisation that led to the beginning of the conflict, which transformed into a prolonged war with Russia on Ukrainian soil. The sabotage of Nord Stream 2 results from extreme securitisation amid pre-existing channels of cooperation between the EU and Russia. Mick Wallace, a member of the European Parliament,

called the Nord Stream sabotage “a terrible attack on European vital infrastructure... [and] an act of Environmental Terrorism” (Wallace 2022).

Superpowers can cause severe disruptions in the regional environmental sustainability complex. The energy needs of Europe and Russia’s geographic proximity are necessary but insufficient to define the regional sustainability complex. For example, Central Asia’s energy resources do not bind to the South Asian sustainability complex even though they are closer than Middle Eastern and African energy reserves. It is the proactive securitisation, which Sprout identified as the cognitive behaviourism that defines a region as a mature environmental sustainability complex. States coordinate their action systems in an environment where the resource becomes referent to the action system. Russia and the EU had created a vast coordinated system of energy cooperation and the Ukrainian war showed the extent of cooperation that went into building that regional framework.

The third case of environmental geopolitics that could portray the regional complex is the weaponisation of environmental issues as a coercive tool in a region. Here, the regional framework might exist as a security complex, but the speech act may introduce the environment as the source of insecurity among the member states in a region. Often, the contrary has been true, where states weaponise environmental sustainability issues to achieve geopolitical objectives. Transboundary rivers are the most conspicuous case, where the narrative about water availability is cut short to riparian state rights. The debate hardly looks at the environmental stress on the water regime of the entire watershed region, where availability depends on a host of climatic and geomorphological features.

Concern about rivers generates multiple symbolic interactions that range from religious sentiment to securitising food security resources. The response from one state is bound to create a reaction from another. The geopolitical explanation based on grounded theory can help explain the motive and interpretative language deployed by the states in understanding the particular environmental threat. The security semantics relates the environmental threat to the referent state’s survival, freedom and identity.

Environmental security reduced to national security goals creates counter-narratives on environmental issues that challenge the holistic approach to environmental security. There arises the question to determine the level at which securitisation happens. The narratives, often termed the speech act, might lead to the consolidation of power by the ruling elites (Wæver 2007, 66–98). The political agency controlled by the elite uses environmental danger to enhance its domestic political legitimacy and seeks to use securitisation as political consolidation. Civil society groups share similar environmental concerns and are part of the securitisation process. Using data demonstration to securitise environmental threats can lead to protectionist policies where inter-state cooperation may take the backstage, leading to more environmentally unfriendly practices.

The regional security model, as advocated by Barry Buzan for a conventional security structure, can serve as a promising foundation to the construction of a model for the Regional Environmental Sustainability Complex (RESC). States do not possess a uniform context for

securitising environmental concerns. Therefore, RESC analysis can establish a necessary framework for states to collaborate on this matter. Buzan contextualised security regarding survival (Buzan et al. 1998). The issue of survival can encompass principles of sovereignty and choices in ideological development. The state continues to be the “primary referent”, although scholars have broadened the scope to include supra-national and sub-national agencies. The system for securitisation spans from military conflicts to compliance within the “rules-based order” (RBO). The challenge of defining the scope of existential threats complicates the requirements for securitisation.

The environmental interdependence resulting from geographical proximity is pivotal for identifying regionally distinctive environmental clusters. In the same way that superpowers influence the regional balance of power, global environmental challenges compel states to adjust to issues such as droughts, floods, tsunamis, and desertification, all of which have significant implications for food security. Environmental concerns may not inherently determine the pattern of friendship or hostility between states. However, the extent to which environmental security objectives align or diverge can assist in gauging the behaviour of states in relation to each other.

The challenge in defining the environmental complex, both from the perspective of actors and analysts, lies in the cultural references to environmental challenges, which can vary significantly in scale. The four levels of interaction are domestic, interstate, inter-regional and global, which define the scope of regional action. The domestic and global tier of environmental security discourse exists, but their absence is conspicuous in the interstate and inter-regional analysis of the environmental security approach. The securitisation within a Regional Environmental Sustainability Complex (RESC) has four elements, namely, 1) environmental concern, 2) uncertainty and vulnerability of the states, 3) uneven environmental costs arising from the concern, and 4) social and economic exchange between the states showing the potential to address the concern. There is a significant geographical aspect, in contrast to the Buzanian RSCT model. The delineation of the RESC relies on watershed boundaries, as most environmental issues are confined within these watershed regions.

The generalised environmental concerns such as global warming and climate change need desecuritisation from neo-Malthusian discourse. The two narratives, poles apart, betray the epistemic crisis in the Western academic world on the fundamental nature of the present demography of the world. The first narrative came to notice through the speech of Jane Goodall, a renowned primatologist. She said the world population exceeds 95 percent of the present 9 billion mass (“Jane Goodall says ‘global issues wouldn’t be a problem if human population was 94% lower’” 2022). Her statement sparked controversy as she attributed the rising economic demand for natural resources to the poor state of the Equatorial Amazon forest and other rainforest lands where severe land degradation has caused environmental degeneration.

The second narrative, a report targeting China, writes about the indiscriminate logging of rosewood in Ghana and relates it to the insatiable demand of the Chinese economy (Gbadamosi 2022). This story fails to underscore that Chinese furniture exports to the US and Europe contribute equally to the rising Chinese demand for Ghanaian rosewood (“China overtakes US as EU’s biggest

trading partner.” 2021). Hence, the overpopulation in the third world and the consumption demands of the first world act as the two ends of a dumbbell, causing a continual shift in policy orientation.

Almost a half-century ago, Sprout and Sprout analysed the dichotomous nature of the man and environment relationship. They argued that man’s cognitive environment comes out through his textuality, action system and the enveloping environment, a flux of natural and human factors. Interaction between the two is visible through behavioural approaches. Sprout highlights that Columbus embarked on a quest to find a new route to Asia, driven by his mistaken geographical understanding. Similarly, countless wells have been dug in vain in the hope of finding oil where none was to be found. Assumptions about the natural environment in pursuit of political objectives create a perplexing situation where inter-state relations can become fraught with conflict (Sprout and Sprout 1960).

Environmentalism in the domestic sphere is a state-society interaction; internationally, it is an inter-state affair. The RESC integrates the two as a common denominator, receiving and sending the impulse across the border. A structural understanding of environmental sustainability demands that state agencies act as the nodes of the relations defined by environmental factors. A global and local approach can be disregarded in this case. Securitisation through spatial practices makes an exclusionary vision of the environment and its territoriality. It points to a territorial trap where cognitive behaviour sounds reflexive of environmental factors (Agnew 1994; Reid-Henry 2010). One possible resolution to this dualism is to enumerate all potential milieus in which the state can engage with its composite environment. It measures the relative capacity of the state power in terms of the ability to respond to those possible action choices.

There are five operational milieus in which the state can engage with the environmental concerns: environmental determinism, environmental possibilism, free-will environmentalism, probabilistic behaviourism and cognitive behaviourism (Sprout and Sprout 2016). The extra-territorial nature of the response, where most environmental challenges remain, highlights the importance of regional environmental sustainability complexes (RESCs). The critical aspect of the RESCs is that the state cannot afford a mutually exclusive securitisation of their operational milieu. Therefore, they must cooperate to elevate their operational milieu from environmental determinism to environmental possibilism. A mature stage of cooperation harnessing the environmental benefits in the neighbourhood defines the case of probabilistic behaviourism.

A harmonised environmental policy among states within a region points to an optimal condition where each state’s action is cognitive of the environmental complex and its role in sustainability choices for an integral benefit attained through cognitive behaviourism. When viewed through an environmental lens, the theorists who define the distribution of power among states have often overlooked the structural environmental constraints placed on a state. These constraints and opportunities are delineated by the social, physical, psychological, and operational environments that define a state agency’s operations. The word milieu describes

the complex mix of social and natural environments that factor into decision-making (Sprout and Sprout 1957).

Great powers characterise the free-will environmentalism milieu that can act as the determining environment for the other not-so-powerful states. Smolnikov asserts that the ability to use hard power is impossible every time, and to practice a perpetual pursuit of power maximisation needs systemic strategies that great powers aim at (Smolnikov 2018).

The great powers in the post-Cold War period took serious note of the environmental hazard from nuclear waste due to the scaling down of the Cold War rivalry. The problem was acute, as the Chornobyl accident showed, and the possibility of smuggling nuclear waste from the former Soviet Union demanded that the US immediately seek help from Europe in managing the Russian situation (Floyd 2010). The US collaborated with Norway in managing the spent nuclear fuel from the decommissioned Russian submarine fleet. The Arctic Nuclear Waste Management Program focussed on Russia's nuclear waste dumping sites in the Murmansk region. One of the chief objectives of Environmental Sustainability Complexes (ESCs) is the ability to cooperate in mitigating environmental threats. Although this case does not qualify as a region-defining situation, Europe and Russia still form a shared space for environmental concerns. As a superpower, the US demonstrates the globality of its environmental security concerns. The problem with these global power projections is the discursive hegemony over the nature of environmental challenges and the difficulties of policy adaptability at a varying scale.

## South Asian Regional Environmental Sustainability Complex (SARESC)

The RESC calls for an environmental perspective with a holistic and integrated approach to security that can define interstate relations. The Buzanian concept of regional security engendering with fear in the neighbourhood is a limiting case for understanding the motives of interstate behaviour. The environmental costs of inter-state rivalries have grown substantially, and the regions are distinct in their typologies of environmental stress caused by the degradation.

The Buzanian theme of regional security oscillated between the initial conception at the sectoral level and later shifts towards the spatiality of the concept. This inevitable landing of the security complex theory into a territorial trap lends credence to raising the security discourse from a subaltern perspective where communities and rural and urban spaces become strong entities in securing the environment. The desecuritisation of the Regional Environmental Sustainability Complex (RESC) can happen when states develop policy interdependence to mitigate environmental challenges. Buzan defined the South Asian Regional Security Complex (SARSC) in one of his earliest writings, and the same innovated into the South Asian Regional Environmental Sustainability Complex (SARESC).

The SARESC is more extensive and not limited to continental borders and territories. The Bay of Bengal and the Arabian Sea constitute a significant body within the designated

environmental sustainability complex. They pose as the insulator bodies in the securitisation process within the SARESC. The transboundary resource consumption in SARESC provides ample scope for understanding interstate behaviour. The Himalayan rivers affect Afghanistan, Pakistan, India, Nepal, Bhutan, Bangladesh, Myanmar and China; only Sri Lanka and Maldives are aloof. The hydrological securitisation discourse involves water utilisation for agriculture, household consumption and electricity generation. The Monsoons are unique meteorological phenomena that extend over most of the South Asian region and affect the food security framework of the SARESC.

The most visible form of environmental crisis relates to the variability in temperature and precipitation. An appropriate response to the water scarcity for the human population and the impact of air quality on food security is pressing. The climate-related policies take centre stage when addressing the vagaries of nature, namely water, soil and air pollution, floods and droughts. These are the most impactful consequences of environmental degradation. Their footprint is regional, although they reflect over the region with varying intensity across countries.

South Asian countries feel the transboundary impact of environmental stress. The torrential rains of Nepal have regularly influenced the plains of Uttar Pradesh and Bihar in India. Agriculture is the single most significant contributor to GDP for the entire aggregate of South Asia. Vulnerability is high for Pakistan, Nepal and Afghanistan, where agriculture accounted for more than 20% of GDP in 2018. Bangladesh was 13% of its GDP, and Sri Lanka less than 8% in the same year.

This did not correlate with the relative vulnerability of nations following their lower dependence on agriculture for national income. Sri Lanka faced acute food shortages due to a more than 50 percent harvest drop and a foreign exchange crisis (World Food Programme 2022a). Thus, high per capita incomes do not always ensure lower vulnerability regarding food security. The food security crisis in Afghanistan took place after the political transition in 2021 brought the Taliban back into power. The problem of legitimacy leading to the freezing of the development aid and the ethnic conflict exacerbated famine, with food prices soaring high and people becoming jobless (World Food Programme 2022b).

The domain of human health and urban life are also essential to environment-friendly development choices. Environmental degradation has marked footprints in urban areas, such as polluting industries, unhygienic sanitation, worsening air quality, and rising airborne diseases. The October 2022 air quality index for India and Pakistan revealed the dark reality of stubble burning and its impact on urban air quality in big towns such as New Delhi, Lahore, Faisalabad, and Ludhiana. The provinces of Punjab, in Pakistan, and Punjab and Haryana in India are the hotspots for burning crop residue in October for winter cropping seasons, which creates severe environmental degradation (IQAir Staff Writers 2022). There is a need for a regional approach to environmental hazards. A possible example could be the Punjabis of India and Pakistan coming together for a common approach towards handling the rice-stubble-burning issue (Kohari and Bagri 2021).

The complex has a high degree of conflict and a lower degree of cooperation, which indicates its weaker sustainability response. The starting point could be inter-state watershed management. The Indus Water Treaty has survived numerous full-scale wars and low-intensity conflicts between India and Pakistan. Cooperation between Nepal and India often faces political highs and lows, with the potential for enhanced cooperation. Bangladesh and India need an integrated approach to harness optimal utilisation of the Ganges-Brahmaputra river basins. The intra-state watershed management debate is also visible in the form of linking northern Indian rivers with the southern rivers.

Inter- and intra-state cooperation could also enhance the region's air quality. South Asia has one of the world's most heavily polluted urbanisation. There is a need to be more sensitive in reducing overall air quality degradation, and agriculture practices further aggravate the situation. The lack of integration between the South Asian economies contributes to environmental stress, as the states are not sharing the natural resources that could reduce the need for more exploitation. The regional environmental sustainability complex approach can identify the interconnectedness of these phenomena and invite a cogent design from international agencies for tackling the problems. Every complex has a unique set of interlinkages where a grounded approach is suitable for evolving best-suited solutions. One can summarise that regions are a sufficient basis for targeting the environmental sustainability approaches, and the securitisation strategies adopted by the state reveal the growing conflict on these issues.

## Conclusion

The regional security complex model addresses the securitisation of environmental issues by critically examining inter-state behaviour on the concerns around environmental sustainability. The model with suitable adaptation is worthy of proposing a generic set of policies for different regions of the world, reflecting a collective securitisation of environmental sustainability. Therefore, the regional environmental sustainability complex approach is best suited for implementing environmental sustainability goals. Also, there is better scope for attaining success if the Millennium Development Goals (MDGs) translate into Regional Sustainable Developmental Goals (RSDGs), as this shall allow a better policy perspective for resource allocation at a sub-global level. It will also help reduce the binary gap of north-south consumption and production divide into the gradient of such inequality where realistic targets of reducing consumption and production inequalities are achievable with lower geopolitical tensions.

The securitisation of environmental sustainability has the potential to integrate traditional security concerns. From a traditional point of view, the regional security complex is assumed to be static geographic units where the persistence of insecurities by means of narratives or actions keeps feeding the adversarial positions of opposing states. The environmental issues can act as a securitisation overlay that pushes back the conventional fears lower down the

hierarchy. This allows the states to lessen their hostility and seek policy choices that trigger regional transformation.

Buzan has been keen on seeing the regional security complexes turning into regional security communities. That essentially means desecuritisation of those issues that are the cause of insecurity. The failure to come to terms with conventional matters provides a leeway for the states in a region to forge a common ground to undertake environmental challenges. Therefore, the first step in this direction is treating the securitisation of environmental sustainability as a basis for delimiting regional security complexes.

South Asia has a high degree of exposure to the vagaries of the environment due to its Monsoon climate and vast population base, forcing the state to focus on all three securities: energy, food and environment. The South Asian Regional Environmental Sustainability Complex (SARESC) is a case for securitising the environmental challenges that threaten human lives more than potential conflict or an unconventional war. The policy convergence of the South Asian states to handle environmental crises can lead to an internal transformation that can mitigate conventional threats over a longer period of time.

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