

The Globalisation and Climate Change Paradox: Implications for South Asian Security

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This paper first seeks to understand the term 'security' beyond the traditional descriptions in most geo-political narratives. It thereafter seeks to understand the existing and emerging faultlines within India and in the South Asian region that may pose a challenge for the strategic and security architecture. It discusses how climate change and its myriad manifestations, including the global negotiations on its containment, could aggravate or affect these faultlines and security considerations. The paper places these discussions alongside the process of globalisation that India and other countries in the region have undertaken and seeks to understand how the unfolding of global integration will influence climate policy and security. Finally, it visualises certain measures and responses that could help the South Asian region respond to climate change and better manage the emergent security paradigm.

Introduction

The interpretation of security through the prism of Westphalia¹ for the past three centuries now stands under scrutiny. Traditional state-centric security narratives are giving way to a more complex discussion on security. These take into account the influence of global developments and negotiations (on trade, climate and economics), actions of non-state actors and ecologically sensitive policy emphasis that place the individual at the centre of the emerging complex

rubric of how security is now understood. This distinct shift is indeed a result of the greater inter-dependencies that globalisation has woven across the globe and the increasing influence that non-state actors have on this paradigm.

The Western liberal development model that pervades most contemporary societies has resulted in wealth and resources available with nations to now reside in the private domain, with national governments even ceding the task of governance and social security to non-state institutions. Alongside (and sometimes as a result of this), the threat to a nation's security has also evolved from being viewed as the rudimentary danger posed by the actions of other nation-states to hostile acts from non-state actors such as terrorists, religious radicals, organised crime, etc. These two realities are reshaping our understanding of security and are compelling us to develop response frameworks that can account for these new threat vectors as well as deploy the resources available in the private and public domains to respond to threats from traditional and non-traditional sources.

But, perhaps the single biggest change in our understanding of security is based on the recent realisation that 'internalities' within society, communities and countries comprise perhaps the defining nuance of contemporary security. These include food security, migration, socio-economic constructs, etc. What makes these internalities even more difficult to comprehend and respond to is the very nature of these vectors that makes them susceptible to historic developments, international interactions and simmering and sometimes volatile residual faultlines. The challenge of responding to these threats will be further heightened by another emerging reality, which is the 'changing climate', and its influence on geo-political, economic and internal security.

South Asia in particular cannot afford to ignore the impact of this changing climate for two central reasons. First, in terms of geography, South Asia has a unique identity². Plains, grasslands, mountains, deserts, glaciers and rain forests constitute this subcontinent. Furthermore, it is surrounded by three water bodies: the Bay of Bengal, Arabian Sea and Indian Ocean. Any conceivable effect that climate change can have on any of these geographical features will all be felt singularly and concurrently in South Asia.

Second, the region's large population, among the highest in the world, only exacerbates the situation further. Natural resources are already under

severe strain to cater to the demands of this young population which, as a result of the recent economic growth, has the means at its disposal to start consuming at historical levels. This situation will be further tested by the changing climate and its impact on coastal migration, agriculture production, water availability and resource competition (internal and external) among its inhabitants. The availability of water for irrigation and potable use in the region will be under strain, and the land for cultivation and the resources required to sustain agricultural growth will also exact policy improvisations. The contest over energy resources, as the world regulates the use of fossil fuels, will further heighten competition among nations across the globe and in the region. Clearly, resource availability will be a determining factor as the vagaries of climate manifest themselves with greater force in the coming days.

This paper will attempt to articulate the impact of this changing climate on the new and more comprehensive understanding of security in the South Asian context. In doing so, it will firmly place this discussion alongside the influence of another recent and equally decisive force that has shaped the region: globalisation. It has been argued that globalisation has created universal attitudes and values without necessarily globalising resource availability. This intersection of an emerging global ‘aspirational’ culture and the limited per capita resource availability in the region is testing the already fragile socio-economic faultlines among the multitude of ethnic and economic groups in the region. The changing climate in South Asia will serve to reinforce these.

The process of globalisation or “Westernisation”, as it is also referred to by many, is placing greater demand on the resources, both material and economic, available within India and the South Asian region. The excessive strain on the socio-economic fabric seems to only increase as the process gains momentum and there are significant strategies, political and economic, that are at work to ensure that the lure of Westernisation gains strength across all the sections of society. As this paper discusses, even the incremental and modest increases in purchasing power among the ‘bottom of the pyramid’ results in consumption that is increasingly recognised as unsustainable.

This in a sense defines the new security challenge for the region and its people. The increasing appetite for consumption across all sections of the populace and nations will be placed alongside the diminishing resource availability. The security dimension in the non-traditional sense will then need to discuss and address the faultlines that emerge from this contemporary duality and to resolve the possible conflicts over resources and the model of development itself. There are clear signs that the Global North is not enthused by the possibility of two and half billion Indians and Chinese living the ‘American Dream’ and consuming at the levels of Organisation of Economic Cooperation and Development (OECD) countries; this is also reflected in the current North-South dialogue on climate change and sustainable development.

In South Asia the ‘Copenhagen theatre’ is being seen in some quarters as ineffective in responding to the ‘here and now’, and serving to maintain the status quo. The current focus and obsession with mitigation in the climate negotiations deprives carbon space to the aspirations of those living on the margins of economic growth. In fact, it has been argued that the current debate on climate is less about preventing climate change and more about preventing change itself.³ This global influence on the socio-political landscape in India and the region may result in increasing the cost of development and can lead to creating entry barriers for swathes of people into the economic mainstream by denying them cheap energy, infrastructure and the promised ‘consumerist lifestyle’.

If consumption levels of the rich or the ‘Global North’, their energy guzzling cars and carbon intensive urban lifestyle are acknowledged as contributors to emissions, then at the core of the debate is the dilemma that many discuss in the Global South: can consumption curbs be implemented equitably? Can any response to climate be effective that does not include lifestyle changes for the Global North? How can any global agreement on climate ensure the aspirations of the poor through redistributing the excesses available with the rich? While substantial responses to this dilemma still evade the dominant narratives and cannot be captured in the current paper, these will undoubtedly influence the socio-economic and security architecture in the region.

However, I would first like to state at the outset that there are two issues that this paper does not engage with. First, this discussion steers clear of the debate on man's influence on climate. Instead, it seeks to understand the impact of changing climate on countries, communities and people. The use of the term 'changing climate' in this section is deliberate and apolitical and any other phrase indicating the same in this paper is also used in a similar manner. This discussion is based on the simple premise that irrespective of the causation, variations in climate affect people and security and responding to these changes has to be the prerogative of those having the wealth and resources to do so, historical responsibility or not. After all, if new science was to prove that rising sea levels and other predicted and dramatic developments are not a result of a greenhouse gases (GHG), will the developed world abandon the South countries having limited means to defend themselves?

Secondly, this paper does not seek to undermine the importance of reducing carbon emissions and in endeavouring to reverse the GHG in the atmosphere. It merely questions why the current debate on climate change is dominated by its impact on the future and how to mitigate it; instead of focussing on the plight of the people in the developing world who are grappling with the harsh realities of changing climate and resource scarcity even today.

Finally, this paper fully appreciates that the quest for energy, green or traditional, will define national interests and geo-political discourses; and the absence of this aspect from the current conversation is due to the limited scope and does not detract from the criticality and centrality of energy security within the broader discussion on security.

Redefining Security

Security has traditionally been defined and understood as protection from external threat of the self. According to Walter Lippmann, "A nation has security when it does not have to sacrifice its legitimate interests to avoid war and is able, if challenged to maintain them with war."⁴ Former UN Secretary General Kofi Annan had recently defined security as the "defence of territory from external attack".⁵ This has been the misplaced definition of security till

very recently. At the end of the Cold War, due to the increasing incidence of hostilities from religious extremists, rogue states and non-state actors, the need to widen the understanding of security resulted in the new phraseology “non-traditional security”, which ironically sought to include threat vectors that are as old as mankind. There is very little about this new understanding that is ‘new’ or ‘non-traditional’. The origins of the term security, points to more than just protection from external aggression. Derived from the Latin term *se* (without) and *cura* (care), security cannot evade its beginnings. The original medieval term not only suggested an individual’s freedom from threat but also implied dangers arising from carelessness. In this context, the concept of security had to become more holistic to encompass human aspects.

One of the earliest proponents of the redefinition of security was Lester Brown (then President of Worldwatch Institute), who, in his paper entitled, “Redefining National Security”⁶ in 1977, discussed the effects of the energy crisis at the time. He also advocated looking into other economic threats such as inflation and migration and “food insecurity” which he later linked to deforestation, soil erosion, the threat of climate modification, including the effect of greenhouse gases.

In an article in *Foreign Affairs*, Jessica Tuchmann Matthews argued for the broadening of the definition of security to include “Resource, Environmental and Developmental issues”. She argued that the earth was unable to sustain the current rates of economic and population growth, without serious environmental degradation.⁷ In 1994, the United Nations sought to capture all the above factors in its Human Development Report and formulated a more comprehensive definition of security. Expanding on the concept of ‘human security’ the report argued that global security must encompass seven aspects, including food, economy, community, health, the environment, the community, political and personal security⁸. It was Kofi Annan who famously worded the UN definition of security as, “Freedom from want, freedom from fear, and the freedom of future generations to inherit a healthy natural environment—these are the interrelated building blocks of human, and, therefore, national security”.⁹

“Freedom from want” arises from fulfilling the basic needs of food, water, shelter, clothing, etc. “Freedom from fear” can be achieved through state and human protection and the “freedom of future generations to inherit a healthy natural environment” can be achieved by environmental protection. These ‘freedoms’ and ‘needs’ are thus interrelated and need to be central to the development of any responses to the new ‘security paradigm’.

Climate Change and Security

The earth’s climate sustains life and strongly influences where and how people live. In the past, gradual changes in the climate have altered agricultural patterns, trade routes and the types of products and commodities that were produced and traded. It has had a significant impact on the lives of people and has catalysed the rise and fall of civilisations.

The Mayan Empire may have been wiped out due to a prolonged drought that destroyed its agricultural base and deprived its cities of drinking water.¹⁰ In Europe the medieval warm period that lasted from 1000 to 1400 AD might have facilitated the expansion of the population, agricultural activity, urbanisation and education, which together laid the foundation for the industrial revolution¹¹. Recently, UN Secretary-General Ban Ki Moon¹² argued quite convincingly that while the crisis in Darfur was discussed in a “convenient military and political shorthand, as an ethnic conflict pitting Arab militias against black rebels and farmers,” at its roots it possessed a “more complex dynamic” driven by an ecological crisis, arising at least in part from “climate change”. A simple conflict between Arab nomadic herders and settled black farmers has degenerated into the war we see today.

The above examples bring forth two specific aspects of the impact of climate on communities and civilisations. Firstly, abrupt and drastic climatic disturbances (on a geological time-scale) can decimate civilisations, while allowing others to grow and prosper. The second and equally important aspect of climate change is the impact of the environment on development patterns, livelihood options, growth, strife and war. This will be increasingly influenced by the global negotiations on climate on local policy-making and the consequent impact on societal evolution.

In the context of South Asia, climate change is already provoking discussions on resource sharing within and among nations, migration, urbanisation and the sustainability of current development models. These are further nuanced by the influence of another decisive force in the region: globalisation. In the 21st century, South Asia's security implications will be defined by two distinct factors: globalisation and climate change. South Asia's future security will increasingly depend on its ability to meet the aspirations and needs that globalisation shall foster in its newly emergent economies. The impact that this will have on its environment is the other threat vector which has already emerged.

In this respect, water will likely define South Asian security deliberations in the years to come. South Asia is notorious for playing host to some of the most intractable water disputes in the world. India in particular has the distinction of having a water dispute, with every one of its neighbours in the region. Climate change will complicate these geo-political equations further.

For South Asia, the Himalayan glaciers are the primary source for all the major rivers of the region. Approximately 1.3 billion people depend upon these rivers for their livelihood, which encompasses everything from basic drinking water to irrigation water for agriculture.¹³ Climate change has meant that the glaciers that provide water to these rivers are melting at an alarming rate, thus, putting the primary source of water for over a billion people in jeopardy.¹⁴

While the general implications of climate change are often couched as long-term *future* complications, water is a serious problem that afflicts South Asia *today*. A case in point is the Indus water dispute between India and Pakistan. Ironically, the Indus Water Accord is one of the rare success stories in Indo-Pak relations, in that an actual institutional mechanism exists to sort out disputes between both sides on the river. However, some issues have persisted and climate change may exert new dynamics. The Indus River receives almost 80 percent of its water from glaciers that originate in the Tibetan plateau. But according to recent UN studies, 90 percent of the Tibetan plateau has receded and the melt rate has increased markedly over the last decade.¹⁵ This means that many of the rivers of South Asia,

the Indus in particular, could lose as much as 70 percent of their flow. For Pakistan, this is indeed a grim scenario. The country depends heavily on the Indus for a variety of economic and social purposes. Pakistan uses only 10 percent of the river water for drinking, while the remaining 90 percent is used for irrigation. The potential impact on agriculture, Pakistan's core economic sector could be significant. Existing agriculture posers, including the current wheat crisis, could be further exacerbated by 2025.¹⁶ Under the circumstances and given Pakistan's fragile security situation, the probability of a conflict in the future over water between India and Pakistan is not improbable, though the level of engagement among the stakeholders on the matter could significantly reduce the possibility.

Migration is another South Asian challenge. 'Climate refugees' will lend a new dimension. In 1990, the IPCC had commented that the greatest impact of climate change might be on human migration, with millions of people displaced by shoreline erosion, coastal flooding and disruptions in agriculture.¹⁷ South Asia is already living this prediction and Bangladesh is the front line state. Like Pakistan, it is heavily dependent upon a single river, in this case the Ganges, for its livelihood. Thus, melting of the Himalayan glaciers, particularly the Gangotri glacier, poses a clear danger. It is estimated that between 1842 and 1945, the glacier was receding at an average of 7.3 metres per year; the rate of recession between 1985 and 2001 has been measured at 23 metres per year, directly impacting the river flow of the Ganges River.¹⁸ The subsequent rise in sea levels from the melting glaciers will likely effect over 70 million Bangladeshis.¹⁹

While the Government of India estimates that there are upto 5-10 million illegal Bangladeshi immigrants in India already,²⁰ the displacement of 70 million Bangladeshis due to climate change has the seeds of a potential humanitarian catastrophe in South Asia. Not only will this development displace large populations, it will also test the ability of the new locality to accommodate these millions. The incoming refugees will exacerbate pre-existing socio-economic '*faultlines*' in the host country.

Land and resource allocations, already vitriolic issues in South Asia, could become further inflamed. The events of 9/11 clearly demonstrated how terrorists can (and still continue) to exploit loopholes in monitoring

immigration to spread terror.²¹ These inter-linkages between migrants and terror groups present the emerging possibility of a grave threat to the region and specifically to India. The Indian response to the development is, therefore, likely to be strong (harsh) and in the national interest. Some of the response measures could be hard options involving force and intrusive security measures that could lead to the militarisation of a humanitarian challenge.

Similarly, food and agricultural disturbance could fuel the same migratory pressures and pose similar security risks in the coming days. These disturbances would include changes in food and production from changes in agro-ecological conditions, and greater volatility in food stability through frequent climatic fluctuations. Falling productivity would lead to decrease in income and increase in food prices, thus, restricting access to food for many communities and increase in the propensity of diseases, would compound hunger, further reducing the ability of a community to utilise their food.²²

Internal migrations within nations in the region like India are fuelling a dangerous strain of regional chauvinism and internal security pressures are like to increase on this account. At the core of all these challenges will be the contest for resources, physical spaces and ideological room, as has been witnessed in Darfur in the past two decades. If not managed well, South Asia could house multiple Darfur-like conflicts. While there are other aspects of human security, including health and ecological events, that will be tested by the changing climate, water and migration will clearly be the determinants of security in South Asian. But what truly captures the South Asian dilemma is as follows. The low carbon development model, advocated in the dominant discourse for managing climate change will sharply influence the rate of development in the region. The renewable energy alternatives are currently ten to twenty five times more costly than the traditional sources on an 'on-grid' basis, with solar energy clearly at the steep end of the equation. The increased cost of energy under the low carbon development pathway could clearly increase the cost of development, with a direct bearing on the pace of growth as well. There is a clear linkage between development and poverty alleviation and as per World Bank estimates, a one percent reduction in rate of growth could leave behind upto 20 million people in poverty²³

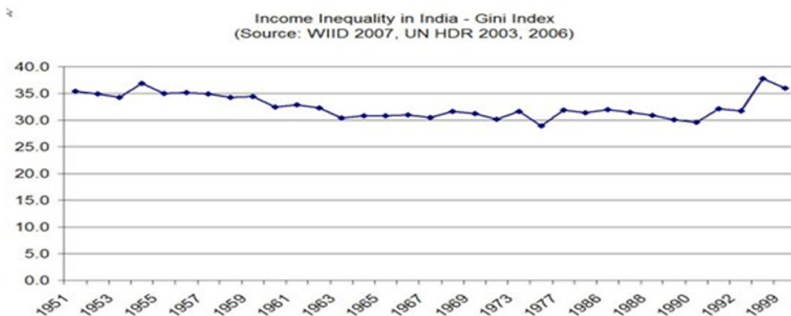
globally. Since South Asia houses half of the global poor, the effect of slow growth potentiates socio-economic despair. The irony is that were it not to initiate measures to mitigate carbon emissions aggressively, the previously discussed implications on security due to migration water, food, agriculture will become a sharper reality much sooner.

South Asia and Globalisation

Starting in the 1970s, with Sri Lanka opening its economy, the countries of South Asia began to integrate with the global economy. With little option resulting from an economic crisis of its own making, India was forced to follow suit in 1990.²⁴ Globalisation brought in new opportunities, greater access to global markets, and technology transfers provided South Asia with a path towards improved productivity and higher living standards. In the period following 1990, India has witnessed an increase in GDP growth rates from 5.6 percent in 1990-91 to peak at a level of 9.4 percent in 2008.²⁵ India's exports grew from 8.5 percent in 1995 to rate of 25.75 percent in 2004.²⁶

However, this period of greater global integration has not resulted in the expected levels of redistribution of wealth of resources within the region and nations. Despite the increased economic activity over the past two decades, the world and South Asia are characterised by difference rather than uniformity and widening rather than narrowing inequality²⁷. The rising inequality of income is indicative of this. Despite the economic rise of India since 1990, income inequality has increased considerably, rising from a historic low of 29.6 in 1990 to 32.5 in 2000 (a rise of 9.7 percent). So clearly,

Fig 1



on the one hand, there is a widening of equality in resource distribution; the other more demonstrable effect of globalisation was the convergence of aspirations among the wider populace, creating a starker future.

To understand this emerging paradigm, we need to revisit the definition of globalisation itself. Traditionally, the process of globalisation has been described as “the increasing cross-border flows of capital, knowledge, information and consumer goods”²⁸ and the “tremendous intensification of social, political, economic and cultural interdependencies on a global scale”.²⁹ The by-product of the last classification alludes to increased globalisation of ‘aspirations and values’. The present-day interdependency has created a set of values based on consumption. Although Adam Smith argued that “consumption is the sole end purpose of all production,” the analysis of consumption has largely been neglected in favour of consumption and distribution. Consumption was initially based on the assumption of rational individuals buying goods to maximise their satisfaction. Little acknowledgement was given to the external costs imposed on society by the traditional economic theory which treated man as a utility maximiser. Climate change discourses in the past have tended to focus exclusively on generally esoteric, vague, and/or long-term concepts and ideas such as Clean Development Mechanisms (CDMs), carbon intensity, carbon trading, etc. The overarching focus of all these deliberations has been on the production process. The issue of consumption is completely ignored.

Even when consumption is discussed, the language tends to focus more on how current lifestyles can be continued without damage to the environment. The Brundtland report defined sustainable development as the process that “meets the needs of the present without compromising the ability of future generation to meet their own needs”³⁰ but what these needs comprise remains ambiguous and has yet to be clarified in any forum discussing the problems of climate change.

Furthermore, this obsessive focus on production has meant that policy-makers in the Global North assume that current consumption trends can continue unabated by simply modifying the current energy mix. So the response relies primarily on other sources such as biofuels or ‘clean coal technologies’.³¹ What they overlook is that any gains made by increased

energy efficiency are offset by an increase in the emissions from increased household consumption. The International Energy Agency conducted an analysis of the consumption trends in industrialised countries from 1990-2004³². Their findings were:

- Despite an improvement of over 25 percent in energy intensity of GDP in both Europe and the US, total emissions have only fallen by 1.5 percent in Europe, while in the US they actually increased by 16.3 percent due to its higher growth rate fuelled by increasing consumer demand.
- The energy used in manufacturing has remained unchanged, but final energy use and carbon emissions have increased by 14 percent. This is despite energy efficiency meeting half the increased demand.
- The use of electricity by appliances such as refrigerators and computers has increased by 48 percent.
- Energy used in the transport and freight sector increased by about 25 and 24 respectively, while passenger travel has increased by 31 percent. Buses and trains, however, only account for 5 percent of this traffic, whereas air travel has increased by 61 percent. Also worth noting is that cars used 88 percent of the energy in the transport sector, with a minimum ownership level of 0.35 cars per capita.
- Service sector electricity consumption increased by 50 percent and in households by 35 percent. Oil (47 percent) and electricity (26 percent) dominate final energy consumption.

The inference is clear. While action can be taken to ‘mitigate’ climate change by targeting the production process, no climate change policy will be effective until it evolves a mechanism that deals with the impact of consumption, particularly household consumption on climate change.

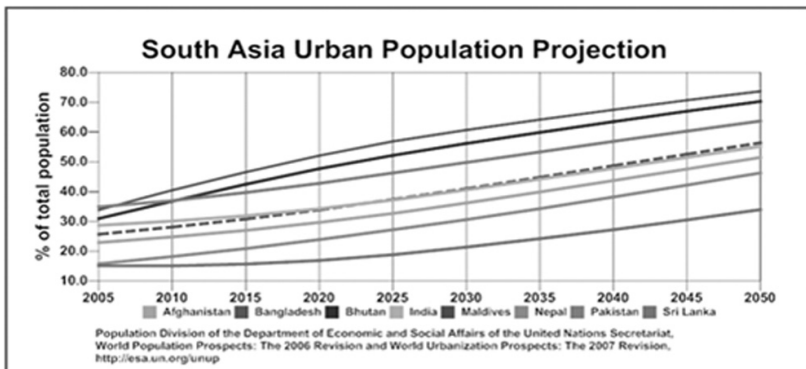
Globalisation has seen South Asia increasingly mimicking the consumption patterns of the West. In India, for example, domestic auto sales almost doubled from 5,941,535 in 2002-03 to 9,723,391 in 2008-09.³³ But, it is the growth of consumer durables that has been a major source for India’s recent growth. Consumer durables include electronics such as air conditioners, refrigerators, computers and TVs, which as discussed earlier,

are a significant source of the rise in household emissions around the world. India’s urban consumer durable market is growing at a rate of 7-10 percent a year and the rural market is growing at 25 percent a year.³⁴

The latter is particularly relevant to this discussion. Rural India is seen as the next best investment opportunity by most global and Indian corporations. With rising levels of disposable incomes in rural households and improving purchasing power thanks to schemes like the National Rural Employment Guarantee Scheme (NREGS), consumption in rural India is growing. What is significant in the growth of rural India’s consumption is the growth of the Fast Moving Consumer Goods (FMCG) sector. This sector comprises goods which are sold quickly at low costs and consist of items such as toothpastes, biscuits, cosmetics, soft-drinks, etc. Rural India spent about \$17 billion on FMCG goods and around \$2.5 billion on automobiles and consumer durables.³⁵ Rural consumption is not only quickly catching up with urban consumption, it is also mimicking its wasteful tendencies.

The idea of more than 1-2 billion South Asians consuming at OECD levels is indeed a frightening prospect. To further compound this already grim situation is the skewed rural-urban ratio that is emerging in South Asia. Despite the changing consumption dynamics in rural India, globalisation and the mediated aspirations to live the urban life are resulting in a rapid shift of populations to urban centres. The rate of migration is growing and with the influence of climate, the rates of movement could be steeper which

Fig 2



could further strain the limited urban resource base. The World Bank has estimated that by the year 2020, Mumbai will be the second largest city in the world, followed closely by Delhi and Dhaka. With the addition of Karachi and Kolkata, it is likely that by 2020, South Asia will be home to 5 of the world's 11 mega cities.³⁶

The consequent strain on local governments to provide basic amenities such as food, shelter and drinking water will be tremendous. Governance is being clearly overwhelmed by population relocation. Urban crime, contest over spaces, slums and unemployment could emerge as significant determinants of security in the days ahead. This security equation will also include increased air and ground pollution, water contamination and poor waste management.

The question now is, if rabid overconsumption as promoted by globalisation is a problem, can it be contained? If the marketing figures of the US are anything to go by, the answer is likely to be negative. In 2005, the US spending on marketing exceeded \$1 trillion annually.³⁷ If marketing were a vertical industry, it would represent 9 percent of the US GDP and would be the 5th largest industry in the US. It should also be noted that this figure is at par with the GDP of India, South Asia's largest economy. Additionally, India and China are now tasked with helping the world recover from the economic downturn.³⁸ The day after the Copenhagen Summit, some newspapers carried headlines announcing that consumption in India, China and the Philippines is leading global recovery. With the world economy just beginning to recover from the economic meltdown of 2008-09, all indicators suggest that global corporations, auto-makers, durable goods producers are all going to develop marketing models to leverage the consumption potential of Asia in general and South Asia in particular. This is the second irony that will define the Indian and South Asian debate. On the one hand, while there will be global focus on profiting from the consumer markets in South Asia, there will concurrently be pressures from the emerging climate policy to de-carbonise the economy, resulting in increased cost of production/development.

Conclusion

Today, South Asia's security paradigm is being defined by two forces: globalisation and climate change. Globalisation has redefined the needs of South Asia's populace. It has fostered a condition where the individual now demands the satisfaction of his 'aspirational needs' in addition to his basic needs. To this end, nations have been drawn into intense competition for the increasingly scarce resources to meet these imperatives, thus, increasing the propensity for conflict. The adverse effect of climate change on these scarce resources has further compounded the situation.

In the light of these realities, the developing nations are further affected by a climate debate that is an impediment to their ability in meeting the demands of globalisation. In discussing greenhouse emission norms, caps, etc. no heed is paid to the punishing effect the cost of these measures will have on the developing nations. The truth is that until cost-effective and green sources of energy which can replace fossil fuels are developed, curbs on carbon emissions will condemn billions to poverty.³⁹ The countries of South Asia will need to secure themselves in this backdrop. In constructing a responsive framework to these challenges, policy-makers need to articulate a framework that incorporates the following three aspects.

The first policy challenge would be to refocus the global response to changing climate on the 'here and now' defined by food insufficiency, migration, water shortages and other aspects that have been discussed earlier. These are the South Asian realities and the onerous task of the policy-makers is to position these at the core of the global negotiations and response frameworks. The pitiful existence of billions today cannot be the price for securing the lifestyles of the future generations of the privileged. Global justice and redistribution have to be at the heart of the response and India, with its growing international leverage, must be a fair and honest representative of the developing countries. It must not cede this responsibility when it sits at the global high table. If poverty alleviation necessitates seeking greater carbon space for development, then the political position must articulate this need.

The second nuance would be to clearly make the developed world own up to their historic and ethical responsibility. Should the loss of lives and cost

of relief and rehabilitation witnessed in South Asia each year resulting from changing climate be the responsibility of the local governments alone or should the global community start owning responsibility? This must be the articulated poser for the developed world to respond. There are indications that the 'Copenhagen Accord' has provided an exit door to the Annex 1 countries, and efforts must be made to rectify this.

Lastly, Indian and South Asian leaders should ensure that adaptation should take centre-stage in all discussions going forward. The belief that adaptation equates to 'handouts' has resulted in the developed world evading engaging with this most important aspect. There are a number of studies that demonstrate that the best response to climate is adapting to it and yet this aspect is often neglected. India must take a lead in rectifying this at the earliest. Mitigation which primarily focusses on reducing the effects of climate change⁴⁰ by reducing greenhouse gas emissions, is an attempt to 'cure' the problem of climate change. However, the problem with this approach is that mitigation cannot reverse climate change; it can only stop its long-term effects.⁴¹ The consistent focus on mitigation has meant that climate adaptation has become a mere footnote in the dialogue process.

Issues such as the leaked climate e-mails notwithstanding, a general consensus on the inevitability of climate change is growing. And within this emerging rubric, an emergent interest in climate adaptation must generate greater interest. The inevitability of climate change should mean that we must accept a greater emphasis on the process of adaptation. This does not mean that mitigation efforts get diluted, but that these should be subsumed into a holistic adaptation-based model on climate change.

The first two policy challenges need to be discussed together. As South Asia's vulnerability to climate change is high, any cataclysmic event and longer term changes in the local ecology would have a profound effect on a large section of the global population that ironically did very little to contribute to the change in climate. In this context, India's position on climate change today must be revisited post-Copenhagen. By all accounts the accord pronounced at the summit allows shifting of goal posts for the developed world, in terms of their emission reduction obligations as well as in terms of the responsibility they have

in helping South Asia and other parts of the emerging world to respond to climate change. This must not happen. The developed countries must own up responsibility and assured climate funds must flow in a time-bound manner to the developing world of which India is a part. At the heart of India's position is the assumption that India must be allowed the carbon space it needs to grow and develop even as it undertakes measures to combat climate change. This too has been diluted by the policy announcements of the government recently and it must be ensured that India and the region would not need to compromise on the carbon space required for development and infrastructure creation. India must be forthright and articulate about its needs at the international fora and the lure of leadership at G-20 and other such elite clubs must not detract or distract from the task of poverty alleviation and economic upliftment that the millions in the region seek.

On a regional basis, as the country with the largest and fastest growing economy in South Asia,⁴² India needs to assume benevolent leadership. But it should also avoid projecting itself as the lone voice of the region and instead should evolve a joint mechanism to engage with the challenges faced by the region. The development of alternative and more efficient means of water management is something that should be pursued in consultation and with the cooperation of all the countries of South Asia. This could include among others projects and studies related to managing river waters, flood management, drought, and irrigation and hydro projects. Joint research on climate technologies, policies and adaptation measures should be initiated at the earliest on a regional basis. There must be a de-securitisation of water and the economic benefits of this common resource must benefit all.

Furthermore, if India is to be at all effective in articulating a climate change policy for South Asia, then the current 'India-China' hyphenation must be discontinued at the earliest. The two countries are at different stages of their development and correspondingly their needs and context are very different. A common solution for India and China is unlikely to be responsive to the South Asian needs. China has already overtaken the US in total emissions,⁴³ According to the International Energy Agency (IEA),

despite a recent surge in emissions, India's per capita emissions will still remain well below those of OECD member nations.⁴⁴ This will allow India greater freedom in negotiating with the developed world to do more to stop climate change, as India and South Asia are the frontline states in the climate rubric.

Notes

1. Jackson, R.H.; P. Owens (2005) "The Evolution of World Society" in John Baylis and Steve Smith, eds. *The Globalisation of World Politics: An Introduction to International Relations* (Oxford: Oxford University Press), p. 53.
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