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COMPREHENSIVE SECURITY FOR SOUTH ASIA : AN ENVIRONMENTAL APPROACH

Abstract

The causes of intra or inter-state conflicts are largely embedded in environmental degradation or scarcity of renewable resources. When the conflicts are addressed by resorting to force, the very purpose or cause of halting the slide in environment is lost. War itself is also a cause of environmental degradation. Thus, environmental degradation generates a self-perpetuating process. What is needed is a comprehensive framework of security for the entire region, achievement of which is contingent on cooperation and understanding among the countries of the region affected. Environmental cooperation could be promoted among the states within a region for the purpose of achieving greater comprehensive regional security as an end in itself. Moreover, regional cooperation on environmental protection and natural resource utilization serves as confidence building measures for the purpose of heralding comprehensive international security. In the context of South Asia, the focus may be on whether the SAARC countries, following the example of the European Union, can bring about an environmental integration, so that armed conflicts between India and Pakistan over Kashmir, and other conflicts between India and other South Asian countries, can be resolved.

Introduction

Most of the conflicts plaguing the world are between and among neighbouring states who tend to resort to force or threat of force for the resolution of these conflicts. Underneath many of these conflicts lie the environmental causes or scarcity of renewable resources. In many regions of the world, the depletion of the renewable resources occurs faster than their natural rate of replenishment. Moreover, the political boundaries of states are not always in synchrony with the ecogeographical watersheds of the world. As a result, most environmental problems are shared by two or more of the sovereign states. In the face of this incongruence between ecogeographical

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regions and the political boundaries, environmental degradation often binds the states in interactive and conflictual relations.

Thus, the causes of intra or inter-state conflicts are largely embedded in environmental degradation or scarcity of renewable resources. Environmental degradation in land, water, air and forest coupled with all its social effects in terms of poverty, economic decline, decreased agricultural production, displacement and migration of people, tends to become an issue of intra-state or inter-state conflicts. When the conflicts are addressed by resorting to force, the very purpose or cause of halting the slide in environment is lost. War itself is also a cause of environmental degradation. Thus, environmental degradation generates a self-perpetuating process. What is needed is a comprehensive framework of security for the entire region, achievement of which is contingent on cooperation and understanding among the countries of the region affected by the environmental problems.

The purpose of the article is to argue that environmental problems in a sub-system, because of their inter-linkage among themselves as well as with other aspects of security, can only be meaningfully addressed in a comprehensive framework. To begin with, the concept of an ecogeographical region is clarified. A definition of comprehensive security is offered after outlining what is regional political and environmental security. The situation of South Asian environmental degradation and the emerging conflictual scenario is depicted to make the central arguments of the paper in the conclusion.

Ecogeographical Region

An ecogeographical region may be conceived of essentially as an ecological subsystem made up of living and non-living components of the environment that interact to form a life support system. It is by no means fully self-contained because it has numerous feedback relationships with subsystems in the adjoining areas and beyond. Thus, it is a part of the global ecosystem. But then it has a dynamics

of its own so that it may also function independently of the contiguous and more distant regions, as well as of the globe as a whole.

An ecogeographical region can be terrestrial or aquatic or both. The various sorts of socially determined regions such as ethnic, linguistic, religious ones and so forth are superimposed upon the ecogeographical region. However, lack of correspondence and congruence between the two has often in the face of environmental degradation generated situation of conflict between and among these ethnic, religious or linguistically divided societies. Force or war has never been a solution to these conflict[1]. So long as the root causes of these conflicts mainly embedded in environmental factors, remain unaddressed, force or war has only aggravated the situation. What is needed is greater cooperation among these regions to achieve regional security.

Regional Political Security

During the Cold War period, super power rivalry and their global designs have defined regional security to a great extent. Approaches to the regional conflicts were made not according to merit of the cases or regional demands, but to supper powers' global outlook. As a result, many conflicts instead of being resolved, aggravated. The end of the Cold War provided the opportunity to emphasise on the efficacy of a regional focus.

Regional political security implies the development of relations among the regional states sufficiently amicable and sufficiently

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1. L. H. Brown, "Regional collaboration in resolving third world conflicts" *Survival*, London, 28, 1986, pp.208-220; See, also L.J. Cantori and S. L. Spiegel (ed)., *International Politics of Regions : A Comparative Approach* (New Jersey : Prentice Hall, 1970), p. 432; B. M. Russett, *International Regions and the International System : A Study in Political Ecology* (Chicago: Rand-McNally, 1967), p. 252; R. Vayrynen, "Regional conflict formations: an intractable problem of International Relations", *Journal of Peace Research*, Oslo, 21, 1984, pp.337-59. Arthur H. Westing (ed.). *Comprehensive Security for the Baltic : An Environmental Approach*: PRIO OSLO, (UNEP) London: Sage, 1989 pp.1-13.

codified to avoid armed conflict among them. A number of justifications can be cited in support of an emphasis on regional political security:

[1] Regional efforts are more likely to succeed than global ones because the problems are more circumscribed and more clearly definable. The need for a joint action is more readily apparent and the potential partners are easier to deal with;

[2] The series of interstate conflicts are primarily between neighbouring states involving the use of deadly force;

[3] The various regions of the world being composed of different groupings of countries, differ sharply in their historical friendship and animosities, their aggregation of political systems, their ethnic composition and their level of development. Since these and other national variables help to determine the nature of the regional security issues, the necessity for regionally distinct approaches becomes truly evident;

[4] Enhanced regional security serves to strengthen global security by virtue of being a part of the globe and setting an example for other regions and globe; and

[5] The ecogeographical region is endowed with an ecological integrity that most nations could not achieve short of resorting to conquest.

Regional Environmental Security

Two major prerequisites must be satisfied in order to achieve regional environmental security: (a) the quality of the human environment must be protected, and (b) any harvesting of renewable natural resources must be carried out on a sustainable basis. Protecting the quality of the human environment implies the prevention of soil erosoin, of air and of water pollution in excess of the natural renewal or cleansing processess or in excess of levels that could jeoparadise public health. Protection of the human

environment implies actions that could restore the damage already caused.[2]

The harvesting of renewable natural resources – primarily of wood, grass and fish etc. – on a sustained yield basis implies that the growing stock be maintained at such a level that the annually harvestable increment is maximized.

Comprehensive Regional Security

Comprehensive regional security demands both the prevention of armed conflicts and the fulfillment of basic human needs and amenities. It is clear that environmental factors play an important role in satisfying the former of these two requirements and a key role in the latter.[3]

With respect to regional conflict, some level of regional political insecurity can be attributed to the export of pernicious wastes by transboundary air or water currents. Further, regional political insecurity can be attributed to the disproportionate exploitation of natural resources being shared by two or more states or by the overall depletion of such resources. Various wars can be even attributed to the desire by a nation to allay its natural-resource insufficiencies.[4]

Thus, it would be of interest to explore the subtle interactions between these two domains. It could be also possible to find out whether progress in one facilitates significant progress in the other, or conversely, whether reversals in one lead to significant reversals in the other.

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2 A. H. Westing "Environmental Component of Comprehensive Security", *Bulletin of Peace Proposal*, Oslo, 20, (2) 1989, pp.29-34.

3 A. H. Westing, "Expanded Concept of International Security" in A. H. Westing (ed) *Global Resource and International Conflict: Environmental Factors in Strategic Policy and Action* (Oxford: Oxford University Press, 1986), pp. 183-200.

4 A.H. Westing, "Wars and skirmishes involving natural resources : a selection from the twentieth century" in Westing (ed.)., *Ibid*, pp. 200-204.

South Asian Region : Environmental Degradation

The region of South Asia is one of the poorest in the world and has a high rate of population growth and population density. The SAARC member states comprise 20 per cent of the world's population living on 3.5 per cent of the total land area and generate only 2 per cent of the world's GNP. The pressures that these socio-economic conditions create on the natural environment are enormous. The vast majority of the region's population depends directly on the environment to meet its daily survival needs like energy for cooking food, fodder, water, building materials and herbal medicines. The region spans an extra-ordinary ecological diversity – from the cold arid deserts of the trans-Himalayan region to the hot arid desert of the Thar, from the high mountain systems of the sub-temperate Himalayan ranges to the high mountain tropical ranges of the Nilgiri, from the vast Indo-Gangetic alluvial plains to the swamplands of the Sundarbans, from long coastal stretches to densely inhabited coral islands. Since groups of countries within the region share similar ecosystems – for instance, India and Pakistan share the Thar desert; India, Pakistan Nepal and Bhutan share the Himalayan ranges; India, Pakistan, Bangladesh, Sri Lanka and Maldives all possess long coastlines; India, Pakistan and Bangladesh share the Indo-Gangetic plains; and, Bangladesh, India, Maldives and Sri Lanka possess the region's coral island ecosystems -- there is a natural need for them to cooperate with each other and share experiences and resources in their common endeavour to ensure a safe, sustainable and better future for their peoples.

Under heavy pressure exerted by agricultural development, industrialization, mining, logging, firewood collection and livestock grazing, land degradation has become a serious problem in the SAARC region. While irrigated agriculture has led to vast areas becoming waterlogged and saline in countries like India and Pakistan, deforestation and cropping in the high mountain regions has led to heavy soil erosion, which then contributes to floods in the plains of Pakistan, India, Bangladesh, Maldives and Sri Lanka.

Environmentally sound agricultural and livestock policies are necessary for sustainable use of the land resources.[5]

Forests play a crucial role not only in the region's development process through the supply of timber and pulpwood but also in meeting people's daily needs through the supply of food, firewood, fodder, manure etc., edible and non-edible oils, and medicinal herbs. In addition, they provide ecological services in the form of soil and water conservation and recreational amenities.

The region is extremely rich in biodiversity and several areas show high levels of endemic species. India and Pakistan, for instance, encompass a unique spectrum of ecological regions ranging from snow capped mountains to hot deserts and coastal mangroves. Bhutan, Nepal, Bangladesh and Sri Lanka also have a high diversity of plants and animals and a high degree of endemism. Maldives, on the other hand, possesses unique coral land formations, and a large variety of reef fish. Very little of this biodiversity has yet been studied but it is already under heavy threat of extinction. Once most of the region, with the exception of Maldives, was covered with thick forests. Degradation of forest, replacement of traditional crop varieties with modern high yielding varieties, deforestation of reefs, and pollution of rivers and construction of dams and barrages pose a serious threat to the region's aquatic, animal and plant diversity.

Though the region as a whole is relatively rich in water, the incidence of rainfall varies considerably from one area to another – from a few hundred millimetres of rainfall in the Thar desert of India and Pakistan to several thousand millimetres of annual rainfall in the northeastern corner of the region, Assam, in particular. Considering that rainfall is limited to a few days in a year, water conservation and its conveyance over long distance is inevitable.

Water resources in the region, therefore, face a serious threat. Optimal use and management of water at the national level, and cooperation in water resources development between riparian states

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5 SAARC, *Regional Study on the Causes and Consequences of Natural Disasters and the Protection and Preservation of the Environment* (Kathmandu : South Asian Association for Regional Cooperation, Dec 1992), pp.198-204.

within the region, are therefore, of utmost importance. The question of cooperation should not be confined to augmenting and sharing of the quantum of water resources. Water quality is also a major cross–border issue. Near major cities, rivers and groundwater systems have become seriously polluted. But as the water courses cross border, management of the entire watershed for better water quality has become an imperative.

Air pollution is not yet a serious problem in most SAARC member countries. It has, however, already acquired acute dimensions in the major cities of the relatively industrialised and more populated countries of the region, namely, India, Pakistan and Bangladesh.

There are about 4000 urban centres and around 700,000 villages. Rates of urbanisation exceed population growth rates in most SAARC nations indicating substantial rural-urban migration, largely because of a lack of economic opportunities in the rural areas. Rapid urban growth has led to serious problems of overcrowding in most cities of the region. Cities near coastal regions have often resorted to land reclamation, sometimes with adverse environmental consequences. In Male, for instance, the reclaimed land has been attacked by severe tidal waves. Demand for building materials has also exerted a pressure on the environment, including coral reefs. Environmental deterioration, increasing insanitary conditions and pollution of local water sources is, therefore, common. Almost all countries in the SAARC region suffer from a lack of an integrated approach to urban management and a proliferation of agencies dealing with different aspects of urban growth and urban life, which has led to confusion and indecision. South Asian countries must develop resource-conserving urbanisation strategies; otherwise, the urban demand for resources will also destroy the resource base in the rural areas.

Countries of South Asia suffer both from existing typical problems like malnutrition, lack of sanitation facilities and inadequate supply of safe drinking water, as also from those arising

from changes in lifestyles and industrialisation. These result in exposure of human populations and their being subject to a range of diarrhoeal diseases, dysentery, cancer and heart attacks.

Floods annually ravage parts of South Asia, bringing destruction and destitution to thousands of poor peasants trying to eke out a precarious living in these ecologically temperamental areas. Bangladesh and India are the most flood prone countries in the world, and Nepal, Pakistan and Sri Lanka also suffer considerable loss of life and property during the monsoon months. The Himalayan mountains system which is ecologically fragile is prone to disaster. It is the youngest mountain range, therefore, one of the most erodible in the world. It is lashed by rainstorms of an intensity unknown to any other mountain range. The range is extremely seismic having periodically witnessed some of the world's worst earthquakes. The Himalayan rivers, therefore, inevitably bring down enormous quantities of silts and have a long history of devastating floods and changes in river courses.

Droughts are common in India and Pakistan, and occasionally in Bangladesh, Nepal and Sri Lanka. They affect more people and larger areas than other froms of natural disasters in the region. Unlike cyclones, earthquakes or floods, droughts do not come suddenly, but they may pervade large areas with far-reaching economic consequences. Drought prone areas are characterised by low and variable annual rainfall, high evaporation, and lack of assured water and moisture availability. Of all the SAARC countries, India is most affected by drought. The Thar and Baluchistan deserts of Pakistan experience chronic drought. In Nepal, localised drought conditions are known to prevail. But lack of irrigation facilities leaves agriculture in several areas drought prone. Small areas in Bangladesh and Sri Lanka suffer from temporary, spatially irregular and non-periodic drought. Maldives and Bhutan usually have an abundant supply of water, except during prolonged dry spells.

The countries of the Himalayan region in particular and, of late, Sri Lanka, are extremely susceptible to loss of life and property due to landslides and mass wasting. Other hill ranges in the region like

the Nilgiri in India also experience landslides in the monsoon months to a minor extent. Bank erosion along river systems is common in Bangladesh. Some 30 per cent of the world's landslides occur in the young fractured Himalayan.

Except for landlocked Nepal and Bhutan, which may experience the peripheral effects of cyclones, the other five SAARC nations are all duly afflicted by cyclones, tidal waves or sea storms and their compounding effects. Because of their long coastlines, Bangladesh, India, Maldives, Pakistan and Sri Lanka suffer from the effects of sea based storms and coastal erosion.[6]

Environmental Conflict

It is seen that environmental degradation in South Asian countries along with its social effects in terms of decreased agricultural productivity, poverty and economic decline, health hazards, displacement of people from rural to urban and sometimes, to neighbouring territories, and the growing incapability of the states to meet the basic needs of the people, have come as a greater threat than military. For example, flow of refugees and migration of people across the borders have been issues between India and Bangladesh. Bodoland and ULFA movements in Assam owe their origins to group identity sharpened over the migrants issue. Assam has been subject to the orgy of ethnic violence, affecting the centre-state relation in India and also the relations between India and Bangladesh.[7] Another issue of conflict between India and Bangladesh centred round the Ganges water available to Bangladesh through Farakka Barrage. Of course, the problem has been greatly ameliorated in the wake of signing of the Thirty Year Treaty between Bangladesh and India. The issue of use, management and harnessing of water resources has become a point of conflict between India, Nepal and Bhutan.

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6 SAARC, *Regional Study on Greenhouse Effect and its Impact on the Region* (Kathmandu, South Asians Association for Regional Cooperation, Dec 1992), pp. 1-170.

7 N. Gaan, *Environmental Degradation and Conflict : The Case of Bangladesh-India* (New Delhi : South Asian publisher, 1998).

One of the main reasons for the ethnic conflict in Sri Lanka has been the occupation of dry lands of the Tamils by the majority Sinhalese population Of course, the Government's policy of discrimination in the field of education, job and economy has exacerbated the ethnic crisis. The Tamil factor impelled India to get itself involved in Sri Lanka's ethnic imbroglio.[8]

Environmental scarcity of fishes on the Kachchtivu water has been escalated recently into killing of Tamils by the Sri Lankan naval forces exacerbating the relations between India and Sri Lanka.[9]

Environmental degradation and scarcity of resources in Pakistan has been the root causes of violence in Karachi and other cities. Settlement of Afghan refugees in Baluchistan has caused a massive deforestation and land degradation. Diversion of river water to the Punjab bypassing Baluchistan, Sind, and NWEP has led in the past to the rise of separatism. Poverty, economic decline and decreased agricultural productivity in these states will create conditions for civil strifes challenging the very legitimacy of the government to rule. In view of the enmity between India and Pakistan, any violence in Pakistan may be alleged to be engineered by India.

As predicted by scientists, sea level rise due to global warming in the worst case scenario would result in drowning of many parts of Bangladesh and Maldives in sea, compelling millions to flee their homes. This would result in more group identity conflicts, as discussed earlier.

Conclusion

Solution to these conflicts does not lie in use of armed forces. The root causes of environmental degradation and its social effects have to be addressed head on. With their eradication, a solution to the crisis can be found. What is needed is cooperation among the

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8 N. Gaan, "Environmental causes of ethnic conflict In Sri Lanka : Intra- and Interstate", *Asian Profile*, 1997.

9 N. Gaan, "Environmental scarcity of fish and conflict : The case of India-Sri Lanka over Kuchchativu Waters", *International Studies*, Vol. 22, No.3, Fall 1997.

SAARC countries in the management of environmental crisis. Crucial to the attainment of regional security remain the following three steps :

[1] environmental cooperation could be promoted among the states within a region for the purpose of achieving greater comprehensive regional security as an end in itself;

[2] regional cooperation on environmental problems enhances regional cooperation in the diplomatic arena or on other fronts;

[3] regional cooperation on environmental protection and natural resource utilization serve as confidence building measures for the purpose of heralding comprehensive international security.

In the light of the above framework, the focus may be on whether the SAARC countries, following the example of European Union, can bring out an environmental integration, so that many of the armed conflicts between India and Pakistan over Kashmir, and other conflicts between India and other South Asian countries, can be resolved. It may be argued that environmental integration may create necessary confidence building measures for the resolution of conflicts on other issues between India and other SAARC countries.

Going a step further following Karl Deutsch's political integration, attention may also be given on exploring the possibility whether an environmental integration among the SAARC countries is feasible at four levels i.e. institutional integration, policy integration, attitudinal integration and security integration. Further scholarly resources may be devoted to assessing the feasibility of these levels of integration.

To reiterate, establishment of comprehensive security on the very foundation of environmental security will foster regional security on a more sustained basis because the security system will be built on local elements through a local process rather than extraneous considerations as has been the case in the past.